# Prospects for the achievement of EFA by 2015: methodology

hapter 5 includes country prospects based on trend projections to 2015. Projections are made for three of the six EFA goals that have an explicit quantitative target: universal primary education (goal 2), adult literacy (goal 4) and gender parity in primary and secondary education (goal 5). For a description of the projection methodology for adult literacy, see p. 261 of the 2006 *EFA Global Monitoring Report* as well as the *Global Age-specific Literacy Projections Model (GALP): Rationale, Methodology and Software*, available at www.uis.unesco.org/TEMPLATE/pdf/Literacy/GALP.pdf.

# Projection methodology for UPE and gender parity

Prospects for achievement of these two EFA goals are based on extrapolation into the future of past trends in enrolment ratios between 1990 and 2005 (for further details, see Education Policy and Data Center, 2007a). Particular emphasis was given to trends during the most recent period, 1999–2005, which provide a picture of the possible effects of education policies implemented since the Dakar forum in 2000. These projections do not aim, or claim, to forecast enrolment rates, but rather are meant only to show how the rates would change in the future if past trends were to continue. The projections do not, therefore, take account of recently implemented policy changes that may affect enrolments but have not yet manifested themselves in the data (Education Policy and Data Center, 2007a). Despite this limitation, trend projections are useful as an analysis and monitoring tool and as a baseline to reflect on education policy changes that may be needed for countries to achieve the various EFA goals.

In general, only countries that have a sufficiently complete set of data and that have not yet achieved UPE and the primary and secondary education gender parity goals were included in the projections, that is, 86 countries for the first goal and 113 for the second one.

### Projecting net enrolment ratios

The NER is one of the two most relevant indicators widely used to measure progress towards UPE, the other being the completion rate. Projections are based on the total primary school-age NER (TNER), which takes into account all children of primary school age enrolled either in primary (NER) or secondary school. As primary school-age children enrolled in secondary school have, by definition, already attended primary school, including them takes fuller account of the reality of UPE than does the primary education NER. Only TNER and NER were projected separately for each sex, using a logistic function, particularly when rates were rising. The choice of this method is based on the very nature of the rates, which tend towards a natural maximum of 100% and should not exceed that. In addition, their marginal rate of increase falls as a country approaches the 100% limit of UPE. For countries in which rates were decreasing, the projections employed a linear regression to keep projected rates from falling to unrealistically low levels, as might have happened had the logistic function been used.

## Projecting the gender parity index in primary and secondary education

Achievement of gender parity is defined as having reached a GPI value between 0.97 and 1.03 (see Chapter 2). The 3% tolerance is to allow for statistical measurement errors and does not imply any judgement about the acceptability of any particular level of disparity (UNESCO, 2003*b*).

Country prospects for the achievement of gender parity are assessed on the basis of trend projections of GERs in primary and secondary education, by gender, for 2015 and 2025. Projected primary GERs by gender were reconstructed, based on the NER and the NER/GER projections by sex. In countries with fully mature primary school systems, the NER/GER ratio is close to 1 – in other words, almost all children in school are of the official school age. These are school systems where late school entry, repetition rates and dropout rates are all very low. On the other hand, in countries with high levels of late entry and high repetition rates, the NER/GER ratio is below 1 (by definition it cannot exceed 1).

Like NER and GER, the NER/GER trend changes over time, in some countries rising, in others declining. For those where NER/GER is rising, the assumption of a logistic curve produces more reasonable behaviour in the projections and also seems empirically more likely. For countries where the NER/GER ratio was declining – implying that the growth of the over-age or under-age school population is more rapid than that of the on-time students – it was maintained constant for the projections in order to avoid impossible results (i.e. impossibly high GER). Therefore projections of the NER/GER ratio are based on the following assumptions:

- 1. If the NER/GER trend is positive, project a logistic curve.
- 2. If the NER/GER trend is negative, maintain constant at most recent value.
- 3. If only one year of NER/GER ratio is available, maintain this value in the projections.
- 4. If none of the above applies, no NER/GER projections are made.

Once the GERs by gender were projected, the projected GPIs were calculated as the ratio of the girls' rate to that for boys.

GERs by gender for secondary education were projected directly using a linear regression.

## Prospects analysis for achievement of the goals

The methodology used to assess countries' chances of achieving the three EFA goals takes into account two dimensions, one static and one dynamic. The first represents a country's current situation: it may have reached a goal, or be close to it, in an intermediate position or far from it. Each country is also moving towards or away from the goal – the dynamic dimension. The two dimensions are integrated and compared on the basis of explicit criteria, forming a matrix containing four quadrants (Table 4).

Countries that have already achieved a particular goal are not included in the matrix per se for that goal, with the exception of the gender parity goal (see Table 5.3), which has two target dates: 2005 and 2015. The quadrants also show countries' chances of achieving a goal by the target date set in Dakar. Thus, quadrant I, labelled 'High chance of achieving the goal', includes countries currently either close to the goal or not yet there but moving towards it. Quadrant II contains countries that have a low chance of achieving a goal because of their current position far from the goal, but that are nonetheless moving towards it. Quadrant III comprises countries that, though close to the goal or in an intermediate position, are moving away from it or are moving too slowly and are therefore at risk of not achieving it. Finally ,other countries far from the goal, but moving too slowly or in the wrong direction (away from it), are in quadrant IV, labelled 'Serious risk of not achieving the goal'.

For the adult literacy goal, a slightly different methodology was used to determine the dynamic dimension in the quadrants. As almost all countries reduced their adult illiteracy rates between the periods 1985–1994 and 1995–2004, there was no point in distinguishing between movements towards or away from the goal. This is all the more the case because the target for 2015 – halving the illiteracy rate – varies in quantitative terms from country to country according to its rate in the most recent period (1995–2004).

For example, a country with a literacy rate of 70% in 1995–2004 would have as the target for 2015 a rate of 85%; one with an initial rate of 80% would have a target of 90% to reach by 2015, and so on. The rate of progress is thus used as a criterion for the dynamic dimension in this analysis. On the basis of their current literacy levels, countries progressing rapidly enough to reach the target in 2015 are considered 'fast performers', while those with low progress are labelled 'slow performers'.

Distance from the goal in 2005	Close or in intermediate position	QUADRANT I High chance of achieving the goal (Moving towards the goal, with steady progress)	QUADRANT III At risk of not achieving the goal (moving away from the goal or progress too slow)
	Far	QUADRANT II Low chance of achieving the goal (Moving towards the goal, with rapid progress)	QUADRANT IV Serious risk of not achieving the goal by 2015 (moving away from the goal or progress too slow)
		On track	Off track
		Change between 1991 and 2005	

#### Table 4: Analytical framework