REDUCING GLOBAL POVERTY

PATTERNS OF POTENTIAL HUMAN PROGRESS
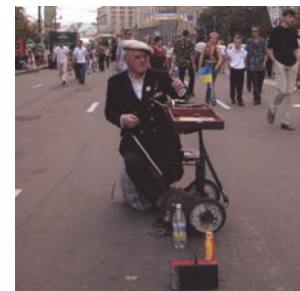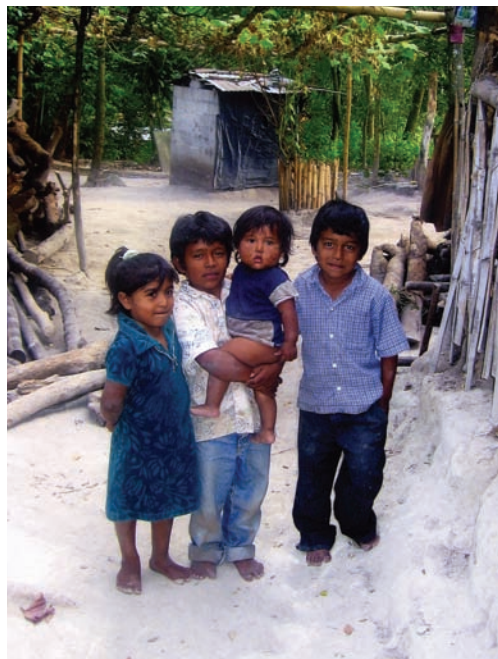
VOLUME 1

Barry B. Hughes

Mohammod T. Irfan

Haider Khan

Krishna B. Kumar

Dale S. Rothman

José R. Solórzano

PARDEE CENTER
for International Futures

OXFORD
UNIVERSITY PRESS

Introduction

Global Poverty

Poverty, the inability to attain a "minimum" level of well-being, is the most fundamental economic and social problem facing humanity. In the extreme case, poverty actually kills people. Even when it does not kill, poverty is a basic deprivation that stunts the very possibility of human development. It is therefore stating the obvious to declare that the reduction and ultimately the eradication of poverty must be a central goal for the people on this planet.

Even before the widespread publicity associated with the Millennium Development Goals (MDGs) by the United Nations, global poverty was understood to be a somewhat intractable problem. World Bank documents in the 1970s and 1980s illustrate the many efforts to analyze the state of global poverty and many proposals to reduce global poverty. However, with the increased emphasis given to the goal of poverty reduction in the MDGs, the measurement of poverty and its speedy amelioration have now become central to the efforts of the entire global development community.

There are deep moral motivations for a commitment to poverty reduction. To take one well-known approach, the Rawlsian principle of justice as fairness leads directly to the consideration of the state of the poor and a commitment to improve their lives. More recently, the Nobel laureate Amartya Sen advanced an even broader concept. According to Sen's capabilities approach, a liberal society is committed to the equalization of capabilities that roughly correspond to one's ability to lead a human life with reasonable longevity, nutrition, health, and social functionings. The upshot of Sen's approach is also that we must seriously try to improve the conditions of the poor in this world.

The Character and Extent of Poverty

Poverty is not a single phenomenon with a simple foundation, invariant across geographic location and social condition. Poverty has many

There are deep moral motivations for a commitment to poverty reduction.

faces. Important aspects of the global poverty profile include its global distribution, the rural-urban divide, its gender aspect, and features specific to particular countries or regions such as the caste system in India.

The spatial nature of poverty

Using two standard measures of poverty, namely living on less than $1 or $2 per day, Table 1.1 shows World Bank data and forecasts across the economically less developed part of our world.

South Asia and sub-Saharan Africa have two of the largest concentrations of the poor. In the more than sixty years since the end of World War II, East Asia has undergone the greatest progress in reducing poverty. In the last thirty years, the People's Republic of China (PRC) has shown a remarkable reduction in poverty also, although in absolute numbers China still has a large number of poor people.

