

The MDGs and SIDS: Issues of performance and use

Introduction

The UN Millennium Development Goals (MDGs)¹ were designed to provide a toolbox for monitoring progress in sustainable development and for guiding investment. The framework of the MDGs covers 8 Goals, 18 Targets and 48 indicators which are included within the UN Statistics Division database. The 8 Goals are to:

- 1 Eradicate extreme poverty and hunger;
- 2 Achieve universal primary education;
- 3 Promote gender equality and empower women;
- 4 Reduce child mortality;
- 5 Improve maternal health;
- 6 Combat HIV/AIDS, malaria and other diseases;
- 7 Ensure environmental sustainability; and
- 8 Develop a global partnership for development.

This chapter sets out how the basic MDG toolbox can be adapted to the needs of policy-makers in small island developing States to strengthen its value as a framework for action. The chapter bases this prescription on an assessment of how far the MDG system can be used to monitor progress towards sustainable development by the AIMS Group of countries² within the context of progress by the 55 million population living in small island developing states (SIDS) as a whole³. It critically reviews the limitations of the MDG toolbox as an aid for policy-making and for monitoring key aspects of sustainable development in SIDS. It examines the MDG system against the priorities adopted in the UN SIDS Mauritius Strategy of 2005, taking into account the more general improvements in the system being promoted in the work of the UN Expert Group on MDGs. The chapter commends the continuing adaptation of the essential concepts of MDGs, to meet the varying needs and priorities of countries and regions⁴.

Method of assessment of progress

This assessment of current information in the MDG system principally uses the UN Statistical Division database figures compiled by the UN from reports provided by the countries themselves up to August 2006 and made available in December 2006⁵. Most of the goals and targets were set by the UN with a 1990 baseline and a target year for achievement of 2015. For the purpose of the present assessment, performance status on each indicator,

Table 14.1. Performance of AIMS group countries in pursuit of MDGs all Goals 1–8

Country totals AIMS region	Achieved	On track	Off track	Missing data	Total	% progress		
						all data	excl. missing data	% missing data
Bahrain	9	7	3	19	38	42	84	50
Cape Verde	8	8	3	19	38	42	84	50
Comoros	8	8	7	17	40	40	70	43
Cyprus	11	7	5	15	38	47	78	39
Guinea Bissau	8	6	6	20	40	35	70	50
Maldives	6	9	7	16	38	39	68	42
Malta	11	7	3	17	38	47	86	45
Mauritius	10	8	4	16	38	47	82	42
São Tôme & Príncipe	7	5	3	24	39	31	80	62
Seychelles	9	6	3	20	38	39	83	53
Singapore	12	4	4	18	38	42	80	47
						Total	Total	Total
All above	99	75	48	201	423	174	174	201
Per cent	23	18	11	48	100	41	78	48

Source: UN Statistics Division, downloaded December 2006

for each of the AIMS Group countries, is defined in terms of three values:

- ‘Achieved’: target value reached,
- ‘On track’: movement towards the target value, and
- ‘Off track’: movement not towards the target value.

The term ‘Progress’ refers to the sum of ‘Achieved’ and ‘On Track’ values. The status ‘Missing Data’ has been assigned where either the baseline value or a latest value or both are not shown in the UN database.

Results

The AIMS countries have made substantial progress towards attaining the MDGs (see Table 14.1). Across all the Goals the 11 AIMS countries have made progress towards 41 per cent⁶ of the indicator target values, of which 23 per cent are already achieved and 18 per cent are on track. On 11 per cent of the indicators the AIMS countries are off track. But this overall assessment is affected by missing data for 48 per cent of the indicators. Excluding these missing data, the AIMS countries have made progress with 78 per cent of the indicators, with 45 per cent already achieved and 34 per cent on track.

AIMS country achievements by Goal

Progress by the AIMS countries in the pursuit of each of the MDGs is shown in Table 14.2.

Table 14.2. Performance of AIMS region in pursuit of MDGs by indicators for Goals 1–8

						% progress		
Goal totals		On	Off	Missing		%	excl.	%
AIMS region	Achieved	track	track	data	Total	progress all data	missing data	missing data
1 Poverty	0	4	5	46	55	7	44	84
2 Education	1	15	7	10	33	48	70	30
3 Gender equality	11	19	5	9	44	68	86	20
4 Child Health	1	28	4	0	33	88	88	0
5 Maternal health	2	6	4	10	22	36	67	45
6 Disease control	15	0	5	56	76	20	75	74
7 Environment	34	1	13	40	88	40	73	45
8 Partnerships	35	2	5	30	72	51	88	42
						Total	Total	Total
All above	99	75	48	201	423	174	174	201
Per cent	23	18	11	48	100	41	78	48

Source: UN Statistics Division, downloaded December 2006

The principal achievements have been:

- Goal 4, Improving child health: 88 per cent progress.
- Goal 3, Increasing gender equality: 68 per cent progress.
- Goal 8, Promoting partnership: 51 per cent progress (especially in the field of technical transfer in telecommunications and computing).
- Goal 2, Improving education: 48 per cent progress.
- Goal 7, Ensuring environmental sustainability: 40 per cent.

Least progress has been made in:

- Goal 1, Poverty relief: 7 per cent.
- Goal 6, Disease control: 20 per cent.
- Goal 5, Maternal health: 36 per cent.

