

NOTES

1 The developing world consists of six regions: East Asia and the Pacific, South Asia, Sub-Saharan Africa, Latin America and the Caribbean, Europe (eastern) and Central Asia, and the Middle East and North Africa (in decreasing order by total population).

2 We have adopted the World Bank's definition of the extreme poor people of the world as those who live on less than one international dollar per day (\$1.08 to be more precise) per person, measured at the 1993 purchasing power parity (PPP) exchange rates for consumption. See Appendix 1 for details on the method of deriving the PPP exchange rates.

3 Although the poverty gap ratio and the distribution-sensitive squared poverty gap ratio could be used to measure the depth and the severity of poverty, respectively, we used the head count measure of poverty because its interpretation is straightforward.

4 To be more precise, subjacent poverty is defined as the proportion of the population living on between \$0.81 and \$1.08 a day; medial poverty as between \$0.54 and \$0.81 a day; and ultra poverty as below \$0.54 a day. All are measured at the 1993 PPP exchange rates.

5 "Africa makes a fool of our idea of justice. It makes a farce of our idea of equality. It mocks our pieties; it doubts our concern; and questions our commitment." Bono.

6 Poverty traps have been found to be present in Madagascar (Barrett et al. 2006), Kenya (Barrett et al. 2006), South Africa (Adato, Carter, and May 2006), and Cote d'Ivoire (Barrett, Bezuneh, and Aboud 2001), but have not been found to be present in Russia (Loshkin and Ravallion 2004), China (Jalan and Ravallion 2004), and Mexico (Antman and McKenzie 2005), although the researchers did find considerable persistence of poverty over time.

7 Household data were not available for China so it was not included in the countries considered in Chapter 3. However, Vietnam was included, as were Laos and Timor-Leste.

8 India, Bangladesh, Pakistan, and Sri Lanka are considered in Chapter 3.

9 A lack of access to household data prohibits us from examining Nigeria in Chapter 3, but a number of other significant Sub-Saharan African countries are included (such as Zambia and Mozambique).

10 Peru, Nicaragua, and Guatemala are considered in the country-level analysis conducted in Chapters 3 and 4.

11 Spearman rank correlation = 0.79, p-value=0.000, sample size is 89 countries. Interestingly, the rank correlations of the GHI with all four international poverty measures (poverty headcount ratio at \$1 and \$2 a day, poverty gap at \$1 and \$2 a day) exceed the rank correlations of these poverty indicators

with any of the index components (see Wiesmann 2006).

12 A more detailed explanation of the hunger indicators, including measurement reliability issues, can be found in Smith, Alderman, and Aduayom (2006).

13 Poverty estimates for Ethiopia were not included because they were deemed to be unrealistically low. Those for Laos were not included because expenditures data are not available for this analysis.

14 Calorie consumption could not be estimated for Vietnam and Peru because data on quantities of food consumed were not available in the household survey datasets for these countries.

15 The reader should keep in mind that although it is true that rural dwellers are more physically active than urban dwellers and thus will tend to have a higher actual energy requirement, this study uses the requirement for light activity to distinguish the hungry from those who are not hungry, a minimum normative requirement below which a person is defined to be food-energy deficient regardless of his or her actual activity level.

16 It is worth noting that the strongest deviation from 100 percent overlap is for Nicaragua, where only 57 percent of poor people are hungry, and this is most likely due to overestimation of poverty rates as a result of an overly high PPP.

17 Only hunger data were calculated for Laos and Ethiopia, and data on key characteristics were not available for Kenya, Senegal, and Timor-Leste.

18 Pakistan, Sri Lanka, Tajikistan, Peru, and Guatemala were omitted because the number of observations in ultra poverty was too small for analysis.

19 UNAIDS/UNICEF/USAID 2002.

20 The net enrollment rate (NER) is the ratio of enrollment by children of the official targeted age (we used ages 6-11 for the five-year primary school cycle) in a given level of schooling (such as primary) to the total number of children of the official targeted age. The NER excludes under-age and over-age children. As age of children was not included in the Mozambique dataset, it could not be included in this analysis.

