

## The Poorest and the Hungry: A Synthesis of Analyses and Actions

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**A**lthough many countries have seen substantial economic growth over the past two decades and many poor people have experienced considerable improvements in their welfare, for some countries and people progress has been dismally slow. More often than not, those left behind have been the poorest countries and the very poorest individuals within those countries.<sup>1</sup>

Many cultures and faiths make consideration of the lowest and most vulnerable people a central tenet—for example, Mahatma Gandhi’s principle of *antyyodaya*: “Recall the face of the poorest and the weakest man whom you may have seen, and ask yourself if the steps you contemplate are going to be of any use to him” (Gandhi 1947, 311); Christianity’s “Do unto the least of these” (Matthew 25:36); and Islam’s “Alms are for the poor and needy” (Tawbah 9:60). On this count, how do we evaluate recent global progress? Has life improved for the world’s poorest people? What causes lack of progress, and what policies have worked to improve the livelihoods of the poorest? How can substantial improvements in the lives of the poorest be achieved?

As the next section of this chapter details, poverty reduction has most often benefited people living close to the poverty line rather than those at the very bottom of the income distribution. The very poorest individuals tend to be from socially excluded groups, live in remote areas with little education and few assets, or—in Asia, particularly in South Asia and parts of East Asia such as Vietnam—be landless, or they may have all of these characteristics. Further, these groups are likely

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to have experienced the severe ill health or death of an adult member or to have suffered from conflict or environmental shocks such as drought (Ahmed, Hill, and Wiesmann, this volume, Chapter 5).

The main aim of this volume is to focus attention on the poorest and address questions about the determinants of and solutions to ultra poverty. The book addresses not just poverty in general but the often overlooked issues of bottom-end poverty and hunger. It takes as a starting point an explicit recognition that although a stable, growing economy is essential for providing welfare-improving opportunities for the poorest, extreme poverty can cause the poor to adopt survival behaviors that are costly in the long run. Addressing this situation requires directly targeting the asset base of the ultra poor. Fundamentally, this volume also argues that addressing the political and social causes of exclusion is central to tackling ultra poverty. After reviewing the progress to date on poverty and hunger reduction, this chapter will present the main concepts underlying the material presented in the book and give a broad overview of the topics covered. It then provides a summary of the way forward.

## Global Progress on Income Poverty and Hunger

In 2000, the international community adopted the Millennium Development Goals (MDGs), the first of which is to halve the proportion of poor people living on less than a dollar a day and the proportion of people who suffer from hunger. After briefly outlining what is meant by *poverty* and *hunger* and how each is measured, this section reviews the progress achieved to date.

### Income Poverty

Poverty and deprivation are multidimensional realities (Sen 1976), and recent developments in multidimensional measures of poverty have produced a more accurate understanding of who is poor (McGillivray 2006; Alkire and Foster, this volume, Chapter 3). Researchers have improved and standardized new alternative measures of poverty (see Moser 2006 on asset-based measures, for example) and of subjective well-being (Samman 2007).<sup>2</sup> Although these measures are controversial (see Bruni and Porta 2005), they have allowed for different and insightful comparisons of well-being across continents. Considering these measures of well-being alongside the more standard measures of income poverty provides a more nuanced view of the nature and magnitude of poverty. It is improvements in the measurement of income poverty, however, that provide a much better idea of global progress against deprivation and of who remains poor (Chen and Ravallion, this volume, Chapter 2). Thus, the following discussion of global progress in reducing poverty

focuses on the measure of income poverty. More precisely, the discussion uses the standard income threshold of a dollar a day, defined by the international community as constituting extreme poverty.

Although referred to as a dollar a day, until recently this standard threshold was measured as US\$1.08 per day at 1993 purchasing power parity (PPP).<sup>3</sup> In 2008 new estimates emerged using 2005 PPP exchange rates, resulting in an adjusted poverty line of US\$1.25 at 2005 PPP (Chen and Ravallion 2008a,b; Chen, Ravallion, and Sangraula 2008).<sup>4</sup> Although the new estimates suggest that changing the PPP exchange rate and the poverty line results in a substantial increase in the number of people counted as poor, the progress achieved with respect to the first MDG remains unchanged (Chen and Ravallion 2008a). These new estimates, however, do not take into account the increase in food prices since 2005.

Globally, progress in reducing poverty and hunger has been significant: using the poverty line of US\$1.08 per day at 1993 PPP, the proportion of the world's population living in poverty fell from 29 percent in 1990 to 18 percent in 2004—a decline of almost 280 million people (Ravallion, Chen, and Sangraula 2007)—even though the population of developing countries grew by 1 billion during this time. Under the revised poverty line of US\$1.25 at 2005 PPP, the proportion of the population living in poverty fell from 42 percent in 1990 to 25 percent in 2005—a reduction of approximately 445 million people (Chen and Ravallion 2008a; this volume, Chapter 2). No matter which measure is used, if poverty and hunger reduction continues at its current pace, the first MDG will likely be met at the global level. Furthermore, within countries, there is some evidence that throughout the world, poverty is urbanizing (Ravallion, Chen, and Sangraula 2007). The urban poor are increasing in number, and the prevalence of hunger is increasing in urban areas, requiring a shift in policies.

Much of the world's progress in poverty reduction reflects progress in East Asia and the Pacific (particularly in China and Vietnam) and in South Asia. In contrast, poverty in Sub-Saharan Africa has remained more stubbornly entrenched. Indeed, in the East Asia and the Pacific region, which has surpassed the poverty MDG, the poverty rate (using a poverty line of US\$1.25 at 2005 PPP) dropped almost 38 percentage points, from 55 percent in 1990 to 17 percent in 2005. The poverty rate in South Asia fell from 47 to 40 percent during the same period, and in Sub-Saharan Africa it fell from 58 percent to 51 percent. In Latin America and the Caribbean the poverty rate fell from 10 percent to 8 percent (Chen and Ravallion 2008a).<sup>5</sup> As a result, the regional composition of poverty has changed dramatically. As Chen and Ravallion discuss (this volume, Chapter 2), the region with the highest share of the world's poor in 1984 was East Asia and the Pacific, and Sub-Saharan Africa accounted for only 13 percent. By 2005 Sub-Saharan Africa's share was 28 percent,

and if this trend continues the region will have almost 40 percent of the world's poor by 2015. If progress on poverty reduction continues at its current rate, some regions and countries, particularly those in Sub-Saharan Africa, will not meet the first MDG.

Within countries, there is some evidence that progress has been slowest among the poorest. Certainly, the number of people living on less than a dollar a day encompasses a multitude of people living in varying degrees of poverty—all of them poor but some more desperately poor than others. Therefore, the dollar-a-day figure does not fully capture the severity of poverty.

A number of powerful, though less used, poverty measures exist that attempt to better capture the magnitude of poverty—that is, how far below the poverty line an individual's welfare falls (Sen 1979, 1981; Foster, Greer, and Thorbecke 1984). For example, Foster, Greer, and Thorbecke developed a class of poverty measures in which the researcher decides the weight given to the distance a person's welfare falls below the line. In headcount measures the weight is zero: everyone below the line is counted equally regardless of how far below the line they fall. By increasing the weight, the researcher gives rising importance in the measure to those who fall further and further below the line. When the weight is set at one, the distance a person's welfare falls from the line is aggregated; this is the "poverty gap measure." One downside to these measures is that it is often harder (relative to the headcount measure) to conceptualize what changes in these measures mean in terms of how welfare has improved for those well below the line. Thus, for ease of comprehension and interpretation, this volume uses a lower poverty line of 50 cents a day in line with Ahmed et al. (2007) to proxy for the severity of poverty.<sup>6</sup> By this measure, 162 million people out of the 969 million living on less than a dollar a day in 2004 lived in ultra poverty—that is, on less than 50 cents a day. And, as shown by Ahmed et al. (this volume, Chapter 5), since 1990 poverty reduction among these ultra poor has been slower than poverty reduction among those living on more than 50 cents a day.

The severity of poverty in Sub-Saharan Africa and the limited progress in reducing it indicate that the poorest in Sub-Saharan Africa may be trapped in poverty, as some recent literature suggests (Azariadis and Stachurski 2005; Sachs 2005; Barrett and Carter 2006; Collier 2007). The idea of poverty traps may also be behind the observation that poverty fell more slowly for those living on less than 50 cents a day than for those living on between 50 cents and a dollar a day and the observation that the average income levels of countries are diverging, not converging, over time (Azariadis and Stachurski 2005). Microeconomic evidence of a trap has been found in countries in Africa more often than in countries elsewhere. Poverty traps have been found in Madagascar (Barrett et al. 2006), Kenya (Barrett et al. 2006),

South Africa (Adato, Carter, and May 2006), and Côte d'Ivoire (Barrett et al. 2001) but not in Russia (Lokshin and Ravallion 2004), rural China (Jalan and Ravallion 2002), or Mexico (Antman and McKenzie 2007). The issue of path dependence is discussed further in the presentation of the conceptual framework of this book.

### Hunger

Hunger, the second component of the first MDG, entails a lack of sufficient food of needed quantity, quality, and dietary diversity. Its effects closely relate to health outcomes. Hunger, therefore, has many faces: loss of energy, apathy, increased susceptibility to disease, shortfalls in nutritional status, disability, and premature death. Although hunger is partly driven by poverty, other factors related to access to health and education are also important drivers of hunger and malnutrition.<sup>7</sup> More than 50 percent of the hungry live on small farms in developing countries and are connected to the rural economy. Agricultural growth thus has a key role to play in reducing hunger and ultra poverty through development.

The main measure of the level of hunger is caloric deficiency; the hungry are those who consume fewer than 2,200 calories a day. By this measure, caloric deficiencies affect about 800 million people, who are found mostly among the poorest (Ahmed et al., this volume, Chapter 5). Analysis of household survey data suggests that the severity of hunger is much greater in Sub-Saharan Africa than in South Asia and other parts of the world (Smith and Wiesmann 2007; Ahmed et al., this volume, Chapter 6). In the African countries analyzed in Chapter 6 (Burundi, Ethiopia, Kenya, Malawi, Rwanda, Senegal, and Zambia), most of the hungry consume fewer than 1,600 calories a day and are thus at risk of dying from extreme hunger or starvation. In the Asian and Latin American countries surveyed (Bangladesh, Guatemala, India, Laos, Pakistan, Sri Lanka, Tajikistan, and Timor-Leste), the hungry are more likely to consume between 1,600 and 2,200 calories a day. At less than 2,200 calories a day, however, individuals are still living in substantial deprivation, consuming less than what is needed to undertake even light activity (such as sitting and standing).

Given the multidimensionality of hunger, a number of other measures can also shed light on the situation, such as measures of micronutrient deficiencies, dietary diversity, and malnutrition-related mortality. Micronutrient deficiencies affect about 2 billion people, which include mostly low-income people but also a significant part of the population living on one to two dollars a day (Ahmed et al., this volume, Chapter 5). As for dietary diversity, Smith and Wiesmann (2007) showed that in Sub-Saharan Africa and South Asia, where staple foods form a large part of diets, there is a lack of foods rich in protein and micronutrients, with the situation in Sub-Saharan Africa more severe.

Another measure, the Global Hunger Index (GHI), was designed by the International Food Policy Research Institute (IFPRI) to capture three main dimensions of hunger: lack of economic access to food, shortfalls in the nutritional status of children, and child mortality, which is to a large extent attributable to malnutrition (Wiesmann 2006). By combining these three dimensions, the GHI aims to capture the reality that hunger is caused by more than just insufficient availability of dietary energy at the household level; it is also caused by nutritional inadequacies—such as vitamin A deficiency, which is strongly associated with under-five mortality<sup>8</sup>—that have immediate and long-term consequences on welfare. Indeed, it has been shown that inadequate diet quality, as much as insufficient energy consumption, is a major dietary constraint facing poor populations (Graham, Welch, and Bouis 2004; Ruel et al. 2004).<sup>9</sup> Accordingly, the GHI includes the following three equally weighted indicators: the proportion of people who are food-energy deficient as estimated by the Food and Agriculture Organization of the United Nations, the prevalence of underweight in children under the age of 5 as estimated by the World Health Organization, and the under-five mortality rate as estimated by the United Nations Children's Fund (UNICEF).<sup>10</sup> The index then ranks countries on a 100-point scale, with 0 the best score (no hunger) and 100 the worst, although neither of these extremes is found in practice. In general, a value greater than 10 indicates a serious problem, greater than 20 is alarming, and greater than 30 is extremely alarming.

The most recent GHI (reported in 2008 with data up to 2006, before the world food crisis of 2007–08) shows that the hot spots of hunger are in Sub-Saharan Africa and South Asia. Both regions have “alarming” levels of hunger, with Sub-Saharan Africa scoring 23.3, closely followed by South Asia, with a score of 23. Nevertheless, GHI trends over time show substantial improvements in hunger in some parts of the world. Although East Asia and the Pacific experienced only a small reduction in its GHI score during the 1990s, the region had a lower GHI score at the outset, suggesting that in the early 1990s it was more able than Sub-Saharan Africa and South Asia to meet its population's most basic food and nutritional needs. With its GHI falling by 25 percent between 1990 and 2008, South Asia made tremendous strides in combating hunger in the 1990s. Yet despite remarkable improvement in child nutritional status, the region still has the highest prevalence of underweight children in the world, and thus a high GHI score. In Sub-Saharan Africa, overall progress in the 1990s was slow; between 1990 and 2008 the GHI decreased by less than 11 percent. Although the proportion of people who were food-energy deficient decreased, there was little improvement in terms of underweight children and the under-five mortality rate (Wiesmann 2006; von Grebmer et al. 2008).<sup>11</sup>

In sum, global trends in poverty and hunger suggest that the poorest and the hungry are becoming increasingly concentrated in Sub-Saharan Africa and in countries where growth has been stagnant. Three-quarters of those living on less than

50 cents a day live in Sub-Saharan Africa. And although South Asia still accounts for the highest share of those living on less than a dollar a day, Sub-Saharan Africa's share is increasing.

