CHAPTER 1

The Meaning of Human Development

What Does Development Really Mean?

It may seem strange that such an abstract, speculative question should matter to ordinary people. But this question precisely underlies both the interest and apprehension surrounding *Philippines 2000*, the administration's summary phrase for its vision of development. Despite its lack of definition and its evident political expediency, the idea of *Philippines 2000* has gained currency and is repeatedly intoned simply because it fills a need. Even critics give it some validity by constantly making reference to it.

There is general skepticism about the government's plans, but for the most part, this has something to do with how realistic are the targets. Can a given growth rate or level of income be attained in a given time? This is an important question, but still less fundamental than the question of whether the set goals and criteria for measuring success are themselves right and adequate. Nevertheless, what now appears to be the overriding objective of the government is for the nation to achieve the status of a newly industrialized country (NIC) such as that achieved by South Korea, Taiwan, and Hong Kong or, more modestly, by Malaysia or Thailand.

This objective reflects a manner of thinking that tends to equate development with *economic* development which, although a complex process, is often perceived by the public in terms of raising incomes per person, or per capita GNP.[1]

The government targets an average GNP growth rate of 7.5 percent annually until 1998 and a per capita income of over $1,000 before that. This is combined with a promise to reduce the incidence of absolute poverty from 40 percent in 1991 to 30 percent by 1998. The underlying suggestion is that aggregate growth will enhance the welfare of the poor. But, of course, even in these terms, the fact remains that Filipinos have not yet regained the average incomes they earned in 1982.

Why Rapid Income Growth is an Insufficient Measure of Success

There is certainly nothing wrong about Filipinos aspiring for high and increased incomes. There is no reason to denigrate the goal of sustained income growth, or to underestimate the magnitude of changes needed to bring it about. Indeed, the pursuit of sustained income growth is the first order of business, and it is in this aspect of genuine development that the country has most lagged behind (Chapter 2).

Although important, per capita income is only *one aspect* of development. There are good reasons to qual-

[1] A sophisticated definition would refer to the size of the industrial or manufacturing sector. But this is ambiguous since there are obviously developed countries whose manufacturing sectors are in fact shrinking in favor of services, just as the Philippines' services sector is expanding. The difference between them is simply income — the services sector in one case yields higher incomes and productivity than in the other. Hence, the common reduction of the difference in income has a basis.

ify this preoccupation with per capita income by placing it in perspective. *First*, it is not enough to pose the goal of rapid income growth only in a broad and aggregate sense since this tends to de-emphasize the question of internal distribution. Two things were wrong with growth in the past: (*a*) it could not be sustained for long, and (*b*) it was not equitably distributed. The current preoccupation with growth seems to address only the first problem. In the country's experience, whether growth has risen or fallen, inequality has remained or has even worsened, and the number of poor people has increased in absolute terms. Some studies (Balisacan 1993) suggest that the lot of the poor has worsened because the distribution of income has deteriorated.

Many of the factors that made past growth inequitable *also* made it unsustainable. The most important examples are trade and industrial policies that favored the use of machinery instead of labor, and the "price-scissors" that penalized agriculture.[2] If many of these wrong policies can be redressed, future growth can be sustained and made more equitable. But unless the goal of a better income distribution is rendered more tangible and explicit, there is nothing to distinguish rapid growth based on a massive "empowerment" of the majority from rapid growth that grows on the backs of the poor.

Second, even if economic growth is revived and sustained, large pockets of people will, in the short-run, continue to have little or no means of participating or competing in the markets, and, therefore, no means of sharing in the newly-created incomes. These people include subsistence producers such as upland farmers, small fisherfolk, landless farm workers, unskilled workers, scavengers in the cities, and others. For many of these so-called "core" or "subsistence" poor,[3] purely market-opening and market-enhancing programs will be largely irrelevant since in terms of education, health, and skills, they are the least prepared to make use of new market opportunities. For many of them, there is no guarantee that, even under conditions of growth, things will not get worse before they get better.

