

**DEVELOPMENT ASSISTANCE
TO REDUCE POVERTY:**
Defining and Measuring Progress

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DEVELOPMENT ASSISTANCE TO REDUCE POVERTY:

Defining and Measuring Progress

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INTRODUCTION

One of the goals of development assistance is the reduction of poverty. Directly or indirectly, donors hope to ease the lives of millions of people who struggle with malnutrition, illiteracy, and disease. In all, more than a billion persons -- approximately 20 percent of the planet's population -- live in poverty.¹ How can development assistance help?

Studies have documented the contributions of foreign aid to economic growth and poverty reduction in selected countries. For example, in the 1950s and 1960s, aid helped Korea invest in infrastructure, improve the educational levels of its work force, and promote agricultural and rural development. These actions contributed to the development of greater self-reliance and also helped reduced poverty.²

The experience of other countries has been less encouraging. Over a period of 30 years, Tanzania received large amounts of foreign aid. In spite of the government's promotion of equity and poverty alleviation, poverty increased and Tanzania became increasingly dependent on aid. Several other African countries have followed similar paths.³

Donors are now wrestling with questions of what actions to take to alleviate poverty and how to determine whether actions taken have actually reduced poverty. The World Bank

recently completed the **World Development Report 1990**, a compendium of data and development experience from which the authors develop a strategy for improving the quality of life for the poor. Similarly, the United Nations Development Programme (UNDP) published **Human Development Report 1990**, an analysis of country experience relating to the human dimension of development, that distills practical insights for use in policy making. Both reports present data from a wide variety of sources and include tables of relevant indicators for the many countries of the world.

The U.S. Agency for International Development (A.I.D.) has been mandated by Congress to identify appropriate indicators to measure A.I.D.'s contribution to the reduction of poverty in each country receiving A.I.D. assistance. This paper was commissioned as part of a process of reviewing recent literature and selecting indicators for A.I.D. use. It aims to summarize current thinking on how poverty is defined and measured and review a number of important perspectives on poverty alleviation.

The paper draws selectively from the World Bank and UNDP reports and from a variety of other recent sources. It does not attempt to advance the state of the art. Rather, it presents information in a readable fashion, to facilitate awareness of the many ways poverty may be defined, measured, and understood.

DEFINING POVERTY

Poverty is a multidimensional concept; deprivation in one dimension usually correlates with deprivation in other dimensions. For example, as a group, people who are

relatively deprived economically also have the highest illiteracy rates, the most serious malnourishment, the highest infant mortality,

and the shortest lives. In many countries, poverty is nearly a universal condition.

Approximately 75 percent of the poor in developing countries live in rural areas, but the proportion in urban slums is increasing. Many of the poor live in areas of low agricultural potential where environmental degradation exacerbates poverty. Also, poverty has a gender bias. In poor households, women often suffer more deprivation than men because of cultural practices that favor men in the allocation of food, education, and other necessities. In some regions (especially rural Africa and the urban slums of Latin America), a large proportion of poor households are headed by women.⁴

Traditionally, poverty has been defined as a discrete characteristic; determining who is poor requires selecting specific criteria and choosing a cutoff point -- a dividing line separating the poor from the non-poor. Theoretically, many options exist, but in practice, decisions are often arbitrary, determined by the availability of data and some assessment of what level of resources is adequate.⁵ Within a country, a cutoff point can be chosen on any basis, but for cross-country comparisons, care must be taken to standardize data and choose a poverty level that has relevance internationally.

Some definitions reflect **absolute poverty**; that is, they differentiate the poor from the rest of the population on the basis of some minimum level of consumption or income. Other measures reflect **relative poverty**; they use some proportion of the population, for example, persons falling in the lowest 30 percent of the per capita income distribution for the country.

Generally, people who are defined as poor (below the cutoff point) are not a homogeneous

group. In developing countries such as India or Bangladesh, Lipton⁶ differentiates between the ultra-poor (the poorest 10-20 percent) and the poor (the remaining 25-35 percent who fall below the poverty line, i.e., have an income per person too low to afford 2250 calories per person per day).