### The Conceptual Framework of the Book

This section presents the organizing framework of the book and provides a contextual background for the issues addressed. The goal is not to provide an overview of all the chapters and essays of this volume (each part of the book opens with an introductory segment) but to provide some rationale for the structure and focus of this book. There are many ways to structure a volume such as this one, because the various chapters and essays in this volume address a range of issues concerning some of the causes of extreme poverty and the actions needed to spur sustained reductions in extreme poverty and hunger. The organizing rationale used here is based on three broad conclusions of the material presented:

1. Creating an economywide environment that allows for income and asset *growth* of the poorest is necessary to improve their welfare.
2. The perverse dynamic associated with ultra poverty highlights the need for *targeted action* to build up the nutrition, health, land, credit, and education of the poorest households.
3. The *political dimension* of poverty requires addressing the current and historical exclusion of the poorest through policies that allow for their inclusion.

Further, these conclusions suggest policy areas to be addressed in the context of a social strategy that takes appropriate account of institutional conditions.

Widely different growth experiences since the Industrial Revolution have contributed to large disparities among countries in terms of poverty and hunger reduction (Rodrik 2003). Indeed, a number of cross-country studies have shown that poverty reduction is more likely to take place in countries that experience economic growth (Fields 2001; Ravallion 2001; Dollar and Kraay 2002; Kraay 2006). The chapters in this volume thus argue for policies that ensure growth, and in particular growth in labor productivity and in sectors where the poorest are located. The relationship between poverty reduction and growth, however, is a pattern observed on average across countries. It is thus consistent with an uncomfortably large number of countries experiencing growth accompanied by no reductions in poverty, or growth accompanied by poverty increases. This situation calls for an additional focus on targeted action and political inclusion to address ultra poverty in social strategies.

A growing body of research (see the subsection headed “Individual-Level Determinants of Poverty: Labor, Assets, and Behavioral Adaptation”) suggests that ultra poverty has its own dynamic. When faced with severe asset deprivations, individuals alter their behavior to ensure survival. In ensuring survival, however, their actions often make future growth less likely. Targeted action that addresses extreme asset deprivation—deprivation in nutrition, health, education, and physical and financial assets—is needed to break this cycle. This volume argues that the centerpiece of such strategies is social protection. Other crucial interventions include nutrition programs for the poorest, “microcredit-plus” programs, social security, and innovations in insurance.

Current and historical political undercurrents that influence who becomes poor and who does not must also be addressed. Throughout the world, the rate of ultra poverty is especially high among minorities and marginalized people (see the subsection headed “Power, Discrimination, and Exclusion”). For example, the systematic exclusion of groups such as ethnic minorities in Southeast Asia, hill tribes and scheduled castes in South Asia, indigenous groups in Latin America, and pastoralists and strangers in Sub-Saharan Africa from access to resources and markets increases their propensity to be poor. This consistent and persistent pattern of poverty across continents highlights the fact that addressing extreme poverty and hunger often requires addressing social and political processes as much as economic issues (Sen 2000; Narayan and Petesch 2007; Green 2008).

The three conclusions, and the corresponding areas of action identified, are not mutually exclusive. The synergies and spillovers between investments in economic growth and targeted investments in poor households to mitigate poverty are widely recognized (Ahmad et al. 1991; Devereux 2008; Hoddinott 2008; Alderman and Hoddinott, this volume, Chapter 20). For example, productivity-enhancing investments can also facilitate poor people’s access to social services, and investments in nutrition and health care directly improve the welfare of poor households and increase their productivity (Pattillo, Gupta, and Carey 2005). At the macroeconomic level, economic growth increases the public resources available for financing social programs and also reduces the need for social programs in the future (Devereux 2008). Public budgets for livelihood-enhancing investments and social protection programs should be viewed not separately but as complements (IFPRI 2008). Addressing the political causes of exclusion also has benefits for the other two areas of action. Discrimination against groups based on identities of race, region, and ethnicity creates economywide inefficiencies by preventing those discriminated against from fulfilling their productive potential. Similarly, improving the nutrition, health, credit, and education of the poorest households is possible only when individuals are not discriminated against in the provision of public services or credit.

This section discusses further why action in each of these areas is important for reducing poverty and hunger among the world's most deprived. First, it describes how macro-level determinants affect the poorest, focusing on both global-level factors and national-level determinants of ultra poverty. Second, it presents evidence on how extreme asset deprivation contributes to the persistence of poverty over time. Third, it highlights the political and social underpinnings of extreme poverty. The third section of the chapter discusses specific policy actions in each of these areas. The fourth section discusses strategies to ensure the effectiveness of these actions.

This chapter follows the broad structure of the book: As shown in the schema in Table 1.1, the first set of chapters (in Part 1) looks more closely at some of the characteristics and causes of ultra poverty to answer the questions of who and where the poorest are and why poverty persists. The remainder of the book then deals with the actions that need to be taken to reach and include the poorest and the hungry: the chapters and essay in Part 2 focus on the actions needed to spur growth in countries where the poorest live, Parts 3 and 4 look at how to reach this subset of the population through targeted building up and inclusion, and Part 5 looks at the financing, sequencing, and implementation of such actions.

As already stated, although divergent growth patterns play an important role in explaining some of the disparities in the progress achieved, other factors and disparities in the contextual characteristics of individual countries and populations can also provide insight in explaining the disparate experiences. Different disciplinary perspectives highlight the different parts of the explanation. For example, whereas economists focus on economic growth patterns, political scientists may emphasize the existence of conflict and power relations, sociologists may focus on the existence of discrimination and exclusion in societies that prevent certain subgroups of the population from getting out of poverty, and nutritionists and epidemiologists may stress the relationships between health, hunger, and deprivation. The following subsections explore these perspectives to give a more comprehensive picture of the drivers of welfare gains and losses by looking at some of the determinants of ultra poverty and by investigating the coping mechanisms and behavioral adaptations of the poor.

#### Macro-Level Determinants of Poverty

Large differences in poverty rates between countries point to the importance of economywide determinants of ultra poverty. The presence of peace is perhaps one of the greatest determinants of a country's ability to secure growth for its richest and poorest citizens alike. Additionally, factors such as global economic trends, disparate national policies, demographic composition, and asset inequality are important



determinants of differences in the pace of poverty and hunger reduction. Each of these factors is reviewed next.

*Global Trends.* Fostering growth and poverty reduction is not just a matter of national policy, particularly in the context of an increasingly globalized world. Effectively, globalization influences poverty by offering countries opportunities for growth and offering poor people direct or indirect access to previously unavailable assets and markets. Many countries, however, have not been able to translate these opportunities into increased poverty reduction (von Braun and Mengistu, this volume, Chapter 10). And for those that have, integration into global markets has some risks in the sense that these countries become more susceptible to the global trends. Many global economic variables—such as global cycles of growth and downturn; levels and terms of global trade; global trends in inflation, interest rates, and exchange rates; export subsidies in developed countries; and food and commodity prices—affect country growth rates (Díaz-Bonilla, this volume, Chapter 9) and poor countries' ability to facilitate pro-poor growth and even growth in general. In addition, other global variables such as climate change and international migration also affect the status of the poor.

- *Global economic trends.* As stated earlier, developing countries are increasingly sensitive to global economic trends. In recent years, one of the most notable global events to affect developing countries and the poor who live in them was the rapid rise in food prices (including prices of the most-consumed grains—rice, wheat, and corn) in 2007–08. This global food crisis rocked many countries in the developing world, especially those that are net importers of food.

The discussion in the first section of this chapter focused on the progress that was made until 2004–05, the years for which the latest estimates of global poverty and hunger are available. These numbers therefore do not account for the global food crisis of 2007–08, which will be reflected only in data currently being collected. The realities on the ground nevertheless suggest that the food crisis has had a substantial and detrimental impact on the welfare of the poorest households, particularly those living in urban centers (von Braun et al. 2008). The most recent *World Economic Situation and Prospects* report of the United Nations Conference on Trade and Development (UNCTAD) suggests that “between 109 million and 126 million people may have fallen below the \$1 per day poverty line since 2006 owing to the increase in food prices, with the vulnerable populations located in South Asia and sub-Saharan Africa” (UNCTAD 2009, 26). The World Bank also estimates that the food crisis has caused an increase of 44 million in the number of people suffering from malnutrition (World Bank 2009). Additionally, simulations using recent household data for a number of countries show that in most cases the poverty rate and the poverty gap increase with a rise in food prices

(except in Peru and Vietnam),<sup>12</sup> signifying that increased prices affect the poorest households in particular (Ivanic and Martin 2008).

Global cycles of growth and slowdown also greatly affect developing countries' growth and poverty reduction experiences (Díaz-Bonilla, this volume, Chapter 9). For example, from 2002 to 2007, the world experienced several years of sustained high rates of growth, including in some of the poorest countries. These poor countries, usually commodity exporters, benefited from increased commodity prices driven by an economic boom both in developed countries and in the large developing countries, mainly Brazil, China, India, and Russia (Lin 2008). Currently, the opposite—a global recession originating from a financial crisis in the United States and Western Europe—is occurring, and developing countries feel some of the negative impacts. Indeed, although the exposure of developing-country banks to underperforming assets was limited,<sup>13</sup> the crisis is starting to affect developing countries through the drop in global demand and the resulting reductions in export earnings and foreign direct investment (Naudé 2009). Furthermore, remittances, an important source of foreign exchange for many smaller and poorer countries, are expected to drop because of fewer economic migrants and lower volumes of remittances per migrant. Aid flows from developed countries are also expected to decline (te Velde 2008; IMF 2009).

The crisis is affecting low- and middle-income countries differently. Middle-income emerging economies have been affected mainly through the falling demand in developed countries and the resulting decline in global trade. For example, countries such as Brazil, India, Indonesia, and the Philippines all registered declines in exports on the order of 15–29 percent in the last quarter of 2008. Furthermore, these countries have experienced a decline in private capital inflows (World Bank 2009). Low-income countries, particularly those that depend on primary commodity exports, are also seeing their export earnings decline as a result of decreased demand and prices for primary commodities. According to the World Bank, prices for non-oil commodities fell by 38 percent between July and December 2008. With donor countries expected to scale back aid flows, low-income countries, which traditionally rely on official development assistance in times of declining export revenues, will likely experience budgetary contractions (World Bank 2009).

The World Bank estimates that the recession will increase the number of people in poverty by 46 million in 2009 because of falling employment, reduced real wages, and declining remittances. Such slowdowns also often hurt the poorest the most, because they are the least prepared to deal with the negative impacts of the downturn. The situation is all the worse given the recent global food price crisis; the poorest households, which are just barely coming out of that crisis, will

have to stretch their coping mechanisms even more. Governments in many developing countries may not be able to adequately respond to this crisis because many of them are seeing their revenues fall with the reduction in export earnings and aid. The decline in government revenues could have longer-term consequences for poverty levels if it translates into reduced public services, especially in the areas of public health and education (World Bank 2009).

The extent of the crisis will depend largely on the success of U.S. and E.U. responses (te Velde 2008). The larger and more advanced developing countries, some of which built up massive reserves and strong current account positions over the years of growth—such as China, India, and Korea—have also introduced fiscal expansion packages to stimulate demand. But there is not much that smaller and poorer countries, particularly those that already have higher inflation rates and depreciating exchange rates, can do to mitigate the crisis. For these countries, appropriate policy responses would include avoiding spending increases in certain sectors (for example, export subsidies and public-sector wages); increasing interest rates to attract capital; raising domestic resources through increased taxation, particularly in countries with low ratios of taxes to gross domestic product (GDP); and maintaining flexible exchange rates to maintain competitiveness (IMF 2009; Naudé 2009).

- *International migration.* International migration has increased greatly in the past 20 years as part of the general trend of globalization. From 1990 to 2005, the number of international migrants increased from 120 million to 185 million, and net migration (the total number of immigrants less the total number of emigrants) for developing countries as a whole decreased from –2.58 million to –18.63 million (Taylor 2006; World Bank 2008b). This increase reflects an increase in economic migration—the migration of people from developing nations to developed countries seeking a better economic future (de Brauw, this volume, Chapter 15).

The rise in international migration has created some opportunities for poverty and hunger reduction. Given the high costs and risks involved in international migration, it is usually not the poorest who migrate, but they often benefit from the remittances sent back by migrants, which provide opportunities for poor and vulnerable households to improve their standard of living. In fact, remittance flows from migrants to their families in developing countries has increased steadily over the years, going from US\$116 billion in 2002 to an estimated US\$283 billion in 2008 (Ratha, Mohapatra, and Xu 2008). Furthermore, increased international migration can create some scarcity in the local labor market, putting upward pressure on wages from which the poor can benefit.

