



Millennium Development Goals and Other Poverty Indicators

At the Millennium Summit in September 2000, 147 heads of state and government adopted the Millennium Declaration and reaffirmed their commitment to working toward a world in which sustaining development and eliminating poverty would have the highest priority. This declaration led to the formulation of a set of goals, targets, and quantifiable indicators: the Millennium Development Goals (MDGs). The Goals focus the efforts of the world community on improving peoples' lives. A summary of the key elements of the MDGs is in Box 5. All Pacific island governments adopted the MDGs in 2002.

1. GOING IN THE RIGHT DIRECTION?

The Goals must be mainstreamed into national planning, resource allocation, and implementation at all levels of government if they are to be achieved by 2015. Senior officials, budget documents, and medium-term strategic development plans in several PDMCs indicate a lack of awareness of this critical linkage and of how to effectively operationalize the Goals nationally and locally. Commitment from the highest political levels and assistance from development partners is clearly required.⁷

As noted in the previous section, a high proportion of those who participated in the PAH consistently stated that instead of making progress on the MDGs, they perceived that their situations were getting worse. In other words, the delivery of primary health care, primary education, and other essential services and access to markets and to job opportunities were deteriorating rather than improving. Do the data support these perceptions?

Not all of the MDGs apply equally to all Pacific nations. Hunger (MDG 1) is not a major issue in the Pacific although poor nutrition most certainly is. The increase in incidence of non-communicable and lifestyle diseases, many of which have dietary causes, is testament to this. Malaria is endemic and is a serious concern in the Melanesian countries but not in others. While accepting that poverty or hardship *per se* is unacceptable in any society, the

⁷ ADB. 2004. *Governance in the Pacific: Focus for Action 2005–2009*

Box 5

Millennium Development Goals Summary

For Economic Wellbeing

Reduce by half the proportion of people whose income is less than US\$1 per day.

Reduce by half the proportion of people who suffer from hunger.

For Social Development

Achieve universal primary education: Ensure that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Eliminate gender disparities in primary and secondary education (by 2005).

Eliminate gender disparities in all levels of education.

Reduce by two thirds the mortality rates for infants and children under 5 and reduce by three fourths the maternal mortality rate.

Have halted and begun to reverse the spread of HIV/AIDS.

Have halted and begun to reverse the incidence of malaria and other major diseases.

For Sustainable Development

Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Halve the proportion of people without sustainable access to safe drinking water.

Achieve a significant improvement in the lives of 100 million slum dwellers.

relevance of individual MDGs and any adaptation of them have to be individually subscribed in each country. For example, other indicators such as the incidence of diabetes, dependency ratios, and the proportion of own production in household food consumption can be used to assess aspects of hardship and vulnerability in the subsistence economies of the Pacific.

Estimating the size and nature of Pacific poverty is also constrained by a lack of statistics and in some cases by the reluctance of a few governments to accept the presence of poverty and hardship and thus the need to assess them.

2. MEASURING POVERTY AND HARDSHIP

Measuring poverty in a quantifiable manner is as difficult as defining it. What is deemed poverty in one country might be relative affluence in another. Estimating the size and nature of Pacific poverty is also constrained by a lack of statistics and in some cases by the reluctance of a few governments to accept the presence of poverty and hardship and thus the need to assess them.

In order to combine the various factors of income, opportunity, and access, the United Nations Development Programme (UNDP) has developed the Human Development Index⁸ (HDI) and Human

Table 3
Human Development and Poverty Indices of PDMCs^a

<i>PDMCs</i>	<i>Human Development Index (HDI)</i>		<i>Human Poverty Index (HDI)</i>	
	<i>Value</i>	<i>Rank</i>	<i>Value</i>	<i>Rank</i>
Cook Islands	0.822	2	6.1	2
Fiji Islands	0.667	3	8.5	4
Kiribati	0.515	10	12.6	8
Marshall Islands	0.563	9	19.5	9
Micronesia, Fed. States of	0.569	8	26.7	10
Nauru	0.663	4	12.1	7
Palau	0.861	1	10.8	6
Papua New Guinea	0.314	14	52.2	14
Samoa	0.590	6	8.6	5
Solomon Islands	0.371	13	49.1	13
Timor-Leste	0.395	12	49.0	12
Tonga	0.647	5	5.9	1
Tuvalu	0.583	7	7.3	3
Vanuatu	0.425	11	46.4	11

^a Figures refer to 1998 data, except for Timor-Leste which are for 1999.

Source: United Nations Development Programme (UNDP), East Timor Human Development Report 2002; UNDP, Pacific Human Development

⁸ HDI = a composite measure of: life expectancy at birth; adult literacy rate; combined gross enrollment ratio; and GDP per capita.

Poverty Index⁹ (HPI). Index numbers and rankings for the PDMCs for 1999 are shown in Table 3. A country that ranks either well or poorly on one index, with one or two exceptions, will rank at a similar level on the other. Tonga's HDI rank of 5 and HPI rank of 1 and Palau's HDI rank of 1 and HPI rank of 6 are the widest differences between the two followed by Tuvalu's HDI of 7 and HPI of 3 and Nauru's HDI of 4 and HPI of 7. Tonga's HDI score is reduced by its per capita gross domestic product (GDP) while Palau's HPI score is brought down by its relatively poor access to safe water and health care and its higher rate of adult illiteracy. Similarly, Tuvalu's HDI is depressed by its GDP per capita while Nauru's HPI is brought down by its relatively high death rate for those under 40.

Income poverty levels can be assessed by using average per capita GDP or gross national income (GNI), but these figures do not reveal anything about the spatial distribution of income and the extent to which poverty is present. There are also problems in the measurement and extent of inclusion of non-monetary production in national account estimates. The UNDP's MDG measures of US\$1 or US\$2 per capita per day in 1993 purchasing power parity (PPP) terms do not adequately accommodate the high level of subsistence production in PDMC economies. Using this indicator for PDMCs is also constrained by the lack of agreed PPP values against which it can be properly measured.

HIES are the usual source of data for the calculation of national poverty lines. However, while most PDMCs have undertaken these surveys, they have often not been designed with poverty analysis in mind, consequently the data are not always adequate for the purpose. National food and basic-needs poverty lines have nevertheless been established, and the incidence of poverty has been assessed where data are available. Although poverty appears to vary widely in incidence, depth, and severity across the Pacific, it is emerging as a serious issue, and, despite the weakness of the data in some countries, the scale of the problem is increasing.

More than two decades of weak economic performance coupled with relatively rapid population growth have resulted in aggregate US dollar denominated real per capita income declines

National Per Capita Incomes

More than two decades of weak economic performance (annual average real GDP growth rate of 2.7% from 1985–2002) coupled with relatively rapid population growth (annual rate of 2.9% over the same period) have resulted

⁹ HPI = a composite measure of: people not expected to survive to age 40; adult illiteracy; proportion of underweight children under five years; and people without access to safe water or health services.

in aggregate US dollar denominated real per capita income declines (see Table 4). This low or negative growth was accompanied by a lack of new, formal- sector employment opportunities, by continuing urban drift, and by a perceived weakening of traditional support mechanisms. It is not surprising, therefore, that there has been a regional increase in hardship and poverty. While some countries have undoubtedly managed to achieve positive, real per capita growth, this has often been achieved only through significant (and likely unsustainable) increases in public sector expenditure (Kiribati and Tuvalu) rather than through growth in the private sector components of their economies (Samoa).

Table 4
Real GDP Per Capita in US\$ at 1995 Prices ^a

<i>PDMC</i>	<i>1985</i>	<i>1990</i>	<i>1995</i>	<i>2002</i>	<i>% per annum 1990-2002</i>
Cook Islands	–	–	5,326	4,891	-0.8
Fiji Islands	2,150	2,312	2,585	2,736	1.6
Kiribati	533	520	575	682	2.2
FSM	–	1,804	1,996	1,675	-0.4
RMI	1,563	2,048	2,160	1,604	-1.5
PNG	819	766	1,018	879	0.9
Samoa	–	–	1,215	1,501	3.4
Solomon Islands	625	746	843	534	-2.4
Tonga	1,345	1,350	1,595	1,749	1.8
Tuvalu	–	888	931	848	0.5
Vanuatu	1,312	1,12,3	1,353	1,176	0.2

Sources: World Bank World Development Indicators Online; ADB Key Indicators 2004 for basic data (Real GDP, Population & Exchange Rate) for Cook Islands & Tuvalu.

Notes: ^a 2000 market prices for Cook Islands; 1988 constant factor costs for Tuvalu; 1996–2002 for Cook Islands; 1995–2002 for Samoa

In some cases, notably PNG and Solomon Islands, poor economic performance and structural failures have been exacerbated by rapidly depreciating currencies. However the local impact of a notional US dollar denominated decline in income might not be as dramatic at the individual level. In most countries, the poorest and most disadvantaged individuals and households are likely to be more insulated from currency influences by their dependence on consumption of domestic, non-traded goods.

It is often difficult to compare Pacific estimates of gross national output and income per capita with those of other regions where subsistence

production is less important. External remittances, external trust fund earnings, other resource rents, and other income sources in some countries also distort international comparisons. In addition, public investment in the Pacific including external official assistance may be considered high on a per capita basis, but this is largely due to diseconomies of scale and to high costs associated with distance.¹⁰

It is nevertheless important to note the variability of income levels within the region where estimates of nominal current-price per capita GNI in 2001 ranged from \$438 in Timor-Leste to \$6,107 in the Cook Islands (see Table 5). Similarly not all PDMCs are equally well supported by external assistance, either official or from private remittances.

Subsistence agriculture, fishing and other household economic activities contribute significantly to incomes in the Pacific; however the contribution of these activities to national output has generally not been well measured.¹¹

Table 5
Nominal GNI and Ratio of Aid to GNI in US\$ in 2001

<i>PDMC</i>	<i>GNI per capita</i>	<i>Ratio of Aid to GNI (%)</i>	<i>Remittances Significant¹²</i>
Cook Islands	6107	6.2	No
Fiji Islands	2146	1.5	Increasing
Kiribati	898	14.9	Yes
FSM	2186	52.4	No
RMI	2182	64.6	No
PNG	569	6.8	No
Samoa	1437	17.2	Yes
Solomon Islands	612	22.3	No
Timor-Leste	438	59.1	No
Tonga	1491	13.5	Yes
Tuvalu	1250	73.9	Yes
Vanuatu	1129	13.9	No

GNI = gross national income

Sources: GNI (gross national income, formerly GNP) and Aid per capita data are from World Bank's World Development Indicators and Global Development Finance 2003 Online; GNI per capita data is unavailable for Cook Islands and Tuvalu. Nominal GDP per capita data were used instead.

¹⁰ Aid has a most noticeable impact on FSM, RMI, Timor-Leste, and Tuvalu with a lesser, though still significant impact in the case of Kiribati, Samoa, Solomon Islands, Tonga, and Vanuatu.

¹¹ Household surveys and national accounts systems use different methodologies and valuing models to capture subsistence production and consumption. In some countries, notably Kiribati, official GDP data excludes subsistence agriculture and much other household production almost entirely.

¹² Remittances are significant if they are the primary source of income for more than one third of households

Typically for the Pacific poor, food accounts for two thirds of household expenditure in the rural areas and outer islands and just under 60% in urban areas. For households with average incomes, the corresponding figures are 61% and 43% respectively. Not surprisingly, subsistence production is more important for rural/outer island households accounting for about 60% of total food consumption compared to a still-high 40% in urban areas. For the average income family, the corresponding figures are 47% and 28% respectively.

The importance of subsistence production for low-income households (where data are available) is illustrated in Table 6. In all cases except FSM, poor rural households rely more heavily on their own production than urban households do. This is markedly so in Samoa and Tuvalu but somewhat less so in Timor-Leste and Tonga. However, in the case of Tonga, rural low-income households reportedly obtained all their food needs from their own production. This might seem a little unrealistic, but given the remoteness and lack of trade stores in some of the islands, it is indicative of the strong agricultural base of the Tongan economy. The figures for FSM appear to be anomalous, but the urban/rural distinction is less clear there than in other countries. Although Pohnpei is the national capital and has been classified as urban, a large proportion of the population actually lives outside the main urban center of Kolonia.