More specifically, approximately 1 billion people globally lived on less than $1 per day

Table 1.1 World Bank data and forecasts of poverty

| | Millions of persons living on | | | | | |
| | Less than $1 per day | | | Less than $2 per day | | |
Region or country	1990	2004	2015	1990	2004	2015
East Asia and the Pacific	476	169	40	1,113	684	296
China	374	128	29	819	452	186
Rest of East Asia and the Pacific	102	41	11	294	232	110
South Asia	479	446	256	954	1,116	997
India	376	371	217	734	868	772
Rest of South Asia	103	76	39	220	248	226
Europe and Central Asia	2	4	2	20	46	16
Middle East and North Africa	5	4	2	49	59	38
Sub-Saharan Africa	240	298	290	396	522	567
Latin America and the Caribbean	45	47	34	115	121	102
Total	*1,247*	*970*	*624*	*2,647*	*2,548*	*2,017*
Excluding China	*873*	*841*	*595*	*1,828*	*2,096*	*1,831*
	Percentage of the population living on					
	Less than $1 per day			Less than $2 per day		
Region or country	1990	2004	2015	1990	2004	2015
East Asia and the Pacific	29.8	9.1	2.0	69.7	36.6	14.5
China	33.0	9.9	2.1	72.2	34.9	13.4
Rest of East Asia and the Pacific	22.1	7.1	1.6	63.7	40.4	16.9
South Asia	43.0	30.8	15.1	85.7	77.1	59.0
India	44.3	34.3	17.6	86.4	80.4	62.7
Rest of South Asia	38.9	20.6	8.5	83.4	67.6	49.2
Europe and Central Asia	0.5	0.9	0.3	4.3	9.8	3.4
Middle East and North Africa	2.3	1.5	0.7	21.7	19.7	10.3
Sub-Saharan Africa	46.7	41.1	31.4	77.1	72.0	61.5
Latin America and the Caribbean	10.2	8.6	5.5	26.3	22.2	16.3
Total	*28.7*	*18.1*	*10.2*	*60.8*	*47.6*	*32.9*
Excluding China	*27.1*	*20.7*	*12.6*	*56.8*	*51.6*	*38.7*

Source: World Bank 2008: 46 (Table 1.5).

in 2004, and more than 2.5 billion or half of all those in low- and middle-income countries lived on less than $2 per day. Although there has been limited reduction in those numbers since 1990 (none at all at $2 per day), the percentages have declined significantly, and the World Bank anticipates substantial further decline by 2015. In fact, the Bank expects the percentage of those living on less than $1 per day to have been cut by almost two-thirds between 1990 and 2015. Clearly, the extremely rapid reduction of poverty in China greatly influences broader trends. In India the numbers of the poorest fell little in the 1990s, but Thailand and Vietnam (not shown) achieved significant reductions.[1] And sub-Saharan Africa has experienced much smaller reductions since 1990 in the percentage living on less than $1 or $2 and, in fact, has seen substantial growth in the numbers of people living at those levels.

In addition to region of the world, urban/rural location affects the likelihood of living in poverty. The UN calculated that the urban share of global population reached 50 percent in 2007. In developing countries, however, the portion of the population in urban areas is closer to 40 percent, with the 50 percent number to be reached in about 2020.[2] Poverty is, however, disproportionately a rural phenomenon, and only about 30 percent of the world's poor live in urban areas (Ravallion 2001b: 2). Poverty will likely become predominantly an urban phenomenon as urban population growth outpaces that in rural areas. Martin Ravallion forecast that the urban share of poverty will reach 40 percent in 2020 and 50 percent about 2035 (when the urban population share reaches 61 percent).

The social nature of poverty

Subpopulations within societies differ significantly in their poverty levels. Both case studies (Agarwal, Humphries and Robeyns 2005; Nussbaum and Glover 1995) and empirical analyses (UN ECLAC 2005: 44–45) indicate that being female makes one more vulnerable to poverty.

One of the distressing manifestations of poverty and gender inequality is the phenomenon of excess mortality and artificially lower survival rates of women in many parts of the world. This phenomenon is known as "missing women" (Sen 1992b). In the United States and Europe, there tend to be more women than men in the total population, with a female-male ratio of 1.05. One reason is that women are biologically "hardier" than men and, given equal care, survive better. The situations in the developed West and in less developed nations reveal a sharp contrast. The contrast is especially grim in parts of Asia and North Africa, where the female-male ratio can be as low as 0.95. Using the Western ratio as the benchmark, approximately 100 million women worldwide appear to be "missing." Even adjusted measures with other benchmarks suggest that the number is roughly 60 million.[3]

