

# How Important Are Difficult Environments to Achieving the MDGs?

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with

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This working paper is intended to stimulate public discussion.  
It is not necessarily DFID or UK Government policy.

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## **Acknowledgments**

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## Summary

- Difficult environments pose a significant challenge to meeting the Millennium Development Goals (MDGs). Around a third of people living in absolute poverty around the world, live in difficult environments. Excluding India and China, this proportion rises to almost two-thirds. Given that the population in difficult environments is only about a sixth of the population in all developing countries, absolute poverty is highly concentrated in difficult environments. We argue that difficult environments are the single biggest challenge to the MDGs. Regardless of successes in other developing countries, many MDGs simply cannot be met without significant improvements in difficult environments.
- Difficult environments are places where governments are unable or unwilling to harness international or domestic resources to tackle poverty. A difficult environment is not just confined to the state level. It can also exist sub-nationally and regionally. Although this paper takes the 'state' as its unit of analysis, this wider definition means the extent of the challenge from difficult environments on the MDGs is inevitably under-stated in this paper.
- This paper uses three proxy lists of countries to assess the scale of the challenge. These lists are in the public domain and are increasingly being used by the international community for measurement. They tell us that difficult environments carry:
  - **A third (28~35%)<sup>1</sup> of those living in absolute poverty in developing countries.**
  - **On average, one in three people living in difficult environments is undernourished; this proportion is twice as high as in other developing countries.**
  - **A third of the children (32~46%) living in developing countries who are not receiving a primary education.**
  - **Nearly half of the children (41~51%) dying before their fifth birthday each year in developing countries. On average, one in eight children born in difficult environments don't reach their fifth birthday.**
  - **A third (33~44%) of maternal deaths each year in developing countries.**
  - **A third (34~44%) of those living with HIV/AIDS in developing countries.**
  - **A third (27~35%) of those living without sustainable access to safe drinking water in developing countries.**
- Analysis of the available data suggests that, in order to eliminate poverty and meet the MDGs in an equitable way, current rates of progress in difficult environments are significantly off-track.

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<sup>1</sup> Percentages vary according to which list of difficult environments is used.

**Summary Table of Estimated 2000 Status of MDGs**

|  | 2000                   |                            |
|--|------------------------|----------------------------|
|  | Difficult Environments | Other Developing Countries |
| Population*  | 871m                   | 4,361m                     |
| <b>MDG 1</b><br>Number of living on less than 1\$/day<br>Proportion of undernourished (mean 1999-2001) | 343m<br>33%            | 821m<br>15%                |
| <b>MDG 2</b><br>Primary education enrolment  | 70%                    | 86%                        |
| <b>MDG 3</b><br>Primary education female:male enrolment ratio  | 0.84                   | 0.92                       |
| <b>MDG 4</b><br>Child mortality rate per 1000 (2002)   | 138                    | 56                         |
| <b>MDG 5</b><br>Maternal mortality rate per 100,000  | 734                    | 270                        |
| <b>MDG 6</b><br>Number of people living with HIV/AIDS (2001)<br>Malaria death rate per 100,000         | 17.1m<br>90            | 21.4m<br>7                 |
| <b>MDG 7</b><br>% of population without access to safe water   | 38%                    | 18%                        |
| <b>MDG 8</b><br>Tel. lines and cell. subscriptions per 100 people                                      | 4.5                    | 18.8                       |

\* List C - see Appendix 1 for population in difficult environments. Other Developing Countries: 2002, WDI.

## **Introduction:**

The lack of progress towards the 2015 targets set out in the MDGs is well documented. Based on available data, this paper illustrates the extent of the MDG challenge that resides in difficult environments. As such, it underlines the need to tackle the developmental challenges posed by difficult environments not only to approach the 2015 targets but also to advance towards the overall elimination of world poverty.

The Poverty Reduction in Difficult Environments (PRDE) team defines difficult environments<sup>2</sup> as areas where governments are unable or unwilling to harness international or domestic resources to tackle poverty.

This definition has not been operationalised. Therefore, for this paper, three of the few publicly available proxy lists of difficult environments were employed (thus the PRDE team did not select the countries listed in this paper as difficult environments). The inclusion criteria for each list and the actual countries appearing in them can be found in Appendix 1.

For each MDG target analysed, the situation in difficult environments is compared to that in all developing countries<sup>3</sup>, to give an indication of the extent of the global MDG challenge that resides in difficult environments. The global values quoted in the paper represent every developing country in the world (including difficult environments) and indicate progress towards the global MDGs. Comparisons are also made with a Global\* value. This value represents the situation in all developing countries excluding India and China. These two countries contain 38% of the world's population and as such have a huge influence on overall progress towards the MDGs. They also contain large regional differences within their borders with respect to progress towards the MDGs. By separating them out in the analysis, it is possible to assess the importance of approaching poverty reduction in difficult environments alongside the obvious need to tackle the problem in India and China.

A summary of the results for each list of difficult environments can be found in Appendix 3. The results are relatively similar across lists suggesting that the different methods of listing difficult environments capture similar 'core' countries that carry particular influence on progress towards the MDGs (see Appendix 1). Due to the similarities in results, for clarity, in the main section of the paper only the results for list C were quoted for difficult environments.

For a full list of methods, notes on the data and its sources, see Appendix 2.

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<sup>2</sup> See PRDE Working Paper 1: Defining difficult environments for poverty reduction

<sup>3</sup> See <http://www.worldbank.org/data/countryclass/classgroups.htm> for list of developing countries

Listed below are the 18 MDG targets. In bold are the targets for which analysis was carried out. Insufficient or inappropriate data sets exist for the targets for which analysis was not carried out.

|   |  |
|---|--|
| <b>Goal 1: Eradicate extreme poverty and hunger</b>         |  |
| Target 1  | Halve, between 1990 and 2015 the proportion of people whose income is less than one dollar a day.  |
| Target 2  | Halve, between 1990 and 2015, the proportion of people who suffer from hunger  |
| <b>Goal 2: Achieve universal primary education</b>          |  |
| Target 3  | Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling                                       |
| <b>Goal 3: Promote gender equality and empower women</b>    |  |
| Target 4  | Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015                               |
| <b>Goal 4. Reduce child mortality</b>                       |  |
| Target 5  | Reduce by two thirds, between 1990 and 2015, the under-five mortality rate   |
| <b>Goal 5. Improve maternal health</b>                      |  |
| Target 6  | Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio  |
| <b>Goal 6. Combat HIV/AIDS, malaria and other diseases</b>  |  |
| Target 7  | Have halted by 2015 and begun to reverse the spread of HIV/AIDS  |
| Target 8  | Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases   |
| <b>Goal 7: Ensure environmental sustainability</b>          |  |
| Target 9  | Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources                           |
| Target 10   | Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation  |
| Target 11   | By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers   |
| <b>Goal 8: Develop a global partnership for development</b> |  |
| Target 12   | Develop further an open, rule-based, predictable, non-discriminatory trading and financial system  |
| Target 13   | <b>Address the special needs of the least developed countries.</b>   |
| Target 14   | <b>Address the special needs of landlocked developing countries and small island developing States</b>   |
| Target 15   | Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term |
| Target 16   | In cooperation with developing countries, develop and implement strategies for decent and productive work for youth  |
| Target 17   | In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries   |
| Target 18   | <b>In cooperation with the private sector, make available the benefits of new technologies, especially information and communications</b>                          |

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

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

***Difficult environments contain almost a third of those living on less than a dollar a day globally.***

Excluding the challenge in India and China, over half of those living in absolute poverty around the rest of the world are found in difficult environments. Whilst the data set may be incomplete and not a thorough predictor of the actual situation, it is currently the clearest available indication that a large proportion of the challenge in achieving target 1 resides in difficult environments.

Table 1.1: Numbers of those living on less than a dollar a day

| Global       | Global*     | Difficult Environments |             |              |
|--------------|-------------|------------------------|-------------|--------------|
|              |             | Number                 | % of Global | % of Global* |
| 1164 million | 595 million | 343 million            | 29%         | 58%          |

\*'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C

- **Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger**

***Difficult environments contain a quarter of the world's undernourished. On average one third of a difficult environment's population is undernourished, this is twice as high as is found in other developing countries.***

Table 2.1: Numbers of undernourished 1999-2001

| Global      | Global*     | Difficult Environments |             |              |
|-------------|-------------|------------------------|-------------|--------------|
|             |             | Number                 | % of Global | % of Global* |
| 840 million | 491 million | 209 million            | 25%         | 43%          |

\*'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C

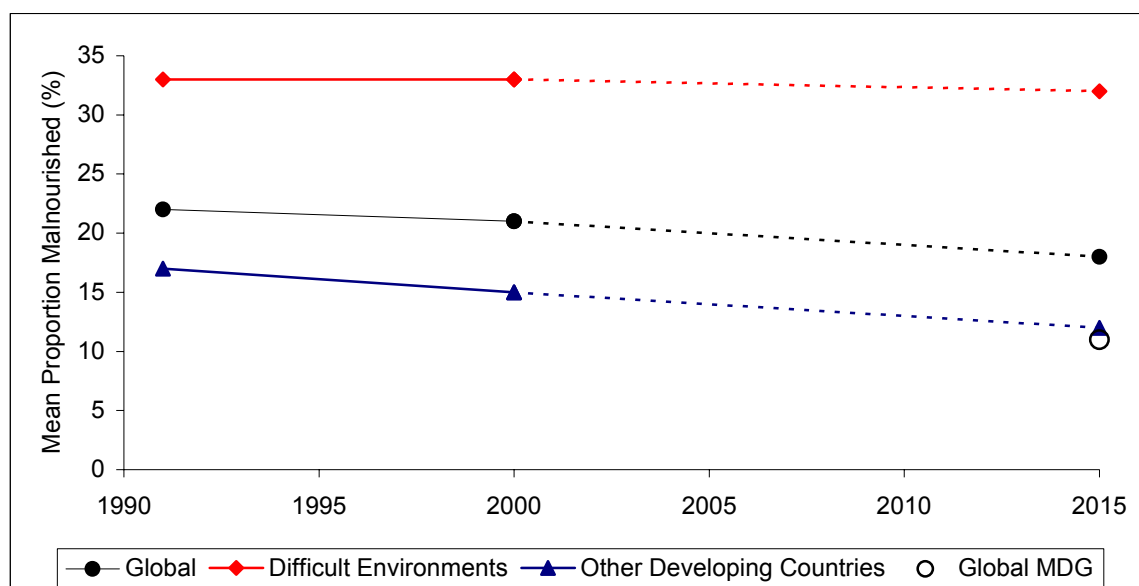
Difficult environments contain a quarter of the world's undernourished and thus a considerable proportion of the challenge of achieving target 2 resides in them.