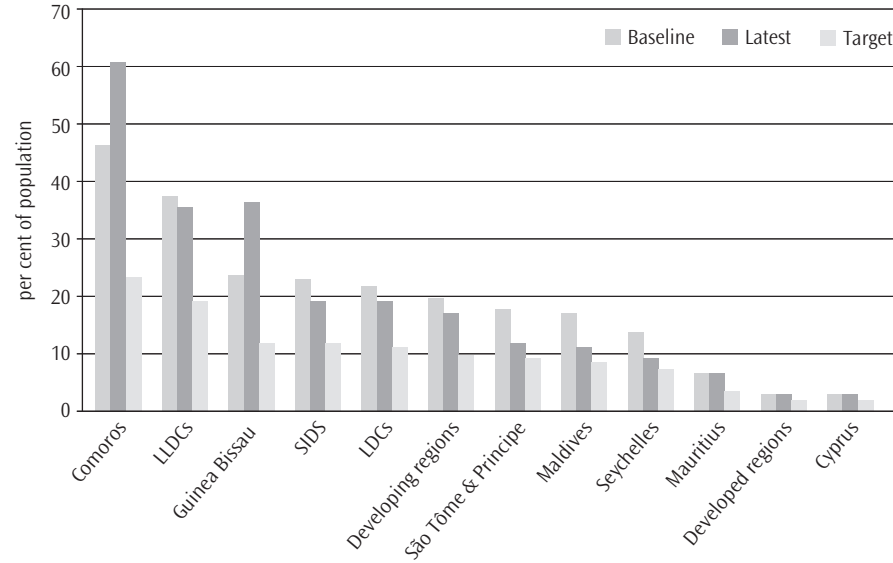
Performance of SIDS and International Benchmarks

The UN MDG database reports progress with MDGs by ‘region’. One of the ‘regions’ specified is SIDS⁷. The database reports summaries of SIDS regional data for only 10 of the 48 indicators⁸. Set out below is a selective review of progress for each of the eight MDGs, using available UN summaries of SIDS, plus detailed data from the SIDS AIMS region and some comparative data from other SIDS and from other small states⁹.

Goal 1: Poverty reduction

Progress on this Goal is generally poorly reported in SIDS. 84 per cent of the data is missing in the AIMS countries. Data on malnourishment, however, shows that 19 per cent of people in SIDS are malnourished. The target is to reduce this to 11 per cent by 2015. (See Figure 14.1.) Overall the SIDS countries are on track to achieve this target. The latest report

Figure 14.1. Goal 1, Poverty reduction. Indicator 5, per cent population below minimum dietary levels. Target: Reduce by half by 2015 the 1990 poverty level.



Source: UN Statistics Division 2006–07

from the Comoros in the AIMS group of SIDS is that 62 per cent of the population is malnourished and below the minimum dietary level, and for Guinea Bissau the latest reported level is 37 per cent of population below this level. In the AIMS region for whom data are reported, over 1 million people (9 per cent) are malnourished living below the level of minimum dietary energy consumption; in the Comoros, there are 476,000 (68 per cent) below this poverty level and in Guinea Bissau 555,000 (40 per cent).

Goal 2: Educational improvement

Three of the AIMS group countries (Bahrain, Maldives and Malta) have more than 90 per cent of their children enrolled in primary education; (Goal 2, Indicator 6). The Comoros has 55 per cent, and Guinea Bissau 45 per cent, both falling well below the latest average value for least developed countries (LDCs).

Goal 3: Gender: Seats held by women in national parliaments

Overall the per cent of seats held by women in national parliaments in SIDS has increased from 14 per cent in 1990 to 18 per cent in 2006¹⁰, (Goal 3, Target 4, Indicator 12). For the AIMS countries, the median per cent of seats held by women in their national parliaments was 14 per cent, with the highest being in Seychelles, 29 per cent, and the lowest in Bahrain, 0 per cent. The rate of increase in Seychelles, if continued, would indicate a provision of 35 per cent seats for women by 2015, but still short of the target of gender equality. The world highest reported national levels¹¹ are in Sweden 45 per cent, in Norway 38 per cent, and in Rwanda 49 per cent.

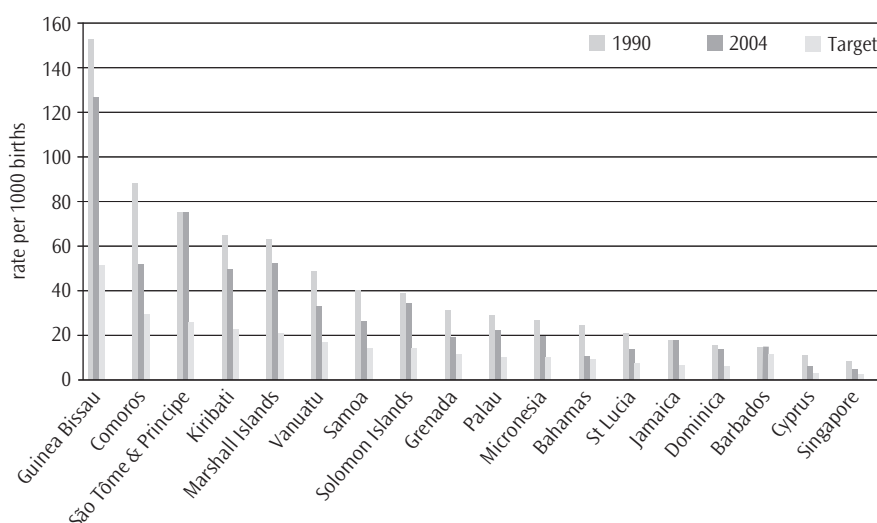
Goal 4: Child health

Figure 14.2 shows the Infant Mortality Rate¹² (IMR), Goal 4, Target 5, Indicator 14, for 18 of the 46 UN SIDS¹³ for 1990 and 2004. The target values for these SIDS range from an IMR of 51 for Guinea Bissau to an IMR of 2 for Singapore. All of the 18 SIDS included here are 'on track', moving in the direction of the targets, except Jamaica whose reported value (IMR 17) for 2004 was the same as for 1990, and also São Tôme & Príncipe, which had an IMR of 75 in 1990 and the same value for 2004. In the period 1990–2004, SIDS had overall a downward linear trend on IMR of 22 per cent. This downward trend however varied between the SIDS regions. In the Caribbean, it was 28 per cent; in the AIMS region, 22 per cent and in the Pacific, 8 per cent.