Increases in immigration, however, can pose significant policy challenges in migrant-sending countries. The loss of skilled labor, also known as “brain drain,” is a major issue.<sup>14</sup> Furthermore, in the short run, the productivity of the migrant-sending household decreases, although in the long run, productivity generally increases as households make productivity-enhancing investments with the remittances they receive (Taylor 2006).

- *Climate change.* One of the greatest and most long-term challenges facing the world may be climate change. The phenomenon is bringing about gradual changes in precipitation, sea-level rises, increases in temperature, and associated shifts in climatic zones. These climatic changes are also likely to cause more frequent and severe extreme weather events such as floods and droughts (Poverty–Environment Partnership 2003). The impacts of climate change will vary across countries and regions. For example, average global temperature increases of a few degrees will have very different impacts in different locations. Temperature increases in some places could be twice as high as in others, with increased droughts, tropical storms, floods, and sea levels affecting coastal zones, islands, and parts of Africa.

Climate change is expected to particularly affect the poorest countries and the poorest households and communities in those countries because of their location, their greater dependence on agriculture, and their lower availability of water, land, production inputs and capital, and public services. For some the world’s poorest people, the impact will be large and catastrophic. As the *Human Development Report 2007/8* on climate change states, “While the world’s poor walk the Earth with a light carbon footprint they are bearing the brunt of unsustainable management of our ecological interdependence” (UNDP 2007, 3). Mitigation and adaptation are both essential, but mitigation is especially important in that it reduces the burden on adaptation along with suffering and can provide a source of income generation in rural areas.

- *Conflict.* More than perhaps anything else, conflict has the ability to retard and negate progress in reducing poverty and hunger. The presence of conflict or peace in different parts of the world has been a major driver of welfare losses and gains. Indeed, a third of those living in absolute poverty in developing countries live in countries defined as “difficult environments” because of conflict or state collapse. Of the 980 million people identified by Collier (2007) as living in 50 failing states, nearly three-quarters live in states that have recently been through or are still in the midst of a civil war (and 70 percent live in Africa). Similarly, Wiesmann (2006) showed that most countries with comparatively high GHI

scores, especially in Sub-Saharan Africa, have experienced long-lasting wars in the past 15 years. And this picture is incomplete, because those countries most affected by conflict—such as Afghanistan, Iraq, and Somalia—are those without hunger estimates.

The majority of civil wars are fought on ethnic lines (Wimmer 2004). Although ethnic fragmentation alone does not explain the presence of civil wars, unequal access to power based on ethnicity can generate conflict (Bates 1999; Weiner and Russell 2001; Varshney 2003). When ethnically diverse resource-rich countries have political institutions that place limited checks and controls on the power of government, conflict often results (Collier 2007). Further, there is some evidence that unequal distribution of resources (Sørbo and Strand, this volume, Chapter 16), extreme poverty, and, more generally, political, social, and economic inequalities can instigate conflict (Stewart 2002).

Conflict affects poverty and hunger both during and after the conflict. The most direct impact of conflict on well-being is the loss of human life. In addition to the immediate distress this causes, loss of life can have a long-term impact on a household's welfare because the loss of members limits the household's earning ability and deprives children, the sick, and the elderly of their caregivers. When people are compelled to leave their homes as a result of conflict, they are cut off from their usual sources of income and food and become highly vulnerable. In refugee camps, they are frequently subject to overcrowding, poor sanitary conditions, and inadequate food supplies.

The disruption of markets, roads, crops, livestock, and land that warfare brings also has an immediate and long-term impact on the incomes of those in the affected areas. Provision of basic services is difficult during and after conflict when institutions are absent, many service providers are missing, and security cannot be guaranteed. Persistent poverty and hunger become more likely when basic services are absent. During conflict schools are destroyed and teachers are killed, compromising the education of a whole generation, especially in long-lasting civil wars. Health care services are also jeopardized through deliberate destruction of health care facilities, lack of medical supplies, and personnel losses.

Collier (2007) highlights that the countries with the lowest per capita GDP are those that suffer from persistently low levels of state capacity or long periods of war and civil conflict. The impact of conflict on poverty and hunger in turn makes conflict more likely. Regression estimates suggest that halving the income of a country doubles the risk of civil war. This finding and the fact that conflict is also likely to recur—half of all civil wars are postconflict relapses—generate a “conflict trap” in which countries embark on a downward spiral of increasing impoverishment, hunger, and violence.

*Growth and Inequality.* The Organisation for Economic Cooperation and Development (OECD) stated in a recent publication that “economic growth is an essential requirement and, frequently, the major contributing factor in reducing economic poverty” (OECD 2006, 10), reflecting the findings of a number of cross-country studies showing that poverty reduction is more likely to take place in countries that experience economic growth (see, for example, Fields 2001; Ravallion 2001).

There is a long history of literature in economics that takes growth as the starting point for explaining the absence of poverty in some countries and not others. It was the focus of texts such as Adam Smith’s *Wealth of Nations* (1776). These explanations have also formed the core of recent assessments of the causes of divergent development and poverty experiences across countries (for example, Hayami 2001; Commission on Growth and Development 2008). Hayami (2001) argued that the observed global divergences arise not so much because of differences in natural resources as because of differences in countries’ ability to develop and adopt advanced technologies. Low-income economies have difficulties in “preparing appropriate institutions for borrowing advanced technology under their social and cultural constraints” (vii). This argument is bolstered by the fact that the regions of the world that have experienced the most poverty reduction in recent years have also experienced the highest growth (East Asia and the Pacific and South Asia). Several studies have found that on average and across countries, growth of 1 percent will lead to a 2–3 percent reduction in the number of people living below the poverty line (Ravallion and Chen 1997; World Bank 2000b). In a recent study involving 14 countries, however, Klasen and Misselhorn (2006) obtained more modest results; they estimated that the potential impact of growth of 1 percent on poverty reduction varied between 0 and 0.73 percentage points.

Growth is not equally good in all countries, however. For example, Bourguignon (2003) found that growth explains only a quarter of the cross-country variation in poverty reduction. The level of income inequality in a country is one of the factors that affects the relationship between growth and poverty. Indeed, growth has been found to have a smaller impact on reducing poverty in countries where inequality is high. This finding suggests that in countries where inequality is high, not only do the poorest and hungry have the least share of resources; they are also least likely to benefit from growth. Yet not all inequality is equally bad; some types of inequality are more likely to result in persistent poverty and hunger than others (Ravallion, this volume, Chapter 11). For example, removing market restrictions that keep inequality low by compressing the labor-market returns to schooling may in the long run help households escape poverty. But inequalities resulting from unequal education, exclusion of certain groups on grounds of their ethnicity, or inequalities in access to credit, insurance, and land (especially in agriculture-based societies,

which are found in most low-income countries) make it hard for the poorest to improve their welfare.

In short, the influence of growth on poverty and hunger depends on whether the type of growth that occurs benefits poorer or richer households more. Growth in sectors in which the poorest and hungry people earn their livelihoods and in the regions where they reside benefits them the most. For much of the developing world, that means growth in the rural sectors of the economy, such as in agriculture (World Bank 2008a; Klasen, this volume, Chapter 13). Furthermore, enabling the poor to improve their labor productivity through investments in education, improvements in health, or specialized activities can promote pro-poor growth (Valdés and Foster, this volume, Chapter 12). Additionally, reducing inequality through growth that favors the poor more than the rich or through redistributive measures will reduce poverty. For example, Besley and Burgess (2003) estimate that reducing the level of inequality in each region in the world by one standard deviation is enough to more than halve poverty in Sub-Saharan Africa and almost halve poverty in Latin America. The power of reductions in inequality to reduce poverty and hunger is further evidenced by the experience of Brazil in the past 10 years: Brazil achieved large reductions in poverty, from 38 percent to 19 percent, with a growth rate of only 1.1 percent (Ferreira and Leite, this volume, Chapter 29).

*Demographic Composition.* Demographic variables and poverty are linked in complex and dynamic ways. Wide variation in births and mortality rates across the developing world has enabled researchers to analyze how demographic composition can affect economic development and welfare. At the more micro level, there is some evidence that extreme poverty encourages high fertility rates, particularly in the context of high mortality rates, because a higher number of surviving children represents additional labor. Furthermore, there is a feedback mechanism at work whereby when costs of additional labor increase, households have an incentive to produce more children, which in turn exerts greater pressure on the fixed resource base (land, for example), thus increasing the labor requirements and providing a greater incentive to have more children (Dasgupta, this volume, Chapter 8).

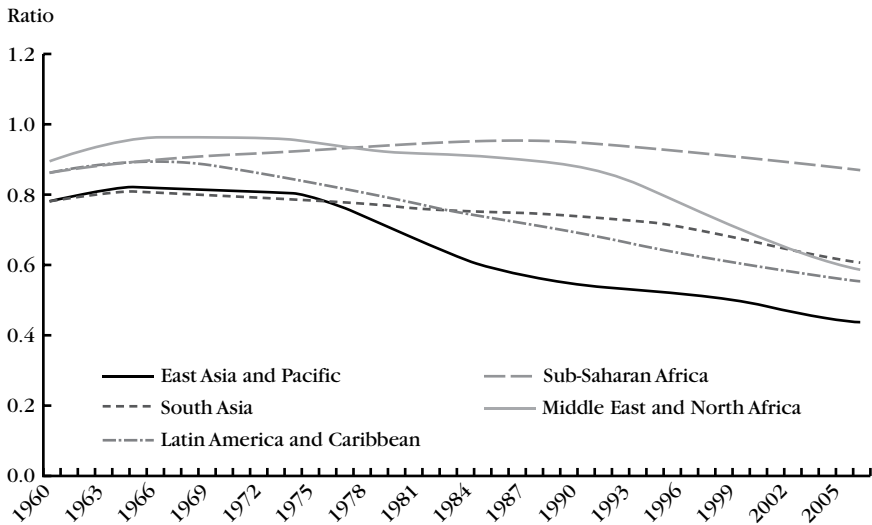
The literature on how this process translates to the more macro level is vast and contentious. For a long time, the debate focused on the impact of population size on economic growth and welfare. In the 1960s and 1970s, inspired by the Malthusian viewpoint, many argued that growing populations can restrict growth and reduce welfare because agricultural resources are fixed and unsustainable increases in population size would cause the depletion of these nonrenewable resources. The result would be welfare losses and perhaps ultimately widespread poverty and famine (Ehrlich 1968). Others made the opposite claim, suggesting that large population sizes can actually promote growth by stimulating innovation and technological progress in the face of increased demand (Boserup 1965; Simon

1981). Still another group argued that population size has no significant effect on growth, because cross-country regressions show that, controlling for factors such as education level, country size, openness to trade, and the quality of institutions, population size is only slightly correlated with economic growth, as proxied by GDP per capita (Bloom, Canning, and Sevilla 2003).

In recent years, the discussion has moved toward an examination of how population age structure affects economic development (Bloom, Canning, and Sevilla 2003; Bloom and Canning 2004). It is now widely recognized that the age structure of a population, and in particular dependency ratios, have important repercussions for a country's growth experience. For example, Lipton and Eastwood (1999) used household survey data for developing and transitional economies to show that higher fertility rates increase poverty by reducing income and worsening income distribution. According to their data, if in 1980 a hypothetical median country (with GDP, the fertility rate, and the dollar-a-day poverty rate equal to sample median values) had reduced its fertility rate by 4 per 1,000 births (which would have been equal to the fall in the median of their sample during this time) and continued to do so throughout the 1980s, it would have reduced its dollar-a-day poverty incidence from 18.9 percent to 13.9 percent, with the growth and distribution effects contributing about equally to this reduction.

Bloom and Canning (2004) also argued that population age distributions are crucial for economic performance. Countries with large youth and elderly cohorts, which tend to be net consumers, are more likely to experience slower economic growth than those with large working-age cohorts, which tend to be net producers. They further suggest that East Asia's "economic miracle" and Sub-Saharan Africa's "economic debacle" can be explained in part by their respective population age distributions. Indeed, as shown in Figure 1.1, since the 1970s East Asian countries have seen their dependency ratios fall, with rapidly declining fertility and mortality rates. This change has resulted in a working-age population "bulge," creating a window of opportunity for these countries to spur economic growth, also known as a "demographic dividend." By implementing sound economic policies that enabled the absorption of the large working-age cohort into the labor force, these countries were able to take advantage of this demographic dividend. Bloom and Canning (2004) estimate that as much as one-third of the East Asian miracle is a result of this phenomenon.

In contrast, during the same period, Sub-Saharan African countries saw only small declines in fertility and mortality rates and therefore no significant changes in the dependency ratio (see Figure 1.1). In the absence of such a demographic change, these countries have not had the same opportunities as East Asian countries to benefit from a demographic dividend. On the contrary, the HIV/AIDS epidemic has actually caused the dependency ratios in some African countries with high

**Figure 1.1 Age-dependency ratios, 1960–2007**

Source: World Bank, *World Development Indicators 2008* (Washington, DC: World Bank, 2008).

prevalence rates to increase, because the disease has caused higher mortality rates among working-age groups. As a consequence, an increasing number of households are composed of just children and the elderly; for example, 40 percent of orphaned children in South Africa and Uganda and more than 50 percent in Zimbabwe live with their grandparents (Ainsworth and Filmer 2002). In such cases, poverty is likely to increase because most households depend on working-age adults to provide for them. For example, in Malawi, Uganda, and Zambia, the poverty rate among households with only the elderly and children is 20 percent higher than the average (Kakwani and Subbarao 2005).