Estimates are also available of the proportion of each country's population that is undernourished. The most recent estimates suggest that on average, a third of people living in a difficult environment are undernourished. This proportion is twice as high as in the other developing countries.

Whilst it is problematic to assess trends based on estimated data, doing so provides some indication of the progress towards reducing undernourishment in difficult environments compared to the rest of the world.

Figure 2.1 suggests that progress in reducing the mean proportion of undernourished has been slow in all developing countries. However, it also highlights how much greater the mean proportion of malnourished is in difficult environment countries compared to in the other developing countries, and the effect this has on the global mean proportion.

Figure 2.1: Mean proportion of undernourished 1990-2015



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

Table 2.2: Mean Proportion of undernourished 1990-2001 with projected values for 2015 based on 1990-2001 trends

|           | Global | Difficult Environments | Other Developing Countries |
|-----------|--------|------------------------|----------------------------|
| 1990-1992 | 22%    | 33%                    | 17%                        |
| 1999-2001 | 21%    | 33%                    | 15%                        |
| 2015      | 18%    | 32%                    | 12%                        |

\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.



## **Goal 2: Achieve universal primary education**

- **Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling**

***Over a third of the primary school age children who are not in education in developing countries live in difficult environments. Mean net primary education enrolment ratios in difficult environments have improved from 1990-2000, however, the target cannot be met unless this rate of improvement increases three-fold from 2000-2015***

Target 3 requires universal completion of primary education across all developing countries. It follows that it cannot be attained without universal completion of primary education in difficult environments, which is currently a long way from occurring. Over one third of the primary school age children who are not in primary education across all developing countries live in difficult environments. Excluding India and China this proportion rises to half.

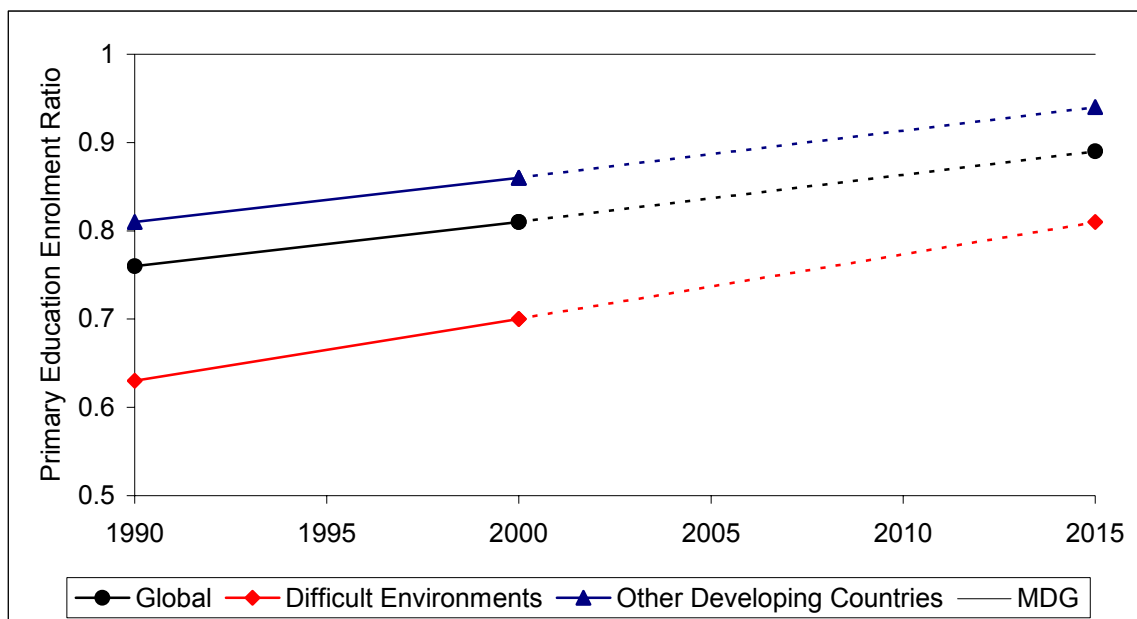
Table 3.1: Number of eligible age children not in primary education (2000)

| Global      | Global*    | Difficult Environments |             |              |
|-------------|------------|------------------------|-------------|--------------|
|             |            | Number                 | % of Global | % of Global* |
| 102 million | 72 million | 37 million             | 36%         | 51%          |

\* 'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C

Data from 2000 suggests that on average only 70% of eligible children living in a difficult environment country were enrolling in primary education (compared to an average of 86% in other developing countries). A dynamic analysis of net primary education enrolment ratios (based on data from 1990 and 2000) suggests that progress towards universal enrolment is occurring at a similar rate in difficult environments as in the other developing countries. However, in the other developing countries, only a small improvement in the rate at which mean net primary education enrolment increased from 1990-2000 is needed to reach the 2015 target. Meanwhile, in difficult environments a nearly three-fold improvement in the 1990-2000 rate of increase is required.

Figure 3.2: Mean primary education enrolment ratios 1990-2015



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

### **Goal 3: Promote gender equality and empower women**

- **Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015**

***Mean gender disparity in enrolment is greater in difficult environments than in the other developing countries for both primary and secondary education. In difficult environments, the 2015 target cannot be met for primary education without more than doubling the rate at which disparities were decreased from 1990-2000.***

Target 4 requires the elimination of gender disparities in primary and secondary education in all developing countries, and hence, without addressing the problem in difficult environments, the target cannot be met. That the mean net female:male primary and secondary education enrolment ratios in difficult environments are so much lower than in the other developing countries suggests that a considerable challenge to achieving target 4 resides in difficult environments.

Table 4.1: Mean net primary and secondary education female:male enrolment ratios 1998-2000

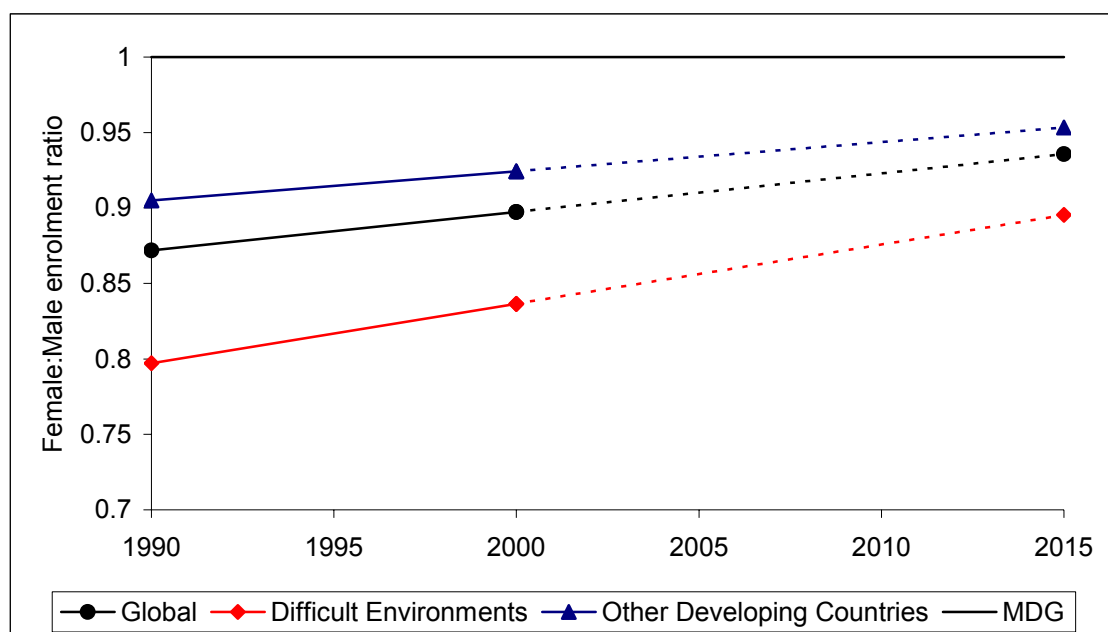
|                     | Global | Difficult Environments | Other Developing Countries |
|---------------------|--------|------------------------|----------------------------|
| Primary Education   | 0.90   | 0.84                   | 0.92                       |
| Secondary Education | 0.89   | 0.77                   | 0.95                       |

\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

Globally, the mean level of gender disparity in enrolment is similar in both primary and secondary education and is some way from parity. Splitting the global mean into one for difficult environments and one for the other developing countries reveals two trends. Firstly, in difficult environments there is greater gender disparity in both primary and secondary education enrolment than in the other developing countries. Secondly, in difficult environments the gender disparity is greater in secondary education than primary education, whilst in the other developing countries the opposite is the case.