Infant mortality in SIDS is strongly negatively related to GDP per capita, measured at purchasing power parity¹⁴ (see Figure 14.3). The richer the country, the fewer the infant deaths. Beyond the point of GDP per capita of US\$5,000 the rate of decline of IMR is sharply reduced. This is consistent with diminishing returns to investment in high technology interventions, such as neonatal intensive care, and higher priorities in other aspects of economic and social development.

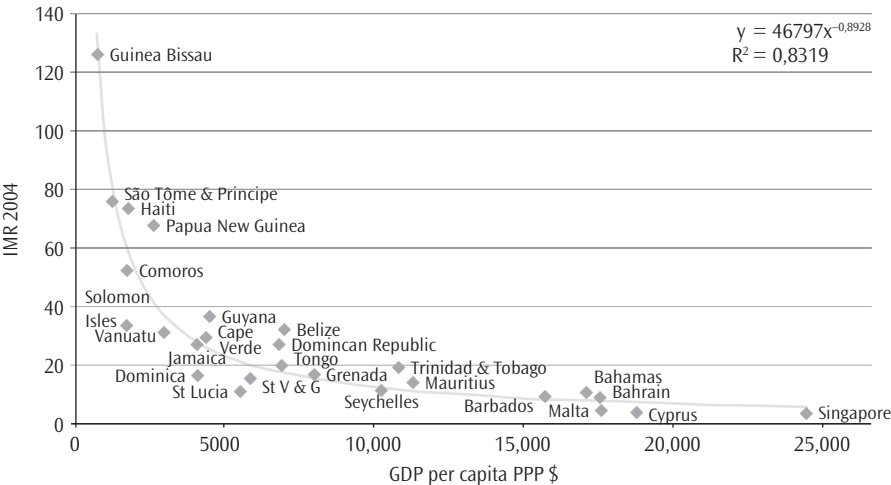
In 1990, 87 per cent of the 70,000 infant deaths in the 35 SIDS covered by the data came from just four of the SIDS countries: Haiti, in the Caribbean region (37 per cent), Papua New Guinea, in the Pacific region (19 per cent), Guinea Bissau in the AIMS region (16 per cent), and the Dominican Republic in the Caribbean region (15 per cent). Fourteen years later, in 2004, 88 per cent of the 52,000 infant deaths in these 35 SIDS came from these same four countries which are amongst the poorest of all the SIDS. There is a downward trend in infant deaths in SIDS, with countries mostly moving towards their targets, but from a policy and economics perspective, the priority should be to seek the greatest reduction in the remaining total 52,000 annual infant deaths in SIDS from the total resources

Figure 14.2. Goal 4, Target 5, Indicator 14, Infant Mortality Rate. 1990, 2004 and target values



Source: World Bank World Development Indicators: Data downloaded February 2007

Figure 14.3. Goal 4, Target 5, Indicator 14, Infant Mortality Rate 2004 and GDP per capita PPP



Source: World Bank 2007, UNDP 2006

available. The format of MDGs does not take into account inter-country inequity, nor does it directly encourage regions to focus on those countries offering the greatest returns to investment.

Goal 5: Maternal health

The maternal mortality ratio¹⁵ (MMR) varies in the AIMS region from 1,100 in Guinea Bissau to 24 in Mauritius and 21 in Malta. The MDG target is to reduce by three-quarters the 1990 levels in each country by 2015. Only Mauritius has already achieved this target. Four AIMS countries are ‘on track’, moving in the direction of the target, but four other AIMS countries are ‘off track’.

Within the AIMS region the current relative risk of maternal death for mothers is 46 times greater in Guinea Bissau than in Mauritius. If the current birth rates and MMR continue from 2007 until 2015 there will be over 6,000 maternal deaths in Guinea Bissau compared with 36 maternal deaths in that period in Mauritius.

The differences in MMR are doubtless related to differences in services and resources. In Guinea Bissau, 41 per cent of the population lack safe water, 65 per cent lack safe sanitation and 75 per cent lack access to essential drugs¹⁶; in Mauritius, none lacks access to safe water, only 6 per cent lack access to safe sanitation and 2 per cent lack access to essential drugs¹⁷. In Guinea Bissau, there are 17 physicians and 45 nurses per 100,000 population; in Mauritius, the comparative figures are 85 physicians and 241 nurses per 100,000 population¹⁸.

The MDG system provides signals that need re-assessment in terms of regional and global justice, the priorities for which may not be immediately evident from the individual national indicator values and the arbitrary numerical targets themselves. The MDG system is being

developed and adapted and substantial progress has been made by the UN through certain of its agencies, such as UNDP, UNESCO and the Millennium Development Project to promote a sharper focus on priorities and relevant action¹⁹. Achieving the MDGs is worthwhile, but more attention is needed to the issue of reducing the gross inter-country differences through the most cost-effective deployment of available resources.

Goal 6: Disease control, HIV/AIDS, Malaria and TB

HIV/AIDS

In the UN database, disease control is poorly reported for SIDS. Latest values for HIV percentage prevalence in 15–49 year olds is reported for 6 of the 11 AIMS countries. The values range from 0.1 per cent in Bahrain and Singapore to 3.8 per cent in Guinea Bissau. This compares with international benchmarks for 0.4 per cent for developed regions and 1.19 per cent for developing regions. The highest AIMS value on this indicator is lower than the average for Sub-Saharan Africa which is reported to be 7.3 per cent. This should not imply there is no need for action. Establishing control programmes on HIV/AIDS, before it infiltrates the population at large, is a key opportunity in those SIDS which have low HIV/AIDS prevalence. But data from the UN database on intervention in HIV/AIDS, Indicators 19 and 20, is poorly documented, with 'missing data' for 10 of the 11 AIMS countries. Improvements in this element of the MDG data base are being strenuously promoted with an EU-funded programme in the Indian Ocean countries²⁰.

Malaria

The control of malaria is not reported in the UN database for the SIDS region as a whole. Where data are reported (4 countries), the latest rates vary from 3 deaths per 100,000 population in the Maldives to 80 per 100,000 in São Tôme & Príncipe and the same for the Comoros. Effective treatment is reportedly available for 23 per cent of cases in São Tôme and Príncipe and for 63 per cent in the Comoros. Malaria has been eradicated in Mauritius but this is not recorded in the UN database.