Like East Asia, Latin America has seen significant decreases in its dependency ratio since the 1970s (see Figure 1.1), but unlike East Asian countries, most countries in Latin America were not able to capture the advantages of having large working-age cohorts because the policy environment necessary to spur growth was not in place. Indeed, throughout the 1980s and 1990s, many Latin American countries suffered from macroeconomic or political instability or both, and many adopted inward-oriented trade regimes and difficult labor laws (Bloom and Canning 2004). These lessons are important for countries and regions that will soon be in a position to derive a demographic dividend. As shown in Figure 1.1, South Asia and the Middle East and North Africa are next in line. Starting in the mid-1980s and early 1990s, these regions experienced declines in their dependency ratios comparable

to those experienced in East Asia and Latin America two decades earlier. They will need to put in place the right economic policies, including openness to international trade, improved access to capital for investors, flexible labor laws and practices, and improved quality and access to education, to enable the absorption of a large cohort of working-age individuals into the labor market (Bloom and Canning 2004).

There is one downside to the demographic dividend: after a period of time, the bulge in the working-age population will translate into a bulge in the elderly population. This reality poses a whole new set of challenges for developing countries that are currently benefiting from a demographic dividend. With fertility rates continuing to decline—they are even below the replacement level of 2.1 births per woman in some countries in East Asia, such as China, South and North Korea, and Thailand—and life expectancies continuing to increase, East Asian countries will start seeing their dependency ratios rise again.

#### Individual-Level Determinants of Poverty:

##### Labor, Assets, and Behavioral Adaptation

Microeconomic explanations of individual and household poverty revolve around the understanding that an individual's labor (health and energy), human capital (education and skills), and physical and social assets (such as land or access to a social network) determine the individual's ability to generate income both today and in the future. Human capital and assets are important in the future for two reasons: (1) some assets (such as education and early childhood nutrition) can really be acquired only early in life, and (2) at low levels of asset wealth, a positive correlation is often observed between wealth and returns to wealth (Morduch 1991; Dercon 1996). Path dependencies, and perhaps "poverty traps," can thus result when levels of human capital and assets are particularly low, as they are for the poorest and hungry.

Poverty traps, usually defined using quite stringent criteria, imply that if a household's income or asset wealth falls below some low threshold, its members will be unable to improve their income or wealth and will thus be quite literally trapped in poverty (see, for example, Lokshin and Ravallion 2004). Although this outcome might not always be the case even for the very poorest, it is clear that lower returns to assets and labor cause the incomes of the poorest to increase more slowly than the incomes of richer households. As Antman and McKenzie (2007) state after finding that a poverty trap does not exist among Mexican households, "Although the lack of a poverty trap suggests that poor individuals can experience income growth little by little over time, and not be trapped below some threshold level, this will be a rather slow process" (1080). In the long run, initial conditions may not matter, but this long run may be very long.

The presence of path dependencies is consistent with some of the evidence presented at the beginning of this chapter on lower rates of poverty reduction at higher

levels of poverty severity. Although these findings may indicate the presence of a perverse dynamic associated with ultra poverty, they could equally arise because the underlying conditions that cause poverty (such as the political exclusion of certain groups, discussed further in the following subsection) remain unchanged. A considerable body of literature, however, both theoretical and empirical, suggests that behavior may be different for households with low asset wealth or limited food consumption, affecting the improvements these households will realize in the future. Dasgupta (this volume, Chapter 8) describes some of these studies, and other examples include studies by Eswaran and Kotwal (1990); Zimmerman and Carter (2003); Bowles, Durlauf, and Hoff (2006); and Ray (2006). This section considers some of the literature on the nature and causes of path dependency. This literature suggests that the adaptation of behavior would be particularly strong in the poorest households.

It is important that the main tenet of these theories not be misunderstood, as it sometimes can be. The central tenet is not that the behavior of very poor individuals is inherently different from the behavior of richer individuals but rather that the constraints imposed by different aspects of extreme poverty (lack of credit, high vulnerability to external shocks, lack of energy, few observations of others' success) require an adaptation in behavior. In optimally adapting their behavior to ensure survival, the poorest people make future deprivation more likely.

Two additional points on the persistence of poverty are worth noting before highlighting key asset deprivations and how they can engender the persistence of poverty over time. First, given the persistence of ultra poverty, it takes many years to recover from unexpected events that significantly reduce a household's asset stocks or daily consumption. Although an unexpected event that causes ill health, a loss of assets, or a loss of income (often collectively referred to as shocks) can rapidly change the fortunes of a household, recovery tends to be gradual and often slow. Household incomes may take several years to recover from shocks, and the larger the loss, the slower the recovery (Dercon 2004). Some shocks, such as ill health or the death of a family member, directly affect a household's ability to earn. Additionally, a household sometimes has to sell its productive assets, such as land and livestock, in order to survive the hardship brought about by a shock. Longer-term impacts result when households have to reduce their expenditure for education, pulling children out of school (Behrman, Gaviria, and Szekely 2001) or cut back on consumption. Reducing children's consumption can have long-term consequences (Bouis et al. 1998; Hoddinott and Kinsey 2001). A study exploring welfare dynamics in rural Kenya and Madagascar found that every poor household interviewed could ultimately trace its poverty to an unexpected loss of assets or health (Barrett et al. 2006). Similarly, in 74 percent of the households that had fallen into poverty in the Indian state of Andhra Pradesh, serious illness was discovered to be one of the causes (Krishna 2004). Unexpected events often hit harder once a household is

already poor.<sup>15</sup> In fact, as highlighted in the World Bank's work *Voices of the Poor* (Narayan-Parker et al. 2000), the harsh blows these unexpected events inflict on the poorest is a distinguishing feature of what it means to be poor.

Second, panel data studies over recent years have shown that, although poverty may persist among some of the poorest, those who are poor are not a constant, static group. The use of panel datasets (Baulch and Hoddinott 2001) and other innovative survey tools (Krishna, this volume, Chapter 33) shows that there are substantial movements in and out of poverty. Some above the poverty line are vulnerable to poverty, and some below the line may move out of poverty. Others below the line will remain there, perhaps for generations.

Both of these comments suggest that a focus on improving the welfare of the poorest requires a commensurate focus on reducing vulnerability to external shocks. Understanding these vulnerabilities at the micro level is crucial.

The following paragraphs highlight eight key aspects of asset deprivation and how they contribute to the persistence of poverty over time. They first consider aspects of labor deprivation, looking at the relationships between hunger, ill health, fertility, and poverty and at the relationship between education and poverty. This section then considers deprivations in physical and financial assets and finally deprivations in expectations and beliefs. The review reflects the findings of nutritionists, health care professionals, microeconomists, and anthropologists.

- *Hunger, ill health, and productive work.* When an individual is severely malnourished, the resulting lack of energy brings about a behavior adaptation that makes him or her less productive. As a result, the individual earns less. Dasgupta (1997) describes this "hunger trap":

The picture of begging is one of behavioural adaptation with a vengeance. The account tells us that emaciated beggars are not lazy: they have to husband their precarious hold on energy. As we have seen, even the timeless model makes sense of these matters by showing how low energy intake, undernourishment, and behavioural adaptation that takes the form of lethargy can all be regarded as being endogenously determined. . . . 500 million people in Asia, Africa and Latin America are undernourished. . . . The nutrition-productivity model I have sketched here offers an account of how this could have come about. More importantly, it offers an account of how it persists. (30)

The same argument can be made for ill health. When an individual is poor, his or her behavior is altered such that severe health shocks are made much more likely. Poverty increases the likelihood that households are exposed to health risks such as lack of access to clean water and sanitation, but poverty also increases the

relative cost of obtaining health services. As a result, the lower the economic status of a household, the less its use of health services (Gwatkin, Wagstaff, and Yazbeck 2005), resulting in little prompt or preventive care. The impact of ill health is thus often worse for poor households. In many parts of the world, the under-5 mortality rate, for example, is approximately twice as high for the poorest quintile as for the richest quintile (Gwatkin, Wagstaff, and Yazbeck 2005). In turn, severe health shocks exacerbate and prolong poverty. When a poor household experiences HIV/AIDS, malaria, tuberculosis, disfigurement or loss of a limb, or leprosy in a working-age adult, not only does it have to pay the costs of treatment (if sought); it also loses its ability to earn income. In addition, in the case of an illness such as HIV/AIDS and physical and mental disabilities, the illness is often the basis for exclusion from society, village institutions, and public services (Barrett et al. 2006). As von Braun, Swaminathan, and Rosegrant (2004) state, ill health “prevents poor people from escaping poverty because it diminishes their ability to learn, work, and care for themselves and their family members” (3).

Poverty is one factor associated with hunger, but there are many others. As identified by the United Nations Millennium Project Task Force on Hunger, these factors include a low level of food production; mothers’ lack of education; poor water, sanitation, and health facilities; and climatic shocks. The task force further reports that “research has found that women’s education was associated with 43 percent of the reduction in child malnutrition between 1970 and 1995, followed by increases in agricultural production (26 percent), and improvements in the health environment (19 percent) and in women’s status relative to men (12 percent)” (United Nations Millennium Project 2005, 2). Nutritionists and epidemiologists emphasize the relationships among health, hunger, and deprivation. Improvements in health technology and the provision of public services contributed to extending life expectancy in Africa and Asia in the middle of the past century, thereby substantially improving well-being. In much the same way, improvements in health technology and public services brought about increases in life expectancy in Europe in previous centuries (Lipton and van der Gaag 1993). The continued prevalence of diseases such as tuberculosis and malaria and the rise of HIV in poor countries has a large impact on the prevalence of poverty and hunger. As the Millennium Task Force on Hunger reported, “Common infectious diseases prevent people from absorbing and utilizing food properly, and parasites often compete for much that is eaten” (United Nations Millennium Project 2005, 3). Hunger, in turn, makes infection and morbidity from infectious diseases more likely (Gillespie 2006).

- *Poverty and early childhood malnutrition.* A similar dynamic, but of a longer duration, takes place when malnutrition occurs in childhood. Child malnutrition has severe and permanent consequences for physical and intellectual development.

Babies born to severely undernourished and anemic mothers are at higher risk of being underweight and dying early (Smith et al. 2003). If they survive, they will never make up for the nutritional shortfalls at the very beginning of their lives. Adults who were malnourished as children are less physically and intellectually productive, have lower educational attainment, and are affected by higher levels of chronic illness and disability (UNICEF 1998; Behrman, Alderman, and Hodinott 2004; UNS SCN 2004; Victoria et al. 2008). Poverty and nutrition shortfalls early in life translate into lower adult heights, poorer educational outcomes, and, consequently, lower adult earnings.

- *Fertility and the environment.* Members of poor households in many rural communities often have to spend several hours a day fetching water and collecting firewood and fodder, often from communally owned water sources, forests, and woodlands. This task is a fixed cost of running a household that must be incurred daily. In recent years, social norms that once regulated the use of communally owned local resources have changed. As a result, free-riding on common resources has increased. This practice degrades the local natural resource base and impoverishes all households. In certain circumstances, this increased free-riding and resource scarcity can alter the behavior of impoverished households, inducing them to have more children. As natural resources are depleted, households need more hands, leading to increased fertility rates, “further damaging the local resource base and, in turn, providing the household with an incentive to enlarge even more” (Dasgupta, this volume, Chapter 8).
- *Education and human capital.* There is a broad consensus that education is important for raising the incomes of poor households (Klasen, this volume, Chapter 13). It has been shown empirically that education has significant positive impacts on agricultural productivity, off-farm self-employment, ability to get a job, overall income, access to credit, size of social network, political participation, use of government services, adult health, and child health (for a discussion of evidence for the impact of education on some of these outcomes, see Case 2006). When parents face both budget and credit constraints, however, they may not be able to invest in their children’s education as much as they might otherwise choose to. Effectively, the cost of going to school can be a deterrent even when education is free because the cost of books, school uniforms, and traveling to school can be prohibitively high. For households with little income, sending a child to school when he or she could be undertaking productive work also imposes a high opportunity cost. Empirical evidence from all parts of the world shows that when parents face credit constraints, low levels of income affect investments in education. Holding other things constant, children from low-income households

have been shown to be less likely to complete as many years of school as children from higher-income households in Brazil, Indonesia, Malaysia, and Peru. In Peru and Vietnam, children from households with lower income and fewer holdings of durable goods are more likely to fall behind in school (King and Lillard 1987; King and Bellew 1991; Deolalikar 1993; Behrman and Knowles 1999). Children of poor parents are also likely to receive lower-quality schooling than other children (Banerjee et al. 2005). The impact of parental income on investments in children causes poverty to be passed from generation to generation because adults without education are more likely to be poor and face hunger themselves.