The ultra-poor are different from the poor in several respects. When their incomes increase, the ultra-poor buy proportionately more food, in terms of calories, than the other poor. On anthropometric data, the ultra-poor are more likely than the poor to be underweight, have low height for their age, and be susceptible to illness, other physical and mental limitations, and high mortality rates. Disability and unemployment reduce the labor force participation of adults who are ultra-poor, but a high proportion of the ultra-poor are young and able to participate in school and work if they are properly nourished. Thus the ultra-poor in developing countries do not have to be a permanent underclass.⁷

Zuckerman⁸ accepts Lipton's definition of the ultra-poor, but divides the remainder of the poor into borderline poor and new poor to describe how they have been affected by recession and structural adjustment. The borderline poor are low-income persons who have been severely affected by price increases and cutbacks in social programs. The new poor are employees who were not previously poor, but have been laid off because of austerity measures or shifts in production. They may be only temporarily poor.

There are no universally accepted ways to define and measure poverty. Perceptions of poverty vary from culture to culture and change over time. Some people live in chronic conditions of poverty; others move into poverty

as a result of personal misfortune or economic recession -- and may subsequently move out of poverty .

The **World Development Report 1990** defines poverty as the inability to attain a minimal standard of living and recognizes the broad implications of being poor. Being poor means having insufficient resources to purchase adequate food, clothing, and housing. The poor have lower life expectancies, higher death rates among infants and children, and few opportunities to obtain even a basic education.⁹

The **Human Development Report 1990** does not define poverty, but chooses the term "human development" to describe the process of

enlarging people's choices and increasing the level of their achieved well-being.¹⁰ Progress is defined in terms of a comprehensive index reflecting life expectancy, literacy, and purchasing power. (This index is discussed in detail below.)

Recognizing the many definitions of poverty and the diversity of the poor is important when planning and implementing strategies for change. Developing countries are increasingly diverse. Only by understanding the nature of poverty and how the poor are affected by change can planners choose strategies that are likely to contribute to poverty alleviation.¹¹ To be effective, the strategies selected may have to involve the poor themselves in designing and implementing change.

MEASURING POVERTY

In order to develop policies and strategies for reducing poverty, governments must know how many people are poor, where they live, and why they are poor. Answers to these questions permit the identification of social groups and geographic areas at high risk and help planners design programs and actions to reach them. Monitoring the progress of development efforts requires similar data -- preferably clear, concise, easy-to-understand indicators of poverty that will reflect changes in status when they occur.

Because poverty is a multidimensional concept, there are many ways to measure it. No single measure suffices. Some measures focus on levels of income available to meet needs. Others reflect the consequences of poverty, such as illiteracy or under-five mortality rates. Virtually every measure has limitations.

Some measures may be misleading because significant elements are missing; for example, data on employment may exclude unpaid family labor. National averages may conceal wide disparities in the overall population based on income distribution, social group, gender, and region of residence. Similarly, household-level figures may hide intra-household inequality.¹² Data may be based on retrospective questioning and inaccurate recall; mortality data have been shown to underreport deaths. Other data may be out-of date, or at least unavailable for timely decision making. Many countries have no reliable data on how many people are poor or where they are.¹³

Researchers who work with problems of measuring poverty recognize that all data are approximations. In some situations, this causes

minimal difficulty; estimates with relatively wide margins of error may still demonstrate trends -- for example, reduction in very high infant mortality rates. However, if data are to be used to decide how particular interventions (feeding programs, preventive health care, potable water) affect infant mortality, then more precise data are needed to measure small changes.¹⁴

Although the limitations of various measures are well known among researchers, they are rarely discussed by political leaders, the mass media, or the general public. Consequently, many measures are implicitly accepted as being more accurate than they really are. Ideally, indicators should be low-cost, operational, and capable of disaggregation by age, sex, region, and social group, so that the distributional dimensions of development can be assessed.¹⁵ In addition, indicators should be understandable and credible so the public can relate to them and become a political constituency promoting policies that will further reduce poverty.¹⁶

In practice, analysts often have little choice about what measures to use. Because the cost of collecting data is high, they must choose indicators from available data. Quality data are often unavailable, or available for only a limited number of variables. In international comparisons, only a few comparable statistics are available from the different countries of the world. If methods of measurement are improving or changing, trends are very difficult to assess.

This section draws from recent literature to review numerous ways to measure poverty. The first two sections describe composite indices; other sections describe simple (single variable) indicators. Although it is not possible to review methodological techniques in detail, the review

presents major strengths and weaknesses of the different measures.

Headcount Index and Poverty Gap

The World Development Report 1990 uses two measures of poverty -- the headcount index and the poverty gap. Both measure poverty in terms of household income and expenditures per capita, using an annual consumption level of \$275 (very poor) and \$370 (poor) per person per year (in constant purchasing power parity dollars) to establish the poverty line.¹⁷

The headcount index describes the percentage of the population below the poverty line. It does not differentiate between those who are just below the line and those who are far below the line. The poverty gap measures the average shortfall (of per capita household income) from the poverty line when those above the poverty line are counted as having a zero gap. Neither measure captures the extent of inequality, an aspect that may be important for evaluating the effects of policy changes.

