Measuring human development

An introduction to table 8

If development is to assume a more human face, then there arises a corresponding need for a means of measuring human as well as economic progress. From UNICEF's point of view, in particular, there is a need for an agreed method of measuring the level of child well-being and its rate of change.

The under-five mortality rate (U5MR) is used in table 8 (next page) as the principal indicator of such progress.

The U5MR has several advantages. First, it measures an end result of the development process rather than an 'input' such as school enrolment level, per capita calorie availability, or the number of doctors per thousand population — all of which are means to an end.

Second, the U5MR is known to be the result of a wide variety of inputs: the nutritional health and the health knowledge of mothers; the level of immunization and ORT use; the availability of maternal and child health services (including prenatal care); income and food availability in the family; the availability of clean water and safe sanitation; and the overall safety of the child's environment.

Third, the U5MR is less susceptible than, say, per capita GNI to the fallacy of the average. This is because the natural scale does not allow the children of the rich to be one thousand times as likely to survive, even if the man-made scale does permit them to have one thousand times as much income. In other words, it is much more difficult for a wealthy minority to affect a nation's U5MR, and it therefore presents a more accurate, if far from perfect, picture of the health status of the majority of children (and of society as a whole).

For these reasons, the U5MR is chosen by UNICEF as its single most important indicator of the state of a nation's children. That is why the tables rank the nations of the world not in ascending order of their per capita GNI but in descending order of their under-five mortality rates.

The speed of progress in reducing the U5MR can be measured by calculating its average annual reduction rate (AARR). Unlike the comparison of absolute changes, the AARR reflects the fact that the lower limits to U5MR are approached only with increasing difficulty. As lower levels of under-five mortality are reached, for example, the same absolute reduction obviously represents a greater percentage of reduction. The AARR therefore shows a higher rate of progress for, say, a 10-point reduction if that reduction happens at a lower level of under-five mortality. (A fall in U5MR of 10 points from 100 to 90 represents a reduction of 10 per cent, whereas the same 10-point fall from 20 to 10 represents a reduction of 50 per cent).

When used in conjunction with GDP growth rates, the U5MR and its reduction rate can therefore give a picture of the progress being made by any country or region, and over any period of time, towards the satisfaction of some of the most essential of human needs.

As table 8 shows, there is no fixed relationship between the annual reduction rate of the U5MR and the annual rate of growth in per capita GDP. Such comparisons help to throw the emphasis on to the policies, priorities, and other factors which determine the ratio between economic and social progress.

Finally, the table gives the total fertility rate for each country and its average annual rate of reduction. It will be seen that many of the nations that have achieved significant reductions in their U5MR have also achieved significant reductions in fertility.