The relatively low levels of consumption of own-production in Samoa and Tuvalu reflect two rather different situations. In the case of Samoa, there is an active produce market where locally grown foods are readily available, thus there is little need to grow one's own produce although many families still do so. In Tuvalu, in contrast, the high population density and low agricultural potential severely limit the ability of urban households to produce

Table 6
**Own Production as Percentage of Food Consumption of
Low Income Households***

<i>Selected PDMCs</i>	<i>National Average</i>	<i>Urban Households</i>	<i>Rural Households</i>	<i>HIES Survey Year</i>
FSM	53	72**	42***	1998
Samoa	37	17	56	2002
Timor-Leste	48	35	51	2001
Tonga	74	54	100	2002
Tuvalu	48	19	49	1994

ADB Estimates, TA 6002-REG and 6047-REG and TLSS

*Lowest income quintile; Timor-Leste lowest two quintiles; Tuvalu Lowest quartile, ** Pohnpei, *** Chuuk

their own food which forces everyone to purchase imported goods. Timor-Leste has the narrowest gap in levels of own-consumption between urban and rural households. This is largely due to the very rural structure of the economy and to the low per capita income.

3. NATIONAL POVERTY LINES

National poverty lines measure the incidence of relative poverty within a country and are calculated as food poverty lines (FPLs) and basic-needs poverty lines (BNPLs). (See Box 6.) The FPL gives an indication of the poorest of the poor in society while the BNPL measures the incidence of basic-needs hardship. The FPL indicates the number of households (or individuals) reporting insufficient income or access to their own production to meet a minimum dietary intake for themselves and/or their families. The BNPL includes not only food but also a basket of other essential non-food expenditures (goods and services) that each household/individual needs to maintain a basic standard of living. While national poverty lines are not directly comparable across international boundaries (each country has different costs and prices), the extent of relative poverty in each country can be compared against national poverty yardsticks. Wherever possible, national poverty lines are derived from data available in HIES. The comparative poverty lines for a selection of PDMCs adjusted to US dollar 2002 prices are illustrated in Figure 1. In the context of PDMCs, it is important to remember that hardship and poverty are associated with difficulties in meeting basic needs rather than with the condition of absolute poverty or lack of food. It means that low-income households experience periodic cash shortages and that households unable to meet all their basic needs experience hardship.

The calculation of the unit cost of the poverty-line diet provides an insight into the relative PPPs among the PDMCs. Table 7 and Figure 1 indicate the comparative cost (PPP) of a common unit of 100 calories in the basic poverty-line diet for the countries listed (see Box 7). FSM has the highest cost per unit of calories at US\$0.404 in 2002 prices reflecting the high import and low local produce content in the diet. The unit calorie costs in Kiribati, Samoa, Fiji Islands, Tonga, and Tuvalu follow in descending order with the costs in PNG and Timor-Leste the lowest at only around one third of those in FSM. This reflects the high proportion of locally produced food and subsistence production in the latter two countries. Despite the wide differences in the values of the poverty lines and the unit cost of calories in the basic diet, FSM, PNG and Timor-Leste have among the highest incidences of poverty in the region. Urban households in Fiji Islands followed by those in FSM and Tonga have the highest basic-needs poverty lines. In Fiji Islands and Tonga, these primarily reflect

Box 6 National Poverty Lines

The value of the national basic-needs poverty line (BNPL) comprises two components: the cost of a basic family diet which makes up the food poverty line (FPL) and an allowance to meet the costs of basic, non-food expenditures. The latter is added to the income level delineating the FPL to reach a value for the BNPL in recognition of the fact that an individual/family cannot be expected to survive on food alone.

The FPL is a calculation of the minimum income (or expenditure) required to provide an individual with the minimum daily intake of calories required for human survival which is internationally set at approximately 2200 calories/day. In other words, it represents the cost of a basket of food produced or purchased by the consumer that is sufficient for survival; it does not necessarily represent what is actually desired or consumed.

The allowance for basic, non-food expenditures is an estimate of additional costs that might be incurred by an individual/family in the lowest income or expenditure quintile. It includes only the highest priority non-food items such as housing, essential transport, utilities, school fees, clothing and contributions to the church and other social obligations. The expenditure patterns of the poorest quintile of households is usually used to ensure that luxury items are excluded.

The BNPL is calculated by combining these two measures; however, a single national BNPL does not normally provide details of geographic and urban/rural variations in income/expenditure levels, living conditions, consumption of own-food production, and the ratio of food to non-food expenditures. Regional BNPLs are therefore developed to reflect these differences. It has been found that urban households generally have higher average incomes/expenditures and higher non-food expenditures than rural households.

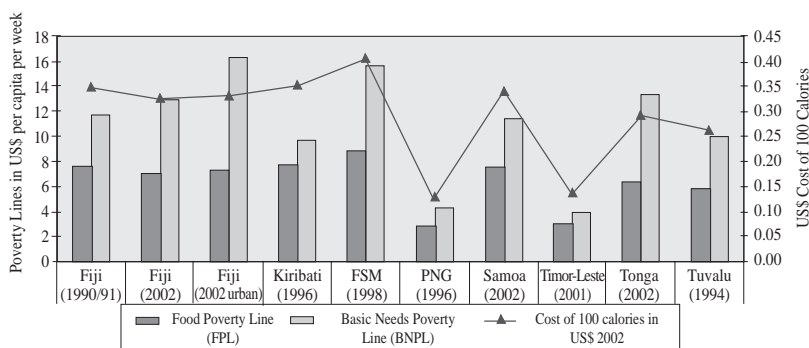
The calculation of poverty lines for ADB's PDMCs is still in its infancy. Further work needs to be done to develop a consistent methodology to address the valuation of subsistence production that plays such an important role in the rural economies of many Pacific states. There is also a need to establish appropriate poverty-line diets for all countries and to develop a set of purchasing power parities to enable calculation of more accurate estimates of poverty incidence based on the indicator of US\$1 per day.

Table 7
Purchasing Power Parities
Notional Cost of 100 Calories in Poverty Line Diets

<i>Selected PDMCs</i>	<i>Notional Cost of 100 Calories US\$</i>
FSM	0.404
Kiribati	0.351
Samoa	0.341
Fiji Islands	0.325
Tonga	0.323
Tuvalu	0.262
Timor-Leste	0.136
PNG	0.130

ADB Estimates, TA 6002-REG and 6047-REG and TLS

Figure 1
National Poverty Lines US\$ 2002 Prices



Source: 1997 Fiji Islands Poverty Report, UNDP; Timor-Leste Survey of Sucos 2001; Other countries ADB estimates from TA 6002-REG, & TA 6047-REG

relatively high non-food components in the expenditures of even low-income households. In FSM, the high BNPL value reflects the high import content and relatively low value of domestic agriculture in food consumption plus the high cost of public utilities and services. In contrast, the low poverty line values for PNG and Timor-Leste generally reflect their low levels of per capita income.

The incidence of poverty, i.e., the proportion of the population and/or households with incomes below national BNPLs, varies widely among PDMCs (see Table 8 and Figure 2). Countries with the lowest per capita

Box 7
Purchasing Power Parity

Purchasing power parities (PPP) attempt to measure the cost of an identical basket of goods in different countries to indicate differences in the relative cost of living or spending power of a currency unit. In this case, the basket of goods would be a unit of 100 calories of nutrition rather than a basket of specific items. This takes into account different dietary preferences and the differing availability of local and imported items in the overall diet. PPP theory says that in the long run, exchange rates should move towards a level that will eventually equalize prices across all countries. A simple and well-known international PPP measure is provided by the *Economist* magazine's Big Mac Index that compares the prices of a McDonald's Big Mac across all countries where they are sold.

Table 8
National Poverty Incidence in the PDMCs

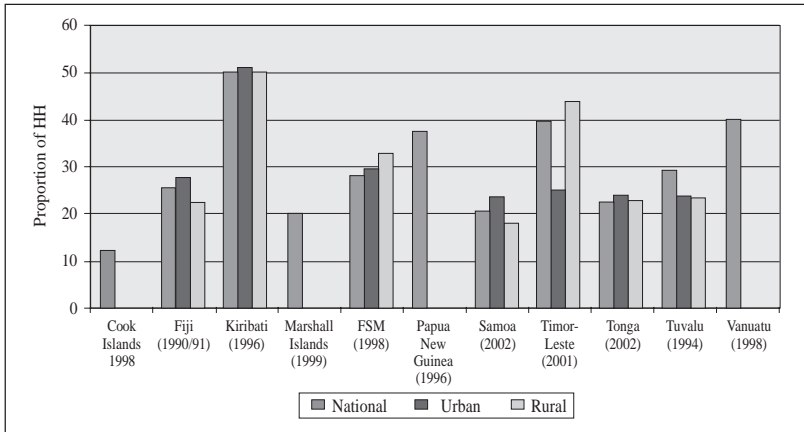
<i>PDMC</i>	<i>Population Below the Basic Needs Poverty Line</i>			<i>Data Source</i>
	<i>National</i>	<i>Urban</i>	<i>Rural</i>	
Cook Islands (1998)	12.0			HIESS
Fiji (1990/91)	25.5	27.6	22.4	HIESS
Kiribati (1996)	50.0	51.0	50.0	HIESS
Marshall Islands (1999)	20.0			Census
FSM (1998)	27.9	29.5	32.9	HIESS
Papua New Guinea (1996)	37.5			HIESS
Samoa (2002)	20.3	23.3	17.9	HIESS
Timor-Leste (2001)	39.7	25.0	44.0	TLSS
Tonga (2002)	22.3	23.6	22.8	HIESS
Tuvalu (1994)	29.3	23.7	23.4	HIESS
Vanuatu (1998)	40.0			HIES

HIES = household income and expenditure survey, TLSS = Timor-Leste Living Standard Measurement Survey. RMI incidence calculated using the income data (Table H.18) of the 1999 Census.

RMI and Vanuatu US\$1-a-day poverty based on 1999 prices for RMI and 1998 prices for Vanuatu.

Source: Work carried out under TA 6002-REG (ADB, 2002. *Technical Assistance for Consultation Workshops for Poverty Reduction Strategies in Selected Pacific Developing Member Countries*. Manila) and TA 6047-REG (ADB, 2002. *Technical Assistance for the Preparation of National Poverty Reduction Strategies in Pacific Developing Member Countries*. Manila).

Figure 2
Proportion of Households with Per Capita Incomes Below National Basic Needs Poverty Lines



Source: 1997 Fiji Islands Poverty Report, UNDP; Timor-Leste Survey of Sucos 2001; Other countries ADB estimates from TA 6002-REG, & TA 6047-REG

GNI, (Kiribati, PNG, Timor-Leste, and Vanuatu) tend to have the highest levels of poverty, although FSM, which has one of the highest GNI per capita, appears to be the exception to this rule. The high level of inequality in income distribution between those who are formally employed and those who are not is also a factor and is discussed in the next section.

Countries that have a strong subsistence agricultural sector and an active local produce market (which FSM does not have) tend to have lower levels of poverty in the rural areas compared to the urban centers. Fiji Islands, Samoa, and Tonga are examples in contrast with FSM where there is little marketing of local agricultural produce. In general, rural households also tend to have lower non-food expenditures thus the costs of their basic needs tend to be lower than those of urban households. For all countries for which data are available, the average incidence of basic-needs poverty is around 25%; in other words, one in four households has income/expenditures below the national poverty line. It is slightly lower in Samoa and Tonga and higher in Kiribati, PNG, Timor-Leste, and Tuvalu.

For all countries for which data are available, the average incidence of basic-needs poverty is around 25%.