- *Land.* For many of the world's poorest and hungry, assets are synonymous with land, because the poor are often smallholder farmers or landless agricultural laborers. Owning land can provide a means of access to other markets, serving, for example, as collateral for credit markets. Owning land is also a means by which a household gains status (Gregorio et al. 2008). In many rural areas, however, little land is bought and sold. Land is mostly passed from one owner to another through inheritance, and land rental markets are weak (Bardhan and Udry 1999). As a result, land ownership can be highly unequal, and in some countries this inequality is further exacerbated by the failure to give or transfer landownership rights to women (Quisumbing, Estudillo, and Otsuka 2004). Research has shown that asset inequality, particularly in terms of land, is negatively associated with growth and poverty reduction (Deininger and Squire 1998; Deininger and Olinto 1999). Indeed, lack of asset ownership impedes access to credit markets, with the result that households are unable to make the investments necessary to increase their productivity to an optimal level (Deininger 1999). Conversely, according to Banerjee, Gertler, and Ghatak (1998) and the World Bank (2003), secure tenure has two effects: (1) a bargaining power effect, which increases the crop share of the tenant, and (2) a security of tenure effect, which encourages investments and eliminates eviction threats by the landlord. The positive relationship between land tenure and income growth has been verified empirically. For example, in a recent study using panel household data from India, Deininger, Jin, and Nagarajan (2009) showed that land reform had a significant and positive impact on income growth and accumulation of human and physical capital.
- *Savings and access to credit.* Sometimes credit is available to poor households, but if they do not have collateral they pay much higher interest rates, making it difficult for them to repay the loans. For example, those living on less than a dollar a day in the Indian city of Udaipur were found to pay 3.84 percent interest per month on average, compared with 3.13 percent among households living on between

one and two dollars a day (Banerjee and Duflo 2007).<sup>16</sup> When poor households are excluded from financial markets, their only option is to slowly accumulate savings. This slow accumulation strategy requires substantial short-term sacrifices for little immediate gain for households that already have very low rates of consumption. Only when they have accumulated enough savings can they invest in indivisible assets and enter into new activities with higher returns. For many of these households, using some of their precious few resources to save for very little immediate reward is just too difficult, and as a result, savings rates are often lower among the poorest (Barrett and Carter 2006).

Low rates of savings combined with lack of access to credit means that poorer households are often unable to make investments to take advantage of economic opportunities that may be possible for their wealthier neighbors. In a cross-country study of the economic activities of the poor, Banerjee and Duflo (2007) show that many of the poor are engaged as entrepreneurs, undertaking many different types of small-scale activities (usually those with low start-up costs in terms of capital or acquisition of skills). These small-scale activities, although low in start-up costs, are not very remunerative. Empirical evidence of this type of asset-based poverty trap has also been found among very poor households in Africa (Lybbert et al. 2004; Adato, Carter, and May 2006; Barrett et al. 2006).

- *Insurance, risk, and information.* Poorer households have access to fewer means by which they can insure themselves against unexpected events. As a result, very poor households take actions to limit their exposure to risk at a considerable cost. Households may pass up a profitable opportunity that is considered too risky, diversify the types of economic activities pursued, or keep as many assets as possible in easily disposable forms. By limiting exposure to risk through these strategies, the poor tend to lower their average income, which reinforces their long-run poverty. For instance, in Guatemala small farmers have been found to forgo market income in order to have a certain supply of maize from their own production instead of more high-value crops. They thus incur the cost of an implicit “food insurance premium” of about twice the market price of maize (von Braun and Kennedy 1994). In Tanzania, a shift into low-risk, low-return crops by poorer households has been found to result in 20 percent lower incomes per unit of land for households in the lowest quintile compared with the richest quintile (Dercon 1996). In India, households with lower levels of wealth have been found more likely to engage in low-risk, low-return activities and more likely to hold low-risk, low-return assets and make investments with higher liquidity (Rosenzweig and Binswanger 1993; Morduch 1995; Fafchamps and Pender 1999). The studies that have reported these findings suggest that the incomes of the poor could be

25–50 percent higher on average if they had the same protection against shocks as those with high asset levels (Dercon 2002).

A related matter is the access of the poor to information, whether market- or service-related, that facilitates dealing with risks and opportunities. Some evidence from Bangladesh and Peru, for example, shows that the poorest benefit relatively more than higher-income people from access to new information and communications technology, such as cell phones, but problems with connectivity and relevant content remain and define the digital divide for the poorest (Torero and von Braun 2006).

- *Expectations and beliefs.* Expectations and beliefs about the future are important determinants of behavior. A key factor in future-oriented behavior is the difference between an individual's standard of living and the standard of living to which he or she aspires (Ray 2006). If this difference—the “aspiration gap”—is too narrow or too wide, individuals do not have incentives to raise their living standards. Those without high or achievable aspirations may not make attempts to better their situation. For example, people may not make investments if they believe they are infeasible or would not lead to significant changes (Bernard, Dercon, and Taffesse 2007). But as Ray (2006) notes, “Poverty stifles dreams, or at least the process of *attaining* dreams. Thus poverty and failure of aspirations may be reciprocally linked in a self-sustaining trap” (409, emphasis in original). In particular, the poor may have low aspirations in part because their own experiences and the experiences of people in their cognitive world suggest that escaping poverty is not a feasible option (Macours and Vakis 2008). A study on Ethiopian villages conducted in 2006 through three surveys found that aspiration failure is prevalent and that this belief had a significant role in potential demand for credit and in an individual's future-oriented behavior (Bernard, Dercon, and Taffesse 2007). In this context, aspiration failure could explain why an individual's level of investment is low when returns to that investment are high. (For example, the bottom-quintile households in Ethiopia spent four times more on stimulants such as coffee, tea, chat, and alcohol than on education and health, although, as the authors note, these nonoptimal investment decisions could also be attributed to lack of education, information, and access to financial assets, among other factors.) It may also be the case that ultra poverty is caused by addictions, in which case policies such as conditional cash transfers can be useful to incentivize change.

#### Power, Discrimination, and Exclusion

From the perspective of political scientists and sociologists, the previously discussed economics-based theories explaining the presence of poverty are limited because “this ideology has little to say about the social and economic inequalities that distort real

economics” (Farmer 2003, 5). Understanding the imbalance of power between individuals and groups in a society allows one to understand who the poorest and hungry are. Extreme deprivation can be explained by the denial of basic human rights of survival by the powerful. Inequality of agency—or, termed differently, a lack of empowerment—limits the extent to which poor people can influence, negotiate, control, and hold others accountable (Rao and Walton 2004; Narayan 2005). For example, the systematic exclusion of groups such as ethnic minorities in Southeast Asia, hill tribes and scheduled castes in South Asia, indigenous groups in Latin America, and pastoralists and strangers in Sub-Saharan Africa from access to resources and markets increases their propensity to be poor. Furthermore, in many societies throughout the world, women have the least power or agency. Women have fewer land rights under customary or statutory legal systems than do men, often lack decisionmaking authority in their households, are at a disadvantage in labor markets and in gaining access to services, have greater burdens on their time, and face threats of physical violence. Such discrimination reduces women’s freedom and impedes agricultural productivity and rural development. Human rights violations, including the neglect of the human right to food and the denial of basic survival to many of the world’s citizens, are thus not accidents but “symptoms of deeper pathologies of power and are intimately linked to the social conditions that so often determine who will suffer abuse and who will be shielded from harm” (Sen 2003, xiii).

In the field of economics, there has been an increase in the number of studies on discrimination and the impact of social power relationships on an individual’s ability to improve his or her welfare (Becker 1957; Loury 1977; Manski 1993; Durlauf 1999). These studies show that discrimination against groups based on identities of race, region, ethnicity, gender, and religion reduces the well-being of those individuals who face discrimination. It also results in economywide inefficiencies, given that many people are not permitted to fulfill their potential (Becker 1957). The rate of asset ownership among groups who face discrimination is much lower than that among nonexcluded groups, given that land control, for example, is largely inherited. Their exclusion, or adverse inclusion, in markets and nonmarket exchanges causes the return to their assets and labor to be lower (Thorat, this volume, Chapter 34). Furthermore, analyses have often shown that even when holding constant observable asset levels (such as family size, asset ownership, education, and location), minority groups have lower income levels (see, for example, World Bank 2004, 2006b; Borooah 2005; Hall and Patrinos 2005). Although this outcome may sometimes reflect individual differences, when it is systematically experienced by distinct disadvantaged groups, it is likely to be a consequence of their socially excluded status (Kabeer 2005).

Different groups also often have very different access to public services such as health care, education, and safety nets. Even when access is constant, discrimina-

tion at the point of delivery often results in certain groups' using these services less. Access to political representation and social networks is also often heavily determined by group membership. In Peru, for example, indigenous people have little political voice. As a result, although there has been general social progress over time, wage earners have more social protection than members of indigenous populations in rural areas.

Legal discrimination against groups still exists in some cases. In parts of Sub-Saharan Africa, access to land under customary law depends on membership in groups defined by common descent or residence, so those without ethnic roots in an area are excluded from ownership (Kabeer 2005). Indigenous groups in Latin America are also sometimes prevented from owning land. For example, the Chiquitano people in Bolivia were once required to work unpaid and prevented from owning land. In 2007 they won the legal title to 1 million hectares of indigenous territory (Green 2008).

Moreover, legal discrimination against women's landownership is present in most regions. In Asian kinship systems, household and property management is conducted by fathers and sons (Das Gupta et al. 2004), although this practice is beginning to change in some places (in Vietnam, for example, land documents must now be registered under both husband and wife). Other forms of legal discrimination against women also take place. For instance, in Pakistan and Iran the evidence in court of a Muslim woman is worth half that of a man (Al-Alwani 1996; Green 2008). In Indonesia discriminatory hiring against married women is still permitted, and female employees are channeled into dead-end jobs, are paid low wages, and are the first to be laid off (Tzannatos 1999). In Lesotho and Swaziland, women are legally considered minors and, in addition to being unable to own property, cannot enter into contracts or receive bank loans without a male relative (Quisumbing, Meinzen-Dick, and Smith 2004).

Even when no explicit discriminatory behavior has been exhibited, group membership can have a measurable impact on individual welfare by determining role models and peer groups (Durlauf 2006). By influencing both perceptions of others and aspirations, the group an individual belongs to can exert a strong influence on educational attainment, occupational choice, employment, and protection by the law. For instance, the lower performance of scheduled caste children when their caste is announced and they perceive that they will be judged prejudicially is strong evidence of the power of a history of discrimination and deprivation to affect perceptions and actions (Hoff and Pandey 2004).

As a result of either outright discrimination or more subtle group membership dynamics, poverty and hunger reduction has been slower among certain excluded groups—ethnic minorities, disadvantaged people, and those with disabilities—causing poverty and hunger to be increasingly concentrated in these groups.

The book *Development as Freedom* (Sen 1999) highlights the need for laws to respect the rights of different people and ensure human rights. A rights-based approach to development is based on equity in relations between groups of people, which must be advanced and protected by the state (Nankani 2005). Ensuring legal redress for some of the inequalities affecting certain groups can be powerful in bringing about social change (as, for example, in South Africa). Addressing ultra poverty is thus intertwined with addressing inequality in power between individuals and groups. Indeed, the constant inequality in economic, political, and social opportunities of some groups of people highlights the need to address inequality directly (World Bank 2005; Ferreira and Walton 2006; Walton et al. 2007).

### Areas for Action

Consistent and persistent patterns of poverty across continents highlight the fact that addressing extreme poverty and hunger often requires addressing social and political processes as much as economic issues (Sen 2000; Narayan and Petesch 2007; Green 2008). Therefore, addressing poverty and hunger is a complex challenge. As highlighted in the previous two subsections, persistent and severe hunger and poverty have many interacting causes, and no single approach will provide the solution.

The analysis in the preceding sections suggests that addressing ultra poverty and hunger will require economic growth in poor countries. Growth alone, however, will not be enough; also needed will be innovative approaches for including the poorest, with a focus on policies and targeted programs that are particularly effective at improving the welfare of the world's poorest and hungry. Further, because of the current and historical political undercurrents that influence who becomes poor and who does not, policies must also be developed to address the political causes of exclusion.

This section considers in more detail the policy responses that fall under the three action areas—growth, targeted building up, and inclusion. The discussion of each response emphasizes why action in this area is important to meeting the needs of the poorest and the food insecure and highlights some of the findings of the chapters on the types of action that can be undertaken as part of comprehensive strategies.

#### Growth

This section considers the countrywide conditions under which welfare improvements for the poorest and hungry are most likely to be realized and highlights the policies that can be developed to ensure that these macroeconomic conditions are provided.

*Peace and Stability.* Achieving peace is clearly an important prerequisite for a poverty and hunger reduction strategy. A blend of approaches is needed to achieve peace. In countries prone to conflict, ensuring peace requires taking action to prevent ethnic conflicts from escalating as well as restoring peace once conflict has broken out.

In postconflict situations, expanding international peacekeeping and security guarantees plays an important role in maintaining the peace in the short to medium run. In the short run, there is a need for local-level peace-building and reconciliation work. To maintain stability over the long run, it is important to understand how to design institutions, constitutions, and laws that channel ethnic conflicts into non-violent forms or nonethnic political competitions (Wimmer 2004). This approach includes addressing the grievances of marginalized people through, for instance, land rights management in agrarian states. Such rights are particularly pertinent, because many civil wars and conflicts are in fact agrarian crises whose underlying land issues often go overlooked and unaddressed (Sørbø and Strand, this volume, Chapter 16).