The headcount index and poverty gap (income and consumption data) reflect standards of living. To incorporate other dimensions that are relevant to poverty, the World Development Report 1990 examines data on nutrition, life expectancy, under-five mortality, and school enrollment rates.

Human Development Index

The Human Development Report 1990 developed a "human development index" to measure the process of enlarging people's choices and increasing their well-being.

Developing the index required defining measures of deprivation for each country on three variables – life expectancy, adult literacy, and purchasing-power-adjusted gross domestic product (GDP) per capita.¹⁸ For these same variables, "minimum" and "desirable" values were specified, based on the lowest and highest values observed in 1987. For life expectancy, these values range from 42 years (in Afghanistan, Ethiopia, and Sierra Leone) to 78 years for the highest (Japan).¹⁹ For adult literacy, the minimum value used was 12 percent (Somalia); the desirable value was 100 percent.²⁰ For purchasing power, the values used were \$220 (Zaire) and \$4,861 (the average official poverty line for nine industrial countries adjusted for purchasing power parity).²¹

To obtain a composite index, minimum and desirable values were taken as end-points of a scale indexed from one to zero for each measure of deprivation. Measures of deprivation for each country were located on each scale and the three readings were averaged to obtain the human development index (HDI).²²

The HDI captures some of people's choices but leaves out many others. It provides a simple index that permits a ranking of numerous countries around the world – but it is biased by its focus on measuring the absence of deprivation and its failure to recognize growth beyond the level it selects as desirable (GDP per capita of \$4,861).

To what extent the data used were actually comparable across countries is not clear. Literacy figures, for example, are based on different questions in different countries and may not always require respondents to both read and write as the UNDP definition stipulates. The degree of fragility or probable

error in estimates used is not given. Also, the implicit weighting of the three variables is arbitrary, making the rankings appear subjective. Finally, since the HDI does not facilitate understanding of why some countries are doing better than others, it is of minimal use in planning and monitoring change.

Household Surveys

Recognizing the limitations of available social and economic data on national economies, the World Bank initiated the Living Standards Measurement Study (LSMS) in 1980. Its purpose was to explore ways to improve household survey data collected by statistical offices in developing countries in order to better understand the extent of poverty and factors influencing living standards. The LSMS study has now become a permanent entity at the Bank.²³

Surveys have been completed in several countries to provide household-level data on income, consumption, savings, employment, unemployment, health education, fertility and contraceptive prevalence, nutrition, housing, and migration. These surveys are a valuable resource because they provide data that can be used to analyze the effect of policies and programs on the living conditions of the population, especially when surveys are repeated after an interval of time. (National-level data cannot provide the same level of insight.) Nevertheless, household surveys have many problems, including high expense and inaccuracies caused by incomplete recall.

In the past, the time lag between data collection and availability was a problem, but personal computers seem to have solved this difficulty. Currently, World Bank household

survey data are usually available within two months after interviewing is completed.

Using data from the LSMS program in Cote d'Ivoire, Glewwe and van der Gaag²⁴ were able to assess the implications of choosing a number of different measures of poverty. Their analysis found that different measures selected different populations as poor, even though each measure was set so that 30 percent of the population was classified as poor. Thus, using different measures of poverty to analyze the effects of economic policies on the poor may lead analysts to make different observations and offer different recommendations.

Measures considered in the Glewwe and van der Gaag study (and several others) are described below.

Consumption

Consumption (total expenditure) data are usually collected at the household level to measure expenditures on goods and services and the imputed value of other consumption, such as crops grown for household consumption and the use value of durable goods. For the items of consumption that are difficult to measure directly, many different views exist on how to construct in-kind or equivalent scales. These differences complicate the use of consumption data in studies of poverty.

One measure of poverty derived from consumption data is **total household consumption**. This measure tends to overstate the welfare level of persons in large households where goods and services must be divided among more people. An alternative is to use **per capita consumption**, assuming that each

member of each household enjoys the same level of economic welfare. In fact, this is often not the case. A third possibility is to use **adjusted per capita consumption**, adjusting for differences in household size by using household equivalence scales. (For example, in one study, Glewwe and van der Gaag counted adults as 1.0, children 0-6 as 0.2, children 7-12 as 0.3, and children 13-17 as 0.5.)²⁵

Income

One common basis for determining the existence of poverty is income. As a group, people who are relatively deprived economically also have higher than average rates of illiteracy, malnourishment, and infant mortality.