21 Household survey data on the ownership of cultivable land were available for only 12 countries.

22 No electricity data were available for Burundi, which is why it is missing in the tables and figures for electricity.

23 UNFPA 2004, p. 48.

24 Recently, some cross-country regression analyses suggest that the world income distribution is developing in a way that is consistent with poorer countries remaining poor and middle-income and rich countries becoming richer (Azariadis and Stachurski 2005, for example). However, others provide evidence that is more in line with convergence (Kraay and Raddatz 2007). From the current analysis, it appears that the jury is still out on whether poverty begets poverty on a national level.

25 Azariadis and Stachurski 2005.

26 Sen 2000.

27 Rodrik 2003.

28 Ravallion 2001, Fields 2001, Dollar and Kraay 2002, Kraay 2006.

29 World Bank 2000b, Ravallion and Chen 1997.

30 Also see Besley and Cord 2007; Grimm, Klasen, and McKay 2007.

31 Besley and Burgess 2003.

32 Ravallion, Chen, and Sangraula 2007.

33 Collier 2007.

34 Messer, Cohen, and Marchione 2001.

35 World Bank 2002c.

36 Blattman and Lundberg 2007, World Bank 2002c.

37 Baquet and van Herp 2000.

38 Bucagu 2000, UNDP 1999.

39 Messer, Cohen, and Marchione 2001.

40 World Bank 1998a, p. 13.

41 World Bank 2002c.

42 Rwelamira and Kleynhans 1996.

43 Green 1994, Criel 1998.

- 44** UNDP 1999.
- 45** Collier 2007, Messer and Cohen 2006.
- 46** Collier 2007.
- 47** Ravallion, Chen, and Sangraula 2007.
- 48** World Bank 2005a.
- 49** World Bank 1995a.
- 50** Sachs 2001.
- 51** Baker 2004.
- 52** UNDP 2001.
- 53** World Bank 2005c.
- 54** World Bank 1995c.
- 55** TANGO International 2003a.
- 56** Alwang et al. 2005.
- 57** Jalan and Ravallion 2002.
- 58** Kabeer 2005.
- 59** World Bank 2003b.
- 60** Figueroa and Barron 2005.
- 61** Hill and Christiaensen 2006.
- 62** World Bank 2003c.
- 63** World Bank 2002b.
- 64** Khandker, Balcht, and Koolwal 2006.
- 65** World Bank 1994.
- 66** World Bank 1996a.
- 67** Redding and Venables 2004.
- 68** Robinson 1999.
- 69** Barrett et al. 2006.
- 70** World Bank 2005a.
- 71** Alderman 1996, Jalan and Ravallion 1999, Dercon and Krishnan 2000.
- 72** Narayan-Parker et al. 2000.
- 73** Jalan and Ravallion 1999.
- 74** Dercon 2004.
- 75** World Bank 2005a.
- 76** World Bank 2003a.
- 77** Bouis et al. 1998.
- 78** Hoddinott and Kinsey 2001.
- 79** Behrman, Gaviria, and Szekely 2001.
- 80** World Bank 2002a.
- 81** World Bank 2003a.
- 82** Barrett et al. 2006, p. 259.
- 83** Mango et al. 2004 and Randrianjatovo 2004, cited in Barrett et al. 2006.
- 84** Krishna 2004.
- 85** Kabeer 2002.
- 86** World Bank 2004, p. 37.
- 87** World Bank 2003b.
- 88** World Bank 2004.
- 89** Hoogeveen 2005.
- 90** Gomart 2003.
- 91** World Bank 1996b.
- 92** World Bank 2003a.
- 93** HelpAge International 2002, p. 3.
- 94** Ainsworth and Filmer 2002.
- 95** Ghana National Commission on Children 1997.
- 96** There is a large literature on the relationship between height and earnings, height and cognitive development, and height and progress through schooling. Hoddinott and Kinsey (2001) review this literature.
- 97** Becker and Tomes 1986.
- 98** Quisumbing 2006a (many of the following examples are drawn from the literature review in this paper).
- 99** TANGO International 2003b, World Bank 2002a.
- 100** World Bank 2003b.
- 101** King and Lillard 1987, Deolalikar 1993, King and Bellew 1991, Behrman and Knowles 1999.
- 102** Neri et al. 2000, Jacoby and Skoufias 1997, Behrman, Gaviria, and Szekely 2001.