In fact, many aspects of welfare that are immediately useful to the very poor (public safety and protection from harrassment, health care and micronutrient provision, education, water supply systems and sanitation) will be weakly reflected in earned incomes. Many of these welfare services are difficult to buy or to supply privately,[4] and their provision does not translate immediately into visibly higher incomes. Therefore, if the goal is rapid income growth, the question that arises is, what importance shall be attached to elements that do *not* immediately contribute to that goal?

It is heartening when the government targets not only growth but makes the equally important commitment to reduce poverty incidence. But even this raises questions. The numerical goal of reducing poverty incidence carries a bias: it can be achieved most expediently by focusing efforts on those groups that are already on the margin of being non-poor, i.e., the "survival" poor. It implicitly gives less value, therefore, to policies and programs that make the poorest *less* poor though they remain poor nonetheless.[5] Yet, can this really be the intention? If not, then at the very least, separate targets for education, health, nutrition, water and sanitation, and others must be set even though these have no large bearing on measured incomes or GNP. (It is hardly reassuring when a government professing concern for the poor also cuts out the budgets for the surveys that monitor poverty.)

Finally, among the national priorities, the assessment of the cost of rapid growth in terms of political and social institutions needs elaboration. The challenge to a reductionist "growthmanship" interpretation of

[2]This refers to policies that depress prices for agricultural products and raise prices for their inputs. Examples are price and trade controls on important staples such as rice and corn, and high prices for fertilizer, other chemical inputs, and packaging materials as a result of the tariff structure.

[3]In contrast to the "survival" poor who are closer to escaping poverty.

[4]This is because most of these are so-called "public goods" for which a case can be made for public provision. For the very affluent, many of these public goods can also be privately supplied (e.g., private security agencies, high quality private schooling, private medical care, water purifiers, and others).

[5]As Balisacan (1993) has pointed out, this is a consequence of adopting the simple headcount measure of poverty. Other measures of poverty incidence would be sensitive to changes in inequality or redistribution among groups of the population.

Philippines 2000 is to specify exactly to what lengths it should go in order to achieve the goal of, for example, double-digit growth. Can this goal be achieved under a system of civil liberties and democratic institutions? To be sure, leaders of authoritarian NICs (typified by Lee Kuan Yew of Singapore) continue to doubt whether NIC-hood can be achieved in the Philippines under a system that is characterized as too "Western." If this pessimistic assessment should happen to be right, what choice should society take? Shall it choose salvation through supergrowth or the preservation of democratic practices and institutions? This question has not been resolved.

In these respects, the reduction of social and economic goals to achieve NIC-hood, while not entirely wrong, is inadequate as a development strategy. At the very least, it oversimplifies the process of development and invites a distortion of priorities.

Meaning of Human Development

Human well-being improves when incomes rise or when command over commodities expands. At the household or family level, an adequate source of livelihood is needed to raise well-being. But high income and well-being are not always synonymous. Well-being is not always reducible to the amount of commodities a household can buy. Other factors — including geographical availability of public services and facilities, social and cultural values, demographic factors, psychological states, and others — may contribute to poor conditions of health, nutrition, or literacy despite relatively adequate income.

For example, some goods and services may simply not be readily available for purchase. In remote and unserved areas, it is not easy for a household, even with income, to buy physical security, news and information, medical care, a full education, and others. Ordinarily, adequate family income results in good nutrition, health, and high literacy for family members, but not if culture, for example, gives lower priority to females. Even among people with higher income, spending is not always allocated in the manner most consistent with well-being (e.g., expenditures on tobacco, alcohol, gambling, expensive entertainment).[6] All these merely demonstrate that higher incomes represent only *means* and are not synonymous with well-being itself. Incomes are not outcomes.

Therefore, human development must relate mainly to outcomes or results. These outcomes must in turn refer to an expansion of those capabilities that make life humane. *Human development may be defined as the process of enabling people to have wider choices* (UNDP 1990, 1991, 1992). In particular, the most important dimensions of human capabilities relate to a person's physical survival and health, level of knowledge, livelihood or income, and political freedom.