TB

TB death rates have been reduced in all the AIMS SIDS. But the TB death rates vary from 0.4 per 100,000 population in Cyprus, accounting for 3 deaths per year, to 43 per 100,000 in Guinea Bissau, accounting for 565 deaths a year. The relative risk of death from TB in Guinea Bissau is 188 times that in Cyprus. The MDG system of national targets obscures the issue of the regional and inter-country distribution of the total burden of disease.

WHO is promoting the use of a Burden of Disease index²¹ for regions. This index shows the health burden from groups of diseases taking into account loss of life years and years of disability. This index helps countries to focus on those disease groups such as heart disease, diabetes, cancers and traumatic injury that are responsible for the greatest burden of loss of life years and disability. Neither expectation of life nor noncommunicable diseases are included in the MDG indicators. The burden of disease index in the health sector, at regional level, is now complementary to the use of the Expectation of Life at birth as an indicator of comparative health status.

The level of expectation of life at birth in Cyprus is 79 years, and with Singapore it has the

highest level of all SIDS; this compares with Guinea Bissau where expectation of life at birth is 45 years, the lowest of all SIDS²². The monitoring of health in SIDS and the delivery of health services is not adequately encompassed in the MDG system in general, and is not covered at all in the UN regional summary database for SIDS. At country level in SIDS adaptation of the MDG data base is being made to provide a sharper focus on these issues.

The deficiencies in the health data in the UN system for SIDS are now being rectified through both regional and national initiatives. Improving the health of the local populations and the ability of these countries to attract tourists both depend on reducing disease and promoting a healthy environment and supportive social culture. This is an important target for sustainable development in SIDS. Recent initiatives in promoting better health at national and regional level depend on improvements in information and a sharper focus of this part of the MDG data system and its relevant application to SIDS²³.

Goal 7: Environmental sustainability

Protected areas

From the UN regional summary tables it appears that SIDS have overall increased their protected areas, under Goal 7, Target 9 Indicator 26, from 2 per cent to 3 per cent of their territorial areas since 1990. This compares with LDCs whose protected areas now stand at 10 per cent; developing regions have 12 per cent protected areas and developed regions have 16 per cent of their territorial areas protected. But the value of this indicator is highly debatable. The area of a country under accorded 'protected area' status by itself means little. As a comparator, it means even less. Some countries may have more or less reason than others to place lands in protected area status and the variation in absolute size of the national areas is concealed by the use of percentages. From a global perspective it is the size not the percentage that provides the environmental gain.

Slums

On Goal 7, Target 32, the global aim is to improve the lives of at least 100 million slum dwellers. The UN reports that in the SIDS region overall 24 per cent of the urban population live in slums; this compares favourably with the figure of 43 per cent for developing regions, and 78 per cent for LDCs. But the level of urban slums in SIDS is four times higher than the level for developed regions of the world. In 2001, 7 million people (13 per cent) were living in slums in SIDS. Improved housing, income support, employment, and related social facilities are key elements in poverty relief, but none encompass the basic MDG system.

Safe water

Goal 7, Target 10, Indicator 30 is to halve by 2015 the proportion of people without sustainable access to safe drinking water. Progress with this target, assessed on the basis of the 21 SIDS with complete data sets, shows that 8 have already achieved their target, 3 are 'on track', 10 are 'off track'. Excluding the 25 SIDS with missing data, this shows a progress rate of 52 per cent. In reviewing priorities for action, however, it is necessary to turn from these percentage gains to the absolute numbers of people without safe water.

For the 34 SIDS for whom there are data for 2004, 10 million people lack safe water. 86 per cent of people in these SIDS without safe water come from just 5 of the 34 countries;

Haiti 35 per cent, Papua New Guinea 32 per cent, Cuba 9 per cent, Guinea Bissau 6 per cent and Fiji 4 per cent.

In the 10 out of 11 AIMS countries who reported on this indicator in 2004 (Bahrain is the exception), 911,000 people (9 per cent) lack sustained access to safe water supply. 89 per cent of these people without safe water live in three of the AIMS SIDS, namely Guinea Bissau (612,000), Comoros (108,000) and Cape Verde (93,000). Only one of these (Comoros) is signalled as 'off track' in the formal assessment of progress towards targets in the MDG system. This regional perspective should be used to focus scarce resources for improvement in water supplies on the needs of the largest numbers, where the returns to investment are likely to be greatest.

Air pollution

Target 9 is to reverse the loss of environmental services. The highest level of emissions reported for SIDS for 2002 was for Singapore with 58 million metric tonnes. This volume constitutes 0.2 per cent of the global total. The total CO₂ emissions for the 33 reported SIDS in 2002 was 206 million metric tonnes, which is 0.8 per cent of the global total. In the period 1990–2002 the reported global CO₂ emission declined by 18.6 per cent; the total for the 33 reported SIDS declined by 18.1 per cent. 21 of the 33 SIDS reported increased total emissions; in 5 there was no reported change; in 7 the reported CO₂ emissions were reduced. The largest reductions since 1990 were in Cuba and in Singapore. The highest level of per capita emissions in the 33 reporting SIDS in 2002 was 31.8 metric tonnes per year in Trinidad and Tobago – an increase of more than 100 per cent over the level of 13.9 recorded in 1990. CO₂ emissions in SIDS, whilst small in total volume by international standards, provide an indicator of potential for energy conservation in these small states who are increasingly turning to more efficient and renewable sources.

Goal 8: Partnerships

Telecommunications

SIDS have increased the number of telephone lines and cellular subscribers per 100 population (Indicator 47) from 7 per cent in 1990 to 38 per cent in 2004, an increase of 418 per cent. The level achieved by SIDS in 2004 is twelve times higher than for LDCs (3 per cent) but three times lower than that reported for developed regions of the world (130 per cent). In the AIMS region, all eleven countries have increased their level of telecommunications on this indicator since 1990. The more rapid development of telecommunications in SIDS is a vital means of reducing the impact of their geographical isolation.