The effects of income poverty and various dimensions of social exclusion upon the lives of individuals and subpopulations overlap and interact. A further element of vulnerability comes from being in the wrong segment of a status-hierarchical society. One example of this is the caste system in India. Particularly in rural areas, the intersection of gender and caste can make a woman very vulnerable, as the following example so movingly illustrates:

"I may die, but I still cannot go out. If there's something in the house, we eat. Otherwise, we go to sleep." So Metha Bai, a young widow with two young children in Rajasthan, India, described her plight as a member of a caste whose women are traditionally prohibited from working outside the home—even when, as here, survival itself is at issue. If she stays at home, she and her children may die shortly. If she attempts to go out, her in-laws will beat her and abuse her children (Nussbaum and Glover 1995: 1).

Like gender, age often shapes poverty rates, with the young and old suffering disproportionately. Ethnic differences within countries also commonly coincide with considerable differences in poverty levels. For instance, indigenous populations typically have rates of poverty that are multiples of the rates in European settler populations, as do the descendents of imported slaves. An extreme example is Paraguay, where the rate is nearly 8 to 1 (UN ECLAC 2005: 49).

This report will not be able to forecast poverty specifically for social subgroups, and its differentiation of poverty will be overwhelmingly structured by the borders of

● Subpopulations within societies differ significantly in their poverty levels. ●

countries. Moreover, it will focus heavily upon the income bases of poverty. It is important, nonetheless, to recognize the complex social character of poverty around the world.

Why This Report?

The phenomenon of global poverty is the fundamental issue of global development, and a web search on "poverty" brings up over 50 million cyber addresses. One might therefore reasonably conclude that enough has been and is being done by others. Yet there are several remarkably large deficiencies in the huge body of studies and policy analyses on poverty. First, partly because of the time horizon of 2015 identified by the Millennium Development Goals, and in spite of the very long horizon of many interventions to reduce poverty, little analysis explores the longer-term human future on this critical issue. Second, global analyses of poverty typically do not cover regions of continents, much less individual countries. It is critical, however, to be able to explore the spatial dimension of poverty broadly. Third, there is a natural tendency for analysts and institutions to focus on specific, targeted interventions for several reasons: (1) sometimes because they are seen as "silver bullets"; (2) sometimes because of scholars' knowledge of or familiarity with the research terrain; and, more fundamentally, (3) because it is critical that we understand the different implications of various interventions. A much smaller portion of analysis explores a wide range of interventions, however, both singly and in comparison and in combination.

The need for a long horizon

Poverty will not disappear by 2015, even when defined with a bar as low as an income of just $1 per day for each individual. If the MDG of reducing the rate of poverty in the developing world by half between 1990 and 2015 were met but not exceeded, there would still be nearly 890 million people living on less than that amount. And although there is substantial consensus that the goal will likely be met and even exceeded globally, it will almost certainly not be met in sub-Saharan Africa.

We thus need to think beyond 2015, as well as maintaining and strengthening our efforts through that year. As humans, we understandably tend to be impatient. We want to see change in our lifetime so that we and our families and communities can benefit from it. Yet much sociopolitical change is slow. Payoffs for investment often accrue to successor generations, sometimes the children of those who act, but often their grandchildren and even great-grandchildren. In addition, changes often require sequencing. Thus shorter-term and longer-term horizons are essential.

It is also important to understand that, as critical as the reduction of poverty may be, it is not the only high-priority human goal. When historians of the future look back on the twenty-first century, hopefully they will be able to look at it in terms of a long, broad sustainability transition. That transition is likely to be defined, much as it already is today, in terms of individual human development (including poverty reduction and the development and exercise of human capabilities), social development (including the expansion of human participation in governance and social decision making on the basis of justice and fairness), and a sustainable relationship between humanity and its broader environment. The positioning of poverty as one aspect of this larger transition is another reason that both longer-term and near-term perspectives are needed.

The importance of maintaining global and country-specific perspectives

The global assault on poverty requires simultaneous attention to multiple levels of analysis. Global and continental perspectives help us to grasp the magnitude of the problem, to understand trends, and to begin to speculate about the appropriate interventions. Although some action against poverty is clearly being undertaken at the global level, most of it remains at and within individual countries.

This study crosses levels of analysis. Earlier chapters devote more attention to the global and continental level. Chapter 7 begins to explore regions within continents, and Chapter 8 dives into such regions, individual countries, and even subregions of countries. Most important, for those who have specific country interests, the forecast tables at the end of the volume provide an extensive set of variables for mapping poverty and human well-being more generally.