From 1990-2000, improvements were made in difficult environments with regards decreasing gender disparity in primary education enrolment. However, simply sustaining this rate of improvement would not be sufficient to reach the 2015 target. For this to occur, decreases in gender disparity in difficult environments would have to occur 2.5 times faster from 2000-2015 than they did from 1990-2000.

Figure 4.1: Mean global, difficult environment and other developing countries' primary education female:male enrolment ratios 1990-2000 with projected values for 2015 based on 1990-2000 trends.



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

## Goal 4. Reduce child mortality

- **Target 5: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate**

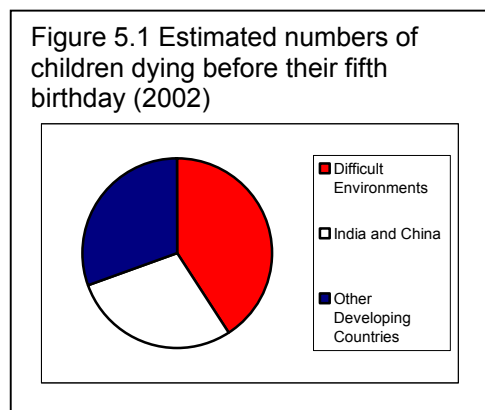
**40% of the under-five deaths in developing countries occur in difficult environments. Even if Child Mortality were completely eliminated in all other developing world countries by 2015, target 5 still would not be met if the 1990-2002 rate of decrease in Child Mortality Rate in difficult environments did not improve.**

Estimates suggest that two-fifths of under-five deaths in developing countries take place in difficult environments. Excluding the challenge in India and China, it is estimated that over half of the under-five deaths in the rest of the developing countries occur in difficult environments. With such a high proportion of under-five deaths occurring there, it is clear that difficult environments pose a real challenge to achieving target 5.

Table 5.1: Estimated numbers of children dying before their fifth birthday (2002)

| Global       | Global*     | Difficult Environments |             |              |
|--------------|-------------|------------------------|-------------|--------------|
|              |             | Number                 | % of Global | % of Global* |
| 10.8 million | 7.7 million | 4.4 million            | 41%         | 57%          |

\* 'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C



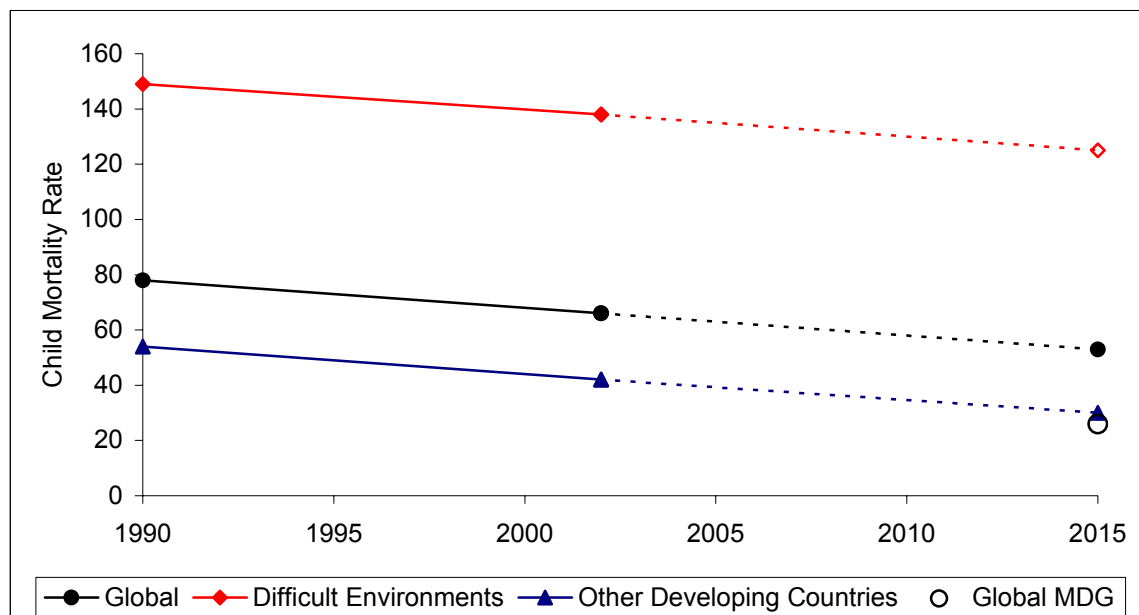
The MDG target concerns the Child Mortality Rate (CMR), which is the number of children per 1000 born who will die before their fifth birthday. Based on 1990 estimates, the 2015 target for the global mean CMR is 26. We are clearly some way off this and at the current rate of progress, will not meet the target.

By splitting the global mean into values for difficult environments and the other developing countries, one can see clearly that progress towards the target is being hindered by the high mean CMR in difficult environments. If the CMR in difficult environments is to reach one third of 1990 levels, than a seven-fold improvement in the rate of decrease of CMR from 1990-2002 is required from 2002-2015.

Table 5.2 also has a line labelled 2015\*. This represents an imagined situation wherein by 2015, the CMR has been reduced to zero in all other developing countries whilst in difficult environments, the 1990-2002 rate of decrease has remained constant from 2002-2015. Even given this situation, the global mean CMR would still be greater than the MDG target. Thus, even if child mortality were eliminated in all the other developing countries by 2015,

without improvements in tackling the problem in difficult environments, target 5 still would not be attained.

Figure 5.2: Estimated mean Child Mortality Rate 1990-2003 with predicted 2015 value based on 1990-2002 trend.



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

Table 5.2: Estimated mean Child Mortality Rate (CMR) with projected 2015 value based on 1990-2002 trends and projected value supposing the CMR in the rest of the developing world is reduced to zero by 2015 (MDG target in brackets).

|       | Global  | Difficult Environments | Other Developing Countries |
|-------|---------|------------------------|----------------------------|
| 1990  | 95      | 149                    | 70                         |
| 2002  | 81      | 138                    | 56                         |
| 2015  | 66 (32) | 125(50)                | 41 (23)                    |
| 2015* | 38 (32) | 125                    | 0                          |

\*'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are the developing countries that don't appear in list C.

\*\*2015\* represents the possible 2015 Global mean CMR if child mortality were eliminated in the other developing countries but the 1990-2002 trend continued in difficult environments.

## Goal 5. Improve maternal health

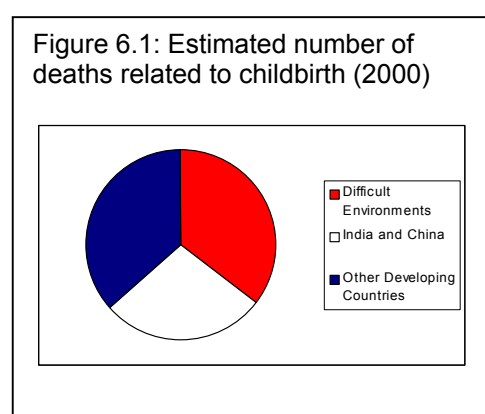
- **Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio**

**Over a third of the maternal deaths in developing countries occur in difficult environments. Even if maternal mortality was eliminated in all other developing countries, target 6 would still not be met if the 1990-2002 rate of improvement in difficult environments did not increase.**

Table 6.1: Estimated number of deaths related to childbirth (2000)

| Global  | Global* | Difficult Environments |             |              |
|---------|---------|------------------------|-------------|--------------|
|         |         | Number                 | % of Global | % of Global* |
| 527,000 | 380,000 | 187,395                | 36%         | 49%          |

\* 'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C



The estimated numbers of maternal deaths (deaths related to pregnancy and childbirth) suggest that a high proportion of the challenge to achieve target 6 resides in difficult environments. Excluding the challenge in India and China, it is estimated that almost half of maternal deaths in the other developing countries occur in difficult environments. Table 6.2 suggests that on average, only half of births in a difficult environment are attended by a skilled health worker.

Table 6.2: Mean Proportion of Births attended by skilled health personnel

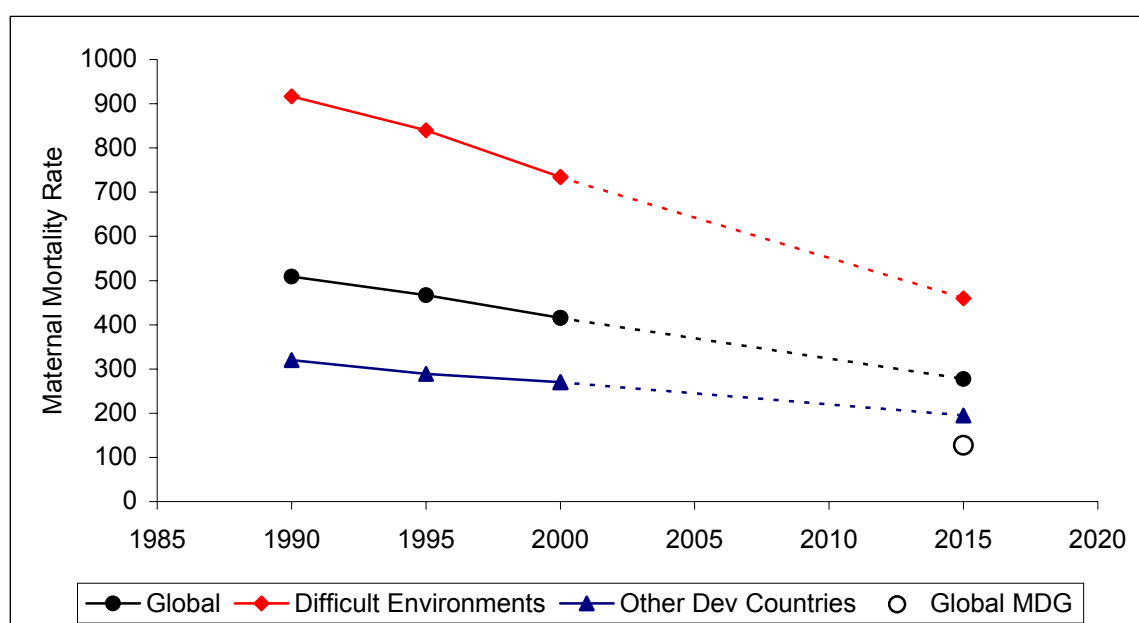
| Global | Difficult Environments | Other Developing Countries |
|--------|------------------------|----------------------------|
| 72%    | 52%                    | 82%                        |

\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

A dynamic analysis (noting the limitations of ascertaining trends from the estimated data) was conducted on Maternal Mortality Rate (MMR-Number of deaths per 100,000 live births). Figure 6.2 suggests that maternal mortality rates decreased from 1990-2000 in difficult environments. This 1990-2000 rate of decrease would, however, have to almost double from 2000-2015 in order to reach a MMR in difficult environments that has reduced by three quarters between 1990 and 2015.