Physical survival and health

The most basic level of human well-being is the state of a person's health and nutrition, or the length of human life itself. In present-day societies, this is closely related to physical safety in a peaceful environment, access to adequate food supplies, preventive and curative health care, and a healthy environment. In terms of a simple but crude measure, longevity or length of life has been used to represent physical well-being. The argument is that the state of physical safety, nutrition, efficacy of health interventions, and others are all ultimately reflected in this variable. The statistical measure used for this is average life expectancy at birth among the population. In the Philippines, the use of this variable suffers from the infrequency of population census, which is the only source of reliable life expectancy statistics. (The regional data provisionally used in this Report are estimates based on the 1980 Census of Households; the 1990 Census figures are still being finalized.)

A person's capacity to be productive is a value in itself. For policy intervention, however, other indicators may be more useful — for example, the incidence of deaths attributed to violent encounters or insurgency, infant and child mortality, female mortality during childbearing, incidence of specific diseases, prevalence of various degrees and types of malnutrition and micronutrient deficiencies, and others. Here, as in other di-

[6]This is also true among the poor and was one reason, among others, why the government's official poverty threshold was redefined in 1991 to exclude such expenditures. This resulted in a lower threshold and incidence of poverty.

mensions of human development, a better understanding of the specific features of the problem will lead to superior measures for evaluation and monitoring.

Table 1 shows life expectancy figures between 1980 and 1991. The national average in 1991 was about 65 years, three years more than the level of a decade ago. Improvements were recorded in all the regions. As expected, the National Capital Region (NCR) ranks highest. The lowest ranking regions are all found in Mindanao. In Luzon, Cagayan Valley and Bicol are the only regions below the national average while in the Visayas, it is Eastern Visayas. This geographical pattern is most likely closely related to the lack of access to health care facilities (partly the absence of infrastructure), poor conditions of public order and safety, and disparities in regional incomes.

The ranking based on life expectancy is admittedly crude and can be justified only as a first approximation. Even the high rank assigned to Metro Manila must be qualified since it fails to reflect the deterioration in the *quality* of urban life as a result of the worsening environment. A person may experience frequent respiratory illness but live long nonetheless due to frequent hospitalization. This situation is certainly inferior to one where people live long because they are free of illness. A simple index of longevity would fail to capture this difference.

Table 1
LIFE EXPECTANCY (in years)

	Region	1980	1991	Rank 1980	Rank 1991
	National Capital Region	66.1	68.6	1	1
I	Ilocos	63.0	66.2	5	5
II	Cagayan Valley	58.3	61.6	8/9	8/9
III	C. Luzon	65.1	68.2	2	2
IV	S. Tagalog	64.3	67.3	3	3
V	Bicol	61.2	64.3	7	7
VI	W. Visayas	62.2	65.2	6	6
VII	C. Visayas	63.9	67.2	4	4
VIII	E. Visayas	58.3	61.6	8/9	8/9
IX	W. Mindanao	51.5	54.7	12	12/13
X	N. Mindanao	55.0	59.1	10	10
XI	S. Mindanao	54.4	57.7	11	11
XII	C. Mindanao	51.5	54.7	13	12/13
	PHILIPPINES	61.6	64.9		

Level of knowledge

People's achievements depend on the extent of their understanding of their natural, social, and cultural environment. Today, this capability is primarily associated with the process of formal education, and the acquisition of literacy and numeracy, although it must be recognized that, historically, societies will have different traditions of nurturing knowledge. In more modern terms, for example, radio, television, and cinema (comics and newspapers to a lesser extent) have served as influential bearers of values and information along with the formal educational system. These forms make different (typically less) demands on literacy and numeracy. For example, weather forecasts aired by a commercial radio fulfill a vital function in production for fisherfolk. Warnings of natural disasters (e.g., impending volcanic eruptions and lahar danger) have saved countless lives in Central Luzon. Certainly, political education has been mediated primarily by the mass media. In certain instances where formal education is unavailable, both government and non-government organizations have also experimented with more flexible forms of non-formal education. In short, attempts to assess people's levels of knowledge must also take into account the different channels by which people actually learn and gain information. These forms may not be restricted to the spread of formal education.