Two measures of income are used to describe poverty – **household income** or **per capita income**. An implicit assumption is that access to increased income enables people to improve their welfare. However, income may be used to either improve or endanger well-being – for example, to purchase essential medicines or narcotic drugs. Increased income is not automatically linked to other measurable indicators of well-being. Furthermore, present income may not be a good predictor of future earning capacity.²⁶

In developing countries, income data may only be available for wage-earners, a relatively small percentage of the employed persons. For people who operate their own farms or businesses, accurate records may be unavailable. Furthermore, the incomes of the self-employed, especially farm incomes, vary from year to year so that income in any one year may not correspond to average welfare over time.²⁷ Since income is so difficult to measure in rural areas of developing countries, consumption data

may be more accurate than measured income.²⁸

Henderson recommends that income data be used to divide the population into quintiles in order to show the relative gaps between the richest and poorest quintiles and permit assessment of the extent to which the gap is widening or closing.²⁹

Food Indicators

Three measures of poverty involve food. One is **per capita food consumption**. This measure requires less data collection than total household consumption, may be more accurately reported than other forms of consumption, and readily translates into food price indices. A second measure is **food ratio**, the proportion of the household budget spent on food. No adjustments are made for household size or other household characteristics.³⁰

Food consumption data may be used to obtain direct information on **daily caloric intake**. This measure is expensive to obtain and problematic because of the difficulty of defining what constitutes an adequate caloric intake. The World Health Organization defines poverty as the inability to obtain a diet adequate in calories to lead a productive life.³¹ But Lipton demonstrates that what constitutes an adequate caloric intake may vary from place to place, depending on climate, weight, age structure, and other characteristics.³²

Anthropometric Data

Anthropometric (body measurement) indicators are particularly useful for detecting the adverse effects of malnutrition on children. Particular indicators include **incidence of**

stunting (low height for age) and **wasting** (low weight for height). Specific medical tests may also be used as indicators.³³ Finally, **low birth weight** (percentage of children born weighing less than 2,500 grams) greatly increases the probability of infant mortality. Birth weight data can identify vulnerable social groups in locations where births take place in clinics or hospitals.³⁴

Basic Needs

Everyone has certain basic needs for food, shelter, education, and health care. When basic needs are not met, people are defined as poor. **Basic needs measures** require some determination of what constitutes adequate levels of food, shelter, education, or health care, a determination that involves considerable subjectivity. Usually one or another measure is used to indicate whether basic needs are being met even though it is generally recognized that needs may be met in one area and not in another. To illustrate, in the Glewwe and van der Gaag study, three basic needs measures were used: floor area of dwelling per capita; average educational level of adult household members; and agricultural land per capita.³⁵

Indicators of Investment in Human Resources

Literate, healthy, well-fed people are generally able to take care of themselves and contribute to a country's development. They are valuable human resources. In contrast, people who are illiterate and malnourished are less able to take care of themselves and contribute to development. They are likely to be relatively deprived economically, to have lower than average life expectancy, and to have

higher than average rates of infant mortality. Improving health, literacy, and nutrition requires social sector investments.

Specific measures of poverty status that can be tracked over time for a large population include: **adult illiteracy** (proportion of the over-15 population who cannot, with understanding, read and write a short simple statement about their everyday life); **primary school enrollment** (estimates of the number of children enrolled in primary school – male and female); **life expectancy at birth** (the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life); **infant mortality** (the number of infants who

die before reaching one year of age, per thousand live births in a given year); and **under-five mortality rate** (the proportion of children who die before reaching their fifth birthday).

The **Human Development Report 1990** notes that improvements in these indices can be obtained through reallocating expenditures within the social sectors or through reordering priorities across sectors, specifically by moving resources from military to social sectors. Two measures that reflect a country's budgetary choices are: distribution of national expenditures between military and health and education; and **number of persons in the armed forces as a percent of teachers.**

PERSPECTIVES ON POVERTY REDUCTION

In a recent address to the Board of Governors of the World Bank Group, President Barber Conable asserted that "success in reducing poverty should be *the* measure of global economic progress."³⁶ For other donors, too, poverty alleviation features prominently on the agenda for the 1990s.