- 103** Patrinos and Psacharapoulos 1992.
- 104** Banerjee et al. 2005.
- 105** Quisumbing 2006b.
- 106** Fafchamps and Quisumbing 2005.
- 107** Subbarao and Coury 2004.
- 108** Siaens, Subbarao, and Wodon 2003.
- 109** Case, Paxson, and Ableidinger 2002.
- 110** Beegle, De Weerd, and Dercon 2006.
- 111** Subbarao and Coury 2004.
- 112** Ntozi et al. 1999, Ramphele 2001.
- 113** Harper, Marcus, and Moore 2003, p. 545.
- 114** Banerjee and Duflo, forthcoming.
- 115** World Bank 2005c.
- 116** World Bank 2004.
- 117** Baulch and McCulloch 1998, Wodon 1999.
- 118** Gang, Sen, and Yun 2006.
- 119** World Bank 2003b.
- 120** Lanjouw, 2007.
- 121** World Bank 2002a.
- 122** World Bank 1996a.
- 123** Gomart 2003.
- 124** Quisumbing, Estudillo, and Otsuka 2004.
- 125** Bardhan and Udry 1999.
- 126** Banerjee and Duflo, forthcoming.
- 127** World Bank 1995c, p. 8.
- 128** World Bank 1995a.
- 129** World Bank 2005a, 2003a.
- 130** Banerjee and Duflo. forthcoming.
- 131** Carter and Barrett 2006.
- 132** World Bank 2005a.
- 133** Lybbert et al. 2004.
- 134** Adato, Carter, and May 2006.
- 135** Azariadis and Stachurski 2005.
- 136** Dercon 1996.
- 137** Morduch 1995, Rosenzweig and Binswanger 1993, Fafchamps and Pender 1999.
- 138** Barrett et al. 2006.
- 139** Dercon 2002.
- 140** Hoddinott 2006.
- 141** Carter et al. 2007.
- 142** Bardhan and Udry 1999.
- 143** Barrett and Foster 2007, p. 254.
- 144** de Weerd 2004.
- 145** Rao and Ibanez 2003.
- 146** Besley, Pande, and Rao 2005.
- 147** Agarwal 1994.
- 148** World Bank 1996a.
- 149** World Bank 2005c.
- 150** World Bank 1995a.
- 151** World Bank 2004.
- 152** World Bank 1996a.
- 153** Mahbub ul Haq Human Development Center 2000.
- 154** World Bank 2002a.
- 155** Haddad et al. 1996.
- 156** Kakwani and Subbarao 2005.
- 157** World Bank 2005c.
- 158** Shepherd 2007, p. 19.
- 159** Kabeer 2005.
- 160** World Bank 2006b.
- 161** World Bank 2004.
- 162** Hall and Patrinos 2005.
- 163** Hall and Patrinos 2005.
- 164** Borooah 2005.
- 165** World Bank 2003b.
- 166** Sainath 2000.
- 167** Durlauf 2006.

168 Conley and Udry 2003.

169 Hoff and Pandey 2004.

170 World Bank 2005a.

171 It calculates two alternative specifications of the Lorenz curve—the General Quadratic (Villaseñor and Arnold) and the Beta model (Kakwani) and gives the specification that is best for the data.

172 In fact, the FAO measure currently captures a narrow aspect of food security as defined by heads of state and other high-level representatives of the international community at the World Food Summit in 1996: “Food security exists when all people, at all times, have physical and economic access to

sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO 1996b, Paragraph 1).

173 Eradicating extreme poverty and hunger and reducing child mortality are part of the Millennium Development Goals. As specific targets, these goals include halving the proportion of people who suffer from hunger and the proportion of people living below \$1 a day between 1990 and 2015, and reducing the under-five mortality rate by two-thirds in the same period (United Nations 2001).

174 The PPP exchange rates and base year CPIs are taken from Sillers (undated). The survey year CPIs are from IMF (2007).