An important problem — especially in the Philippines where different cultures, religions, and ethnolinguistic groups exist — is whether the existing systems of formal education or mass media make enough efforts to respect the integrity of local languages and cultures. To the extent that they fail to do so, then they may be regarded as irrelevant or threatening and risk rejection. For example, it would be inappropriate to insist on putting up schools with full western (Judaeo-Christian) tradition in predominantly Muslim areas. The same sensitivity should be present when dealing with tribal cultures. In such contexts, the lack of achievement in formal education may have more to do with the defects in the system being put up than with deficiencies in the level of human development.

Finally, there are large differences in the quality of formal education for the same level of attainment. This is due to the differences in quality between public and private education and among public schools themselves as distributed in the various regions.[7] Recent studies that seek to measure these quality differences are very few and difficult to find.

Concededly, some appropriate system of education and a minimal level of literacy are indispensable for developing the capacity to learn. For purposes of constructing a human development index in this *Report*, the state of knowledge may be measured as a combination of (a) adult literacy rate and (b) average educational attainment among the population, measured as mean years of schooling. In the method of constructing an index used by various international human development reports, the literacy rate and the educational attainment are given weights of two- thirds and one-third, respectively. The literacy rate more closely measures a basic outcome, while educational attainment indicates degree or quality of knowledge.

Again, for policy purposes, other measures may be used to monitor not only outcomes but crucial *inputs* into the process. Formal education is monitored using rates of enrolment and of completion (cohort-survival). There is still much work to do, however, in developing measures of education quality. Besides the effectivity of formal education, the reach of mass media and communications may also be measured: radio listenership, TV viewership, newspaper circulation, telephone density, and others. Even the quality of outcomes in terms of literacy may be improved. Statistics on literacy measure only the most rudimentary or basic literacy (the ability to read and write one's name and a simple message), and they tend to give a favorable picture due to the near-universal provision of elementary education. Closer measures of ability, however, such as tests for *functional* literacy, have shown less reassuring results. In 1989, it was estimated that almost one-fourth of all Filipino adults were functionally illiterate.

Tables 2 and 3 show the performance of the various regions in literacy and schooling. Nationally, over the past decade, mean years of schooling rose from six to seven years, and literacy improved from 83 to 94 percent. There are some variations across regions. The regions with the lowest educational attainment are Western and Central Mindanao; Southern and Northern Mindanao rate much better. Eastern Visayas also fares poorly on both measures, and Central Visayas ranks only 10th, lower than some regions in Mindanao and the poorer Luzon regions of Cagayan and Bicol. This points to a deficiency not easily seen by simply identifying the region with the fastest-growing province, Cebu. In Luzon, the high achievement of the Ilocos region in both schooling and literacy is noteworthy, while the achievements of the NCR and regions close to it are high, as might be expected.

▮ Livelihood and income

As a component of human development, livelihood has two dimensions. First, it yields income which supports consumption and further improvement of human capabilities. Second, it expresses people's capacity to be productive and to contribute meaningfully to society. Discussions about growth consider livelihood as im-

Table 2
LITERACY RATES (in percent)

Region	1980	1991	Rank 1980	Rank 1991
National Capital Region	96.60	99.09	1	1
I Ilocos	85.08	95.80	4	4
II Cagayan Valley	79.32	91.30	9	6
III Central Luzon	88.50	97.80	2	2
IV S. Tagalog	85.81	96.81	3	3
V Bicol	83.48	95.31	5	5
VI W. Visayas	81.16	93.00	7	7
VII C. Visayas	76.09	91.00	11	10
VIII E. Visayas	78.49	89.81	10	11
IX W. Mindanao	64.97	81.32	12	13
X N. Mindanao	83.37	92.90	6	8
XI S. Mindanao	80.06	91.89	8	9
XII C. Mindanao	64.60	83.01	13	12
PHILIPPINES	82.72	93.54		

[7] It should be remembered that the poorer quality of public *vis-a-vis* private education was not always a given. The decline may be dated after the war.