Table 6.3 also has the line labelled 2015\*, representing an imagined situation wherein by 2015, maternal mortality has been eliminated in all other developing countries but in difficult environments, the 1990-2000 rate of decrease has remained constant from 2000-2015. In this situation, the global mean MMR would still be greater than the MDG target, hence, even if maternal mortality is eliminated in other developing countries, without improvements in tackling the problem in difficult environments, target 6 still would not be attained.

Figure 6.2: Mean estimated MMR 1990-2000 with projected 2015 value based on 1990-2000 trends.



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Dev Countries' are all the developing countries that don't appear in list C.

Table 6.3: Mean estimated Maternal Mortality Rate (MMR) 1990-2000 with projected 2015 value based on 1990-2000 trends. (MDG target in brackets).

|       | Global    | Difficult Environments | Other Developing Countries |
|-------|-----------|------------------------|----------------------------|
| 1990  | 509       | 917                    | 320                        |
| 1995  | 467       | 840                    | 289                        |
| 2000  | 416       | 734                    | 270                        |
| 2015  | 277 (127) | 460 (229)              | 195 (80)                   |
| 2015* | 141 (127) | 460                    | 0                          |

\*'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

\*\*2015\* represents the possible 2015 Global mean MMR if maternal mortality were eliminated in the other developing countries but the 1990-2000 trend continued in difficult environments.



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

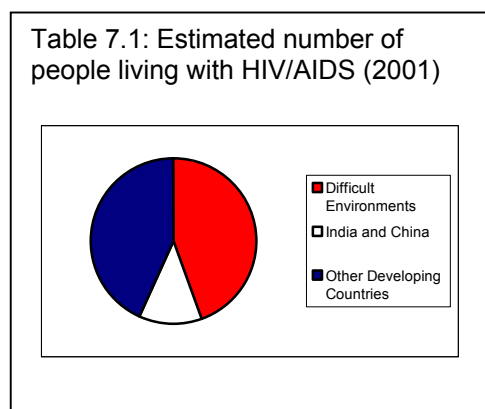
- **Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS**

***Difficult environments contain 44% of those living with HIV/AIDS in developing countries.***

Table 7.1: Estimated number of people living with HIV/AIDS (2001)

| Global       | Global*      | Difficult Environments |             |              |
|--------------|--------------|------------------------|-------------|--------------|
|              |              | Number                 | % of Global | % of Global* |
| 38.5 million | 33.8 million | 17.1 million           | 44%         | 51%          |

\*'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C



Of the estimated 40 million people living with HIV/AIDS worldwide, 96% live in developing countries. Excluding those that live in India and China, over half of these 38.5 million people live in difficult environments.

- **Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases**

***The malarial death rate is over twelve times greater in difficult environments than in other developing countries.***

The results below suggest that malaria continues to have a high impact in difficult environments. There is not sufficient data to allow a dynamic analysis and thus inform any inferences on the spread of the disease of time.

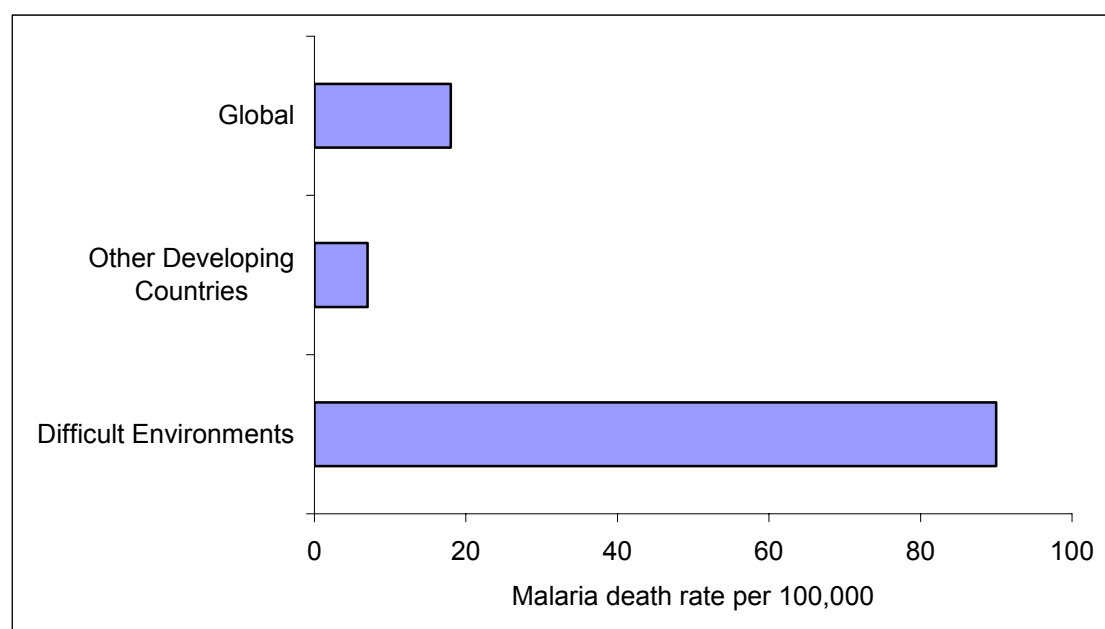
As a vector-borne disease, malaria incidence closely corresponds with geographical location and climate. Since a high proportion of difficult environments are in locations that provide ideal conditions for the spread of malaria it is inevitable that the mean death rate in these countries is far higher than the global death rate, which covers the many countries where the incidence of malaria is not possible/made difficult by the climate. As table 8.1 shows, 87% of difficult environments are affected by malaria, whilst only 28% of other developing countries are affected.

Table 8.1: Malaria Death Rate per 100,000 (2000) and proportion of countries where Malaria is prevalent

|   | Global | Difficult Environments | Other Developing Countries |
|---|--------|------------------------|----------------------------|
| Malaria Death Rate                                  | 18     | 90                     | 7                          |
| Proportion of countries with Malaria Death Rate > 0 | 42%    | 87%                    | 28%                        |

\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

Figure 8.1: Malaria Death Rate per 100,000 (2000)



\* 'Global' refers to all developing countries (including difficult environments), 'Difficult Environments' are the 46 countries in list C, and 'Other Developing Countries' are all the developing countries that don't appear in list C.

## **Goal 7: Ensure environmental sustainability**

- **Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources**

### **Ratification of Multilateral Agreements**

One method of gauging progress towards this target is the extent to which countries have signed up to multilateral treaties. For instance, one such treaty is the convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This is an international agreement to ensure that species survival is not threatened by international trade and was first established nearly 30 years ago. 40 of the 46 countries in list C have signed up to this agreement. However, one must question the extent to which these countries are able and/or willing to uphold these agreements. For instance, Zimbabwe signed in 1982 yet it's estimated that since 2000, it has lost half its wildlife through poaching<sup>4</sup>.

### **Biodiversity Decline**

Myers et al (2000)<sup>5</sup> introduced the concept of biodiversity hotspots, citing 25 areas around the globe that contain the greatest endemic biodiversity. They argued that a targeted silver bullet approach could be the most efficient and effective answer to the problem of biodiversity decline. The 25 hotspots cover only 1.4% of the world's surface area but contain approximately 44% of all vascular plant and 35% of all vertebrate species.

Of list C's 46 difficult environments, over half are found within or contain part of a biodiversity hotspot<sup>6</sup>. Any response to biodiversity decline must engage difficult environments.

### **Deforestation**

The currently high global rate of deforestation is a very visible loss of environmental resources. Table 9.1 suggests that 43% of the annual forest reduction around the world each year occurs in difficult environments. Put into perspective, an area of forest the size of Hong Kong is being destroyed every week in difficult environments.

Table 9.1: Annual Forest Cover Reduction in Hectares (1990-2000).

| Global     | Difficult Environments |             |
|------------|------------------------|-------------|
|            | Number                 | % of Global |
| 13 million | 5.7 million            | 43%         |

\* 'Global' represents all developing countries and Difficult Environments are those countries appearing in list C

<sup>4</sup> <http://www.bbc.co.uk/nature/animals/conservation/rhinos/index.shtml>

<sup>5</sup> Myers, Mittermeier, Mittermeier, Da Fonseca & Kent. Biodiversity hotspots for conservation priorities Nature 403, 853 (2000).