This does not necessarily imply, however, that these families were hungry, destitute, or living in absolute poverty. It means, rather, that they are likely to have insufficient income/expenditure to meet the average daily

requirements for a basic minimum diet plus the costs of other essential non-food items. It means that they are daily faced with difficult choices on how to spend their limited cash resources. Should they pay school fees, should they buy food for the family, or should they send their children to school without lunch? Should they meet their community obligations, or should they pay their power or water bills? They may be making up the shortfalls by additional consumption of their own produce, by borrowing from others, or by doing without food or other essentials from day to day. In some cases they are undoubtedly hungry or at best poorly nourished, and certainly they face hardship.

4. LEVELS OF INEQUALITY

Income inequality in the Pacific has generally been low because of traditional social mechanisms that oblige people to share what they have with their families and communities. Generally, however, redistribution takes place only within the confines of the clan or the immediate family, and if the clan/family is poor, the opportunities for redistribution are diminished. Moreover, rapid urbanization and the gradual weakening of traditional institutions are slowly eroding the practice. Social stigma from diseases like HIV/AIDS has also led to exclusion from traditional support, especially in PNG. In the absence of alternative, comprehensive social welfare systems, income gaps and inequality are thus increasing. The PAH found this to be especially true for the elderly, the infirm, single parents, and those without regular jobs and incomes.

As economic activity has become more concentrated in and around urban areas,¹³ the disparity between urban and rural incomes has increased prompting significant urban migration and the associated problems of unplanned urban growth. Recent urban migrants are often unemployed or earn low incomes. They cannot afford adequate housing, so they live in informal settlements without services. That makes growing inequality both a rural and an urban issue.

Table 9 compares Gini coefficients¹⁴ for selected PDMCs (where this information is available) with countries in Asia. Based on this comparison, Pacific societies may actually appear to be marginally less equal than Asian societies. It is also interesting to note that the countries with the highest

¹³ For example it has been estimated that 70% of Samoa's domestic economic activity occurs either directly or indirectly in the Apia urban area. (Apia Urban Management Study, 2001, ADB, Working Paper 6).

¹⁴ The Gini coefficient is a measure of inequality where 0 = perfect equality and 1 = absolute inequality.

Table 9
Gini Coefficients in Selected PDMCs and Comparisons

<i>DMC</i>	<i>Gini Coefficient</i>	<i>Survey Year</i>
Pacific DMCs		
Fiji Islands	0.46	1990-91
Micronesia, Fed. States of	0.41	1998
Papua New Guinea	0.46	1996
Samoa	0.43	2002
Timor-Leste	0.37	2001
Tonga	0.42	2002
Tuvalu	0.43	1994
East Asia		
China, People's Rep. Of	0.40	1998
Korea, Rep. Of	0.32	1993
Mongolia	0.33	1995
Southeast Asia		
Cambodia	0.40	1997
Indonesia	0.32	1999
Lao PDR	0.37	1997
Malaysia	0.49	1997
Philippines	0.46	1997
Thailand	0.41	1998
Viet Nam	0.36	1998
South Asia		
Bangladesh	0.34	1995-96
India	0.38	1997
Nepal	0.37	1995-96
Pakistan	0.31	1996-97
Sri Lanka	0.34	1995
Central Asia		
Azerbaijan	0.36	1995
Kazakhstan	0.35	1996
Kyrgyz Republic	0.35	1999
Tajikistan	0.35	1998
Turkmenistan	0.41	1998
Uzbekistan	0.45	1998

Note: The Gini coefficients are not strictly comparable across countries due to underlying differences in household survey methods and type of data collected, including whether income or consumption expenditure is used as living standard indicator.

Sources: Asian Development Bank, Discussion Papers on Poverty Assessment, various years; United Nations Development Programme, *Human Development Report 2002*; World Bank, *2002 World Development Indicators*.

incidences of poverty, i.e., Fiji Islands, FSM, and PNG, also appear to have the highest levels of inequality though Fiji Islands and FSM have the highest per capita GNIs while PNG has the lowest.

Inequality can also be gauged by looking at how total income is distributed by income groups. Table 10 compares the distribution of income or consumption of selected Pacific and Asian countries across percentiles of population. Again, based on this comparison, Pacific societies may appear to be less equal than the societies in much of Asia. For PDMCs in general, the lowest quintile receives around 5% of income while the top quintile receives 50%.

Although the data suggest that relative income poverty and inequality of income distribution appear to be as bad if not worse than in many countries in Asia, poverty in the Pacific is rarely absolute or extreme. This apparent inconsistency may largely be explained by the previously discussed difficulties of measuring subsistence production. There is also no doubt that while traditional social systems in the Pacific may be weakening, they nevertheless still play a very important role in mitigating the extremes of hardship and poverty. As monetization gathers pace, the gap between those in the cash economy and those in the traditional subsistence economy widens. Egalitarian communities do, however, continue to exist in more isolated, traditional areas. In the Lau Group of the Fiji Islands, for example, the Gini averaged just over 0.3 compared with 0.46 nationally.

Frequently, increased spending has not fully translated into more or better educational services.

5. EDUCATION INDICATORS

While the opinions of the poor on income poverty are supported by data, this is not entirely the case for their social concerns particularly with regard to access to and delivery of quality primary education (MDG 2).

Where data are available, levels of literacy (Figure 3) would appear to have improved or at least not to have deteriorated in the 15–24 age group. However, with the exception of PNG and Vanuatu, whilst gender disparities in primary education seemed to increase between 1990 and 1998, the ratios all converged towards equity in primary enrollment in the period between 1998 and 2001, (Figure 4).

Whether measured as a proportion of the government's recurrent budget or as a proportion of GDP, many PDMCs have relatively high levels of spending on education (see Table 11). Frequently, however, increased spending has not fully translated into more or better educational services. In a

Table 10
**Distribution of Income/Consumption based on
 Percentiles of Population of Selected DMCs and Comparisons**

<i>DMC</i>	<i>Survey Year</i>	<i>% Share of Income or Consumption</i>			
		<i>L10</i>	<i>L20</i>	<i>H20</i>	<i>H10</i>
Pacific DMCs					
Fiji Islands	1990-91	1.9	5.0	50.0	35.0
Micronesia, Fed. States of	1998	1.3	3.6	55.5	38.7
Papua New Guinea	1996	1.7	4.5	56.5	40.5
Samoa	2002	2.4	6.2	45.3	29.3
Timor-Leste	2001	—	7.0	45.0	—
Tonga	2002	1.6	4.9	47.5	30.9
Tuvalu	1994	1.0	5.6 ^a	53.5 ^a	29.1
East Asia					
China, People's Rep. of	1998	2.4	5.9	46.6	30.4
Korea, Rep. of	1993	2.9	7.5	39.3	24.3
Mongolia	1995	2.9	7.3	40.9	24.5
Southeast Asia					
Cambodia	1997	2.9	6.9	47.6	33.8
Indonesia	1999	4.0	9.0	41.1	26.7
Lao PDR	1997	3.2	7.6	45.0	30.6
Malaysia	1997	1.7	4.4	54.3	38.4
Philippines	1997	2.3	5.4	52.3	36.6
Thailand	1998	2.8	6.4	48.4	32.4
Viet Nam	1998	3.6	8.0	44.5	29.9
South Asia					
Bangladesh	1995-96	3.9	8.7	42.8	28.6
India	1997	3.5	8.1	46.1	33.5
Nepal	1995-96	3.2	7.6	44.8	29.8
Pakistan	1996-97	4.1	9.5	41.1	27.6
Sri Lanka	1995	3.5	8.0	42.8	28.0
Central Asia					
Azerbaijan	1995	2.8	6.9	43.3	27.8
Kazakhstan	1996	2.7	6.7	42.3	26.3
Kyrgyz Republic	1999	3.2	7.6	42.5	27.2
Tajikistan	1998	3.2	8.0	40.0	25.2
Turkmenistan	1998	2.6	6.1	47.5	31.7
Uzbekistan	1998	1.2	4.0	49.1	32.8

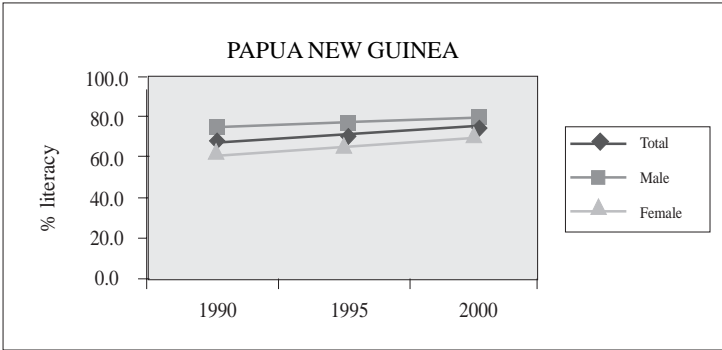
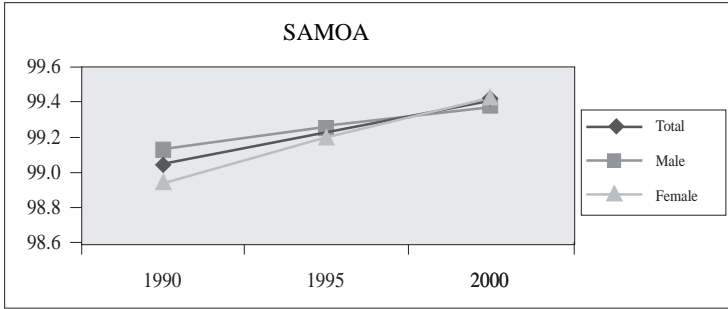
H10 = highest decile; H20 = highest quintile; L10 = lowest decile; L20 = lowest quintile, — = not available.

^a Quartiles for Tuvalu.

Note: The distribution indicators are not strictly comparable across countries due to underlying differences in the household surveys' method and type of data collected, including whether income or consumption expenditure is used as living standard indicator.

Sources: Asian Development Bank, Discussion Papers on Poverty Assessment, various years; United Nations Development Programme, *Human Development Report 2002*; World Bank, *2002 World Development Indicators*.

Figure 3
Literacy Rate of 15-24 Year Olds, Selected PDMCs, 1990, 1995, 2000
(MDG 2)



Source: UNESCO, Institute for Statistics (<http://portal.unesco.org/uis>)

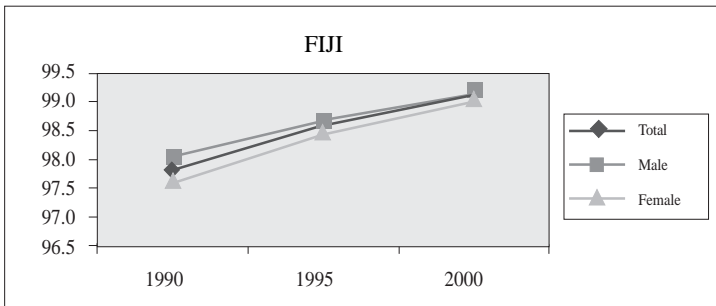
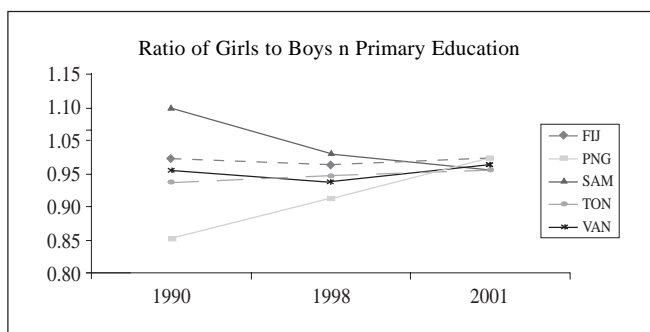


Figure 4
Ratio of Girls to Boys in Primary Education, Selected PDMCs, 1990 and 1998 (MDG 3)



Sources: UNESCAP, *Promoting the Millennium Development Goals in Asia and the Pacific* (2003); United Nations Educational, Scientific and Cultural Organization (UNESCO), Millennium Indicators Database <http://millenniumindicators.un.org/>.