Table 3
MEAN YEARS OF SCHOOLING (in number of years)

Region	1980	1991	Rank 1980	Rank 1991
National Capital Region	9.17	9.73	1	1
I Ilocos	5.85	7.25	3	3
II Cagayan Valley	5.27	6.30	9	9
III Central Luzon	6.18	7.35	2	2
IV S. Tagalog	5.84	7.18	4	4
V Bicol	5.41	6.42	8	8
VI W. Visayas	5.51	6.58	7	7
VII C. Visayas	4.96	6.03	10	10
VIII E. Visayas	4.80	5.75	11	11
X W. Mindanao	4.27	5.32	13	13
X N. Mindanao	5.78	6.75	5	5
XI S. Mindanao	5.61	6.59	6	6
XII C. Mindanao	4.29	5.79	12	12
PHILIPPINES	**5.93**	**7.05**		

portant because of the size of income that it generates. It is this aspect of growth that is most important in a poor country. Higher income gives greater command over more commodities of better quality and wider variety, facilitating a richer human existence. Incomes may be used to invest further in health, education, training, and other forms of human capital (Chapter 3). Strictly speaking, however, income in this sense merely captures a *potential* improvement in the quality of life. As mentioned earlier, the actual use of income for this purpose will depend on other factors.

Aside from higher income, which enables one to finance consumption and invest in human capital, a person's capacity to be productive is valuable in itself. If the pay always translates into fulfillment, income and productivity coincide. In more economically developed societies, however, the problem of alienation from work shows that there are dimensions of work not captured by pay alone. Nevertheless, income derived from productive work is one of the most important sources of personal advantage and opportunity, and should be the main concern in poorer societies such as the Philippines.

Ideally, assessment of livelihood and income should deal not only with their current levels but also with the question of whether these can be sustained. For this reason (as in the case of health), the condition of the environment must be considered. Current levels of income may be high for some provinces due to the presence of some natural resources — such as forest, marine life, and minerals — that are exploited. As the resources are depleted, sources of livelihood and income typically decline and current levels cannot be sustained. When current income levels are used to measure livelihood, one becomes blind to the issue of sustainability except in the long term, when average productivity and income finally fall. For this reason, it is probably wise to monitor the state of the environment separately; high and rising levels of income must be discounted to the extent that they are associated with unsustainable resource depletion. (For more on this, see Chapter 4.)

Apart from per capita income, the most well-known indicator of welfare is the headcount measure of poverty incidence (i.e., the number of households in an area living below the official regional poverty threshold). Table 4 enumerates the figures for the country and each region for the years 1985, 1988, and 1991. Between these years, there was an apparent improvement and then a stagnation in the headcount measure. The absolute number of poor households continued to rise over those years. On a regional basis, poverty incidence was highest for Bicol, Northern Mindanao, and Southern and Central Mindanao. It was lowest for Metro Manila, the surrounding regions (Central Luzon, Southern Tagalog), and the Ilocos region.

Following the convention in various inter-country human development reports, income shall be the variable taken to represent the dimension of livelihood. However, GNP or GDP per capita is adjusted to reflect the hypothesis that the more income contributes less to human development, the higher is the income that has already been achieved. This is done by discounting levels of per capita income above the poverty threshold. The various international HDRs work by setting an "international poverty line."[8] But in making interre-

[8]The HDR used the figure of $4,629 per capita per annum in 1989 values.