<sup>6</sup> <http://www.biodiversityhotspots.org/xp/Hotspots>

- **Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation**

***Difficult environments contain almost a third of the number of people globally living without sustainable access to safe drinking water.***

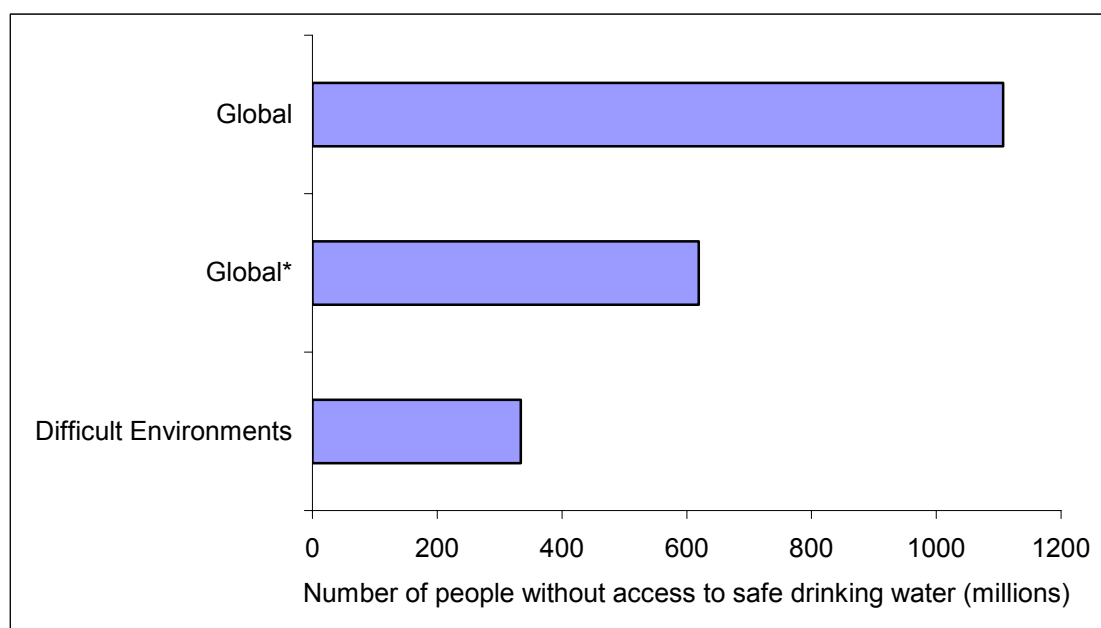
The data suggests that, excluding the challenge in India and China, over half the people living without access to safe drinking water in the rest of the developing countries live in difficult environments. Whilst there is no data to allow for a dynamic analysis, with such a high proportion of the problem residing in difficult environments, meeting the challenge there is essential for achieving target 10.

Table 10.1: Estimated number of people without sustainable access to safe drinking water (2000)

| Global       | Global*     | Difficult Environments |             |              |
|--------------|-------------|------------------------|-------------|--------------|
|              |             | Number                 | % of Global | % of Global* |
| 1107 million | 619 million | 334 million            | 30%         | 54%          |

\* 'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C

Figure 10.2: Estimated number of people without sustainable access to safe drinking water (2000)



\* 'Global' represents all developing countries, 'Global\*' represents all developing countries excluding India and China and Difficult Environments are those countries appearing in list C

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

The goal 8 targets mainly relate to how the international community can respond to developmental challenges and are not readily quantifiable. However, for three of the targets below, it is possible to underline the extent of the challenge to achieve them that resides in difficult environments.

- **Target 13: Address the special need of the least developed countries**

There are currently fifty designated least developed countries (LDCs)<sup>7</sup>. As Table 13.1 shows, there is considerable overlap between the LDCs and the difficult environments designated in lists A, B and C. List C contains almost two thirds of the LDCs, thus 'addressing the special need of the least developed countries' very necessarily involves working with difficult environments.

Table 13.1: Proportion of the 50 LDCs found in lists A, B and C of difficult environments.

| List A | List B | List C |
|--------|--------|--------|
| 46%    | 66%    | 62%    |

- **Target 14: Address the special needs of landlocked developing countries and small island developing States**

A considerable proportion of the world's landlocked countries and small island developing States (SIDS) are difficult environments. List C contains almost one half of the world's landlocked countries<sup>8</sup> and one fifth of the world's SIDS<sup>9</sup>. Therefore, again, addressing 'the special needs of landlocked developing countries and small island developing states' requires significant interaction with difficult environments.

Table 14.1: Proportion of world's landlocked countries and small island developing states (SIDS) found in lists A, B and C of difficult environments

|  | List A | List B | List C |
|--|--------|--------|--------|
| Proportion of World's Landlocked countries | 53%    | 57%    | 43%    |
| Proportion of World's SIDS                 | 10%    | 5%     | 22%    |

<sup>7</sup> For list of LDCs see sources and notes page on statistics section of Least Developed Countries Report 2004 [http://www.unctad.org/en/docs//ldc2004\\_en.pdf](http://www.unctad.org/en/docs//ldc2004_en.pdf)

<sup>8</sup> For list of Landlocked countries see sources and notes page on statistics section of <http://www.unctad.org>

<sup>9</sup> For list of SIDS see <http://www.un.org/esa/sustdev/sids/sidslist.htm>

- **Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications**

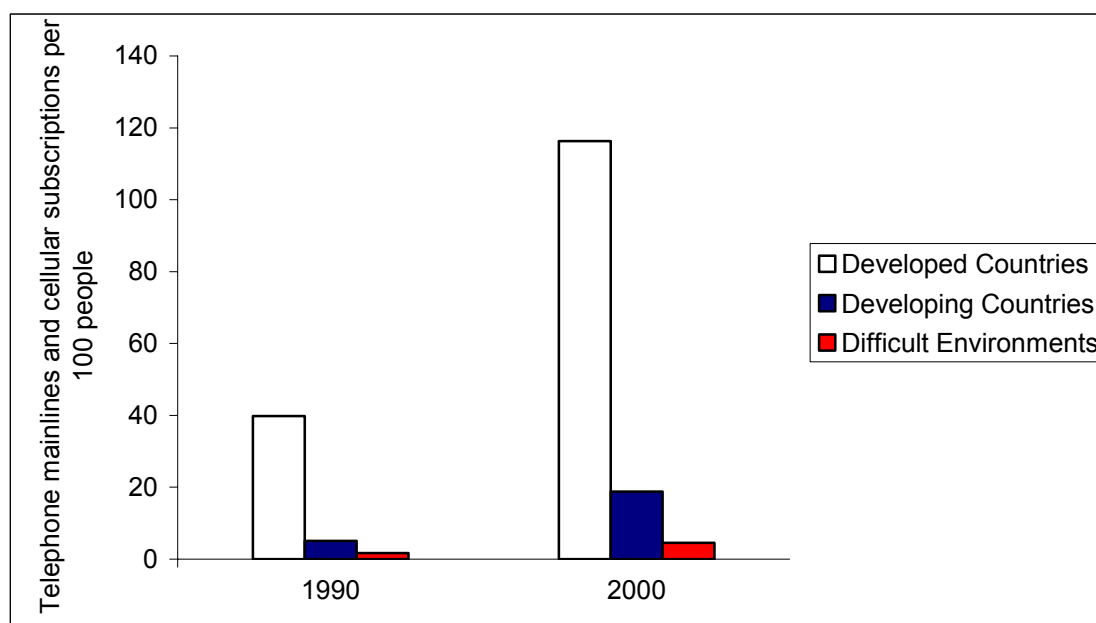
It is estimated that in 2000 there were only 4.5 mainline cellular subscriptions per 100 people in difficult environments. This is 4 times lower than in the other developing countries and 25 times lower than in developed countries.

Table 18.1: Telephone mainlines and cellular subscriptions per 100 people<sup>10</sup>

|      | Developed Countries | Developing Countries | Difficult Environments |
|------|---------------------|----------------------|------------------------|
| 1990 | 39.8                | 5.0                  | 1.7                    |
| 2000 | 116.3               | 18.8                 | 4.5                    |

\* Developing countries are all developing countries excluding difficult environments. 'Difficult Environments' are the 46 countries in list C

Figure 18.1: Telephone mainlines and cellular subscriptions per 100 people in 1990 and 2000



\* Developing countries are all developing countries excluding difficult environments. 'Difficult Environments' are the 46 countries in list C

<sup>10</sup> See Human Development Report 2003: <http://hdr.undp.org/reports/global/2003>

## **Conclusion:**

A considerable challenge to achieving the MDGs resides in areas where the state is unable and/or unwilling to form an effective partnership for poverty reduction.

The UNDP's Human Development Report 2003<sup>11</sup> contains a chapter on progress towards the MDGs. It identifies 31 top priority countries that are considered to be in crisis for each goal. It recommends that with regard to achieving the MDGs, these countries should be the focus of the world's attention and resources. Two thirds of these top priority countries appear in list C of difficult environments. Taking the countries that appear in either list A, B or C, this proportion rises to nearly 80%.

A snapshot analysis of recent data and estimates reveals that difficult environments currently contain very large numbers of people living under the conditions that the goals are attempting to alleviate. Difficult environments contain:

- over 300 million people living on less than a dollar a day
- over 200 million people who are undernourished
- over 300 million people living without sustainable access to safe drinking water
- nearly 40 million children outside primary education
- over 4 million children dying before their fifth birthday each year
- nearly 200,000 mothers dying due to complications with childbirth or pregnancy.
- Over 17 million living with HIV/AIDS

Where a dynamic analysis was carried out, the trends suggest that progress towards the targets has been too slow in difficult environments for any of the targets to be met there. At current rates of improvement, in difficult environments in 2015:

- Only 80% of children will be enrolling in primary education
- Gender disparities in primary and secondary education will still exist
- CMRs will be three-quarters of 1990 levels
- MMRs will be half 1990 levels

Indeed, for these four goals, if the current rate of improvement stays the same in difficult environments, the global MDG targets cannot be met, regardless of how much improvement is made in every other developing country.