Personal computers

SIDS have increased their use of personal computers (Indicator 48) from 4 per cent of population in 1990 to 13 per cent in 2004, an increase of 241 per cent. The average level reported for LDCs in 2004 was 1 per cent and the global level for that year 14 per cent.

In the AIMS region, the highest reported level of use of personal computers in 2004 was in Singapore (62 per cent), an increase of 848 per cent since 1990. The lowest was in the Comoros (1 per cent). The median level in the AIMS region in 2004 was 16 per cent.

SIDS have generally followed world trends in the increase in telecommunications and per-

sonal computers since 1990, but the levels achieved fall well short of developed regions of the world. Wider use of computer technology in SIDS can boost their resilience in the face of globalisation and is a key element in their future economic and social development.

Methodological issues and the interpretation of results

The basic system of MDGs provides an incomplete tool box for aiding policy in SIDS and small states. A number of key elements in the design and management of the MDG system act as critical constraints on the whole system being adopted at national and regional level as a tool for economic and social policy. The principal issues are considered below.

Gaps in indicator system relevant to SIDS: For SIDS there are certain vital missing elements in the MDG system which are of special relevance to them and which are incorporated in the UN SIDS Mauritius Strategy of 2005 (MSI), to which the future sustainable development in SIDS is intimately linked. These include: climate change and sea level rise (MSI Chapter 1), natural and environmental disasters (MSI Chapter 2), management of wastes (MSI Chapter 3), the state of coastal and marine resources (MSI Chapter 4), tourism (MSI Chapter 8), biodiversity (MSI Chapter 9), management (MSI Chapter 18), and indigenous culture (MSI Chapter 19). Other elements in sustainable development not included in the MDG system but relevant to many countries include demographic change, non-communicable disease and injuries, governance and security, competitiveness, and probity. In adapting the MDG system to local use in SIDS these gaps are beginning to be recognised and supplementary data sets added to adapt the basic system to local needs in line with priorities for action.

Missing data: In Downes'²⁴ assessment of progress with MDGs for 73 small states of the Commonwealth, he found, overall, 29 per cent missing data; the missing data levels ranged from 12 per cent missing on Goal 4, Child Health, to 59 per cent missing on Poverty Reduction. In the African regional assessment of 53 states in that region, UNEP²⁵ found there were between 2 per cent and 74 per cent missing data on the 7 indicators examined. In this assessment for the AIMS group of countries, 48 per cent of the indicators were with missing data, thus inhibiting a complete assessment of the status on progress towards many of the targets.

If the system of MDGs is to be used seriously by policy-makers and for international comparisons, the problem of missing data must be a priority for action²⁶. The collection and collation of these figures should be mainstreamed, as in Mauritius for example, within statistical services and subjected to consistent audits for timeliness, accuracy and conformity to international standards.

UN use of interpolated and modelled data: To fill the missing data gaps the UN database puts in values adjusted by UN agencies 'to achieve international comparability'; these include modelled values inserted by the UN where data are absent, simulated values using UN statistical models, running averages spread over a short period of 2–3 years, and reported data which may not cover the full reference period of time. Care needs to be used in policy development in interpreting trends where such devices have been used to avoid the problems of missing data. Interpolated data can provide a false sense of progress on critical targets.

Arbitrary 1990 baseline: The use of an arbitrary baseline of 1990 tends to obscure how far results are affected by both major differences in baseline values between countries and variations in the secular trends of values within the time period of assessment.

For example, Malta's latest reported levels of CO₂ emissions per head, under Goal 7, Target 9, Indicator 28, gives a status of 'off-track' with a higher level of emissions now than in 1990, despite a 23 per cent reduction in emissions in the past three reported years. These implications of the design of the UN system need to be taken into account in adapting the system as a mainstream tool for policy-makers.

Equity and inequity in the definition of targets: The methods advanced in the MDG system for the definition of target values vary across the MDG system. Policy-makers, especially at regional level, need to handle this issue with care.

The promotion of global and inter-country equity is limited to two of the eight Goals, namely Goal 2, Target 3, Education, and Goal 3, Target 4, Gender Equality. For all the other six Goals the method adopted for target setting varies in relation to the baseline 1990 values on the indicators. Thus for six Goals, the target values tend to promote the preservation of inter-country inequity and obscure the size of country differences.

Absence of an economics framework: In the design of the MDG system, the UN did not agree to adopt an economics framework. No assessment was made of the economic implications of the baseline levels on country indicators nor the total or the marginal costs and impact of meeting the arbitrary targets that are part of the system. Under the MDG process assessment of costs has been undertaken at a global and regional level but none of the detailed work took into account the special circumstances of SIDS²⁷.

For example, infant deaths can be reduced in poor countries with high infant mortality by increasing safe water and sanitation and other low cost public health measures rather than by the high cost, high technology intervention required in developed countries with low IMR. Policy-makers, using the MDGs as a tool, need to consider both the technical requirements for intervention and the marginal and total costs and benefits²⁸.

Denominators: many of the indicators in the MDG system and their related targets are expressed as ratios or percentages without reference to the denominators on which they depend. This has the effect of concealing the size of the difference in tasks presented to different countries in achieving their targets. Thus for example, an increase of the ratio of area of the country protected in Guinea Bissau by 1 per cent of total land requires the designation of 361 square kms of its area; in Seychelles, 1 per cent of land is a mere 6 square kms. Where the targets and the denominators also vary greatly, the size of the impact can be further magnified. A two-thirds reduction in IMR deaths in Guinea Bissau would save nearly 6000 lives; in Singapore, a two thirds reduction of IMR would save 40 lives. The identification of the hidden denominators is a key step in the process of policy development in the pursuit of the MDG targets and the assessment of national and regional impact and relative priorities (see Table 14.3).