Realistically, poverty cannot be eliminated by the year 2000, but analysts believe it can be greatly reduced. Recent decades have brought remarkable advances against poverty. Between 1965 and 1985, annual consumption per capita increased nearly 70 percent in the developing world; life expectancy rose from 51 to 62 years; and primary school enrollment rates increased from 73 to 84 percent.³⁷

Changes to date represent significant progress, but they have not occurred equitably around the globe. In Sub-Saharan Africa, for example, where population growth remained

high, the number of people in poverty actually increased.³⁸ Also, within regions and countries, the poor are often concentrated in rural and resource-poor areas where problems of population growth and environmental degradation are closely linked to burdens of poverty. Certain groups, especially women, children, and ethnic minorities, suffer disproportionately from the burdens of poverty.³⁹

Development assistance has changed emphases several times in recent decades. Policies in the 1950s and 1960s emphasized growth as the primary means to reduce poverty; policies in the 1970s promoted the direct provision of health, nutritional, and educational services through local site-specific projects. In the 1980s, macroeconomic concerns predominated, as many countries struggled with structural adjustment and were forced to reduce

public spending. What are the current perspectives on poverty alleviation?

Analysis of development experience provides some guidelines, but each country is unique and there are no foolproof recipes. Some environments are receptive to change; others are resistant. Change occurs as part of a process that is difficult to predict. Current perspectives, outlined in a number of recent documents, are not identical, but they do overlap. A number of important perspectives are presented below.

Labor-intensive economic growth is a key factor in reducing poverty

A recent review of literature relating to development assistance found general agreement that "sustained, self-generating, economic growth is essential for long-term improvements in human welfare."⁴⁰ But economic growth may not trickle down to the poor and increased income may not be distributed equitably. Thus, economic growth appears to be helpful, but not sufficient, for poverty alleviation.

A study of patterns of growth in eleven countries over a period of years provides insights into why some countries have been more successful than others in reducing poverty. Economic growth was not automatically accompanied by improvements in social welfare. In Pakistan, for example, annual growth rates from 1962-84 were high (6 percent), but rates of primary school enrollment remained very low.⁴¹

Countries that reduced poverty used growth strategies that offered opportunities for the poor to participate in that growth –

especially through the creation of income-earning opportunities for the poor. For example, Indonesia and Malaysia emphasized labor-intensive growth, especially in agriculture and achieved significant reductions in the proportion of the population living in poverty.⁴²

Also, countries that reduced poverty implemented policies to stimulate rural development, especially in the agricultural sector. Increases in agricultural income led to increases in non-farm income and thus created jobs in non-farm activities. Investments in infrastructure increased the productivity of the rural poor, enabling improvements in transportation and the expansion of market networks. Infrastructure development also fostered job creation in urban areas.⁴³

Country experience suggests that specific policies may be needed to increase the participation of the poor in economic growth. Examples include policies to: 1) increase the poor's access to land, agricultural inputs, and markets; 2) offer credit through group lending; or 3) involve local groups in building institutions and providing services and technologies to meet the needs of the poor.⁴⁴

Investments in human resources are also needed

To reduce some of the severe consequences of poverty, and enable the poor to take advantage of income-earning opportunities, policies that promote investments in people are essential. Such investments require that governments make a long-term commitment to provide the poor with basic health care, education, and other social services.⁴⁵

Policies and spending patterns vary from country to country. In general, countries that have consistently funded primary education and health care at adequate levels have succeeded in improving health, nutrition, and education. However, in both health and education, many countries have favored higher-level services -- for example, investments in urban hospital equipment and higher education. This pattern of allocating resources has left large numbers of poor people, especially the rural poor, without basic health and education services. Thus, poverty remains closely associated with illness and illiteracy.⁴⁶

Since the primary resource of the poor is their labor, investments that enhance the productivity of labor contribute to poverty alleviation. Investments in health and nutrition, especially preventive health care, increase the productivity of workers and reduce mortality and morbidity. Investments in primary education increase the productivity of labor and offer the poor a way to escape poverty. Without such investments, the vicious cycle of poverty remains unbroken.⁴⁷

In addressing the human resource needs, attention to gender issues is important. Women's economic contributions to poor families are substantial. They often have the dual responsibility of earning cash income and providing for the health and nutrition of their families. Yet social, economic, and legal constraints limit their opportunities from the time they are born. Policies and programs to reduce poverty must be structured to assist women as well as men and to ensure that interventions provide women with opportunities to improve their relative status in society.⁴⁸

Integrating economic growth and poverty reduction is both possible and beneficial