It is unique to analyze poverty in the long term and at global and country-specific levels, with attention to multiple possible interventions.

The value of a deep and integrated look at poverty drivers

The transitions that have essentially eliminated the most extreme poverty in the rich countries of the world were broad and complex. The long and very substantial rise of incomes was clearly the key proximate driver of success, but stating that gives us little real insight.

Perhaps it was the introduction of widespread use of soap and other sanitation measures that set off the demographic transition and ultimately brought about the development of that portion of the world situated primarily around the North Atlantic. Perhaps it was the adoption of legal systems and the protection of property that triggered economic growth. Perhaps it was the invention of the stirrup or oxen harnesses, allowing the plowing of heavy soils. Perhaps it was the interaction of European peoples with others on the same latitudes, facilitating the diffusion of agricultural technology (a là Diamond 1997).

Perhaps, and actually most likely, it was a combination of many factors. Analysis of the prospects for global poverty reduction similarly requires attention to a broad range of forces, not simply the increase in income or changes in its distribution, but the deep drivers that give rise to both of those and also to demographic change that obviously helps immediately frame the number and characteristics of the poor.

Integrated methodology

There are many possible and useful ways of studying complex, integrated change over a long time horizon, including historical analysis and immersion in particular cultural environments. In this volume we have looked to the accumulated theoretical and empirical knowledge about the drivers of change and turned to an integrated computer simulation of global change as a principal tool for analysis.

The International Futures (IFs) simulation is a computer system that represents the structures of global demographic, economic, and sociopolitical systems and their interaction, with additional detail on agricultural, energy, education, health and (to a more limited extent), environmental systems. It provides detail for 182 countries. An extensive database supports the model. IFs is available for web-based use or for download,

so that the analyses in this volume can be replicated, amended, or extended.

Computer models have great limitations, which the next section will elaborate. At the same time, however, they have substantial strengths. They explicitly and formally represent assumptions about relationships. In the case of IFs, users of the system can quite flexibly change such assumptions. Such changes allow policy analysts to simulate interventions or experiments and explore their primary and secondary consequences. Using IFs, such explorations can extend to midcentury, well beyond the meaningful range of simple extrapolative analysis or regression models.

The IFs system makes it possible to explore not just the obvious linkages between poverty and its proximate drivers of economic and population growth and distribution. It is also possible to drill down into the deep drivers, including the development of human capital (education and health), the character and effectiveness of governance, and knowledge extension and diffusion.

Caveats and Cautions

There are, of course, limitations to our study. Caution needs to be exercised in interpreting poverty forecasts for several reasons.

Conflicts over poverty conceptualization

As Chapter 2 will discuss in greater detail, there is no universally accepted definition of poverty. Although income- or consumption-based measures are the most commonly used, many would prefer the broader "capabilities"-based approach of Sen (1984, 1999). The World Bank (1980, p. 32) defined extreme poverty even more broadly as a "condition of life so characterized by malnutrition, illiteracy, and disease as to be beneath any reasonable definition of human decency."

Within the income- and consumption-based measures, poverty can be measured in an absolute sense (for instance, those earning less than $1 per day) or a relative sense (for example, those earning less than a third of the average for the country). In each case, the poverty lines can be drawn at very different levels. Even though the absolute $1-per-day poverty measure has gained widespread usage, including extensive attention in this report, it

A methodology combining historical analysis and computer simulation of change supports this volume.

Conceptual, data, and model limitations reduce confidence in forecasting.

is by no means the best possible or universally accepted measure.

Despite limitations, the $1-per-day measure is easily quantifiable and calculable and allows ready comparison with estimates from other sources. We therefore use it as our benchmark measure but also selectively present absolute poverty measures with $2, $5, and $10 per day as the poverty line, look sometimes at the poverty gap (a measure capturing distribution more fully), and provide some information on other measures of human condition, such as life expectancy and education.

Data and measurement limitations

Chapter 2 also discusses the controversies surrounding the data. Household surveys on expenditure and income across a sample of the population form the basis for poverty data. However, in very poor countries, average consumption levels determined by national surveys are in general lower than average consumption estimated from aggregate national accounts (country-level statistics that include total household consumption). As better-designed surveys and better data collection methods come into use, we hope that the discrepancy between the two will diminish. In the meantime, IFs uses survey data to set the initialize conditions and national income data to compute changes in poverty rates.