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<sup>11</sup> See: Chapter 2 of the report, found at <http://hdr.undp.org/reports/global/2003/>

## Appendix I: Countries appearing in Lists A, B and C

### A. Robert Rotberg's list of collapsed, failed and weak states (2003)

In chapter one of his book 'When States Fail'<sup>12</sup>, Robert Rotberg establishes three categories: collapsed states, failed states and weak states.

A collapsed state e.g. Somalia is defined as a rare and extreme version of a failed state. Characteristics of a collapsed state include the obtaining of political goods through private or ad hoc means, security equated with the rule of the strong and the existence of a vacuum of authority.

Failed states e.g. Afghanistan, Liberia, the Sudan, are described as being tense, deeply conflicted, dangerous and/or contested bitterly by warring factions. Rotberg suggests that it is not the absolute intensity of violence that identifies a failed state but rather its enduring character or its consuming quality. Often the expression of official power in a failed state is limited to the capital city and one/more ethnically specific zones.

Weak states are those that have recently been, or could soon become, failed states. Rotberg describes three varieties of weak state: those with high potential to fail that are descending towards failure e.g. Zimbabwe, those fragily bridging serious inter-communal antagonisms e.g. Fiji and those that are endemically weak e.g. Chad.

In figures 1.1-1.4 of 'When States Fail', Rotberg outlines 47 countries that fitted into the above categories in 2003. These were the countries used as one proxy list of difficult environments. The list contains a wide geographical spread of countries and also includes both middle-income countries e.g. Columbia, and low-income countries e.g. Angola. The 47 countries contain 1005 million people, 16% of the world's population.

|  |  |  |   |
|--|--|--|---|
| <b>Africa:</b><br>Angola<br>Burkina Faso<br>Burundi<br>CAR<br>Chad<br>Cote d'Ivoire<br>DRC<br>Ghana<br>Guinea<br>Liberia<br>Madagascar<br>Malawi | Mali<br>Niger<br>Nigeria<br>Sierra Leone<br>Somalia<br>Sudan<br>Zimbabwe | Korea (Dem rep of)<br>Kyrgyz Republic<br>Lao PDR<br>Lebanon<br>Myanmar<br>Nepal<br>Papua New Guinea<br>Philippines<br>Sri Lanka<br>Tajikistan<br>Timor Leste<br>Turkmenistan | <b>Other:</b><br>Belarus<br>Bolivia<br>Columbia<br>Ecuador<br>Fiji<br>Georgia<br>Guatemala<br>Guyana<br>Haiti<br>Moldova<br>Paraguay<br>Solomon Islands |
|  | <b>Asia:</b><br>Afghanistan<br>Cambodia<br>Indonesia<br>Iraq             |  |   |

<sup>12</sup> 'When States Fail', Robert Rotberg, 2003



## B. Countries appearing in the Centre for Global Development Report (2004)

The Centre for Global Development's Commission on Weak States and US National Security released the report 'On the Brink: Weak States and US National Security' in June 2004. Appendix A of the report contains three lists of countries<sup>13</sup>. List A, 'the security gap', contains those low-income countries that have experienced conflict between 1998-2003. Conflict is used as a proxy for the effectiveness with which a government maintains internal security and can also be used as a proxy for how effectively governments control the sovereign territory of their state. List B, 'the capacity gap' uses immunisation rates as a proxy for the extent to which governments meet basic needs. List C, 'the legitimacy gap' utilises the index of political freedom as a proxy measure for a government's commitment to transparent democratic governance.

To produce one list of difficult environments from these three, any country that appeared at least once in either the whole of list A or the bottom two quintiles of lists B or C was included. These criteria initially captured India but it was decided that due to the distorting effects of its huge population, to leave India out of the final list. The resulting list consists of 48 countries, which contain 1150 million people, 19% of the world's population.

|   |  |  |  |
|---|--|--|--|
| <b>Africa:</b><br>Angola<br>Burkina Faso<br>Burundi<br>Cameroon<br>Central African Rep<br>Rep of Congo<br>Cote d'Ivoire<br>Djibouti<br>DRC<br>Eritrea<br>Ethiopia<br>The Gambia<br>Guinea | Guinea-Bissau<br>Lesotho<br>Liberia<br>Madagascar<br>Mali<br>Mauritania<br>Niger<br>Nigeria<br>Rwanda<br>Senegal<br>Sierra Leone<br>Somalia<br>Sudan<br>Togo | Uganda<br>Zimbabwe   | Papua New Guinea<br>Tajikistan<br>Timor-Leste<br>Uzbekistan<br>Vietnam<br>Rep of Yemen |
|   |  | <b>Asia:</b><br>Afghanistan<br>Azerbaijan<br>Bhutan<br>Cambodia<br>Indonesia<br>Kyrgyz Republic<br>Lao PDR<br>Myanmar<br>Nepal<br>Pakistan | <b>Other:</b><br>Serbia and Montenegro<br>Haiti  |

<sup>13</sup> See pgs 47-49 of 'On the Brink: Weak States and US National Security', Centre for Global Development (Washington, 2004). Available at [http://www.cgdev.org/docs/WeakState\\_Transcript\\_rev.pdf](http://www.cgdev.org/docs/WeakState_Transcript_rev.pdf)

**C. Countries appearing at least once in the 4<sup>th</sup> and 5<sup>th</sup> quintiles of the CPIA ratings between 1999-2003**

The Country Political and Institutional Assessment (CPIA) ratings are produced by the World Bank to help determine relative resource allocation to the International Development Association (IDA) countries<sup>14</sup>. For 2004, the operational cut-off for IDA eligibility is a 2002 GNI per capita of \$865 and thus the countries subject to the CPIA ratings are all low-income.

The ratings are produced by comparing IDA countries' current performance against 20 criteria grouped into four categories: economic management, structural policies, policies for social inclusion and public sector management & institutions.

Over the period 1999-2003, 39 countries appeared at least once in the bottom two quintiles and 7 countries were not rated. The list therefore consists of 46 countries, which contains 871 million people, 14% of the world's population.

|   |   |   |  |
|---|---|---|--|
| <b>Africa:</b><br>Angola<br>Burundi<br>Cameroon<br>Central African Rep<br>Chad<br>Comoros<br>Cote d'Ivoire<br>Djibouti<br>Eritrea<br>Ethiopia<br>The Gambia<br>Guinea | Guinea Bissau<br>Kenya<br>Mali<br>Niger<br>Nigeria<br>Rep of Congo<br>Sao Tome & Principe<br>Sierra Leone<br>Togo<br>Zimbabwe | Indonesia<br>Lao PDR<br>Nepal<br>Papua New Guinea<br>Rep of Yemen<br>Tajikistan<br>Uzbekistan | Solomon Islands<br>Tonga<br>Vanuatu  |
|   | <b>Asia:</b><br>Azerbaijan<br>Cambodia  | <b>Other:</b><br>Dominica<br>Georgia<br>Guyana<br>Haiti<br>Kiribati                           | <b>Not Rated:</b><br>Afghanistan<br>DRC<br>Liberia<br>Myanmar<br>Somalia<br>Sudan<br>Timor-Leste |

<sup>14</sup> See <http://www.worldbank.org> and link to 'International Development Association'

## 'Core' Countries

A summary of the results for each list of difficult environments can be found in Appendix 3. The results are relatively similar across lists and such similarities suggest that the different methods of listing difficult environments capture similar 'core' countries that carry particular influence on progress towards the MDGs.

The following eight countries appear in lists A, B and C. Whilst they are not the only countries that appear in all three lists, they have been picked out here because of their influence on MDG achievement.

The countries are:

|             |         |         |         |
|-------------|---------|---------|---------|
| Afghanistan | Angola  | DRC     | Myanmar |
| Niger       | Nigeria | Somalia | Sudan   |

On average, these eight countries carry an equal challenge to achieving the MDGs as all the other 38 countries in list C put together. For instance, in these eight countries are found 58% of the people in the list C countries living on less than a dollar a day, 54% of total under five deaths in list C countries and 48% of children in list C countries outside primary education.

With regards achieving the MDGs, these **eight** countries contain:

| MDG   | Core Difficult Environments |             |              |
|---|-----------------------------|-------------|--------------|
|   | Global                      | % of Global | % of Global* |
| Number living on <\$1/day                               | 199 million                 | 17%         | 33%          |
| Number malnourished                                     | 90 million                  | 11%         | 18%          |
| Number outside 1 <sup>o</sup> Education                 | 18 million                  | 17%         | 25%          |
| Under-Five Mortality                                    | 2.4 million                 | 22%         | 31%          |
| Maternal Mortality                                      | 84 thousand                 | 16%         | 22%          |
| Number living with HIV/AIDS                             | 6.2 million                 | 16%         | 18%          |
| Number living without sustainable access to clean water | 145 million                 | 13%         | 23%          |

## **Appendix 2: Notes on the data, statistical methods and data sources**

There is no complete, up-to-date, accurate data set for any of the indicators used to assess progress towards the MDGs. The completeness of each data set varies dramatically between indicators, as does the timeframe over which the data is collected. Where estimated data is available, its reliability as an indicator of the actual situation varies from set to set and over time. Cross-country comparisons, which form the basis of this paper, must also be treated with a degree of circumspection since in different countries, different methods for data collection and different bases for estimates may have been used. As a result, the statistics produced in this paper only represent our best guess at the actual global situation with regards progress towards the MDGs.

As well as difficulties in obtaining complete, accurate and comparable data sets, there are a number of effects that cannot be captured by looking at country-by-country data. For instance, difficult environments can have spill-over effects on their neighbours. These effects can impact on other difficult environments eg. refugee flow from Sudan to Chad or impact on non-difficult environments eg. Afghanistan opium production. As such, the importance of difficult environments to the MDGs is likely to be underestimated by analysing data on a country-by-country basis. The analysis also fails to capture intra-country regional differences. Such differences are very important in a country such as India, which contains regions with larger populations than most countries, some of which could be considered as difficult environments and others that could not.