Developing countries do not have to choose between economic growth and poverty reduction. In the long run, it is beneficial to work on both simultaneously. Failure to do so creates special difficulties. For example, economic adjustment, with its emphasis on austere budgets and other cutbacks, may create deprivations for low-income people. Conversely, focusing development efforts on the poor and neglecting economic growth encourages the poor to become more dependent and less able to take care of themselves.⁴⁹

Donors can promote the integration of economic growth with poverty reduction by using non-project assistance to leverage policy reform. Possible economic policy changes include the freeing of internal markets, the reallocation of roles between private and public sectors, and the strengthening of agricultural incentives. Possible social policy changes include modifications in educational policies to promote primary education and literacy, and changes in legal and financial systems to enhance women's social and economic contributions to development. Aid can make policy changes more palatable, especially when donors avoid rigid prescriptions and allow developing country governments some latitude in policy design.⁵⁰

Although integrating economic growth with poverty reduction is possible, many countries find that balance is politically difficult to obtain.

Governments must negotiate policies that encourage maximal support and minimal resistance from the non-poor, who are usually politically powerful and may be adversely affected by policy changes.

How policymakers negotiate the integration of economic growth and poverty reduction can make a big difference to the poor. Some countries have protected social expenditures during budget adjustments; others have cut spending on education and health to increase military expenditures. Donors can encourage developing countries to maintain a reasonable balance between economic growth and poverty reduction by making aid conditional on an appropriate budget orientation.⁵¹

Income transfers and safety nets can address the short-term needs of specific groups

Income transfers and safety nets (some form of income insurance) can help those who are unable to benefit quickly from economic growth and social investments. Among those often requiring special attention are the aged, the disabled, poor households in rural areas, and the poorest of the poor in all areas.⁵²

Since the poor spend a major portion of their income on food, policies to hold down food prices can help the poor, but the changes should be carefully monitored because some of the poor are producers as well as consumers of food. Also, policies and actions that improve the availability of food can benefit the poor. In some locations, this may mean food stamps and subsidized food; in others, direct distribution of food may be necessary.⁵³

Public works schemes are a way to facilitate income-earning by the able-bodied poor while at the same time contributing to development through the building of roads or the rehabilitation of degraded lands.⁵⁴ For those who are unable to work, targeted transfers may be necessary. Chile is one country that has successfully provided cash support to needy households.⁵⁵

Donors can contribute to all these processes by encouraging and facilitating policy reform (especially relating to the price and distribution of food and the employment of the able-bodied poor) and by providing food aid or cash-for-work support, and by working to stimulate production and marketing of basic foodgrains and other staple crops.

Many changes can be made and sustained through locally based initiatives that involve non-governmental organizations and the active participation of the poor

Based on what has and has not worked in many countries, Uphoff describes a strategy for development which he calls "assisted self-reliance." This strategy involves "using external resources -- advice, funds, training, material assistance -- not so much to produce direct results as to strengthen local capacities to initiate, manage, modify, and sustain activities that produce benefits for which the poor are responsible."⁵⁶ The strategy thus focuses on process more than results -- enabling the poor to actively participate in alleviating their own poverty.

Strategies that promote assisted self-reliance require new approaches from donors, governments, and agencies. For example, they require that the poor be viewed as participants rather than beneficiaries, and that their participation be encouraged and supported. They also require working in a flexible way, without pre-set targets, in order to find activities that fit within the priorities and capabilities of the poor. Working in this way represents a major change, since programs tend to be designed on the basis of assumptions about what the poor need and with some expectations as to measurable results.

Organizations play a critical role. A World Bank study of 25 completed agricultural projects found that a "major contribution to sustainability came from the development of grassroots organizations, whereby project beneficiaries gradually assumed increasing responsibility for project activities during implementation and particularly following completion."⁵⁷ Strategies that promote assisted self-reliance emphasize the strengthening of grassroots organizations that can be linked in systems of organizations to expand activities. If such organizations don't exist, they must be introduced, to provide a milieu for the poor to make decisions and resolve conflicts. Focusing on the organization and what it needs to function well may be more useful than focusing on the many needs of clients.⁵⁸

One example of a development effort that used assisted self-reliance strategies is the Grameen Bank, a nongovernmental institution that provides group-based credit for rural non-farm enterprises in Bangladesh. Benefits now extend to hundreds of thousands of persons. The Grameen experience illustrates the benefits of development efforts that involve local

grassroots organizations. (It also illustrates the challenges of replication; its charismatic leader has skills that are simply unavailable in many settings.) Many local initiatives plan to grow in size and influence, but such growth may be difficult to obtain because activities have been designed for unique local situations and personnel may have few incentives to expand. Also, initiatives that work on a small scale may not work on a large scale.⁵⁹