Over and beyond that, we have highly incomplete data concerning poverty on a more disaggregated basis—for instance, by gender, rural versus urban status, skilled versus unskilled, or chronic versus transient poverty. Our general knowledge of the preponderance of poverty within specific groups, such as the rural, the unskilled, women, and indigenous populations, somewhat mitigates this limitation. Yet availability of disaggregated data (and structural representations in the model based on them) would have allowed us to study specific policies to alleviate poverty for subpopulations.

Model limitations

To the best of our knowledge, IFs is the only large-scale integrated global modeling system of its kind that can be used as a thinking tool for the analysis of near-term through long-term country-specific, regional, and global futures across multiple, interacting policy areas. Its economic, political, demographic, social, and environmental modules can handle a wide variety of inputs and capture various interactions.

Despite these strengths, there is a limit to the number of interactions it can capture in detail. For instance, through governmental budget constraints it can capture the decreased availability of resources for health expenditures if more is spent on education. However, it cannot capture the improved political empowerment that the disadvantaged can get from education, allowing them to demand policies that are conducive to poverty reduction.

Limitations on interpretation

Perhaps the greatest caution needs to be exercised in the interpretation of the poverty reduction outcomes we present in tables and figures throughout this volume. Our preferred interpretation of these numbers is the following.

IFs is a model of the economic, social, political, and other forces that can affect the evolution of income, poverty, and similar variables. It is extensive but incomplete. Indeed, no model can be complete. For reasons of simplicity, tractability, and concern with larger issues, many aspects of the world and interactions among them have to be left out. In short, IFs is a thinking tool, not a predicting tool.

Therefore, the reader should view IFs results as providing *tendencies*—simulated outcomes that can give us an idea of how certain strategic interventions fare under the assumptions of the model—rather than *predictions* of how the world will really be. It would have been very difficult in the late 1970s, for example, for any person or model to predict the sudden takeoff in the Chinese and Indian economies in the 1980s and 1990s. These are noncontinuous changes that arise from a confluence of complex political, economic, and social factors. One can conduct a scenario exercise with IFs to study what poverty outcomes would be when one or more countries embark on such economic "miracles," but IFs cannot confidently anticipate such miracles in the first place.

The larger contextual process finds methodological resonance in the "calibration" and "simulation" strategy followed by the modern macroeconomic literature since the

1980s; for instance, see Edward C. Prescott (2006). In this approach, model builders calibrate parameters so that the model outcomes broadly match key observed data. They then test the model by comparing a few ancillary outcomes or time paths of variables with data not used in the original calibration of the model. A match here increases the confidence that the model indeed captures aspects of reality. A model is never truly validated but does accrue increasing credibility from the process (see Hughes 2006 with respect to IFs). Analysts then use the model to simulate the future of an economy or other systems. Often, they conduct "counterfactual" policy exercises, asking how the simulated outcome might look under policies different from the current ones. They often use simulated outcomes for comparing policy alternatives and for getting an idea of the order of magnitude of responsiveness. Again, the search is for tendencies rather than predictions.

Why do this exercise?

A natural question is why the exercise we conduct is useful despite the described limitations in conceptualization, data, model, and result interpretation. In brief, poverty reduction is an overarching imperative facing the world today. Poverty is such a complex and multifaceted problem that any study of it will necessarily fall short. However, given the seriousness of the problem, it is important to take the small but bold steps needed to tackle it. Our model and simulation-based approach is one such step, useful in exploring the evolution of poverty under alternate strategies and scenarios.

The errors of the analysis are unlikely to be so large as to render meaningless all mappings of poverty reduction strategies into likely futures. For instance, fifty years from now the number of poor people in sub-Saharan Africa will almost certainly be lower or higher than the estimate the model generates, but history is highly likely to vindicate its expectation that most of the poor people in the world will live in that region.

Research on poverty, like the extent of poverty itself, is continuously evolving and improving. New concepts, measurements, and research methodologies appear in the study of poverty on an ongoing basis, and studies such as

ours and the debates surrounding them can only aid this process.