Table 11
Public Expenditure on Education

<i>PDMC</i> (selected)	<i>% of GDP</i>	<i>% of Government</i> <i>Expenditure</i>	<i>Year</i>
Cook Islands ^a	—	13.1	2000
Fiji Islands	5.3	17.1	2002
Kiribati	20.5	23.4	2001
Marshall Islands, Rep. Of	11.3	21.0	2000
Micronesia, Fed. States of ^a	9.6	17.6	1998
Nauru ^a	—	7.0	2000
Papua New Guinea ^a	2.3	17.5	2000
Samoa	4.9	22.6	2001
Solomon Islands ^a	3.6	15.4	2000
Timor-Leste ^b	4.1	25.0	2002
Tonga	6.0	14.0	2002
Tuvalu	29.6	22.2	2001
Vanuatu	5.5	26.4	2001

GDP = gross domestic product, — = not available.

^a Estimates from UNESCO Institute for Statistics.

^b Consolidated Fund for East Timor (CFET) data from the 2002 Revised Budget.

Source: ADB, Discussion Papers under TA 6002-REG (ADB. 2002. *Technical Assistance for Consultation Workshops for Poverty Reduction Strategies in Selected Pacific Developing Member Countries*. Manila.) and TA 6047-REG (ADB. 2002. *Technical Assistance for the Preparation of National Poverty Reduction Strategies in Pacific Developing Member Countries*. Manila.)

review of socio-cultural issues confronting the Pacific,¹⁵ Penelope Schoeffel commented that, “Most countries appear to have experienced a serious decline in the quality of primary and junior secondary education.” In many PDMCs, spending on teachers and other staff absorbs a very high proportion of the total education budget (in FSM 90% of 2002 core expenditure was allocated to staff costs) leaving very little for operational expenses and for maintenance of facilities. Consequently, many primary schools, particularly those in rural areas and outer islands, are frequently without books and other teaching materials. As Pritchett and Filmer¹⁶ found in their analysis, spending on school materials had a rate of return ten to one hundred times larger than additional spending on teachers. However expenditure on school materials is usually reduced before expenditure on teachers’ salaries is.

In Fiji Islands, recent figures from the Ministry of Education’s Special Projects Unit revealed that only 56% of those who commenced their schooling in 1988 continued through to form 6. According to the figures, the highest dropout rate occurred in forms 4 and 5 after completing the Fiji Islands junior exams. A total of 18% of form 4 students, mostly indigenous Fiji Islanders, did not progress to form 5.¹⁷

In the Marshall Islands, there is an apparent variation in the quality of education between public and private primary schools. Pacific Islands Literacy Level tests¹⁸ show pass rates for public primary schools in mathematics as 37% compared to 70% for private schools. In English, the rates are 21% against 63% in private schools, and for the Marshallese language they are 30% against 45%.

In Timor-Leste, high repeat and dropout rates were reported in 2001. Between 20–25% of children repeated, and around 10% dropped out in each primary and junior secondary grade. Notwithstanding these high dropout rates, overall levels of enrolment as recorded by the Timor-Leste Living Standards Survey (TLLS) increased dramatically between 1999 and 2001. The improvements were especially noticeable at the primary level generally among poor, female, and rural students. Participation rates for poor male and female primary students rose from 64% and 67% respectively, to 76% and 79 % respectively between the two years.

¹⁵ Schoeffel, Penelope. 1996.

Socio-Cultural Issues and Economic Development in the Pacific Islands. Manila.

¹⁶ Pritchett, Lant and Deon Filmer. 1999. “What Educational Production Functions Really Show: A Positive Theory of Education Spending” *Economics of Education Review* 18, no. 2 (April): 223 - 239; quoted in Easterly 2002

¹⁷ Reported by Radio Fiji/Fijilive March 31 2004. The Fiji Teachers’ Union claimed that poverty was a major contributing factor to the high rate of dropouts with parents “being unable to afford to invest in their kids.”

¹⁸ As reported by the South Pacific Board for Educational Assessment

Tuvalu reported a serious decline in Fiji Islands Junior Certificate pass rates from 61% in 1994 to 13% in 2001 to 37% in 2002. According to the PAH in Vanuatu, families are withdrawing children from public primary schools because of declining standards. Consequently, only about 55% of those over the age of 15 had completed primary school. In PNG, families were withdrawing children from school to work on plantations, particularly vanilla plantations, for two reasons: demand for labor has grown because of increasing vanilla prices, and the returns on education are negative given the low probability of employment after attending school.

Similar responses were obtained on the PAH in Pohnpei, FSM. Although education is free, the associated costs of uniforms, bus fares, books, materials, lunch money, and “voluntary” school contributions prevent some low-income families from enrolling their children. Poor roads and irregular transport services were other key reasons why primary and secondary students were dropping out.

Distance can also be a critical factor in many parts of the Pacific. For example, Satawal is the island farthest away from the capital of Yap. It has only a primary school, and employment is limited to government teaching and health positions. Children and young people have to go to Yap for secondary and higher education, maternal health care, and employment opportunities. A similar situation applies in the outer islands of all the atoll countries as well as in the remoter rural parts of PNG, Tonga, and Vanuatu. Due to lack of educational qualifications or skills, young people who drop out of school early end up idle with little chance of gainful employment until adulthood. They also are a source of concern to their families and communities when they get involved in drugs and alcohol. Lack of motivation, low aptitude, and early marriages were other reasons identified in the PAH as to why young people dropped out of school early.

There are growing urban-rural disparities in both literacy and numeracy in many countries.

There are growing urban-rural disparities in both literacy and numeracy in many countries. In nearly every PDMC, public education expenditure tends to be concentrated in the urban and peri-urban centers. Rural schools and students do not get an equitable share of the public resources devoted to education. Access to quality facilities and teaching standards is reported to be weakest in the rural areas and outer islands of Fiji Islands, FSM, Kiribati, the Marshall Islands, and Vanuatu. It is very likely that the situation would be similar in Solomon Islands. In Tonga, although formal education is generally well addressed and equitable across the country, those living in the rural areas are disadvantaged at the postsecondary level since all technical and vocational training is centered on Tongatapu.

Some PDMCs are, however, showing signs of improvement in educational performance and service delivery. In Kiribati, the establishment of 19 new junior secondary schools in the past 5 years has reportedly made a significant improvement in the level of access for outer island children. However, as so often happens, little consideration has been given to the sustainability of these schools in terms of budgets or staffing. Nor does it appear that much consideration has been given to what happens to the children once they leave school as little has been done to open the economy to new investment and employment creation.

In Samoa, retention rates reported by the ministry of education increased from 95% in 1995 to 101% in 2001 for the 5–14 age group, and from 45% to 49% for the 15–19 age group. During the same period, dropout rates decreased from 18% to 10% in Levels 8 and 9 and from 45% to 39% in Levels 12 and 13. In the Marshall Islands, dropout rates at the primary level were low at 2% (1998/99), but they were still high at the secondary level at 44%. In Tonga, where the gross enrolment rate into secondary education is high at around 66%, the average secondary dropout rate is low at 5.5% (2000) across all years.

The contributing factors to poor educational performance include (i) poor quality of teaching staff; (ii) difficulties in delivering equitable services in a geographically scattered country with high population concentrations in the urban areas; (iii) deteriorating infrastructure; and (iv) a fragmented curriculum. According to national authorities in Fiji Islands, skill profiles of primary teachers in 1997 showed that 99% had some formal training; however only about 4% had degree or diploma qualifications while 16% had not even completed Form 5. In the Marshall Islands, nearly half the teachers have only a secondary school diploma as their highest qualification. In Solomon Islands, about 26% of primary teachers had no formal teacher training, and over 80% had no more than a Form 3 (Grade 9) education (1996). In Vanuatu, about a quarter of all primary teachers were untrained (1994). In many countries there is a need to review the curriculum at both the primary and secondary levels to match education with the skills needed in the labor market. Technical education in agriculture, fisheries, and tourism at secondary and post-secondary levels would help to raise productivity and to improve job access in these sectors.

At the heart of many of the problems in education are the lack of ownership and the lack of sound, effective management. Despite apparently high levels of resources, schools are frequently run-down and poorly equipped, teachers and staff are often poorly motivated and sometimes poorly trained, and the curricula they

At the heart of many of the problems in education are the lack of ownership and the lack of sound, effective management.

deliver may be poorly developed, uncoordinated, and badly integrated. Many of these problems stem from weaknesses or failures in the structure and management of controlling ministries and departments. Improved management would almost certainly lead to improvements in quality.

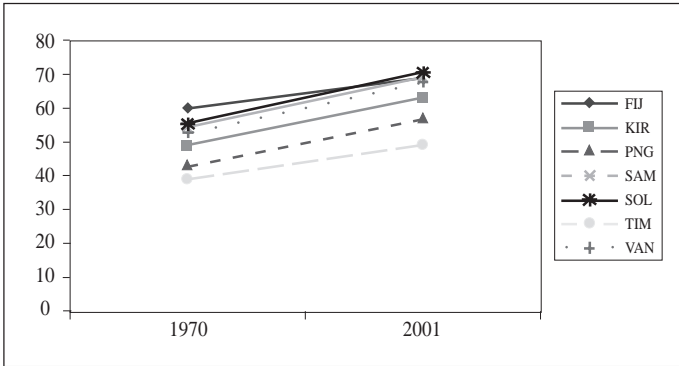
As schools are deprived of resources by poor budgeting and/or poor management, parents are often asked to contribute more, either directly through fees but more often indirectly through in-kind donations and other fund-raising activities. This places an additional burden on family finances particularly in the rural areas where cash incomes are frequently smaller.

Ministries and departments of education often think of education as an end in itself and reckon their effectiveness on the number of years of schooling provided rather than on the quality of teaching, the relevance of the curriculum, and the employability of students when they leave school. Few ministries of education have any regular, formal dialogue with employers about skill needs. (Fiji Islands and PNG are among the few that engage in such consultations.) The theoretical goal is to enable pupils to get white-collar jobs in government or in the private sector even though the number of such jobs created each year is tiny in relation to the numbers finishing school. At the same time, there are not enough technically skilled people to meet the demands of employers. Most people understand these issues and put technical skills high on their lists of priority interventions. School officials are, however, generally located in urban centers and are more concerned with academic qualifications for their own children. Thus resource allocations and educational priorities may be distorted by the demands of the few over the needs of the many. Therefore, although MDG indicators for enrolment rates are generally on target in the PDMCs, with the exception of PNG, Solomon Islands, and Timor-Leste, weaknesses remain in the educational systems.

6. HEALTH INDICATORS

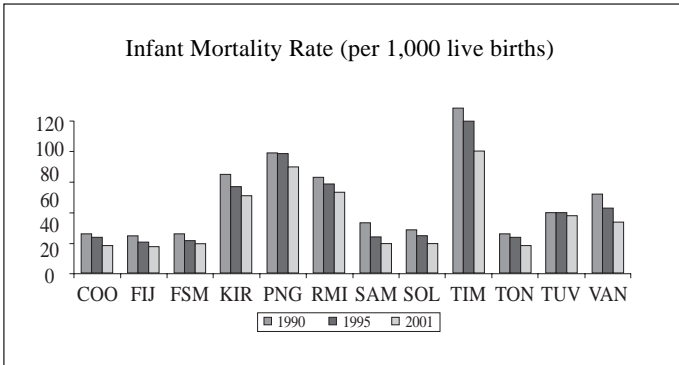
In recent decades there appear to have been marked improvements in health in many PDMCs. Life expectancy has increased (Figure 5), infant and child mortality rates have decreased (Figure 6 and Figure 7), and immunization coverage has been extensive (Table 12). The nature of the problem is, however, changing. The “benefits” of development have included a rapid increase in the incidence of diseases of modern society: diabetes, hypertension, and obesity. Increasing urbanization with areas of very poor housing and cramped living conditions has perpetuated infectious diseases like TB, dengue fever, and malaria. There is also a worrying rise in the number of HIV/AIDS cases in a few countries and an equally worrying lack of data on

Figure 5
Life Expectancy, Selected PDMCs, 1970 and 2001



Source: UNICEF, *The State of the World's Children 2003*.