The Grameen Bank was one of six organizations that Tendler examined in a study of organizations that performed well in alleviating poverty. (Note, however, that the Grameen Bank continues to be heavily subsidized by donors.) Although each organization was unique, all shared a common set of characteristics. They started with a narrow focus, learning about the needs of a particular sector or trade through research and tailoring interventions to those needs. The narrow focus enabled the organization to be realistic and to carry out a succession of small changes over time. As Tendler explains: "...doing less often works better than doing more."⁶⁰ (Lewis notes that many anti-poverty projects of the 1970s were overambitious -- attempting multifaceted, multidisciplinary changes that were difficult to execute.)⁶¹

Four of the six organizations studied by Tendler provided credit. By working through existing structures, rather than providing credit with their own funds, they were able to focus on a limited role and learn the credit business gradually from established institutions. Over time, this intervention served as a catalyst, stimulating other changes. Three of the four organizations later created their own banks. All four organizations now provide social services. That they established income-generating activities first is important to note; moving in

the opposite direction -- from social services to income-generating activities -- is more difficult.⁶²

Uphoff concedes that some development activities, such as major infrastructure or research projects, cannot be approached through "assisted self-reliance," but, given the documented success of this strategy in promoting sustainable development, he finds it surprising that people persist in thinking about development as "a matter of making resource investments in a top-down way."⁶³ Hellinger advocates a major restructuring of development assistance to channel funds to appropriate local institutions and thus empower the poor to define and implement their own development.⁶⁴

The Grameen Bank and other cases illustrate that participatory development can be highly successful in developing human and social capabilities and reducing poverty, but achieving broad-based participation seems to be easier to talk about than to accomplish. The Inter-American Foundation (IAF) has many years of experience in responding to local initiatives for change and in directly targeting poorer segments of Latin American and Caribbean society. In spite of a strong focus on developing local organizational capacity, a recent evaluation of eight IAF-funded organizations found that beneficiaries generally failed to participate in management and decision making, and in several organizations, a strong leader dominated.⁶⁵ Carefully designed policies and programs can support greater participation and encourage private initiative, but, in many situations, broad-based, democratic participation may still remain elusive.

Improving natural resources management can contribute to poverty reduction

The productivity and well-being of large numbers of poor people are linked to the wise use and conservation of the natural resource base. Yet, in developing countries, environmental degradation often occurs because the poor farm marginal lands, use inappropriate agricultural practices, and cut down trees. In the short run, such practices may actually alleviate conditions of poverty -- providing food and fuelwood for a few more months or years. In the long run, environmental degradation undermines future options and opportunities, not only for the poor, but for everyone. Poverty encourages environmental damage and environmental damage reinforces poverty.⁶⁶

Following a three-year study, the World Commission on Environment and Development concluded that "environmental protection and sustainable natural resources are undermined by poverty, and can only be achieved in the context of healthy economic development; and conversely, economic development cannot be achieved on a lasting basis without sound management of natural resources and the environment."⁶⁷ In other words, sustainable natural resources management and economic development must proceed together.⁶⁸

Natural resources rehabilitation and management is a valuable part of increasing agricultural productivity. Making policy changes to provide farmers with land tenure or tree rights and introducing new technologies such as alley farming, living fences, and windbreaks can

contribute to the protection of natural resources and help sustain development efforts. To encourage the participation of the poor, interventions must address their concerns -- the threats posed by near-term food reductions or fuel shortages and the uncertainty of longer-term benefits.

Trends suggest that pressure on the world's resources will continue in coming decades. Sustainable development implies actions to conserve the natural resource base and ensure its availability for future years. Donors can continue to promote understanding of environmental issues in developing countries and can support and expand efforts to conserve and manage natural resources. According to the World Health Organization, the prevention of environmental degradation and public health hazards is cheaper than the remedies.⁶⁹

Focusing exclusively on the poor is seldom politically feasible

Exclusive focus on the poor is seldom politically feasible from the point of view of either the donor or the developing country. Donors have multiple agendas and many constituents. Humanitarian concerns must often compete with political, strategic, and commercial agendas. As a result, reducing poverty is only one of many factors considered in allocating aid. Billions of dollars of aid go to middle- and high-income countries, and aid for poor countries often supports business in the donor country more than the poor in the development country. Thus, investments in physical capital installations may be preferred over investments in health and education programs. Although the extent of focus on the poor could probably be increased, other agendas cannot be eliminated.⁷⁰

From the point of view of developing countries, exclusive focus on the poor may be politically dangerous. Many reforms reallocate resources from the non-poor to the poor. Since the non-poor tend to be politically active and vocal, change may provoke protests and even revolutions. For example, as part of its effort to expand primary education, Ghana reduced subsidies for university students. This action caused massive student protests, closing the universities in 1987 and 1988.