*Growth That Benefits the Poor.* In the past few years researchers have conducted substantial analysis of how to encourage growth that benefits the poor. For instance, the OECD's Development Assistance Committee has been developing and sharing best practices in advancing pro-poor growth since 2003. Two edited volumes (Besley and Cord 2007; Grimm, Klasen, and McKay 2007) have brought together different countries' experiences in fostering pro-poor growth and offer some cross-country lessons on how to foster growth in the regions and sectors where the poor are located (or to which they are likely to move). The main message suggests that for growth to be rapid and sustained, it should be broad-based across sectors and regions and inclusive of the large part of the workforce made up by poor women and men. Given that labor is often the only asset owned by the poor, policies that increase their employment and income-earning opportunities are key; such policies not only promote growth, which may have some beneficial effects for the poor, but also reduce inequality (Valdés and Foster, this volume, Chapter 12). Research has shown that a country's growth experience is greatly influenced by increased productivity stemming from improved production technologies and skills of human resources within the country (Hayami 2001).<sup>17</sup> Therefore, countries need to set the right institutional conditions for developing technology and human resources. They must invest in scientific research and education and organize markets to facilitate innovations by entrepreneurs.

Agricultural growth in general, and growth in production of staples in particular, is typically a strong source of poverty reduction, especially at earlier stages of development. The impact of agricultural growth on poverty reduction in a given country will depend on the characteristics of the poorest, the nature of the economy

(for example, whether it is closed or open and the nature of rural labor markets [Dercon 2009]), and the nature of the agricultural growth experienced (that is, whether it comes as a result of increasing labor or land productivity). Agriculture's impact on poverty operates through several important channels. First, there is a participation effect, because many of the poorest people rely primarily on agricultural activities. Second, there is a growth linkages effect, because income generated by increased agricultural productivity is spent partly locally, creating income opportunities for the poorest. Third, there is a food price effect that comes with productivity growth in the staples sector, because poor people employed in the nonfarm sector spend 50–70 percent of their income on food and benefit from lower food prices (on these issues, see Binswanger and Quizón 1986; Ravallion and Datt 1996; Rosegrant and Hazell 2001; Diao et al. 2006; Bezemer and Headey 2008). This volume also shows the importance of productivity improvements in the food crop sector through better seeds and inputs; improved rural infrastructure and access to credit; improved growth in lagging regions through, for example, infrastructure improvements, investments, and fiscal policies that target lagging regions; increased education and better land access programs to improve the asset base of the poor; and investments in education and employment for women and disadvantaged groups (Klasen, this volume, Chapter 13).

Good policy at the global level is also crucial for encouraging growth and reducing inequality. Most notably, the uneven playing field in global imbalances and trade rules must be addressed in order for developing countries to adequately benefit from the increased opportunities presented by globalization (von Braun and Díaz-Bonilla 2008; von Braun and Mengistu, this volume, Chapter 10).

In summary, in most countries, growth that includes the poorest in a sustainable way will generally involve accelerated rural and agricultural growth and require increased investments in infrastructure, technology, education, and health. Furthermore, these investments will have to be accompanied by safety net policies that reduce and mitigate risks to enable the transient poor to benefit from growth. Conditional cash transfers (discussed further later in this chapter) are a possible policy instrument for doing this, especially if they are an integral part of broader social strategies that give strong attention to well-functioning labor markets (Levy 2008).

*Infrastructure and Migration.* Frequently, the poorest regions of a country are the most remote, with the greatest traveling time to the country's capital and main economic centers. A consistent characteristic of the 20 countries considered by Ahmed et al. (this volume, Chapter 6) is that the poorest and most food-insecure households are those located farthest from roads, markets, schools, and health services. The cost of buying or selling goods increases greatly for households located far from markets, so many households engage in subsistence farming, growing food

to meet their own consumption needs. As a result, the asset-poor often face lower returns to the few assets they own.

Improving access to markets and services for the asset-poor through physical infrastructure can have significant results. In Bangladesh, enhancing accessibility by improving the surface of roads was found to reduce daily transport costs by 36–38 percent and fertilizer prices by 5 percent. It also increased price indexes of agricultural goods by 4 percent and agricultural output indexes by 30–38 percent. Furthermore, the agricultural wages of males increased by 27 percent and annual per capita consumption by 11 percent (Khandker, Bakht, and Koolwal 2006). In addition, millions of small farmers need improved access to value chains, and many poor households need access to nonfarm rural employment. Infrastructure investments are important in providing this access, as are investments in knowledge and information for poor people so they can take advantage of opportunities to improve their livelihoods.

Sometimes policies that make migration affordable and remunerative for poor households is the best way to improve their access to markets and services. In contrast to investments in public infrastructure, which aim to bring markets and services closer to poor households, this approach brings poor households to markets and services. The characteristics of households that migrate vary from context to context. In some cases (such as in Nepal) it is the poorest households that migrate, whereas in others (such as in Nicaragua) it is better-off households that are able to make the journey. The merits of facilitating migration and the design of policies to facilitate it also vary from context to context. Policies to promote migration may include policies reducing the costs of obtaining documents for international travel (such as passports), reducing the costs of searching for new jobs by encouraging the development of recruiting companies, and developing financial institutions in rural areas to facilitate remittance flows (de Brauw, this volume, Chapter 15).

#### Targeted Action on Nutrition, Health, Credit, and Education

The policy responses discussed in this section correspond to the characteristics of persistent and extreme deprivation highlighted earlier and are designed to protect the poorest against vulnerability—in particular against ill health, which is one of the most common sources of vulnerability—and to facilitate asset creation by the poorest. As Drèze and Sen (1991) noted, public support has an irreplaceable role to play in addressing deprivation and vulnerability and is effective even at early stages of development.

Targeted actions that allow the poorest to increase their investments in nutrition, health, education, and assets and ensure that the poorest are protected from shocks can effectively and efficiently encourage growth and poverty reduction. Investing in the nutrition and health care of the poorest households enables them

to participate to a greater extent in productive activities, and providing credit and insurance allows them to invest in activities with high returns. The centerpiece of such strategies is social protection, but other types of targeted interventions include the provision of nutrition programs for the poorest, “microcredit-plus” programs, social security, and insurance.

*Expanding Social Protection and Addressing Vulnerability.* Social protection targeted to the poorest households can both provide assistance to the least well-off members of society and protect these households against shocks. As such, social safety nets not only ease poverty momentarily but also enable growth by allowing poor households to create assets, protect their assets, and allocate resources to risky but highly remunerative production activities (Alderman and Hoddinott, this volume, Chapter 20). In the absence of public safety nets, poor people insure each other to some extent by forming groups and providing mutual support at times of crisis (Platteau 1991). These groups, however, cannot protect households against shocks that are severe or that may affect all group members at once. Other interventions need to be developed and can include the following options:

- *Conditional cash transfers (CCTs).* CCT programs, which condition transfers to households based on their meeting certain requirements such as sending children to school, have proven successful in reducing poverty in the short run (through cash transfers) and in the long run (through the human capital formation that they encourage). They work particularly well in countries with low levels of school attendance and an adequate schooling infrastructure. They are not a magic bullet, however; they do not work in every country, and they are not alone sufficient for reducing poverty (Adato and Hoddinott, this volume, Chapter 22).
- *Social security.* This tool has been shown to address the vulnerability faced by the young, the unemployed, and the elderly (Dethier, this volume, Chapter 21). In South Africa, for example, social security benefits for parents with young children and for the elderly have greatly reduced poverty. For social security to work in low-income countries, national governments need to increase financing from general taxation, separate social security from labor market status, and create new institutions to administer social security programs. The needs for administrative efficiency and good governance are two key challenges in implementing programs. Cooperation between actors is needed to yield the maximum efficiency.
- *Market-based or civil society-based insurance.* In providing insurance for the poorest, it is useful to start with the group-based informal insurance that is already in place. This approach reduces the cost of providing insurance and ensures that

the new forms of insurance provided do not weaken the groups that are already so effective at dealing with some types of risk (Dercon, this volume, Chapter 25). There is often a trade-off between the provision of insurance and that of credit, so microcredit and microinsurance should be designed together. One product will not fit all problems because different types of risk pose different challenges. For example, lack of information is a large problem for crop insurance, and innovations in information, such as the development of weather-based indexes, can help. To provide health insurance to the poorest, schemes should leverage the large amounts that poor people spend on health care out of pocket. Developing a private health insurance scheme and contracting the provision of health care based on performance is one way to do so.

Ultimately, as Dercon (this volume, Chapter 25) notes, a mix of all approaches is needed. The goal is to ensure that the poorest households do not find themselves constrained in making health, education, and production decisions. It is important that these schemes be carefully designed to maintain the incentives for development in all sectors equally (Levy 2008). Phasing in social protection quickly and comprehensively can reduce the vulnerability of households.

*Improving Savings and Credit Markets.* When poor households are excluded from financial markets, they have only a few options for obtaining enough capital for investments. The most viable option is to slowly accumulate savings.<sup>18</sup> As noted earlier, poor households may find that using some of their precious few resources to save for very little immediate reward can be just too difficult, and as a result savings rates are often lower among the poor than among others. Interventions to aid savings and access to credit are needed.

Enabling the poorest to save and use credit is also central in allowing them to invest in acquiring assets and skills and to mitigate the effects of adverse shocks. Microfinance has been shown to effectively meet the saving and lending needs of poor rural households, helping them create and protect assets.<sup>19</sup> But the ultra poor are often excluded from microfinance groups by other villagers and require a different type of microfinance (Abed, this volume, Chapter 27). In Bangladesh, offering grants (rather than loans) to the poorest households has allowed the nongovernmental organization BRAC (Bangladesh Rural Advancement Committee) to reach these households. Through grants, these households become less poor and graduate into being microfinance clients. For microfinance to work, there must be an organization with the institutional capacity to organize groups within villages and act as a retailer of the service. Initial financing may need to come from government and donors. Government regulations can also be a constraint, for many countries do not allow microfinance institutions to mobilize savings.

*Investing in Health and Nutrition.* As Amartya Sen has written, “Health is among the most important conditions of human life and a critically significant constituent of human capabilities” (Sen, quoted in O’Donnell et al. 2008, 1). Ill health is also a cause of poverty: poor people mention ill health most frequently from a list of 15 causes that have driven them into poverty (World Bank 2000a). Ill health is especially damaging when it occurs at the wrong moment, such as just after another health shock, at a time of low income, or in combination with debt (Krishna 2004). Additionally, as already noted, ill health is a means by which poverty is further exacerbated.

Similarly, poor nutrition is also a dimension of deprivation and a means by which deprivation is exacerbated (Dasgupta, this volume, Chapter 8). Poor nutrition is a major cause of increased incidence of disease, given that proper nutrition is essential for the immune system to function. Vitamin deficiencies can have devastating consequences for child survival and development. For example, it is estimated that improving vitamin A status can reduce child mortality by 23–34 percent (Spahn, this volume, Chapter 24). Improving children’s nutritional status can also lead to improvements in cognitive development and improved performance at school. In fact, improving access to high-quality education will not have the desired consequences if children are too hungry to learn.

Interventions that reduce the incidence of disease are essential to improving the well-being and reducing the vulnerability of the poorest. To combat disease, the poor need not only access to better medical technologies and better water and sanitation but also increased access to medical facilities. The costs of traveling to medical facilities, doctors’ fees, medicines, and bribes can make seeking medical care very expensive for poor households. This situation, in combination with the fact that health services have focused on reaching the majority of the population rather than necessarily targeting the poor, means that richer households often benefit more from health care subsidies than do poor households. This outcome has been documented in a number of countries. For instance, according to the *World Development Report 2004*, wealthier areas received more government subsidies for health care in Bangladesh, the Kyrgyz Republic, Mozambique, Pakistan, and Peru, and in India the richest fifth received three times the health care subsidies received by the poorest fifth (World Bank 2004). Both investing in health services and targeting them to the poorest are important.

Providing finance to the poorest households so that they can obtain health services is an important component of investing in health. CCT programs can help, as described earlier, as can microinsurance. Innovations are needed to ensure that the poorest have access to health insurance that will cover the full costs of gaining access to care (van der Gaag, this volume, Chapter 26).

Fortification of foods such as oil, sugar, wheat, and flour and biofortification of staple foods such as sweet potatoes can greatly improve the nutritional status of poor and hungry households. Using fortified foods can present some challenges, particularly related to food delivery and marketing of the foods for consumer acceptance (Spahn, this volume, Chapter 24). Some food-for-education programs provide fortified meals or take-home rations to children in school, conditioned on a child's school attendance, and these programs have proven effective in increasing school participation and improving the nutritional status of children (Adelman, Gilligan, and Lehrer, this volume, Chapter 23).

Improving the nutritional status of children also requires improving the nutritional status of their mothers. Despite the recent decrease in child malnutrition in South Asia, the region still has the highest prevalence of underweight children in the world. The main reason proposed to explain a higher child malnutrition rate in South Asia than in poorer Sub-Saharan Africa is that South Asian women's nutrition and their practices for feeding and caring for young children are inadequate (Smith et al. 2003; World Bank 2006a). South Asia has particularly high rates of underweight women and low-birthweight babies (Smith et al. 2003; UNS SCN 2004; Svedberg, this volume, Chapter 4). Thus, children and women need special interventions that address the health and nutrition constraints that impede their improved well-being, productivity, and livelihoods over the long term. One such intervention is nutrition education for mothers. A recent study undertaken in Bangladesh found that intensive nutrition education for mothers improved child nutritional status significantly and sustainably even when no nutritional supplements were provided, and this effect is attributable to changes in maternal child feeding and caring practices (Roy et al. 2005).