Figure 6
Child Mortality Rate, PDMCs^a, 1990^b, 1995^b, and 2001
 (MDG 4)

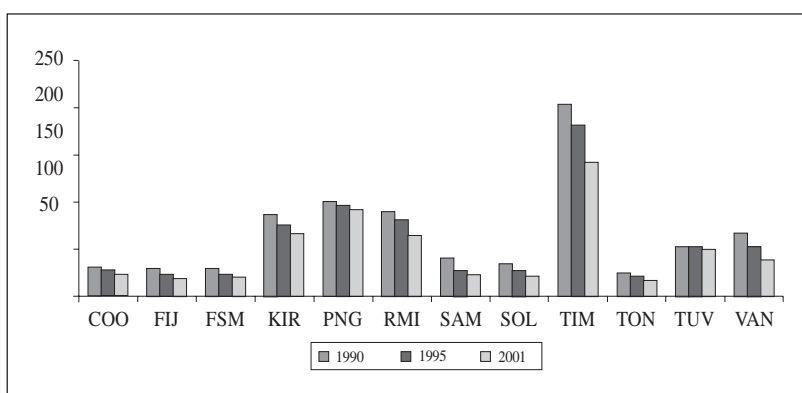


Sources: UNDP, *East Timor Human Development Report 2002*; UNESCAP, *Promoting the Millennium Development Goals in Asia and the Pacific* (2003); UNICEF, *The State of the World's Children 2003*; UNICEF, End-Decade Databases 2002 (<http://childinfo.org/cmtr/>).

^a No available data for Nauru.

^b For East Timor, 1990 actually refer to 1993 data, and 1995 are actually 1996 data.

Figure 7
Under-five Mortality Rate (per 1,000 live births)



Sources: UNDP, *East Timor Human Development Report 2002*; UNESCAP, *Promoting the Millennium Development Goals in Asia and the Pacific (2003)*; UNICEF, *The State of the World's Children 2003*; UNICEF, End-Decade Databases 2002 (<http://childinfo.org/cmr/>).

Table 12
Immunization Coverage of One-Year-Old Children, PDMCs, 2001
(in Percentages)

PDMC	TB	DPT3	Polio3	Measles	HepB3
Cook Islands	99	92	92	84	92
Fiji Islands	99	90	99	90	93
Kiribati	85	85	88	76	85
Marshall Islands, Rep. of ^a	NA	80	80	80	80
Micronesia, Fed. States of	39	75	79	84	81
Nauru	99	95	99	95	95
Papua New Guinea	74	56	33	58	42
Samoa	98	93	92	92	98
Solomon Islands	85	78	80	NA	78
Timor-Leste	72	35	34	NA	NA
Tonga	91	94	95	93	96
Tuvalu	99	96	96	99	99
Vanuatu	90	93	87	94	69

DPT3 = Diphtheria, pertussis and tetanus (3 doses), HepB3 – 3 doses of hepatitis B vaccine, NA = not available.

^a Estimates from ADB's Discussion Paper under RETA 6002 (ADB. 2002. *Technical Assistance for Consultation Workshops for Poverty Reduction Strategies in Selected Pacific Developing Member Countries*. Manila.)

Source: UNICEF, *The State of the World's Children 2003*

Many PDMCs are now facing a double burden of prevention and treatment of persistent, traditional, infectious ailments along with a rising tide of new, non-communicable diseases.

the situation in others. In short, many PDMCs are now facing a double burden of prevention and treatment of persistent, traditional, infectious ailments along with a rising tide of new, non-communicable diseases.

The information in the preceding charts may hide important variations in each country. According to the United Nations Children's Fund (UNICEF), infant mortality in PNG has ranged from a high of 111 in Gulf Province to a low of 40 in Manus. Of concern

also is the fact that infant mortality increased from 72 per 1000 live births in 1980 to 82 per 1000 in 1991 then improved to 79 per 1000 in 2002. Infant mortality in Kiribati reportedly varies from 13 to 90 per 1,000 on some islands. According to the 1994 census, infant mortality in FSM varied from an average of 39 for Yap State to 53 for Chuuk.

While infectious and communicable diseases have been brought under control in some countries, in others, most notably where poverty is highest, they are still the greatest threat to health. The impact on already poor families of the loss or disability of a family breadwinner from any of these diseases can be a major cause of serious hardship and poverty.

The incidence of so-called "lifestyle" diseases in the PDMCs now rivals that of countries like the U.S. and Australia and is placing an ever-increasing strain on hospital-oriented, curative health services. Furthermore, many of the risk factors for these diseases are becoming more widespread in the Pacific. For example, prevalence of smoking has been recorded at 40–80% in the region.¹⁹ The current situation in Tuvalu as recorded in the 2002 census is in Box 8.

The incidence of so-called "lifestyle" diseases in the PDMCs now rivals that of countries like the U.S. and Australia and is placing an ever-increasing strain on hospital-oriented, curative health services.

The shift from traditional diets of fish, taro, breadfruit, and bananas to imported white rice, mutton flaps, tinned corned beef, and sugar has resulted in high intakes of fat, salt, and carbohydrates and reduced intake of fiber.

Malnutrition among children is also a concern in some PDMCs. A 1991 national nutrition survey in the Marshall Islands found that 40% of school age children suffered from it. In Samoa, malnutrition is mainly associated with poor dietary choices. Generally, under-nutrition is more prevalent in the rural areas whereas obesity is common in urban areas. This trend may be related to lack of physical activity and to nutritional factors such as socio-economic status, availability of homegrown food in rural areas, and access

¹⁹ Secretariat of the Pacific Community and the World Bank. 2003. "Non-communicable diseases in Pacific Island countries: Disease burden, economic cost and policy options." Noumea, New Caledonia: SPC

Box 8

Tobacco and Alcohol Consumption: The Case of Tuvalu

The 2002 census indicates that 49% of males and 3% of females on Funafuti regularly consume alcohol. For the outer islands, the proportions were 45% for males and 1% for females. Among the 15–19 and 20–49 age groups, 59% and one third of males reported regular consumption respectively.

For smokers, the census indicated that on Funafuti two thirds of all males and one fourth of all females over 15 years of age were smokers. On the outer islands, the proportions were 58% and 24% respectively. Nationally in the 15–19 age group, the use of tobacco was 28% for males and 4% for females. For those between the ages of 20–49 and the rates 60% and 25% for males and females respectively.

to inexpensive, imported junk food in the urban areas. A study of school children in Fiji Islands²⁰ found that in the urban centers, 24.2% of children were overweight compared to only 8.7% of school children in rural areas. Conversely, 19.4% of children in urban schools were reported to be underweight compared to 32.9% in rural schools.

There are notable urban-rural (including outer islands) discrepancies in the quality of and access to basic health services.

In considering health issues, Schoeffel²¹ also states, “Increasing emphasis on curative services and reduced per capita expenditure on health has led to a widespread decline in rural and primary services.” As with education, there are notable urban-rural (including outer islands) discrepancies in the quality of and access to basic health services. Rural and outer island services lack funding for essential medical supplies and maintenance of facilities because central hospitals in the urban areas and overseas referrals tend to absorb most of the available resources. With poor facilities and difficult transportation and communications, many women on the outer islands are isolated from maternal and infant health services. Nurses and village health assistants often work in very difficult circumstances with poor conditions and inadequate health supplies. In serious cases they may be

²⁰ Nand, N. and Oman, K. Ministry of Health. 1999. The Prevalence of Malnutrition in Urban and Rural Fijian School children: A Cross-Section Study.

²¹ Op cit.

unable to cope with the treatment required, and the patient's survival may depend on the availability of transport to an urban hospital.

As in the education sector, public spending on health services (Table 13) may not generate commensurate health outcomes due to the high cost of service delivery in scattered island countries and to the concentration of resources on centralized curative services. The resources allocated annually to health in the region vary considerably from only US\$16 per capita in PNG to over US\$200 per capita in Cook Islands and RMI. Public spending needs to take into account the changing health care needs brought about by the shift in lifestyles. As mentioned previously, health services are facing a double burden. With limited resources there is a need to reinforce the system as a whole to enable it to properly handle curative and preventive measures for communicable diseases and to provide health education, early detection, and case management for non-communicable diseases as these measures can greatly reduce future curative costs.

Table 13
Public Expenditure on Health

	<i>% of GDP</i>	<i>% of Government Expenditure</i>	<i>Expenditure Per Capita (US\$)</i>	<i>Year</i>
Cook Islands	5.3	13.0	227	2001
Fiji Islands	2.7	8.6	70	2002
Kiribati	12.7	16.1	63	2001
Marshall Islands, Rep. Of	5.8	10.8	204	2000/01
Micronesia, Fed. States of ^a	5.4	9.8	116	2002
Nauru ^a	na	8.9	Na	1995
Papua New Guinea ^a	1.9	6.2	16	1999
Samoa	4.0	18.8	57	2001/02
Solomon Islands	3.6	11.8	Na	1997
Timor-Leste ^b	1.6	9.0	Na	2002
Tonga	3.5	11.5	48	2001/02
Tuvalu	7.4	5.5	115	2001
Vanuatu	2.8	12.4	33	2001

NA = not available.

^a WHO, Western Pacific Region Health Data Bank (rev/2001) (<http://wpro.who.int>)

^b Consolidated Fund for East Timor (CFET) data from the 2002 Revised Budget

Sources: ADB, *Cook Islands 2001 Economic Report: Policies for Progress* (2002); ADB, Discussion Papers under RETA 6002 (ADB, 2002, *Technical Assistance for Consultation Workshops for Poverty Reduction Strategies in Selected Pacific Developing Member Countries*. Manila) and RETA 6047 (ADB, 2002, *Technical Assistance for the Preparation of National Poverty Reduction Strategies in Pacific Developing Member Countries*. Manila); ADB, *Solomon Islands 1997 Economic Report* (1998).

7. ENVIRONMENTAL HEALTH

Making inter-country comparisons and assessing progress in relation to other MDG indicators including access to improved drinking water and sanitation facilities (MDG 7) can be difficult. This also applies to the data on unemployment (MDG 8). Although most of the data needed for environmental health indicators are collected in national censuses and HIES, there is some inconsistency in definitions between countries and/or over time. The data on the status of living conditions, public health, and environmental quality can therefore be misleading. The differences in national definitions of what constitute improved water supplies and sanitation facilities are summarized in Table 14.

In the case of water, “access” data usually refer to physical proximity but have little relevance to water quality. In some countries an “improved” piped supply might nominally be available but in practice might rarely convey any water to households. Table 15 provides a summary of data from different sources on the availability of safe household water. The incomplete nature of the data and the inconsistency in the figures among the various sources can be readily seen. Table 16 provides similar data on the availability of improved sanitation.

The data on water supplies show quite clearly that in many countries the rural areas have a much poorer level of access than the urban areas. However, although in aggregate urban areas tend to be better served, there are many squatter settlements where the urban poor tend to be concentrated that have no access to safe water. This was observed in the PAH in urban areas in Fiji Islands, PNG, and Vanuatu in particular.

Access to sanitation generally refers to physical proximity to a facility. It does not necessarily take account of the state of repair of the facility or of its ability to provide hygienic living conditions and to avoid polluting the environment, including the water the users of the facility may drink. As seen in Table 14, the access of a household to improved sanitation, however defined, is generally lower than its access to improved water. While still not satisfactory from an environmental health perspective, the lack of access to sanitation in a rural village might be less of a health risk than the lack of such facilities in an overcrowded slum.