There are also considerations to be made with regards the proficiency with which we can track MDG progress. For instance, the ability to collect reliable and exhaustive data sets will improve over the period from 1990-2015. As such, how reliably will we be able to compare the 1990 and 2015 situation when comparisons will be made between sets of data varying greatly in their reliability and completeness?

Despite their limitations, the data sets are the only tools we have to measure how far we have progressed since 1990, and so offer the best indication we can have of global progress towards poverty reduction. Almost all of the data sets used for this study are available at the United Nations Statistic Division's website<sup>15</sup>. For some of the MDG targets, data sets had to be complimented with estimates. For an explanation of the basis of these estimates see the methods section below.

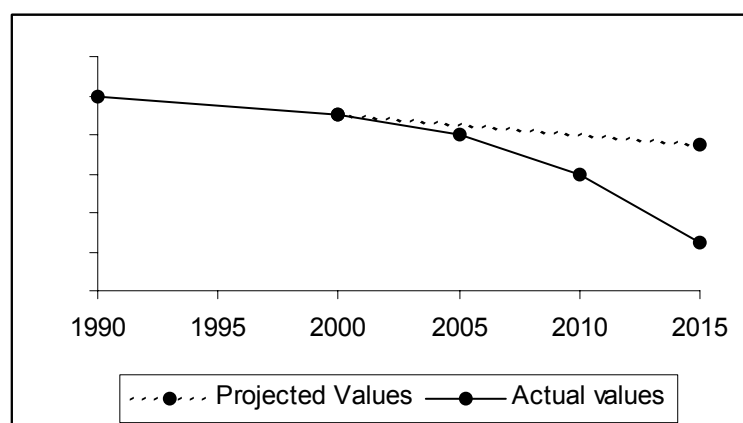
In the paper, a dynamic analysis is carried out for targets where data is available for two different years that are at least five years apart. The extrapolation of 1990-2000 trends is included only as a weak indication of the potential situation in 2015. It only takes into account the changes that occurred from 1990-2000 and makes a linear extrapolation to 2015, thus it ignores potential improvements, synergies etc. It is also noted that trends

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<sup>15</sup> See [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

observed in estimated data eg. the child and maternal mortality data sets, are not necessarily instructive due to the wide margins of uncertainty inherent in the estimates.

The extrapolations are not meant to be predictions but have been included to underline the dynamic aspect of the MDG challenge and prompt thought on the potentially increasing importance of difficult environments to the MDGs in the next eleven years. The aim for DFID and the rest of the international development community is to increase the rate of progress towards the targets (and beyond) with time, so that when it comes to plotting progress towards the MDGs, the actual 2015 values are far removed from the linearly projected values used in this paper, as below:



This paper is not the only analysis of progress towards the MDGs in difficult environments. Other analyses have been, and will be, carried out and due to the nature of selecting which countries are difficult environments and the incompleteness of the data sets, different figures will be arrived at. For instance, the draft 'Summary paper prepared for DAC Learning and Advisory Process on Difficult Partnerships'<sup>16</sup> analyses the progress of 'difficult partnership' countries against four MDG indicators.

Two of the four indicators are also analysed in this paper, Child Mortality Rate and Malaria Death Rate. In this paper we place the Child Mortality Rate in the range 115~146 depending on the list of countries used. The figure given in the DAC summary paper is around 165. For malaria death rate we quote 71~90 where the DAC summary paper places it at around 120.

These differences can mostly be attributed to differences in criteria for the selection of difficult environment/partnership countries. The criteria used in this paper, detailed in appendix 1, result in lists of 46-48 countries. Meanwhile, in the DAC summary paper, countries appearing in the bottom two quintiles of the CPIA ratings are selected. In 2003 this amounted to 30 countries. Given that both indicators are calculated as population-weighted averages, the fewer countries appearing in the DAC summary paper may have driven the higher CMR and Malarial death rates reported there.

<sup>16</sup> 'Summary Paper prepared for DAC Learning and Advisory Process on Difficult Partnerships', Collier and others (2004) DRAFT.

However, whilst there are differences in figures reported, the story remains the same. The DAC summary paper reports progress towards the MDGs in difficult partnership countries against other low-income countries and those middle-income countries that receive aid. For each of the four indicators analysed, the situation is considerably worse in the difficult partnership countries than in the other groups of countries.

## Methods:

**Poverty:** There are inherent difficulties in collecting an accurate, up-to-date and exhaustive data set that is also comparable across countries for the proportion of people living on less than a dollar a day.

Missing data points were filled with estimates based on three different methods:

1. Through consultation with DFID country desks, rough estimates were made of the proportion of the population living on less than one dollar a day. These are listed below: -

| Country     | Estimated proportion living <\$ /day | Country | Estimated proportion living <\$ /day |
|-------------|--------------------------------------|---------|--------------------------------------|
| Afghanistan | 0.70                                 | Haiti   | 0.45                                 |
| Angola      | 0.70                                 | Iraq    | 0.15                                 |
| Benin       | 0.40                                 | Korea N | 0.40                                 |
| Cambodia    | 0.30                                 | Liberia | 0.50                                 |
| Chad        | 0.30                                 | Myanmar | 0.20                                 |
| DRC         | 0.70                                 | PNG     | 0.25                                 |
| Congo       | 0.30                                 | Somalia | 0.60                                 |
| Eritrea     | 0.50                                 | Sudan   | 0.50                                 |
| Guinea      | 0.45                                 |         |                                      |

2. Missing data points were filled using the average proportion of those living on less than one dollar a day in the other countries in its geographic region.  
 3. Missing data points were filled using the average proportion of those living on less than one dollar a day in the other countries with the same World Bank economic classification<sup>17</sup>.

The results each data set produced were:

| Method   | List A      |              | List B      |              | List C      |              |
|----------|-------------|--------------|-------------|--------------|-------------|--------------|
|          | % of Global | % of Global* | % of Global | % of Global* | % of Global | % of Global* |
| <b>1</b> | 28%         | 55%          | 35%         | 69%          | <b>29%</b>  | <b>56%</b>   |
| <b>2</b> | 24%         | 48%          | 33%         | 64%          | 26%         | 52%          |
| <b>3</b> | 27%         | 51%          | 35%         | 69%          | 28%         | 53%          |

The different methods of filling the data gaps produced similar statistics. For the paper the statistics quoted are those for method 1, list C.

<sup>17</sup> For economic classification of countries see:  
<http://www.worldbank.org/data/countryclass/classgroups.htm>

**Malnutrition:** To fill gaps in the data set, any countries classified as high income by the World Bank were designated a zero proportion of undernourished. Any country designated as upper middle income (and for each subsequent classification category below that) was designated the mean undernourished proportion for the other similarly categorised countries in its region. To generate the data on numbers of undernourished, each country's proportion of undernourished was multiplied by its 2002 population.

**Education:** Gaps in the data for the number of children not in school were filled by combining the country's number of children in the primary school age group with its ratio of non-enrolment in primary education. Gaps in the net enrolment ratios were filled with the average across the country's World Bank economic classification. The net primary education enrolment ratios were averaged globally/for difficult environments/for other developing countries. This method meant that countries were not weighted according to their size and as such Vanuatu's enrolment ratio carried as much impact on the average as China's. This is not ideal, however, weighting enrolment ratios by country size would involve combining two incomplete data sets that have been augmented with estimates, thus running the risk of multiplying inaccuracies in the estimates and decreasing reliability.

**Gender:** Female:Male enrolment ratios were available for some/all of the years 1998-2000. For each country, the available enrolment ratio from the most recent year was used. Any gaps in the data set were filled using the average across the country's World Bank economic classification. As with the education target, female:male enrolment ratios were not weighted according to country size to produce non-weighted mean gender enrolment ratios. Also, female:male enrolment ratios alone do not account for differences in female and male eligible age populations.

**Child Mortality:** Gaps in the data set were filled using the average across the country's World Bank economic classification. Child Mortality figures are based on estimates and contain large margins of uncertainty. The basis of the estimates also changed, and improved, from 1990-2002. As such, drawing conclusions from trends observed in the data is inappropriate. A dynamic analysis was conducted for this paper, however, the intention is only to offer a suggestion of the progress made from 1990-2002 and the extrapolation to 2015 should not be confused with a prediction of the future situation but rather a possible scenario.

**Maternal Mortality:** Gaps in the data set were filled using the average across the country's World Bank economic classification. Maternal Mortality figures are also based on estimates whose basis altered and improved over the 1990-2000 period, and thus the same applies for the dynamic analysis as above. The mean proportion of births attended by skilled healthcare personnel is not weighted by number of births. This may be the reason for the relatively high mean proportion of births attended in developing countries. A

note on the 'Maternal Mortality in 2000' report quotes a figure of 52% for developing countries.<sup>18</sup>

**HIV/AIDS:** Gaps in the data set were filled using the average proportion of adults infected in countries with the same World Bank economic classification and geographic region. The average proportion of adults infected was then multiplied with the adult population (ages 15-49) to give a value for number of adults living with HIV/AIDS in the country.

**Malaria:** The malaria death rate was calculated by multiplying the malaria death rate for each country by its population to give total deaths due to malaria in each country. Rates were then calculated globally, in difficult environments and in the other developing countries. To give the indication of Malaria presence globally and in difficult environments, where the Malaria Death Rate was greater than zero, the country was designated as having Malaria present.