In the broad perspective of development, poverty reduction is important, but in a political world, governments must anticipate reactions to change in different population groups and must search for overlapping perspectives. To be politically feasible and sustainable, policy changes may need to offer benefits to both the poor and the non-poor in developing countries.⁷¹

Furthermore, some needs do not lend themselves to a poverty focus, for example, the building of infrastructure. Such investments nevertheless help the poor indirectly, for example, by facilitating the expansion of market networks.⁷² Also, a direct focus on the poorest of the poor may not be the way to achieve change quickly. The ultra-poor may need extensive help over a lengthy period to achieve change while those who are less poor may benefit quickly from small investments and share this benefit with others.

Although neither donors nor developing countries can focus exclusively on the poor, aid can be allocated in support of country policies that help the poor. Where country policies are not conducive to poverty reduction, aid can support the poor themselves, preferably as part of an agreement with the government to make

needed changes to improve the skills and earnings of the poor. Results may not always match intentions, but by monitoring the complex process of change, donors can assess

whether or not aid has been used effectively and increase understanding of how interventions can be helpful.

SUMMARY AND CONCLUSIONS

Poverty is a multidimensional concept that can be defined, measured, and understood in many different ways. Different measures define different populations as poor, although in all cultures, poverty is associated with malnutrition, lower life expectancies, and higher death rates among infants and children. Poverty disproportionately affects women and is closely linked to problems of population growth and environmental degradation.

Many different measures of poverty are currently being used. The headcount index and the poverty gap measure poverty in terms of household income and expenditures per capita. The human development index defines deprivation in terms of life expectancy, adult literacy, and purchasing-power-adjusted gross domestic product per capita. Many studies measure poverty in terms of household consumption data, income data, indicators of food consumption, anthropometric data for children, or information relating to basic needs for food, shelter, education, and health care. Additional measures include life expectancy at birth and rates of adult literacy, primary school enrollment, and infant mortality. Studies usually use several measures, to reflect different dimensions.

Although there are many ways to measure poverty, collecting data is expensive and many analyses must depend on whatever data are available. Since only a few comparable statistics

exist for the different countries of the world, international comparisons are difficult or misleading. Decisions on strategies to reduce poverty must often be made on the basis of estimates which have many shortcomings.

Many factors help create conditions for change -- the commitment of the developing country itself, supportive sectoral and macroeconomic policies, institutional capabilities, the extent to which the poor participate, and many other factors. Because the causes of poverty are complex, so too are the actions needed to alleviate poverty. Development assistance is not a panacea. Foreign assistance is only one aspect of economic relationships between developed and developing countries. Economic collaboration and trade are increasingly important.

Current research is increasing knowledge about poverty and helping donors understand how they can invest wisely and how their investments can contribute to poverty reduction. Strategies, policies and programs to promote economic growth are essential -- especially when they are labor-intensive and create income-generating opportunities for the poor. But governments must also develop human resources by investing in basic health care, education, and other social services, and may provide income transfers for those unable to benefit immediately from economic growth and social investments.

Many programs are designed on the basis of assumptions about what the poor need. Developing grassroots organizations to involve the poor themselves in development efforts can promote self-reliance and increase the likelihood that accomplishments will be sustained. But achieving broad-based participation and building consensus among different constituencies are challenging tasks. Political factors inevitably influence decision making.

Measuring changes in poverty status is both an art and a science. Even when there is consensus that policy changes and projects have been successful, direct links between aid and poverty reduction may be difficult to confirm.

Definitions vary; indicators measure different dimensions; changes may not be sustained -- or may not have measurable effects for years.

Three decades of experience demonstrate that reducing poverty is a complex undertaking. Development assistance can help -- but donors must be realistic. Poverty reduction is a process, not a one-time event. Progress is difficult to achieve and often difficult to record. Much has already been accomplished, but much remains to be done. As research continues to expand understanding of the nature of poverty and the strategies that bring change, donors have new opportunities to improve their contribution to the reduction of poverty around the world.

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