Water and sanitation data need to be used with caution and in conjunction with other data to assess public health and living conditions and to determine appropriate interventions or development options. Definitions and accuracy should be carefully assessed before accepting apparent increases or decreases in access within countries and when comparing countries. Difficulties with definitions are illustrated in the 2001 census in Samoa that recorded that

Table 14
Definitions Of Improved Water and Sanitation, PDMCs

Country	Census Year	Access to Improved Water Sources		
		Improved Water-defined	Not Improved Water-defined	Notes
Cook Islands	2001	Public Watermain, tank, piped to dwelling, piped to outside dwelling.	Public water tank/catchment, other, cart or carry to dwelling	All sources of water were combined in the Census question, so this is an indication only (ie households stated all sources of water available)
Fiji Islands	1996	Water never dries up	Water sometimes or every year dries up	n/a
Kiribati	2000	Rain water, piped water, protected well	Open well	All sources of water were combined in the Census question, so this is an indication only (ie households stated all sources of water available).
Marshall Islands	1999	Public System, catchment well	Bottled water, other, not reported	Well not further defined
Federated States of Micronesia	2000	Public/Community system, catchment, well, tank, drum, public standpipe or hydrant	Distilled water, other source	Well not further defined
Federated States of Micronesia	2000 ^a	n/a	n/a	n/a
Palau	2000	Public water, rainwater (catchment)	Bottled water or bottled water and rainwater	Source of drinking water not water supply
Palau	2000 ^d	n/a	n/a	n/a
Papua New Guinea	1990	Public system, catchment, tank, well	Stream, creek, other	Well not further defined
Samoa	2001	Tap, well or spring	River /lake, rainwater (storage method not specified), paid bottled	Source of drinking water not water supply
Tonga	1996	Piped, own tank, own well	Other	All sources of water were combined in the Census question, so this is an indication only (ie households stated all sources of water available)
Tuvalu	2002	Tank and/or cistern	Community sistern, other	Source of drinking water not water supply
Vanuatu	1999	Piped water (exclusive, shared), tank well	Village standpipe, community tank, river, spring, other, not stated	Main water supply

Sources: Various National Statistical Office websites

Access to Improved Sanitation		
Improved Sanitation defined	Not Improved Sanitation defined	Notes
Flush toilet, pour flush toilet, pit toilet	Lagoon toilet	Toilet facility
Flush toilet, water sealed privy, pilt latrine shared or exclusive	None, other	Toilet facility
Flush toilet, water seal, pit la trine	Attolette, lagoon beach, ocean beach, other, public toilet	Toilet facility
Flush toilet, water seal, pit la trine	None, other not reported	Toilet facility
Public sewer, septic tank, cesspool	Others	Sewage disposal
Flush toilet inside or outside the dwelling	Outhouse, privy, pit, benjo, other, not stated	Toilet facility
Public sewer, septic tank, cesspool	Other	Sewage disposal
Flush toilet inside or outside the dwelling, outhouse, privy	Other or none	Toilet facility
n/a	n/a	n/a
Private of shared flush toilet, ventilated improved pit, pit la trine	None	Main toilet facility
Tank or pour flush, pit	None, other	All types of la trine were combined in the Census wuestion, so this is an indication only (ie households sated all types of la trines available).
Flush toilet (inside or outside), pour flush	Other, none	Toilet facility
Private or shared flush toilet, water seal, ventilated improved pit, pit la trine	No toilet, not stated	Main toilet facility

Table 15
Access to Improved Water

<i>PDMCs</i>	<i>Year</i>	<i>Access to Improve Water % of Households</i>						<i>UNDP Safe Water</i>
		<i>Latest Census Data</i>			<i>WHO/UNICEF</i>			
		<i>Total</i>	<i>Urban</i>	<i>Rural</i>	<i>Total</i>	<i>Urban</i>	<i>Rural</i>	
Cook Islands	1990				100	100	100	95
	1998							
	2000				100	100	100	
	2001	93	98	87				
Fiji Islands	1990					96	69	77
	1996	93						
	1998							
	2000				47	43	51	
Kiribati	1990					91	63	76
	1998							
	2000	60	77	49	47	82	25	
Marshall Islands	1998							82
	1999	88	84	96				
Micronesia, Fed. States of	1998							44
	2000	93	94	92				
Nauru	1998							100
Palau	1990					100	97	86
	1998							
	2000	83	78	94	79	100	20	
Papua New Guinea	1988					93	23	24
	1990	89						
	1998							
	2000				42	88	32	
Samoa	1990					100	77	90
	1998							
	2000				99	95	100	
	2001	89	92	88				
Solomon Islands	1990					82	58	64
	1998							
	2000					94	65	
Timor-Leste	1998							26
Tonga	1990					92	98	95
	1996	99						
	1998							
	2000				100	100	100	
Tuvalu	1988					99	100	85
	1998							
	2000				100	100	100	
	2002	93	94	92				
Vanuatu	1988					100	64	87
	1998							
	1999	60	87	52				
	2000				88	63	94	

Sources: Various National Statistical Office websites; World Health Organization (WHO)/United Nations Children's Fund (UNICEF), Joint Monitoring Programme for Water Supply and Sanitation, Coverage Estimates 1980-2000 (Sept-01); WHO/UNICEF/Water Supply and Sanitation Collaborative Council, Global Water Supply and Sanitation Assessment 2000 Report; United Nations Development Programme (UNDP) East Timor Development Report 2002, UNDP, Pacific Human Development Report 1999

Table 16
Access to Improved Sanitation

PDMCs	Year	Access to Improved Sanitation % of Households						UNDP Improved Sanitation
		Latest Census Data			WHO/UNICEF			
		Total	Urban	Rural	Total	Urban	Rural	
Cook Islands	1990				100	100	100	98
	1998							
	2000				100	100	100	
	2001	100	100	100				
Fiji Islands	1990					91	65	85
	1996	99						
	1998							
	2000				43	75	12	
Kiribati	1990					91	49	46
	1998							
	2000	31	54	22	48	54	44	
Marshall Islands	1998							77
	1999	80	92	57				
Micronesia, Fed. States of	1998							51
	2000	25	59	16				
Nauru	1998							97
Palau	1990					95	100	86
	1998							
	2000	79	92	52	100	100	100	
Papua New Guinea	1988					54	56	25
	1998							
	2000				82	92	80	
Samoa	1990					100	92	97
	1998							
	2000	100	100	100	99	95	100	
	2001	89	92	88				
Solomon Islands	1990					73	2	16
	1998							
	2000					98	18	
Timor-Leste	1998							51
Tonga	1990					92	98	85
	1996	99						
	1998					88	78	
	2000				100	100	100	
Tuvalu	1988					79	77	49
	1998							
	2000				100	100	100	
	2002	87	92	83				
Vanuatu	1988					82	33	91
	1998							
	1999	96	97	95				
	2000				100	100	100	

Sources: Various National Statistical Office websites; World Health Organization (WHO)/United Nations Children's Fund (UNICEF), Joint Monitoring Programme for Water Supply and Sanitation, Coverage Estimates 1980-2000 (Sept-01); WHO/UNICEF/Water Supply and Sanitation Collaborative Council, Global Water Supply and Sanitation Assessment 2000 Report; United Nations Development Programme (UNDP) East Timor Development Report 2002, UNDP, Pacific Human Development Report 1999.

nationally 86% of households used piped supplies as their main source of drinking water. Nevertheless, water supplies were rated as generally poor by the villages surveyed in the PAH. Sixty percent of those consulted said that supplies were intermittent and that they regularly boiled their drinking water as they did not trust the quality. Similar opinions were expressed in a number of other countries. In Kiribati, the 2000 census reported that 70% of the population of South Tarawa was served by an “improved” piped supply system. However the data failed to record that the supplies were provided through communal standpipes for an hour or so each day, and that few would drink the water without boiling it first. In Tuvalu, there is no reticulated system. Almost all water comes from household tanks and/or communal cisterns. While these sources might be safe from ground contamination, they are nevertheless susceptible to contamination from mosquito larvae, vegetation, climbing animals, and birds if not properly screened.

Although inconsistent and variable in quality, *prima facie* the data suggest that most PDMCs will eventually meet the MDG targets for improved water and sanitation. However, national averages may hide significant variations between urban and rural areas. This is confirmed by responses on the PAH.

Prima facie the data suggest that most PDMCs will eventually meet the MDG targets for improved water and sanitation; however, national averages may hide significant variations between urban and rural areas.

8. EMPLOYMENT AND UNEMPLOYMENT

Table 17 presents a summary of formal employment in the region where data are available. Levels of formal employment (excluding subsistence) are commonly low in comparison with the size of the working-age population. A large proportion of the labor force in many of the PDMCs is engaged in the informal sector that includes subsistence activities, village work, and housework. This is especially true in Kiribati, Papua New Guinea, Samoa, Tonga, and Vanuatu. The public sector is often the largest single employer in the formal sector most notably in the small atoll countries.

The concept of unemployment is difficult to define, measure, and compare, again because subsistence activities are still significant. While data on the labor force and unemployment are collected in national censuses, definitions are not standardized and the data are not consistently analyzed and reported. For example, in their recent national censuses, Kiribati, Samoa, and Vanuatu all reported relatively low levels of youth unemployment but high rates of youth engaged in unpaid family activities or not economically active (see Table 18). In contrast, RMI and FSM both reported high levels of

Table 17
Formal Sector Employment

PDMC	Year and Source	Total Population	Formal Employment ^b			
			Working age population ^a	Levels age	Of which Public Sector (%)	Of which Private Sector (%)
Cook Islands	1996 Census	19,103	10,881	5,230 ^c	29.8	57.2
Fiji Islands	1996 Census	775,077	500,699	110,081 ^c	22.3	–
Kiribati	2000 Census	84,494	50,696	9,200	68.3	25.0
RMI	1999 Census	50,840	27,850	10,141	30.6	40.6
FSM	1994 Census	105,506	59,573	21,756 ^d	43.2	44.2
PNG	1990 Census	3,607,954	2,098,388	947,419	–	–
Samoa	1999 Mid-year estimate	169,371	90,900 ^e	23,000	24.8	–
Solomon Islands	1986 Census and various	285,176	164,600 ^f	24,026 ^c	41.0	59.0
Tonga	1996 Labor Force Survey / 1996 Census	97,784	59,526	29,406 ^d	24.0	19.0
Tuvalu	1994 HIES, Preliminary Results	9,319	5,793	1,724	48.3	25.8
Vanuatu	2000 LMS and ISS /1999 Census	186,678	156,000	14,272 ^c	31.4	–

^a ISS = informal sector survey, LMS = labor market survey, – = not available.

^b Working age population in this table is defined as those ages 15 years old and above, unless otherwise specified.

^c Formal sector employment include those 15 years and above who are either employees in the private and public sector, are self-employed (which includes agricultural workers or fishers), employers in own farm or business, paid workers in family farm or business, or unpaid workers in family farm or business, unless otherwise specified.

^d Formal employment for these countries are defined as total wage and salary earners.

^e Population of 15 years old and above who are employed in either subsistence or monetary economic activities.

^f Data is for 2000, population of ages 15 to 64 years old; from the Asia Pacific in Figures 2002, UNESCO.

^g Data is for 1990, population of ages 15 to 64 years old; from the Asia Pacific in Figures 2002, UNESCO. Sources: ADB Pacific Studies Series, latest issues for each Pacific Developing Member Country (PDMC); National Censuses or Labor Force surveys of the PDMCs, various years; Key Statistics March 2003, Fiji Islands Bureau of Statistics; RMI Statistical Abstract 2001, Office of Planning and Statistics.

unemployment, i.e., over 60% in RMI and 35% in FSM. In the latter, the rate was reported as 50 % in Chuuk, the largest state.