Table 14.3. AIMS region: MDG targets to be met

	Goal 1 Target 4 Indicator 5	Goal 4 Target 5 Indicator 14	Goal 7 Target 9 Indicator 25	Goal 7 Target 9 Indicator 28	Goal 7 Target 9 Indicator 30
	Malnourished to be fed	Infant lives to be saved	Forest cover to replace	CO ₂ emissions to reduce	Safe water for more people
Units	Pop'n ×1000	Infants	Square kms	Million tonnes	Population ×1000
Countries					
Bahrain		56	0	5.2	
Cape Verde		144	0	0.0	
Comoros	296	644	78	0.0	81
Cyprus	10	20	0	1.7	0
Guinea Bissau	373	5,550	1,842	0.0	
Maldives	8	95	0	0.2	48
Malta		8	0	0.0	0
Mauritius	37	133	19	1.5	0
São Tôme & Príncipe	5	250	0	0.0	
Seychelles	2	19	0	0.4	5
Singapore		41	0	0.0	0
Totals	730	6,960	1,939	9.1	133

Cultural values and the relevance of targets: MDGs are indifferent to cultural variation, resulting in targets that may not be supported in national policy. For example, under Goal 2 all countries are pressed to ensure universal enrolment in education; but this goal may be in conflict with national and local cultural and demographic factors not represented in the MDG system. In Malta, where only 15 per cent of the population is under 15 years and where only 3 per cent of the GDP is derived from agriculture, the country has 94 per cent enrolment in primary education. In Guinea Bissau, where 48 per cent of the population is under 15 years and 69 per cent of GDP is derived from agriculture, only 55 per cent of children are enrolled in primary education. In such countries, helping with farm-work is part of technical and cultural education and is what many children do at a very young age, to prepare them for their roles in family and community businesses. Cultural values and demographic factors can thus affect differences in enrolment at school and act as constraints on change and the impact of investment in educational facilities.

In some countries, for cultural reasons, politics has not been a field of activity for women. Seychelles has 29 per cent of national parliamentary seats held by women; Bahrain has none; whilst both countries have nearly identical educational enrolment and literacy levels, cultural values doubtless have a major affect on these differences in political representation. They serve as strong constraints on change, motivation and the movement towards the nominal UN targets, some of which may not exist as priorities at national level in every country.

Policy implications

Table 14.3 shows for selected MDG indicators the volumes of services to be planned to meet gaps in provision for five target areas²⁹: Hunger, Child Health, Forest cover, Air quality, and Safe water.

The table shows that for the AIMS region to meet the MDG targets country by country:

- 730,000 malnourished people need to be fed (Goal 1, Target 4 Indicator 5)³⁰;
- 6,960 infant lives need to be saved each year (Goal 4, Target 5, Indicator 14);
- 1,939 square km of forest cover should be re-established (Goal 7, Target 9, Indicator 25);
- 9.1 million tonnes of CO₂ emissions should be cut (Goal 7, Target 9, Indicator 28); and
- 133,000 people should be provided with safe water (Goal 7, Target 9, Indicator 30)³¹.

From a regional policy perspective, however, the table shows that 79 per cent of the malnourished people in the AIMS countries are from Guinea Bissau; 90 per cent of the infant lives to be saved are in the Comoros and Guinea Bissau; 95 per cent of the forest cover to be re-established is in Guinea Bissau; 92 per cent of the CO₂ emissions to be cut are from Bahrain, Cyprus and Mauritius; 97 per cent of the safe water to be provided is for the Comoros and the Maldives. This regional perspective highlights the implications of the anomalies in the MDG system and can help to promote reassessment of priorities at national and regional levels³².

Next steps in policy development

The probable next steps for policy-makers and their teams will be to:

- Assess the technical interventions to deliver the services; the resources required; the financial plans, financial mobilisation, capacity building and management arrangements; the involvement of the public and private sectors and NGOs; the needs for capital infrastructure, equipment, human resources, management and maintenance; and the environmental, economic and social impacts.
- Calculate the total and the marginal costs of the developments, the expected timescale of expenditure and realisation of benefits.
- Develop strategic and operational plans and monitoring mechanisms within the financial policy timescales of the country necessary for establishing inter-sectoral political, financial and social support for the proposals.
- Promote plans through the mainstream of annual and medium-term resource allocation.
- Review progress and revisit policy, resource allocation and technical management procedures in the light of results.

Adaptation of the MDG concept to local needs and priorities

The MDGs at country level are now being adapted to local, national and regional needs. Such issues are increasingly being put on the agenda. These include a review of the arbi-

trary nature of the baselines and the arithmetic of target calculation, the absence of an economic context for reviewing priorities, the variation in technical requirements at national level and the other broader issues of development capacity that chiefly constrain political commitment for implementation.

Despite the modest levels of economic and social development in some SIDS, recent analysis shows that their ecological footprint is generally lower and their efficiency in securing human welfare, in terms of length of life and life satisfaction, exceeds that of many developed countries; Vanuatu comes out on top, whilst the UK and USA have poorer results, coming out 108th and 150th respectively³³. If life in SIDS is beautiful but costly³⁴, the local people seem to like it that way. So their pathway to development and their policy toolbox should be oriented accordingly.

Most SIDS are facing pressure from population increase. The population of SIDS is expected to increase by 1.3 per cent a year from 55 million³⁵ to 63 million by 2015. The pattern is uneven. For a few SIDS their populations are slightly declining, by about 0.1 per cent per year, including Guyana³⁶, Micronesia, Tokelau and the US Virgin islands; whilst others have growth rates of 2 per cent a year or more, including Comoros, Guinea Bissau, Kiribati, and Timor Leste. The projected 15 per cent overall population growth in population of SIDS by 2015 presents the prospect of an increasingly heavy ecological footprint with an increase in population densities, and more physical infrastructure imposing itself in terms of housing, schools, roads, transport, waste production and energy use. This makes the need for responding to these pressures in an ecologically sustainable manner even more urgent in such vulnerable environments. Demographic change is not included in the MDG system, although it is a fundamental factor in the pursuit of global, regional and national policy on sustainable development.