Most importantly, there is an urgent need to explore the efficacy of the many poverty reduction strategies that have been proposed. Given the time it takes for these strategies to work and for results to become visible in the form of lower poverty figures, it is critical to take a long-term, future-oriented perspective in such an assessment. Our model and simulation approach allows us to look far enough into the future to be a useful step in this direction.
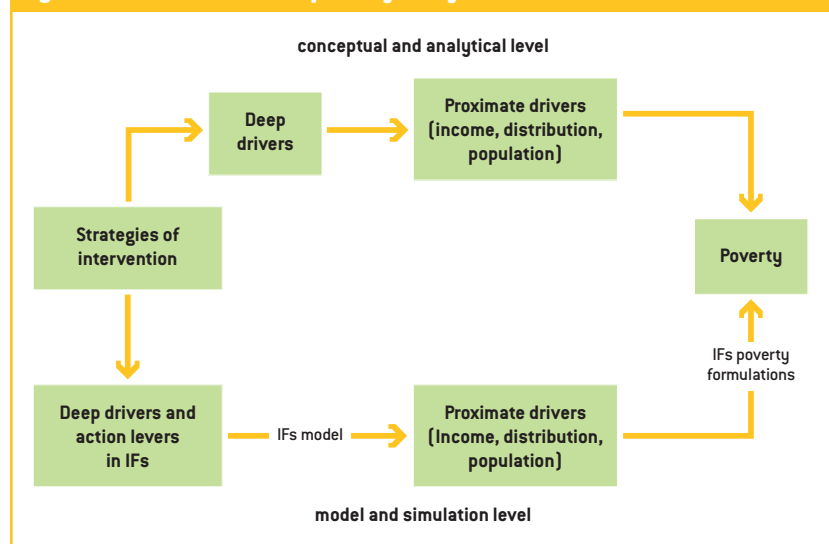
Road Map for This Volume

Simply put, we want in this volume to understand what poverty is and to be able to describe its character and magnitude. We want to understand what the range of possible human futures is with respect to poverty, given reasonable assumptions about changes in its key or proximate drivers. We want to identify strategies for its reduction and for the elimination of poverty in its most severe and life-threatening manifestations. And we want to explore the possible leverage that various individual interventions and more complex strategies might give us with respect to accelerating the reduction of poverty. Figure 1.1 portrays these desires and helps to structure the volume around them.

Chapter 2 discusses poverty in conceptual terms and considers how to measure it. Conceptually, important distinctions exist

In spite of its limitations, all policy action requires forecasting.

Figure 1.1 The structure of poverty analysis

between poverty as an absolute and as a relative phenomenon, poverty as a chronic and as a transitory condition, and poverty in income terms and as an expression of capabilities deprivation. At the interface between conceptualization and measurement, especially when one attempts to construct summary measures or indexes for countries, there are important issues regarding the number or portion of a population falling below a poverty line versus poverty measures that also capture the severity of poverty relative to such a line. When one turns to collecting information and data, issues arise with regard to the operationalization of understandings of income and consumption and the relationship between data from the micro or survey level and that from the macro or national accounts level. In short, poverty may seem to be a simple concept, but in spite of much continuing progress, defining and measuring it is far from simple.

Chapter 3 turns to the critical task of understanding the foundations of poverty. To set the stage for assessing interventions that are likely to reduce poverty, the chapter discusses factors that drive poverty, both at a proximal and at a deep level. Economic growth, income inequality, and population are the proximate drivers of poverty; by knowing them, we can calculate the extent of poverty. The chapter then identifies and surveys deep drivers of poverty—factors that affect one or more proximate drivers. Different types of capital (physical, human, social, and knowledge capital) and fertility are examples of such deep drivers.

Next, Chapter 3 surveys policy levers believed to be useful in reducing poverty. We cannot just will accelerated economic growth; we must help bring it about. The chapter therefore explores the levers for intervention that have been identified in the development literature and via policy analysis. A key purpose of the chapter is to create an extensive inventory of such measures to explore throughout the volume. Decreasing import duties, increasing public expenditure on health and education, and increasing the foreign aid flowing from developed to developing countries are examples of policy levers that would address one or more of the deep drivers, which in turn drive the proximate drivers of growth and inequality. We rely heavily on policies

suggested by a wide variety of development organizations and researchers. Since a given policy is rarely implemented in isolation, from this survey we tease out strategic packages and conceptual and philosophical orientations toward poverty reduction. We identify three major strategic orientations—inward (self-reliant), outward (open), and foreign assistance (aid)—and the strategic components that are part of these orientations.