*Investing in Education.* Evidence suggests that public investments in education can have strong positive impacts on income growth. For example, Duflo (2001) found that each primary school constructed per 1,000 children in Indonesia in the period between 1973 and 1978 led to an increase of 0.12–0.19 years of education and an increase in wages of 1.5–2.7 percent.

Education also has an intrinsic value separate from whether or not it is a means by which people can increase their income. It is a fundamental part of increased capabilities. The Universal Declaration of Human Rights establishes an individual's right to education and emphasizes free and compulsory primary education for all.

Action to ensure the provision of primary education to all households—particularly ultra-poor households—is needed. High-quality free schooling must be provided, along with resources for credit-constrained households to send their children to school, such as through CCT programs. In some cases there has been a trade-off between the provision of primary schooling for all and the provision

of high-quality education. In Uganda, for example, universal primary enrollment compromised the quality of the education provided as classrooms and schools become oversubscribed (Appelton 2001). Similarly, recent evidence from Brazil shows a decrease in quality in the past 10 years—a period during which primary school enrollment was expanded significantly—based on the scores achieved on standardized national tests. If quality suffers with the provision of more schools and teachers, the long-run positive effect sought in human capital formation will be lost. A better understanding is needed of how to expand education systems so that increased enrollment of the poorest comes with an improvement in the quality of education.

Innovative mechanisms for monitoring the quality of education are also needed, because poor parents are often less able than better-off parents to assess the quality of schooling received by their children. In India poorer parents were found to be less able than richer parents to predict whether their school-age children could read (Banerjee et al. 2005). Programs that encourage continual learning and adult literacy can also address the educational deficit faced by many adult members of ultra-poor households.

#### Inclusion

Although addressing individual experiences and needs is important, a focus on individuals alone will miss a fundamental cause of poverty for many people: the deliberate exclusion, current or historical, of particular groups of people from participating in the betterment available to society as a whole. This section considers how to address these relational features of deprivation by empowering the poorest members of society, including women. As already noted, women in many developing societies bear the brunt of exclusion, with fewer land rights and little decisionmaking power within the household. Interventions designed to address exclusion must take these unique dimensions of women's poverty into account.

*Including the Excluded.* Addressing the political causes of exclusion has a beneficial effect on growth and targeted building up. Discrimination against groups based on identities of race, region, and ethnicity creates economywide inefficiencies by preventing the victims of discrimination from fulfilling their productive potential. Similarly, improving the nutrition, health, credit, and education of the poorest households is possible only when individuals are not discriminated against in the provision of public services or credit markets. Nevertheless, it is important to keep in mind that politically, reducing discrimination can be very sensitive, because those who gain from discriminating against certain groups may have an incentive to maintain the status quo. Their gains, or perceived gains, from keeping certain groups excluded may outweigh the effect of reduced total welfare.

Several avenues are available for addressing the inequalities that arise from exclusion. As outlined by Stewart (this volume, Chapter 32), approaches can be broadly classified into three groups: direct policies, indirect policies, and integrationist policies. Direct policies targeted toward excluded groups are commonly thought of as affirmative action. They include targets, quotas, and preferential treatment to improve the discriminated groups' access to jobs, assets, services, government contracts, and political representation. Evidence suggests that this approach can lead to increased equality that engenders greater respect and improves efficiency, although it may also provoke opposition among more privileged groups. Indirect policies are more universal and include tax and spending policies designed to help particular groups. Such policies include progressive taxation; legal policies to correct discrimination in, for instance, housing and employment; and macroeconomic policies that favor particular activities. Integrationist policies are designed to reduce group consciousness among both the excluded and the nonexcluded. They might include bringing people from different groups together in schools and universities. Such policies can promote national identity but can also threaten cultural identities and conceal deep inequalities.

Action often needs to be taken simultaneously in many arenas, because action in one arena alone may not bring about the desired result. Increased political participation alone has not necessarily led to needed changes in social relations. In India, for instance, where one-third of the seats in local councils are reserved for women and scheduled castes and tribes, women still have a low level of participation in council meetings (Khetan and Mehta, this volume, Chapter 35). Given the impact of a history of discrimination and exclusion on perceptions and aspirations, overcoming discrimination takes time and requires continual striving for equality between groups on a number of fronts.

In addition, more open debate and information about the forms and consequences of excluding social groups and effective means of addressing discrimination are needed. One largely "invisible" group, for instance, consists of people with disabilities, 80 percent of whom live in developing countries. National datasets often do not show who has disabilities (such datasets also often lack information on minority groups), making it difficult to know what the poverty rates are in these groups. Where data are available, they confirm the finding of many participatory poverty assessments that the level of poverty is much higher in households with heads who have disabilities (Hoogeveen 2005). Obstacles to their participation take a heavy toll on these people, as well as on their families and communities, who spend enormous amounts of time and resources caring for them. People with disabilities also face discrimination and exclusion that limit their opportunities for full social, economic, and political participation. In Tanzania, for example, children with disabilities have relatively low school attendance, so by the age of 17, children with

disabilities have missed 4 years of primary education compared with 1.7 years among children without disabilities (World Bank 1996). State involvement in developing norms and standards for inclusion, creating an enabling environment, and planning for accessible infrastructure and technologies is crucial in addressing this important issue (McClain-Nhlapo, this volume, Essay 4). Additionally, the state needs to work at involving people with disabilities themselves in setting policy, for the ultimate goal is not pity but empowerment.

Achieving equality between groups requires governance reforms that empower the poor and the excluded to raise their voices and demand accountability and that increase service providers' incentives to respond to their needs. As Narayan (2005) has written, "Empowerment is the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives" (41). Investing in the social capital—the relationships and networks—of the poorest can greatly facilitate this empowerment. For example, in a number of cases, facilitating the development of groups of poor women has brought about increased empowerment and many improvements in welfare. In the Indian state of Andhra Pradesh, successful groups are those that have gathered women of similar socioeconomic status in a village, ensuring that the group is formed on the basis of affinity among the members rather than narrowly defined interests. Federations of these groups at the village level then use the trust built in self-help groups to provide poor women with the economic and political space within which to undertake activities such as marketing, bulk purchasing of commodities, and exertion of pressure on local governments for the provision of services (Kumar Thallam, this volume, Essay 5).

*Property Rights for the Rural Poor.* According to Green (2008), "One of the most agonizing aspects of living in poverty is not having secure rights to your house or land" (70). As discussed earlier, when a household's tenure is uncertain or nonexistent, the household may lose the benefits from its investments in land. Land reform can get at the root of social and economic inequality (Green 2008). Providing property rights is not a simple matter, however, because property rights are derived from many sources (government, custom, and religious laws). In addition, the history of land rights is in many respects context-specific and often complex, even though in general there has been a move from communal patterns of landholding to more individualistic private property rights.

Strategies for legal reform need to take these complexities into account and be designed to help provide for women and marginal groups (Meinzen-Dick, Kameri-Mbote, and Markelova, this volume, Chapter 17). Further, legal reform that works for the poorest needs to go beyond titling programs to include legal literacy programs and dispute resolution mechanisms and should take into account complementary investments in credit and extension services.

## Strategies for Effective Action

Identifying the appropriate areas of action and the best policies and programs to implement is only the first step. Poverty can be reduced only when these policies can be financed and implemented appropriately and effectively. Choosing appropriate and feasible policies for a given setting, securing adequate financing, and knowing when to scale up successful programs and when to keep the scale small to facilitate experimentation are all essential to policy success.

The mix of areas of action will look different for countries at different stages of development (Fan, Brzeska, and Shields, this volume, Chapter 40). Also, policies need to be context-specific; what works in one country may not work in another. Nevertheless, globalism can serve a useful role in reducing poverty and hunger by strengthening learning across countries. It is essential that more be understood about what approaches work best in which contexts. Recent increases in the number of randomized evaluations help, but the number of such evaluations needs to be increased and the resulting data combined with other information and analyses to better answer the question of what will work in a given context at a given time.<sup>20</sup>

As outlined by Regina Birner in Chapter 39 of this volume, all policy instruments for addressing poverty and hunger face at least one of three challenges: political feasibility, administrative feasibility, and fiscal feasibility. This section considers these three challenges and possible solutions, as well as strategies for scaling up successful projects.

### Administrative Feasibility

One element that is key to ensuring administrative feasibility is building the capacity for implementation and innovation on the basis of existing institutional conditions, including the capacity to design and implement policies and programs to reach the poorest. Improving capacity to implement programs requires that skill levels and organizational arrangements receive more attention. It is also important to address the historical reasons for low levels of capacity in the first place; improving health and education services for all improves capacity.

Building capacity for effective action also includes strengthening capacity for social entrepreneurship (Babu and Pinstup-Andersen, this volume, Chapter 43). Social entrepreneurs and enterprises can provide innovative ideas on how to mobilize poor people and take actions to improve their welfare. Social entrepreneurs can also improve the effectiveness and implementation of existing programs. However, psychological and cultural barriers that encourage conservatism and discourage innovation are often commonplace in rural areas. To really stimulate social entrepreneurship, education systems need to be reoriented toward problem solving and entrepreneurship education and need to get better at identifying and encouraging entrepreneurs when they do arise.

### Political Feasibility

To ensure the political feasibility of a pro-poor strategy, governments need to be more accountable to the poor. Indeed, it is important to improve the underlying conditions in which policies are formulated and implemented. Poor people need to have a strong political voice, a vote, and a role in democratic institutions. Political power can be directed to poor people by, for example, reserving seats for marginalized groups in political bodies, promoting their empowerment, and pursuing social mobilization for them that imparts the idea that another world is possible. Past social movements, such as the labor movement, the women's movement, and the cooperative movement, have helped empower poor and marginalized people. But it is not realistic to expect poor people to always speak with a single voice; their interests may differ significantly because they belong to different subgroups. Among a sample of households in Andhra Pradesh, India, for instance, the newly poor subgroup expressed a desire for health services, the persistent poor wanted wage labor, and the escaped poor wanted irrigation and education.

The development community can promote the conditions for self-empowerment, such as the right to associate, freedom of speech, a free press, transparency, access to justice, and accountable political institutions. It can encourage leadership at all levels. And it can choose project implementation methods that create space for empowerment, such as community-oriented development. Building the demand side is not enough, however. State institutions need to have the capacity, incentive, and motivation to respond to this demand, and even to take action on their own.

Governance improvements are also needed to ensure the political feasibility of any strategy. Although improving governance is a long-term project, short-term improvements are also needed to help the poor of today become less poor tomorrow. For most of the poor, sound governance means actually gaining access to the services and rights to which they are entitled, unhampered by corruption and exclusion. Officials need to measure the costs of the benefits that actually reach the poor and build these costs into their budgets. Efforts must be increased to ensure that these investments reach those for whom they are intended. In addition, there is a strong need for independent recourse mechanisms. What good is it to have citizens who can demand services if their concerns are ignored? Often an independent body to hear complaints and put pressure on officials can be helpful. Governance issues should be an integral part of poverty reduction projects, and this approach will require funding and enhanced organizational capacity. The media can help by giving the poor an implicit voice.

### Fiscal Feasibility

Many of the policy proposals discussed require significant financing. Although the financial costs of some of these programs, such as social protection, are not as great

as might initially be believed (Chronic Poverty Research Centre 2008), additional funds may still be needed. Several avenues are available for increasing funds:

- *Reform revenue and outlays at the national level.* Reforming tax systems to be more progressive, improving tax collection, and replacing input and output subsidies with public investment are strategies national governments can use to increase the financial resources they can commit to some of the areas of action identified (Dethier, this volume, Chapter 21; Fan, Brzeska, and Shields, this volume, Chapter 40). Meaningful public expenditure reviews can help. The tax system can have a large impact on ultra poverty. A regressive system based on indirect taxes will reduce the income of the poorest by making basic food items, basic services, and the like more expensive.
- *Increase aid and improve its use.* There is also a role for better-targeted financing from richer countries. As the 2002 Monterrey Consensus Document states, in order for poor countries to achieve the MDGs, a substantial increase in official development assistance (ODA) is necessary (Hirvonen 2005). In particular, more aid needs to go to the poorest countries, which traditionally have not received the bulk of aid. For example, since the 1970s Sub-Saharan Africa, where 75 percent of the world's ultra poor live, has received only about 22–38 percent of the total share of ODA, albeit at an increasing rate over the years (IDA 2007).<sup>21</sup> Further, the effectiveness of aid is hampered by high transaction costs, volatility, and unpredictability, which make government planning and investment difficult. Social strategies cannot be sustainably implemented on such an insecure basis.

#### Scaling Up Successful Projects

Scaling up successful experiments and model projects in different countries is a critical task, as is choosing the scale at which these projects are most effective (Hartmann and Linn, this volume, Chapter 44). Scaling up can be defined as a combination of strategies and technologies to expand proven programs with greater speed and at a larger scale in order to bring more high-quality benefits to more people more equitably and more sustainably. This process involves turning small-scale models into larger ones that can shift the current system at a sustainable rate and level. The primary incentive for scaling up is to assist the clients, namely the poorest and hungry.