In addition to youth unemployment, Table 18 also shows the proportion of women employed. For most countries around one third of formal non-agriculture employment is held by women, however this varies from lows of 24% and 28% in PNG and Timor-Leste respectively, to highs of 41% and 56% in Cook Islands and Tonga. The available data also suggest

Table 18
Youth Unemployment and Women in Employment Selected PDMCs

	<i>Percentage of Youth Unemployed 15 – 24 years</i>	<i>Proportion of Women in Non- agricultural Employment</i>	<i>Census or Survey Year</i>
Cook Islands	-	41.2 ^a	
Fiji Islands	14.1 ^b	31	2002
Kiribati	2.2	37	2000
Marshall Islands, Rep. of	62.6	31	1999
Micronesia, Fed. States of	35.3	33.1	2000
Nauru	-	-	
Papua New Guinea	3.7	24.1 ^c	2000
Samoa	12.2	38	2001
Solomon Islands	11.1 ^d	33.3 ^e	1999
Timor-Leste	5.3 ^d	27.9 ^e	2001 TLSS
Tonga	30.6	56	1996
	13.0		2003 LFS
Tuvalu	25		1991
		35	2003 TNPF
Vanuatu	36 ^e	36.5	1999

- not available; LFS–Labor Force Survey; PDMCs–Pacific developing member countries; TLSS–Timor-Leste Living Standard Measurement Survey; TNPF–Tuvalu National Provident Fund

^a International Labor Organization (ILO) estimate for 2002

^b Refers to adult unemployment rate (15 years and above) as per 2002 Urban household income and expenditure survey (HIES)

^c ILO estimate for 1990

^d Refers to adult unemployment rate as per census

^e Reported as not economically active in census

Sources: Various national censuses and surveys; United Nations Statistics Division (UNSD), Millennium Indicator Database (2003), <http://millenniumindicators.un.org>

Private sector productive investment and employment creation have not kept pace with the rate of new entrants into the labor force; consequently unemployment is increasing in almost all PDMCs.

that the proportion of women employed has increased steadily by about 10 percentage points over the past decade.

Private sector productive investment and employment creation have not kept pace with the rate of new entrants into the labor force; consequently unemployment is increasing in almost all PDMCs. The exceptions are Cook Islands and Palau where easy out-migration means there is a heavy reliance

on overseas workers to service the economies. Moreover, even where investment has occurred, some of the new factories and processing plants are known to pay very low wages often fixing rates at or even below the local minimum. This gives rise to an increasing number of working poor, i.e., people engaged in the formal economy but still living on incomes at or below the poverty line. This occurs most frequently in urban families with only one or two wage earners. In almost all PDMCs, the poorest households have fewer members on average than non-poor households.

In Samoa, the 2002 HIES recorded that 27% of households in the lowest income quintile were headed by someone in formal employment, and that a further 41% were in informal employment in the farming and fishing sectors. According to the 2001 HIES in Tonga, a similar proportion, 27%, of households in the lowest income quintile were also headed by a wage or salary earner. The increase in the number of working poor has led to calls for higher minimum wage levels to bring them above the poverty line. However, economic theory suggests that increasing minimum wage has the effect of reducing the overall level of employment as employers seek to move their operations to a lower-cost location. The consequence is greater unemployment and more people with no income at all. In reality people want jobs, even if they are low paid, as it means that they have at least some cash income with which to meet the costs of school fees and other essential household expenditures. The continuing drift of people into urban centers in search of work is further testimony to this desire.

With increasing urbanization, the core of genuinely unemployed youth is growing particularly among young people who have come to urban centers for education and fail to find work after finishing or quitting school. Traditionally, those who could not find work in the formal sector would have been economically active in rural agriculture or fishing either for home consumption or for sale in the local market. They were unemployed in the sense of not having a formal job though willing to take work if it were available, but they nevertheless actively contributed to national output. This is no longer the norm. The youth are frequently reluctant to return to the traditional village environment because they have less freedom. They prefer to be unemployed in urban centers and live off relatives, thus placing an additional burden on them. They are likely to have poor diets because they eat cheap, imported food. They then suffer ill health and are less likely to find gainful employment. Hanging around urban areas, drifting into petty crime, drugs, and alcohol, these young people are the social problems of today and the poor of the future. Their contribution to national income is negative.

Only around one fourth to one third of all those finishing school will likely be able to find regular work in the formal sector.

The scale of the potential youth unemployment problem can be gauged from education, employment, and census data²² that suggest that in general only around one fourth to one third of all those finishing school will likely be able to find regular work in the formal sector. Youth unemployment is therefore one of the most critical issues facing PDMC governments.

Rising rural dependency ratios and declining populations in some of the remoter regions in many countries provide evidence to support this statement. Rural safety nets are threatened; urban safety nets frequently do not exist.

Current urban crime rates in PNG are a warning to other PDMC governments of the dangers of increasing urban unemployment and poverty. Governments ignore these warning signs at their peril. In the PAH, the people and the youth themselves were fully aware of the dangers. They placed high priority on the need for more organized youth facilities and activities and for more technical skills. They also placed high priority on the creation of new jobs to employ the growing numbers of young people and to give them opportunities for advancement.

The youth unemployment figures and the annual gap between the number of graduates and the number of new jobs point to several policy issues. One option might be to broaden the employment base by creating more low-paid, low-skilled employment in agriculture, tourism, or industry to enable households to increase the number of employed persons. Another might be to deepen the employment base by strengthening vocational and technical training to raise skill levels so more people could create their own enterprises or could move to higher-skilled, higher-paid employment. Clearly the preferred choice would be a combination of broadening and deepening the employment base to satisfy both needs. Without more employment opportunities in general and higher-paid, higher-skilled employment in particular, hardship and inequality will likely increase as the money-based economy continues to develop. Many households are cushioned from their lack of cash employment by remittances. While this may seem a very comfortable situation, it does little to develop the productive base of the domestic economy. Thus weak or in most cases negative growth in real per capita incomes, worsening terms of trade, and rising unemployment all add to the conclusion that poverty and hardship are likely to be on the increase throughout the PDMCs.

Without more employment opportunities in general and higher-paid, higher-skilled employment in particular, hardship and inequality will likely increase as the money-based economy continues to develop.

²² From Kiribati, Samoa, and Tonga, TA 6002 and 6047

PDMCs with limited resources need to build on their strengths. For Kiribati and Tuvalu, this means ensuring that their maritime training institutions and graduates continue to meet international standards. In Fiji Islands, work in international peacekeeping and security is offering new employment opportunities for many young men. Tourism and the environment are also areas of comparative advantage that countries need to maintain and develop.

9. HOUSEHOLD ASSETS

Despite the fact that hardship and poverty appear to be increasing in many countries, those who are formally employed, especially those in public service positions, have generally increased their household assets in recent years. Where time series data are available, e.g. Kiribati, Samoa, Tonga, and Tuvalu, ownership of televisions, video players, transport equipment, refrigerators, mobile phones, and other household appliances has risen markedly in the last 5 to 10 years. The wider availability of power has been one of the catalysts. The MDGs measure only access to communication facilities (ratio of telephones to population) which does not provide any indication of urban-rural availability. In the PDMCs, access to communications is still very poor in many rural locations and outer islands.

An important policy issue in considering the implications of increased asset ownership in assessing people's perceptions of hardship is the difference between what is desired and what is tolerated. Families and individuals will tolerate poor services when they have no option, e.g., if power is not available, they cope. When better services are provided, however, as they have been in many countries in recent years, then families and individuals want them to be maintained. If they invest in new household appliances and the power supply fails, they are not likely to be so tolerant, especially if the investment was made with the expectation that it would generate income and eventually pay for itself like purchasing a refrigerator to store fish or other items to sell. Tuvalu provides an example. The government funded outer island rural electrification projects over a period of 3 years, and household asset ownership rose markedly. Ownership of refrigerators on the outer islands as reported by the census data increased from 1% in 1991 to 11% in 2002. Over the same period, ownership of washing machines was reported to have risen from 2% to 50% and that of televisions and videos from 3% to 36%. Responses in the PAH suggested, however, that after investing in these assets, people were very concerned that the government might not be able to sustain power supplies. Thus the level of tolerance for a return to the *ex ante* situation of no power would be very low.

A similar situation has developed in ownership of household assets in Samoa. In the 1991 census, questions were asked regarding the ownership of radios (84% of all households), television sets (22.2%), and videos (20.2%) only. The comparable national figures for 2001 were 88.6%, 62.6%, and 42.5%. Proportionately, Savaii and the rural areas of Upolu saw the greatest increase in ownership of these assets. In Savaii the proportion of households with a television set rose from 14.5% in 1991 to 50.2% in 2001, and those with a video rose from 12.9% to 32.6%. For rural Upolu the increases were from 13.2% to 52.6% for television sets and from 12.4% to 36.5% for videos. In 2001, refrigerators were owned by over half the households nationally with proportions ranging from 71.2% in Apia to 54.4% and 47.4% in North-West Upolu and the rest of Upolu respectively. At 37.1%, the lowest level of ownership was in Savaii. Clearly the fact that power is available to over 90% of households in Samoa was a major factor in the growth of ownership of household assets. However, rural areas still acquired assets at a much lower rate than the urban areas of Apia and North-West Upolu reflecting their lower income levels.

10. MDG ACHIEVEMENTS AND PROGRESS MONITORING

Progress towards the achievement of all key MDGs indicators is summarized in Box 9.²³ Regional economic and social data present a mixed picture of progress. National averages obscure wide variations in local circumstances, the data set is often weak, and definitions must be more consistent. Nonetheless, the particular concerns expressed by the poor and those living in hardship with regard to declining access to and low quality and delivery of essential public and private goods and services would appear to be well founded. Some countries have made good progress in improving health and education standards and in achieving the relevant MDG targets. Nevertheless, evidence of poorly maintained schools and clinics and of inadequate supplies of medicines and classroom teaching materials is easily observed if not measured. Poor management is often at the core of these problems.

As ADB's review of MDG progress records:

The record of Pacific developing member countries with regard to progress towards the MDGs is mixed. While some have made progress in some areas, others are struggling to provide the social, economic, physi-

²³ ADB. 2003. *Millennium Development Goals in the Pacific, Relevance and Progress*. Manila.

Box 9
**Progress toward Millennium Development Goals
(MDGs) in the Pacific**

Overview: The record of PDMCs with regard to progress toward the MDGs is mixed. Several countries, notably those in Polynesia and Micronesia, have already achieved certain targets such as universal primary education or the elimination of gender disparities in education. While some have made significant progress, others are struggling to provide the social, economic, physical, and political environment that promotes human development. Solomon Islands and, to a lesser extent, PNG, Timor-Leste and Vanuatu are lagging behind in achieving many of the social targets. Discrepancies also continue to exist between islands and between rural and urban areas. Signs of increasing pockets of poverty and hardship challenge countries and donors to better target policies and programs.

Goal 1: Eradicate extreme poverty and hunger

Time series data on poverty are not available. Poverty line incidence based on US\$1/day has been estimated only for RMI, 20.0% (1999) and Vanuatu, 40.0% (1998). For the other PDMCs, poverty incidence has been estimated from calculations of national basic needs poverty lines (BNPLs) derived from household income and expenditure surveys. Population living below these national BNPL were estimated to be 12.0% in Cook Islands (1998), 25.5% in Fiji Islands (1990/91), 50.0% in Kiribati (1996), 30.1% in FSM (1998), 20.3% in Samoa (2002), 23.0% in Tonga (2001), and 29.3% in Tuvalu (1994). In some countries there are wide variations in poverty incidence between rural and urban areas, with the latter often experiencing the highest rates of poverty. Qualitative information and other indicators suggest that poverty levels have increased.

Goal 2: Achieve universal primary education

Universal primary education has been achieved or almost achieved in most of the PDMCs except Solomon Islands, and parts of PNG. Secondary enrolment levels, however, show great variations but remain relatively low in most countries. Most PDMCs also face the challenge of access to educational facilities in remote areas and need to improve the quality of education and relevance to the employment market.