Chapters 2 and 3 thus collectively treat the top layer of Figure 1.1, the conceptualization and analysis of poverty and the forces that determine its extent. Chapter 4 moves to the bottom layer and shifts attention to exploring the future of poverty and the extent of human leverage upon it. The chapter first reviews efforts that have been made to forecast the likely extent of poverty and the methods by which they have done so. It then sketches briefly the tools and approaches that might be considered ideal for analyzing the future course of poverty. The chapter concludes with an introduction of the International Futures system as the primary tool used in this volume, identifying where it falls short of the ideal, as well as indicating the capabilities that it does offer.

Chapters 5 and 6 move further along the bottom layer of Figure 1.1 by considering possible futures for the proximate drivers of poverty and using IFs to explore the poverty futures that might be associated with those. Chapter 5 introduces and explores the base case forecast of IFs, because most subsequent analysis builds on the base case. Insofar as this volume is concerned with the impact that specific interventions might have relative to a baseline, the specification of the baseline itself may not be so important. But insofar as it is also concerned with the possible absolute levels and rates of future poverty, the elaboration of the base case of IFs in Chapter 5 is essential.

Chapter 6 looks at a likely range of futures for the proximate drivers and how those futures might frame the likely futures of poverty relative to the base case. In short, this analysis provides some understanding of the scope for human action. How much might we be able to accelerate the reduction of global poverty? Although Chapter 5 supports the conclusion that we are already well on course to dramatically reduce human poverty

before midcentury, Chapter 6 suggests that the scope for incremental human action remains very substantial.

Chapter 7 reaches back to Chapter 3's analysis of the specific levers and strategies for accelerating growth and otherwise reducing poverty, exploring them individually and in combination. It also begins to consider regional differences in the situations underlying poverty and therefore in the interventions with respect to deeper drivers that might be most effective. It concludes that there are no silver bullets in terms of individual interventions that capture most of the potential gains in poverty reduction. It argues instead that large numbers of small actions contribute to poverty reduction and that, very importantly, those contributions have a substantially additive (as opposed to overlapping or mutually exclusive) character.

Chapters 8 and 9 extend the analysis of poverty futures and strategies that Chapter 7 begins. Chapter 8 further explores regional variations in the specifics of poverty and identifies selected countries for closer attention. Countries, even within regions, vary considerably in their prospects regardless of their policy choices. The chapter therefore builds a stronger base for extended analysis of strategies for poverty reduction. The tables that accompany this volume extend the analysis of Chapter 8.

Chapter 9 widens the analysis by stepping back and looking at additional relationships of importance when considering poverty. For instance, poverty is strongly linked to environmental quality, and the linkages run in both directions, setting up feedback loops: the environment can fail to provide resources to reduce poverty, and poverty can exacerbate various kinds of environmental damage. Similarly, quality of governance and the presence or absence of domestic conflict shape the ability of societies to break free of poverty. Again, relationships run in both directions.

Conclusion

All major social philosophies and religions direct attention to the existence of poverty and call on us to address the problem. In relative terms, it may be correct to assert that the poor are and always will be with us, if only because relative poverty levels float upward with average incomes. Yet we have much reason to believe that extreme global poverty—poverty that strips individuals of the ability to develop and manifest their personal capabilities and that through malnutrition, inadequate health care, and other deficiencies can literally kill—need not persist.

---

1 ADB (2004b) examines poverty experiences in Asia over this period. Wang (2005) and Srivastava (2005) provide information on China and India, respectively.

2 See http://esa.un.org/unup for the 2005 Population Revision numbers.

3 Sen believes that Europe and the United States are not the proper benchmark for a variety of reasons,

including longer overall life expectancies, the history of wartime deaths of males in the West, and higher South Asian fertility rates with associated maternal mortality. In sub-Saharan Africa, there is little female disadvantage in terms of relative mortality rates, and continental life expectancy is no higher and fertility rates are no lower than in South Asia. Using sub-Saharan Africa as the benchmark still leaves a total of more than 100

million "missing women." Sen points out that another way of "dealing with this problem is to calculate what the expected number of females would be had there been no female disadvantage in survival, given the actual life expectancy and the actual fertility rates in these respective countries." Even with this type of calculation, the number of "missing women" is still roughly 60 million.