Conclusions

Substantial progress towards the achievement of MDGs has been made by SIDS although missing data precludes effective assessment of certain vital aspects of development, including well-being, poverty reduction, improvements in environmental quality and the control of disease.

The basic MDG system, whilst popular internationally, lacks many features that are necessary for it to be useful to policy-makers in SIDS. But substantial adaptation is now being introduced at national level. At regional level, some of the difficulties in using the basic MDG system can be overcome if policy-makers divide countries into groups in terms of their stages of economic and social development. The MDG framework can then be adapted for priority setting, taking into account the wide variation in marginal and total costs and expected results that can be achieved by interventions in each country and in the region as a whole³⁷. Lists are available of the type of interventions that are appropriate for the pursuit of each of the targets³⁸. Standard costs have been developed from UN studies in the African region which provide an indication of the costs involved³⁹. But the range of indicators needs to be extended for SIDS to include features of their countries which are vital for future sustainable development, and many of which are key themes in the UN SIDS Mauritius Strategy, yet not embraced in the basic MDG system.

The UN data system has begun to present data for SIDS as a defined region. When this process is completed it will be more helpful for policy-makers.

Development and adaptation of the basic MDG system has been progressing, urged on by the UN Expert Group on MDGs and by action at country and regional level. The UN Expert Group has been promoting capacity building of statistical services and mainstreaming MDG data systems through focal points such as the central statistics office in each country. In many countries closer links are being made between the MDG data and the national policy and budget systems. This is particularly evident in the more developed SIDS, such as Malta, now part of the European Union, Mauritius⁴⁰ working with a variety of regional organisations, and Barbados as part of the Caribbean SIDS region⁴¹.

Recommendations

To assist policy-makers and their teams at regional and national levels to adapt the MDGs as a tool for policy development and planning, SIDS should:

- Rationalise the assignment of countries to the SIDS regional group and their stages of social and economic development, to promote more effective advocacy of their collective interests⁴².
- Differentiate the technical and financial investment required in line with the stages of economic and social development of each country.
- Assess priorities taking into account the environmental impact (ecological footprint) of proposed development, the social welfare gains and economic growth that can be expected.
- Assess the marginal and total costs and benefits of making progress towards specific targets on each indicator and identify priorities.
- Develop a more systematic documentation of the scientific and technical evidence basis for interventions within an economics framework that includes social and environmental costs and benefits.
- Remedy the problems of missing data that inhibit the effective assessment of progress with MDGs.
- Establish data audits to improve the quality and timeliness of data sets.
- Promote strengthening of the UN system of review of SIDS and the implementation of the 2005 SIDS Mauritius Strategy.
- Promote comprehensive UN documentation of data from SIDS as a region and extend in other UN agencies, e.g. UNEP, WHO, UNICEF, UNDP.
- Support UN system agencies working with SIDS countries to develop credible methodologies and accurate data sets on MDG-related goals.
- Build mainstream commitment and capacity at country level, with regional support where necessary, within the central national statistics offices, linking the process of data collection and dissemination of analyses to economic and social policy and to medium term financial budget systems.
- Extend the MDG framework for SIDS to cover priority areas in the Barbados Programme of Action and the Mauritius Strategy of Implementation.
- Establish a review at regional and national levels of the social and economic

implications of the equity issues inherent in those targets based on proportional changes in baseline values⁴³.

Further reading

- Coomaraswamy, I (2006). *Small States, Economic Review and Basic Statistics* Vol. 10. Commonwealth Secretariat. London.
- Data on MDGs: <http://MDGs.un.org/unsd/MDG/Data.aspx>
- MDGs Expert Group (2007). *Millennium Development Goals Report*. www.un.org/millenniumgoals/pdf/mdg2007
- Sachs, J (2005). *Investing in Development: a Practical Plan for Achieving Millennium Development Goals*. New York: UN.
- The World Bank (2005). *World Development Report 2006: Equity and development*. New York: OUP.
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- UN General Assembly 2006. Follow-up to the UN SIDS Mauritius Strategy: A RES/61/196: www.un.org UN General Assembly 200
- UN DESA (2011) List of SIDS. New York: UN. <http://www.un.org/special-rep/ohrrls/sid/list.htm>
- UNDP (2006). *The Sustainable Difference, energy and the environment*. Bureau for Development Policy, New York: UNDP.
- UNESCO (2006). Follow up to the implementation of the Mauritius Strategy, report to the UN Secretary General, General assembly 61st session: <http://www.unesco.org/en/sids>

Notes

- 1 See: www.unmillenniumproject.org www.undp.org/MDG/ <http://unstats.un.org/unsd/MDG/>
- 2 The AIMS region is one of three regions of small island developing States (SIDS) officially recognised by the UN. The Group was formed in 2003 with 11 countries (Bahrain, Cape Verde, Comoros, Cyprus, Guinea Bissau, Maldives, Malta, Mauritius, São Tôme and Príncipe, Seychelles, and Singapore). The name AIMS derives from the capital letters of the names of the marine areas in which the countries are located (Atlantic, Indian Ocean, Mediterranean, and South China Sea).
- 3 The international lists of SIDS vary and lack consistency in their classification. (See Encontre, P (2004) 'SIDS as a category, adopting criteria would enhance credibility', in: Ouane, H et al. (2004) *Is special treatment of small island developing States possible?* UNCTAD, Geneva, UNCTAD/LDC/2004/1 UN). Not all 46 SIDS listed on the UN website are 'small'; not all are 'islands'; not all are 'developing'; and not all are 'States'. The 46 UN SIDS have a total population of 55 million (Source: UNICEF, 2011); divided between the Caribbean SIDS 35 million (64 per cent); the AIMS SIDS 11 million (20 per cent) and the Pacific SIDS 9 million (16 per cent).