Goal 3: Promote gender equality and empower women

The gender gap is particularly noticeable in the Solomon Islands and Vanuatu. While female enrolment ratios have increased, they remain low for secondary education. In these countries there is also a significant gender gap in adult literacy

continue next page

Box 9 continued

rates. In most of the other countries gender disparity in education has, or has almost, been eliminated in primary and to a large extent secondary education. Indeed in some countries, (Samoa, Tonga) girls are outperforming boys at the secondary level. Female participation in employment averages about one third across the region but participation in politics remains limited in most PDMCs.

Goal 4: Reduce child mortality

Child mortality rates remain high in the Solomon Islands and Vanuatu. In the other PDMCs mortality rates have decreased and should achieve the target by 2015.

Goal 5: Improve maternal health

Maternal mortality rates are high in FSM. In most other PDMCs mortality rates have decreased with increasing access to skilled health personnel.

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

Little data on HIV/AIDS prevalence rates is available. However, the recent sharp increase in the reported rate of infections in PNG may have regional implications, especially for those countries that might be deemed to be at greatest risk (Fiji Islands, FSM, Kiribati, RMI, and Tuvalu). Contraception prevalence is very low in Timor-Leste at only 8% in 2000, down from 11–13% in 1997–1999. In most other countries the rate averages around 30–35%. In most PDMCs morbidity and mortality rates associated with non-communicable diseases have risen significantly. Infectious diseases including malaria (where this is endemic), TB, and those associated with poor water and sanitation continue to pose the most serious health risk.

Goal 7: Ensure environmental sustainability

Access to safe drinking water and improved sanitation varies and definitions are inconsistent. Access is generally good in Cook Islands, Samoa, Tonga, and Tuvalu yet remains a challenge in Fiji Islands, Kiribati, Solomon Islands, and Vanuatu, particularly in rural and remote areas.

Goal 8: Global Partnership for Development

Youth unemployment has been increasing in many countries averaging over 25% at regionally and reaching over 50% in parts of FSM. The increasing number of unemployed youth poses one of the serious challenges for PDMCs to meet the MDG goals.

cal, and political environment that promotes human development. Several countries have already achieved certain targets such as universal primary education or the elimination of gender disparities in education. Many countries are facing increasing difficulties to provide efficient and equitable access to basic social services and an environment conducive for private sector development. Finally, signs of emerging pockets of poverty challenge countries and donors to focus policies and action programs.²⁴

The question remains whether private markets and public institutions in the PDMCs are strong enough to sustain and expand progress in achieving the MDGs.

The question remains whether private markets and public institutions in the PDMCs are strong enough to sustain and expand progress in achieving the MDGs. Are governments putting the right incentives in place to provide the catalysts for economic growth? While much analysis still remains to be done on the specific characteristics of poverty in each PDMC and in the geographic regions of each country, common patterns are emerging. Poor households are generally smaller

than non-poor households and are often headed by the working poor, i.e., those with very low-paid jobs in the garment industry, personal services industries, and other labor-intensive manufacturing enterprises. Households headed by the poorly educated, the elderly, and single parents are also likely to be among the poorest as are those that rely predominantly on subsistence agriculture with cash produce sales as their primary source of income.

Growing numbers of donors and governments are now addressing poverty and are committed to achieving the MDGs. There is much still to be done, however, to finalize and update measurement and to better define, benchmark, and monitor progress. Some of the MDGs have already been achieved in some societies, and in others, some of the goals and targets are less relevant. Consistent international focus on the Goals will rightly draw attention to achieving a range of development outcomes. If, however, we are to address the concerns of the poor of the Pacific, we must also pay attention to the measurement of output and outcomes. Effective demand for measuring, monitoring, and reporting progress in the region has been lacking. Performance assessment, management, and reporting all need greater attention in government budgets. Delivery of improved public and private goods and services will only come about through improved organization, operations, institutions, and markets. ADB in cooperation with the

Performance assessment, management, and reporting all need greater attention in government budgets.

²⁴ ADB. Op cit.

Netherlands and UK Department for International Development (DFID) Poverty Reduction Channel Funds will monitor the MDGs through a regional poverty program to be managed by the Secretariat of the Pacific Community. The aim will be to strengthen periodic poverty data collection, analysis, and dissemination in a participatory manner and, at the same time, to strengthen domestic capacity to carry out this work.

11. MONETIZATION AND POVERTY

The ratio of broad money supply (M2) to GDP in PDMCs is shown in Table 19. In many of the countries, notably Kiribati, RMI, Solomon Islands, Tonga, and Vanuatu, the ratio rose significantly in the period 1990–2002. In Samoa, the ratio fell in the early 1990s as the economy was hit by the cyclones of 1990 and 1991, the taro blight of 1993, and the financial crisis of the national airline in 1994/95. However, in the period since 1995, the ratio has risen again as economic and public sector reforms have stimulated growth.

The monetization of traditional, subsistence-based societies brings with it changes in attitudes that are often uncomfortable.²⁵ Budget measures for cost-recovery of user charges increase demands for cash. Introducing

Table 19
Increasing Monetization: Money Supply (M2) as Percentage of GDP

<i>PDMC</i>	<i>1990</i>	<i>1995</i>	<i>2002</i>
Cook Islands	Na	34.2	45.2
Fiji Islands	50.9	52.7	39.9
Kiribati ^a	Na	51.1	71.2
FSM	Na	55.9	50.4
RMI	Na	46.3	71.8
PNG	43.4	35.1	38.8
Samoa	46.8	34.0	38.1
Solomon Islands	29.8	27.2	35.8
Tonga	27.1	32.7	44.8
Tuvalu ^b	100.2	81.4	82.6
Vanuatu	99.0	108.7	106.2

ADB Estimates

^a Bank of Kiribati deposit liabilities

^b National bank of Tuvalu deposit liabilities, 2000 latest year

²⁵ For a detailed discussion of these influences, see “Kiribati: Monetization of an Atoll Economy”, 2002, Pacific Studies Series ADB, Manila

improved transport and communication services raises demand and the need to pay for them. Promoting the private sector both increases the availability of goods and services and also increases the need for money with which to purchase them.

The result of this monetization is that now even families in the most remote rural or outer island villages have to find cash for everyday needs, be it for school fees, utilities, newly essential store goods, social obligations, or church donations. Where social obligations could once have been met with

The result of this monetization is that now even families in the most remote rural or outer island villages have to find cash for everyday needs, be it for school fees, utilities, newly essential store goods, social obligations, or church donations.

woven-mats, traditional food, or other home-produced items, now there is an ever-increasing need to make cash or purchased contributions. All these add to the financial burdens on families and consequently to their needs for economic opportunities.

The growing flows of remittances into some countries (Kiribati, Samoa, Tonga, Tuvalu, and increasingly Fiji Islands) are giving rise to what many of the PAH respondents termed laziness or over-dependence on others. This “easy money” was perceived by many respondents to be a disincentive for young people to actively look for work. In Tonga and Tuvalu, remittances equivalent to 48% and 38% of GDP in 2002 respectively were the most important source of foreign exchange revenues and a very important source of income to many families. In Kiribati and Samoa, where remittances were equivalent to 12% of GDP in 2001 and 21% of GDP in 2002, respectively, this source of income was also extremely important to many individual households. In Fiji Islands, while still small in aggregate (2.9 % of GDP in 2002) remittances are nevertheless becoming increasingly important for many families. In 2001 the net flow of gross private transfer receipts was positive for the first time in recent years.

In Kiribati, the 2000 census recorded that overseas remittances primarily from seamen provided the primary source of income for 30% of households on South Tarawa and that 55% of all households receiving remittances were located on the outer islands. According to 2002 census data, in Tuvalu 34.2% of all households received remittances from abroad, and just over half of those families (18.1% of the total) relied on them as their primary sources of income. In the outer islands, 35% of households reported receiving overseas remittances compared with 34% of those on Funafuti. Of those outer island families, 75% reported that this was their primary income source. In Samoa and Tonga where most are in the form of private, unrequited transfers, recent census data reported that 40% and 75% of all households respectively received some income from remittances.

For many, the prospect of better education (or at least more years of schooling) gives rise to higher economic aspirations, but in a large number of countries, few domestic economic opportunities are actually generated. Young people leave home for school and/or employment in urban centers or overseas. Those who gain a better education and who are exposed to new ideas often develop different attitudes to individual success. Those who are able to gain overseas employment, particularly the seafarers of Kiribati and Tuvalu and increasingly the peacekeepers from Fiji Islands, Samoa, and Tonga, are faced with the greatest challenges to and changes in their traditional outlooks. In contrast, those who drop out of school and/or who fail to achieve their own potential or aspirations tend to become disillusioned and frequently jealous of those who do achieve personal success. Either way the stock of traditional subsistence skills is being depleted, and the strength of traditional customs and village discipline is weakening.

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Despite seeming isolation from the rest of the world, the economies of the PDMCs are nevertheless increasingly inextricably linked to the global economy. For a start, the degree of trade openness among PDMCs as measured by the value of imports and exports as a proportion of GDP is high. Most PDMCs rely heavily on imports particularly from Australia and New Zealand for the southern Pacific countries, from the USA for the northern Micronesian states, and from Japan and recently China throughout. Their exports (or factor incomes) are often priced/valued in US dollars; thus, the recent appreciation of the Australian and New Zealand currencies against that of the US likely also implies a general worsening of the terms of trade of all PDMCs. This is an important issue for those countries that have the highest degree of trade openness: Fiji Islands 70%, Kiribati 85%, and Tuvalu 70%. The latter two are further constrained by their reliance on the Australian dollar as the national currency, their consequent inability to use monetary policy to adjust national competitiveness, and their high reliance on US dollar denominated factor income.

International capital markets have an impact on the revenues of the trust and reserve funds of FSM, Kiribati, RMI, and Tuvalu. Growth in world trade influences the demand for seafarers, and the state of global consumer demand affects the revenues from foreign fishing licenses, from exports, and from tourism. Fuel costs, both for domestic and international transport as well as power generation, are major factors in moving national consumer price indices. Thus movements in global oil prices are key determinants of Pacific inflation rates. The ratification of the Pacific Island Countries' Trade

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Agreement (PICTA)²⁶ and the Pacific Agreement on Closer Economic Relations (PACER) as well as the determination of some PDMCs to accede to the World Trade Organization adds a political dimension to the economic processes.

The progress of globalization and trade liberalization is likely to continue at an accelerating pace. The Pacific region cannot escape. As Domingo recently commented,²⁷ “Very soon, no corner of the world, no matter how remote, how backward, and how pristine, can remain as an isolated economic island. As economic, social, and political barriers and boundaries come down, the playing field will be further opened and leveled by powerful technologies that have become more available, accessible, affordable, installable, and portable.” The challenge for governments is to minimize the adverse impacts from these global linkages on the poor and most disadvantaged and to maximize the positive benefits for the economies as a whole. Monetization and globalization are not, however, the causes of growing poverty. They are, rather, the inevitable consequences of development promoted by international agencies and desired by governments and people alike. They must be seen as presenting opportunities as well as challenges. National strategies need to be developed to meet those challenges and to take advantage of those opportunities.

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12. CONCLUSIONS

The record of Pacific developing member countries with regard to progress towards the MDGs is mixed. Several have already been achieved in some societies, and in others some of the indicators and targets are less relevant. Delivery of improved public and private goods and services will only come about through improved organization, operations, institutions, and markets. The Goals must be mainstreamed into national planning, resource allocation, and implementation at all levels of government if they are to be achieved by 2015. Senior officials, budget documents and medium-term strategic development plans in several PDMCs indicate a lack of awareness of this critical linkage and of how to effectively operationalize the Goals nationally and locally.

²⁶ PICTA provides for the establishment of a free-trade area amongst the Pacific Island members of the South Pacific Forum (excluding Australia and New Zealand); PACER would ultimately provide for the inclusion of Australia and New Zealand in a broader economic cooperation zone.

²⁷ Surviving globalization, Rene P. Domingo, Professor Asian Institute of Management, Businessworldonline.com, Manila, Philippines, Monday, June 21, 2004