**Water:** No changes were made from the data set.

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<sup>18</sup> See Paragraph 3 of : [http://www.who.int/reproductive-health/publications/maternal\\_mortality\\_2000/notes.html](http://www.who.int/reproductive-health/publications/maternal_mortality_2000/notes.html)



**Data Sources:**

| <b>MDG</b>          | <b>Data Source</b>   |
|---------------------|--|
| Poverty*            | World Bank's World Development Indicators 2003<br><a href="http://www.worldbank.org/data/wdi2003/">http://www.worldbank.org/data/wdi2003/</a>  |
| Malnutrition*       | FAO 'The State of Food Insecurity in the World 2003' (Rome, 2003)<br><a href="http://www.fao.org/docrep/006/j0083e/j0083e00.htm">http://www.fao.org/docrep/006/j0083e/j0083e00.htm</a>   |
| Education*          | UNESCO EFA Global Monitoring Report 2003/04 (Paris, 2003)<br><a href="http://www.unesco.org/education/efa/ed_for_all/index.shtml">http://www.unesco.org/education/efa/ed_for_all/index.shtml</a>   |
| Gender*             | UNESCO EFA Global Monitoring Report 2003/04 (Paris 2003)<br><a href="http://www.unesco.org/education/efa/ed_for_all/index.shtml">http://www.unesco.org/education/efa/ed_for_all/index.shtml</a>  |
| Child Mortality*    | UNICEF: State of the World's Children 2004 (Geneva and New York, 2004) <a href="http://www.unicef.org/publications/Eng_text.pdf">http://www.unicef.org/publications/Eng_text.pdf</a><br><br>UNICEF: State of the World's Children 1996 (Geneva and New York, 1996)<br><a href="http://www.unicef.org/sowc96/sc6tbls.pdf">http://www.unicef.org/sowc96/sc6tbls.pdf</a>  |
| Maternal Mortality* | 'Maternal Mortality in 2000: estimates developed by WHO, UNICEF, UNFPA' (Geneva, 2003).<br><a href="http://www.who.int/reproductive-health/publications/maternal_mortality_2000/maternal_mortality_2000.pdf">http://www.who.int/reproductive-health/publications/maternal_mortality_2000/maternal_mortality_2000.pdf</a><br><br>'Maternal Mortality in 1995: estimates developed by WHO, UNICEF, UNFPA' (Geneva, 2001)<br><a href="http://www.unfpa.org/upload/lib_pub_file/235_filename_mmin1995.pdf">http://www.unfpa.org/upload/lib_pub_file/235_filename_mmin1995.pdf</a><br><br>'Revised 1990 Estimates of Maternal Mortality: a new approach by WHO and UNICEF' (Geneva, 1996) |
| HIV/AIDS            | UNAIDS, Report on the Global HIV/AIDS Epidemic (Geneva,2002)<br><a href="http://www.unaids.org">http://www.unaids.org</a>  |
| Malaria*            | WHO, World Health Statistics Annual (Geneva, 2002)   |
| Deforestation       | FAO: State of the World's Forests 2003 (Rome, 2003)<br><a href="http://www.fao.org/DOCREP/005/Y7581E/Y7581E00.HTM">http://www.fao.org/DOCREP/005/Y7581E/Y7581E00.HTM</a>   |
| Water*              | UNICEF-WHO. Water supply and Sanitation Collaborative Council. Global Water Supply and Sanitation Assessment (Geneva and New York, 2000).  |
| Population          | World Bank 2002 population, from World Development Indicators database at <a href="http://www.worldbank.org/data/databytopic/POP.pdf">http://www.worldbank.org/data/databytopic/POP.pdf</a>  |

\*Available on the United Nations Statistics Division Millennium Indicators Database at [http://millenniumindicators.un.org/unsd/mi/mi\\_goals.asp](http://millenniumindicators.un.org/unsd/mi/mi_goals.asp)

### Appendix 3: Statistics for each list of difficult environments

|  |   |   |                     |                      |                                      | List A               |                |                 |                                      | List B               |                |                 |                                      | List C               |                |                 |                                      |      |
|--|---|---|---------------------|----------------------|--------------------------------------|----------------------|----------------|-----------------|--------------------------------------|----------------------|----------------|-----------------|--------------------------------------|----------------------|----------------|-----------------|--------------------------------------|------|
| MDG                                    | Indicator   | Year  | Global/<br>millions | Global*/<br>millions | Global<br>Rate<br>/prop <sup>n</sup> | Number /<br>millions | % of<br>Global | % of<br>Global* | Ratio/<br>Rate/<br>prop <sup>n</sup> | Number/<br>/millions | % of<br>Global | % of<br>Global* | Ratio/<br>Rate/<br>prop <sup>n</sup> | Number/<br>millions/ | % of<br>Global | % of<br>Global* | Ratio/<br>Rate/<br>prop <sup>n</sup> |      |
| Poverty                                | Number living on <\$ /day                         | 1989-2001   | 1164                | 595                  |                                      | 325                  | 28%            | 55%             |                                      | 411                  | 35%            | 69%             |                                      | 343                  | 29%            | 58%             |                                      |      |
| Hunger                                 | Number Malnourished                               | 2000  | 840                 | 491                  |                                      | 210                  | 25%            | 43%             |                                      | 257                  | 31%            | 52%             |                                      | 209                  | 25%            | 43%             |                                      |      |
|  |   | 1990-1992   |                     |                      | 22%                                  |                      |                |                 | 30%                                  |                      |                |                 | 33%                                  |                      |                |                 |                                      | 33%  |
|  | Proportion Malnourished                           | 1999-2000   |                     |                      | 21%                                  |                      |                |                 | 29%                                  |                      |                |                 | 32%                                  |                      |                |                 |                                      | 33%  |
|  |   | 2015  |                     |                      | 20%                                  |                      |                |                 | 28%                                  |                      |                |                 | 31%                                  |                      |                |                 |                                      | 31%  |
| Education                              | Numbers outside 1 <sup>o</sup> Education          | 2000  | 102                 | 72                   |                                      | 33                   | 32%            | 46%             |                                      | 47                   | 46%            | 65%             |                                      | 37                   | 36%            | 51%             |                                      |      |
|  |   | 1 <sup>o</sup> Education mean net enrolment ratio | 1990                |                      |                                      | 0.76                 |                |                 |                                      | 0.68                 |                |                 |                                      | 0.58                 |                |                 |                                      | 0.63 |
|  | 1 <sup>o</sup> Education mean net enrolment ratio | 2000  |                     |                      | 0.81                                 |                      |                |                 | 0.76                                 |                      |                |                 | 0.69                                 |                      |                |                 |                                      | 0.70 |
|  |   | 2015  |                     |                      | 0.89                                 |                      |                |                 | 0.88                                 |                      |                |                 | 0.86                                 |                      |                |                 |                                      | 0.81 |
| Gender                                 | F:M enrol ratio                                   | 1 <sup>o</sup> Ed                                 | 1990                |                      |                                      | 0.87                 |                |                 | 0.82                                 |                      |                |                 | 0.79                                 |                      |                |                 |                                      | 0.80 |
|  |   |   | 2000                |                      |                                      | 0.90                 |                |                 |                                      | 0.86                 |                |                 |                                      | 0.83                 |                |                 |                                      |      |
|  | 2015  |   |                     |                      | 0.94                                 |                      |                |                 | 0.92                                 |                      |                |                 | 0.89                                 |                      |                |                 |                                      | 0.90 |
|  | 2 <sup>o</sup> Ed                                 | 2000  |                     |                      | 0.89                                 |                      |                |                 | 0.82                                 |                      |                |                 | 0.77                                 |                      |                |                 |                                      | 0.77 |
| Child Mortality Rate/Under-five deaths |   | 1994  |                     |                      | 95                                   |                      |                |                 | 130                                  |                      |                |                 | 164                                  |                      |                |                 |                                      | 149  |
|  | 2002  | 10.8  | 7.7                 | 81                   | 4.4                                  | 41%                  | 57%            | 115             | 5.5                                  | 51%                  | 71%            | 146             | 4.4                                  | 41%                  | 57%            | 138             |                                      |      |
|  | 2015  |   |                     | 66                   |                                      |                      |                | 99              |                                      |                      |                | 118             |                                      |                      |                |                 | 120                                  |      |
| Maternal Mortality                     | Maternal Mortality Rate/ Maternal deaths          | 1990  |                     |                      | 509                                  |                      |                |                 | 723                                  |                      |                |                 | 929                                  |                      |                |                 |                                      | 917  |
|  |   | 1995  |                     |                      | 467                                  |                      |                |                 | 649                                  |                      |                |                 | 929                                  |                      |                |                 |                                      | 840  |
|  |   | 2000  | 0.53                | 0.38                 | 416                                  | 0.17                 | 33%            | 45%             | 616                                  | 0.23                 | 44%            | 61%             | 753                                  | 0.19                 | 36%            | 49%             | 734                                  |      |
|  |   | 2015  |                     |                      | 277                                  |                      |                |                 | 456                                  |                      |                |                 | 489                                  |                      |                |                 |                                      | 460  |
| HIV/AIDS                               | Number Infected                                   | 2001  | 38.5                | 33.8                 |                                      | 13.2                 | 34%            | 39%             |                                      | 16.8                 | 44%            | 50%             |                                      | 17.1                 | 44%            | 51%             |                                      |      |
| Malaria                                | Malaria Death Rate /100,000                       | 2000  |                     |                      | 18                                   |                      |                |                 | 71                                   |                      |                |                 | 79                                   |                      |                |                 | 90                                   |      |
| Water                                  | No. w/out safe drinking water                     | 2000  | 1107                | 619                  |                                      | 303                  | 27%            | 49%             |                                      | 390                  | 35%            | 63%             |                                      | 334                  | 30%            | 54%             |                                      |      |

*How Important are Difficult Environments to Achieving the MDGs?*