Successful scaling up requires improved technology, the mobilization of adequate resources to cover long-term investment, skilled management systems with feedback mechanisms, the presence of an enabling environment in terms of markets and financing, investments in people, building of constituencies, and a shared vision and goal for all stakeholders. The organizations involved need to be modified and strengthened, action plans and budgets need to be coordinated, and a built-in moni-

toring and evaluation process needs to be established. Success has been achieved if there is a widespread impact at an affordable cost.

Constraints on the scaling-up process include lack of accountability, dependence on leaders, lack of adaptive management approaches, lack of adequate resources, and government overregulation. Lack of financing, donors' demands for short-term results, competition between partners, and changing development can also pose challenges to successful scaling up. Several countries, however, have successfully scaled up interventions, including Brazil and Thailand:

- In Brazil, several CCT programs—Bolsa Escola, Bolsa Alimentação, and others—were joined and successfully scaled up into Bolsa Família. Designed to eradicate extreme hunger and poverty, the program relies on regional, provincial, and local coordination. The program interfaced with the media, and adequate public resources were allocated. It also had a mechanism for monitoring and evaluation, and these processes included social participation (Ananias de Souza, this volume, Essay 2).
- In Thailand, several elements were key to the country's success in reducing the number of underweight children from 1982 to 1996. Thailand's approach relied on long-term health plans, with a focus on behavior change and prevention and on community-based programs. Health volunteers were well trained, and nutrition was included in the government's poverty alleviation strategy. Finally, the strategy was linked to agricultural production.

### Conclusion: The Way Forward

Research on the ultra poor and hungry is still at an early stage. Researchers generally focus on the entire group of poor living below the dollar-a-day poverty line without differentiating people at the top or bottom of that group. Partly as a result, most efforts at poverty alleviation have worked best for people living just below the poverty line. This volume offers rich evidence that the ultra poor require specific attention in research and that related research needs to be based on sound theory. Core elements of theory should include concepts of “growth+”—that is, it should address the nature of growth that serves the poorest, poverty traps, drivers of inequality, causes of exclusion and discrimination, lack of insurance and risks, the public policy process, and the governance of social strategies.

This chapter, and the chapters that follow, show that there is a need to focus on inclusive growth, improved access to assets and markets for the poorest households, the phasing in of social protection more quickly and comprehensively, accelerated investments in health and nutrition programs (particularly for children

and women), and increased political will and action to include the excluded. They also show that implementing policies and programs effectively requires strategies for improving financing, developing the capacity for implementation, increasing accountability, and ensuring excellence in scaling up. Setting sound priorities requires a framework that captures synergies and trade-offs, analyses based on sound data, consideration of alternative options, recognition of the political process, and a strong evaluation culture.

Because of the limited scope of the chapters in this book, some important factors relevant to poverty reduction for the poorest and the hungry are not adequately covered in the chapters that follow. In particular, the roles of demographic change and human capital accumulation in poverty and hunger reduction are not well covered. This introductory chapter has therefore devoted some discussion to these significant issues.

As shown in Table 1.1, the chapters are organized in five parts as follows:

- The first collection of chapters (Part 1) considers the measurement and understanding of poverty and hunger.
- The next three collections (Parts 2, 3, and 4) consider areas of action that can be particularly effective in reducing extreme poverty and hunger. Each collection refers to one of the three areas of action highlighted in Table 1.1. The collection of chapters in Part 2 focuses on policies that encourage growth that benefits the poor and address inequality. Part 3 addresses targeted interventions that build up the nutrition, health, credit, and education of the poorest households, and Part 4, focusing on the needs of marginalized peoples, looks at how to address inequality between groups and at strategies that empower the poor.
- The fifth and final collection of chapters (Part 5) examines how to effectively implement policies and programs. These chapters consider how to implement programs when lack of capacity poses a key constraint, how to choose the appropriate scale on which to act and to scale up when needed, how to improve governance to ensure the effective design and implementation of policies for the poorest, and how to mobilize resources and prioritize their allocation to ensure the most progress.

The MDGs are appropriately considered only as a way station on the path to ending absolute poverty by 2025. The poorest, who struggle far below the poverty line, have so far not been served effectively by the MDGs. Ultimately, effectively addressing ultra poverty is a matter not of adopting some good projects and some efficient yet small targeted interventions but of setting comprehensive social policies

in the context of growth and opportunity and creating market-oriented economies that respect and foster the rights of the poor.

## Summing Up

Who Are the Poor and Hungry Today?

This volume establishes the following facts about those who remain poor and hungry today:

1. The poorest are becoming increasingly concentrated in Sub-Saharan Africa and South Asia.
2. Poverty and widespread hunger remain even in regions that have experienced rapid economic growth and substantial reductions in poverty.
3. A twin problem needs to be addressed: the urban poor are increasing in number and the prevalence of hunger is increasing in urban areas, while the poor are still predominantly rural.
4. Poverty and hunger reduction has been slower among the poorest and among excluded groups—ethnic minorities, disadvantaged people, and those with disabilities. In addition, poor women and children are particularly vulnerable to the long-term effects of poverty and hunger.
5. Although the total number of people in poverty may change little, this stability masks substantial movements for some, in and out of poverty. Others far below the poverty line (usually the very poorest) will be there for longer, perhaps for generations.
6. New risks are arising for the poor, as a result of, for instance, climate change, economic imbalances, and health crises.

What Action Is Needed?

Action in several areas can accelerate the reduction of ultra poverty and hunger:<sup>22</sup>

1. *Focusing on inclusive growth.* A different pattern of growth—one that includes the poorest and hungry from the beginning—is needed. In many countries, such growth will generally involve accelerated rural and agricultural growth.

2. *Improving access to assets and markets.* Appropriate property rights are needed to address inequality in assets. Millions of small farmers need improved access to value chains, and many poor households need access to nonfarm rural employment. Enabling the poorest to save and use credit is also central in allowing them to invest in assets and skill acquisition and to mitigate the effects of adverse shocks.
3. *Phasing in social protection more quickly and comprehensively.* Social protection needs to be phased in much more comprehensively and earlier in the development process to reach those who will not benefit sufficiently from general economic growth (such as children and the elderly).
4. *Accelerating investments in health and nutrition programs, particularly for children and women.* Many of the poorest, including children and women, need special interventions that address the health and nutrition constraints, and related barriers to education, that impede the improvement of their well-being, productivity, and livelihoods over the long term.
5. *Including the excluded.* Actions in areas 1 through 4 all require an effective state that is responsive to the needs of the poorest and the socially excluded. Actions to empower women are also particularly important to ensure their full participation.

What Political and Institutional Change Is Needed?

Effective action requires political and institutional change in the following areas:

1. *Political core issues.* For effective poverty and hunger reduction, a set of political core issues needs more attention: Conflicts and instability need to be overcome. Governance and rights need to come to the forefront in poverty reduction policies while ensuring that sound economic policies are in place.
2. *Scale.* Scaling up successful experiments and model projects is a critical task, as is choosing the scale at which these projects are most effective.
3. *Political process.* New attention should be directed to the political process to create broad-based support for action. New synergies between old and new actors still need to be developed.
4. *Local action.* The decentralization of government can facilitate local empowerment, but at the local level it is crucial to establish the capacity to mobilize resources and to promote sound governance with accountability.

5. *Capacity to implement.* Improving capacity to implement programs requires that skill levels and organizational arrangements be given more attention.

## Notes

1. As recently recognized by Collier (2007) and Ahmed et al. (2007; this volume).
2. Measures of subjective well-being are based on an individual's own assessment of his or her welfare and thus take into consideration the subjective and multidimensional nature of well-being and poverty.
3. PPP exchange rates convert dollar amounts into local currency. These exchange rates are calculated by comparing the cost of a given basket of goods in each country. This exchange rate is useful for comparing living standards across countries because the PPP exchange rate takes into account differences in costs of living between countries. The data required to compute PPP exchange rates are collected, however, only at given points in time. The rest of this chapter refers to exchange rates computed on the basis of global data collection efforts undertaken in 1993 and 2005.
4. According to Chen and Ravallion (2008a), the new estimates improve on the previous ones in three ways: (1) they correct for large biases in the price surveys that were previously used to calculate PPPs; (2) they apply a revised international poverty line of US\$1.25 a day (PPP), which represents the mean of the poverty line of the 15 poorest countries in terms of consumption per capita and is therefore more representative of the poverty lines of the poorest countries than was the US\$1.08-a-day (PPP) measure; and (3) they are derived from a larger set of household surveys and are therefore more precise.
5. Somewhat similar trends are observed when using a poverty line of US\$1.08 at 1993 PPP.
6. Similar to the dollar-a-day measure, the poverty line of 50 cents a day corresponds to a poverty line of US\$0.54 at 1993 PPP. Only the 1993 PPP is used for this analysis because it was conducted before the 2005 PPP estimates were available. The following numbers thus refer to a dollar-a-day poverty line of US\$1.08 at 1993 PPP and to a 50-cents-a-day poverty line of US\$0.54 at 1993 PPP.
7. For example, in his pathbreaking 1903 survey of food expenditures among working-class populations in York, England, which were disaggregated into five income groups, Seebohm Rowntree found that food consumption and the nutritional content of food were very similar among the highest three income groups even though these groups had markedly different incomes (Rowntree 1903).
8. See Wiesmann (2006). Child mortality is not only an indicator of hunger—the focus of the first MDG—but also the focus of the fourth MDG, which is to reduce the mortality rate among children under 5 by two-thirds.
9. Dietary diversity has been shown to be associated with improved child anthropometric status (Ruel 2002, 2003).
10. See Wiesmann (2006) for details on the measurement and construction of the GHI.
11. It is important to note that the time-series data, particularly for Sub-Saharan Africa, have some limitations. See Wiesmann (2006) for a detailed discussion of the data needs.
12. Ivanic and Martin (2008) found that in Peru, the effects of commodity price changes on

the poor were smaller than those found in other countries. Price increases in beef, of which both rural and urban households were net sellers, had the largest absolute impact, reducing poverty in both settings by 0.1 percentage point. As for Vietnam, the authors found that increases in the price of rice had large effects on rural poverty, with a 10 percent increase in rice prices reducing rural poverty by 0.8 to 1 percent. Urban poverty increased by 0.2 percent, but because of the large rural poverty reductions, the positive effect of the rice price increases on rural households outweighed the negative effects on the urban households. Citing Ravallion and van der Walle (2008), the authors explain that the positive impacts on rural households in Vietnam may be due to the “relatively egalitarian distribution of land in Vietnam and the absence of a large class of poor landless laborers” (Ivanic and Martin 2008, 3).

13. With the exception of Eastern Europe.

14. Nevertheless, a portion of the migrants tend to be relatively low-skilled workers whose productivity is greater abroad than at home.

15. In China and Pakistan, the consumption of households in the bottom income deciles fluctuated much more than the consumption of households in the upper income deciles, suggesting that they were less able to protect themselves against shocks (Alderman 1996; Jalan and Ravallion 1999). In Ethiopia, fluctuations in adult nutrition were found to be larger for women and individuals from poorer households (Dercon and Krishnan 2000).

16. The analysis of Banerjee and Duflo was conducted for poverty lines of US\$1.08 at 1993 PPP and US\$2.16 at 1993 PPP, referred to as one and two dollars a day in accord with the naming convention introduced earlier in this chapter.

17. It is important to keep in mind that unskilled labor intensity is a key factor in determining whether a technology is pro-poor.

18. Households could borrow from informal markets, but such markets usually charge very high interest rates. Households can also borrow from family members, but family members may themselves be strapped for cash and not have enough funds to lend.

19. Although Hulme and Mosley (1996) found that microloans were more beneficial to borrowers living above the poverty line than to borrowers living below the line, a more recent paper by Hulme and Moore (2006) reassesses that conclusion and suggests that at least in the case of Bangladesh, microfinance has been able to reach the poorest—that is, people “with low and unstable incomes, little or no land or assets, low social status, and few if any alternative sources of financial services that are both accessible and affordable” (7).

20. Randomized evaluations are not the only form of research that is needed to better understand what works. Indeed, as argued by Deaton (2009), randomized control trials (RCTs), which are often (and wrongly) viewed as “the gold standard,” and quasi-experimental designs have to overcome a number of technical difficulties, which may undermine the internal validity of the research. Further, even in the most ideal RCT, there may be problems with the external validity of the results, for the program may work very differently outside the experiment. Thus, while very valuable in improving the scientific basis for policy recommendations, it is not clear that results emerging from RCTs, as stated by Deaton (2009), “automatically trump” results emerging from other types of research using different methodologies.

21. Furthermore, some argue that ODA allocation within these countries tends to favor the interests of the “rich” (Hefeker and Michaelowa 2003). Poor targeting arises because much aid is allocated to serve the strategic interests of donor countries or allocated to countries with reasonably sound governance and economic policies, where it is believed that aid will work better (Dollar and Levin 2004), rather than to countries that need aid the most. There is also a clear bias in aid flows

toward countries that have strong political, historical, colonial, and economic ties with donors (Isopi and Mattesini 2008).

22. This section is extracted from von Braun and Pandya-Lorch (2007).

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