- 4 See, for example, Multinational Development Banks (2004) *Better Data for Better Results; An Action Plan for Improving Development Statistics; Second International Roundtable on Managing Development Results, Marrakech*; www.afristat.org/contenu/pdf/initiaves/marrakech-en.pdf; Ganoo, M (2008) *MDGs the Mauritius experience*; www.mdgs.un.org/Mauritius; and MDG Expert Group (2007) *Millennium Development Goals*, Report 2007, UN; www.un.org/millenniumgoals/pdf/mdg2007
- 5 Supplementary data are from other sources including the World Development Indicators database of the World Bank, the Commonwealth Secretariat *Small States Economic Review and Basic Statistics*, UNICEF, country reports, and from *World Factbook*, www.cia.gov/cia/publications/factbook
- 6 For simplicity of presentation in this assessment all percentages are reported as rounded to the nearest whole number and 'percentages' are used where 'proportions' are specified in the indicators.
- 7 For this purpose the UN adopts the UN Secretariat list of 46 SIDS.
- 8 Source: <http://unstats.un.org/unsd/MDG> downloaded 6 February 2007. The indicators included in the SIDS summaries are: 5–10, 26, 32, 47, 48. These cover aspects of: Goal 1: Poverty; Goal 2: Education; Goal 7: Environment; and Goal 8: Partnerships.
- 9 Coomaraswamy, I (2006). *Small States, Economic Review and Basic Statistics*, Economic Affairs Division, Commonwealth Secretariat, ISBN-10:0-85092-831-1.
- 10 The UN regional tables do not specify how many of the 46 SIDS are included in the report.
- 11 UNDP (2006). *Human Development Report*, tables; www.undp.org downloaded November 2006.
- 12 The number of deaths in the first year of life per 1000 live births, for the reported calendar year.
- 13 World Bank, World Development Indicators database, downloaded February 2007. The UN database summary by region, generally used in this assessment, does not include regional figures for SIDS for this indicator.
- 14 A method adopted by UNDP and the World Bank, based upon UN survey data to adjust GDP at exchange rate values for the relative purchasing power of the local currency for a standard basket of goods and services.
- 15 The number of maternal deaths per 100,000 live births.
- 16 www.undp.org *Human Development Report 2006*, Tables.
- 17 Sources: Un Statistics Division 2007 and UNDP 2006.
- 18 Coomaraswamy I et al. (2005). Op. Cit. Table 43.
- 19 www.undp.org/MDG/MDGNET
- 20 AIRIS-COI project see IOC website www.coi-ioc.org
- 21 Murray, C and A Lopez (2002). *Reducing risks and promoting healthy life*. World Health Report, Geneva, WHO.
- 22 Source: www.undp.org *Human Development Report, 2006*, Tables.
- 23 See for example Binger A (2008) and Ganoo A (2008). Op. cit.
- 24 Downes AS (2005) 'Progress towards achieving the millennium development Goals in the Small States of the Commonwealth', in: Coomaraswamy I et al. (2005) *Small States economic review and basic statistics*, pp. 27–39, Commonwealth Secretariat, ISBN–10: 0-85092-831-1.
- 25 Chenje, M et al. (2006). *Africa Environment Outlook 2*. UNEP ISBN 92-807-2691-9, Progress Press Ltd, Malta, for UNEP.
- 26 www.undp.org/mdg
- 27 Sachs, J (2005). *Investing in Development: A practical plan for achieving millennium development goals*. New York: UN.
- 28 See Millennium Development Project (2005) *Handbook on MDGs*, New York, UN, www.un.org This provides guidance for review of the most cost-effective interventions. Also see <http://ddp-ext.worldbank.org/ext/GMIS> Millennium Development Goals, achieving the targets, and research and country studies; www.undp.org MDG country reports, including for SIDS: Jamaica 2004, Bahrain 2003, Mauritius 2003 and a sub-national report for the island of Rodrigues 2003. These reports link the pursuit of MDGs with the formulation of national

- programmes of intervention by the public, private sectors and by NGOs. Levels of expected outcome are however not directly linked to investments.
- 29 The table has been calculated excluding the missing data which are identified for each of the target areas.
- 30 Data are missing for four countries (Bahrain, Cape Verde, Malta, Singapore).
- 31 Data are missing for Bahrain, Cape Verde, Guinea Bissau and São Tôme & Príncipe.
- 32 See, for example, UNDP (2004). *Jamaica, MDG Report*, p. 50, www.undp.org/mdg country reports; downloaded February 2007.
- 33 See Marks, N (2006). *Happy Planet Index*. New Economics Foundation; downloaded from www.neweconomics.org September 2006
- 34 Winters, LA and PMG Martins (2004). *Beautiful but costly, business costs in small remote economies*. Commonwealth Secretariat.
- 35 See UNICEF, UNDP, Commonwealth Secretariat and World Fact Book, CIA.
- 36 Guyana is included in the UN list of SIDS as a low lying state.
- 37 See Roberts, JL (2006). 'Environmental management and resilience in the AIMS Small States', Appendix 1 'A framework for investment in Development for the AIMS countries, differentiated by stage of Development'; in Briguglio, L et al. (2006) *Building the economic resilience of small states*. University of Malta and the Commonwealth Secretariat, London. ISBNB 99909-49-23-9.
- 38 UN (2005). *MDG Handbook*, <http://mdgs.un.org>
- 39 Sachs, J (2005). *Investing in development: a practical Plan for Achieving Millennium Development Goals*, New York: UN.
- 40 Ganoo, M (2008). MDGs the Mauritius Experience, see www.un.org/Mauritius
- 41 See Binger A (2008). *Vulnerability of Caribbean SIDS, High level Roundtable on International Co-operation for Sustainable development in Small Island Developing States*; www.un.org/esa/sustdev/sids/2008-roundtable; emphasises the importance for SIDS of data on renewable energy production, waste management and food security, which are not embraced in the basic MDG system.
- 42 i.e. omit from the UN core group those countries that are not small, not developing, not islands and not states; but recognise the common interests of many other territories which are small islands but not states.
- 43 Such as Goal 1, Targets 1 and 2, Halving poverty; Goal 4, Target 5, Reducing by two-thirds under five mortality.