Table 4
POVERTY INCIDENCE BY REGION, 1985, 1988 and 1991

Region		1985	1988	1991	Rank 1991
National Capital Region		23.0	21.6	14.9	1
I	Ilocos	37.5	44.9	49.4	3
II	Cagayan Valley	37.8	40.4	43.1	9
III	C. Luzon	27.7	29.3	33.0	2
IV	S. Tagalog	40.3	41.1	38.0	4
V	Bicol	60.5	54.5	56.1	13
VI	W .Visayas	59.9	49.4	46.7	7
VII	C. Visayas	57.4	46.8	42.4	6
VIII	E. Visayas	59.0	48.9	40.7	5
IX	W. Mindanao	54.3	38.7	54.5	11
X	N. Mindanao	53.1	46.1	55.2	12
XI	S. Mindanao	43.9	43.1	47.5	8
XII	C. Mindanao	51.7	36.1	51.0	10
PHILIPPINES		44.2	40.2	40.7	

gional comparisons, region-specific official poverty lines are used.

There are two possible sets of data for representing average regional incomes. The first is the GDP or product figures at the regional level, which are available annually. The other is from the *1991 Family Income and Expenditure Survey* (FIES), which gives average income figures per region. Both sets are imperfect. GDP reflects only the output produced and is imperfectly related to the incomes earned by inhabitants of the region. For example, the profits of a plantation in Mindanao owned by a transnational corporation with offices based in Manila form part of regional GDP, but if these are remitted to Manila — or worse, overseas — they do not form part of Mindanao's income. On the other hand, the FIES income data typically underrepresent the higher income brackets. For example, using that series, Central Visayas (despite Cebu) would be poorer than Cagayan Valley or even Western Visayas. This imperfect relationship is seen in Figure 1. In the figure, the regions are arranged according to decreasing GDP per capita, represented by the columns. The fact that the line representing income does not always move in the same direction shows that the two series do not coincide.

In the end, however, for purposes of developing a measure, this *Report* provisionally adopts the series of regional GDP per capita in order to follow the spirit of the UNDP methodology as closely as possible. (Appendix 1.2 discusses the shortcomings and possible refinements.) Regional GDP per capita is adjusted using the poverty thresholds of the various regions in order to arrive at Table 5, the adjusted regional GDP figures. Since the same (national or international) poverty threshold is used, the ranking based on the adjusted GDP figures will not differ from the original. The only

Figure 1
REGIONAL GDP PER CAPITA AND AVERAGE INCOME (in 1991 pesos)

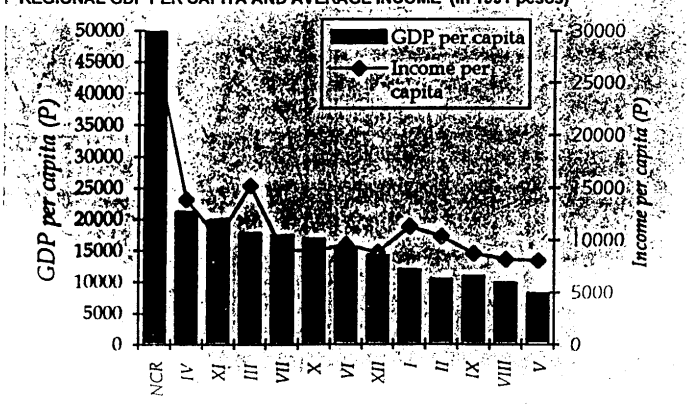


Table 5
ADJUSTED AND UNADJUSTED GDP PER CAPITA, 1991
(in current pesos)

Region		Unadjusted	Adjusted	Rank
National Capital Region		49,752	8,001	1
I	Ilocos	11,905	7,485	9
II	Cagayan Valley	10,304	7,459	11
III	C. Luzon	17,596	7,595	4
IV	S. Tagalog	21,137	7,641	2
V	Bicol	8,052	7,403	13
VI	W. Visayas	15,093	7,548	7
VII	C. Visayas	17,346	7,591	5
VIII	E. Visayas	9,791	7,449	12
IX	W. Mindanao	10,783	7,467	10
X	N. Mindanao	16,722	7,582	6
XI	S. Mindanao	19,790	7,625	3
XII	C. Mindanao	14,148	7,515	8

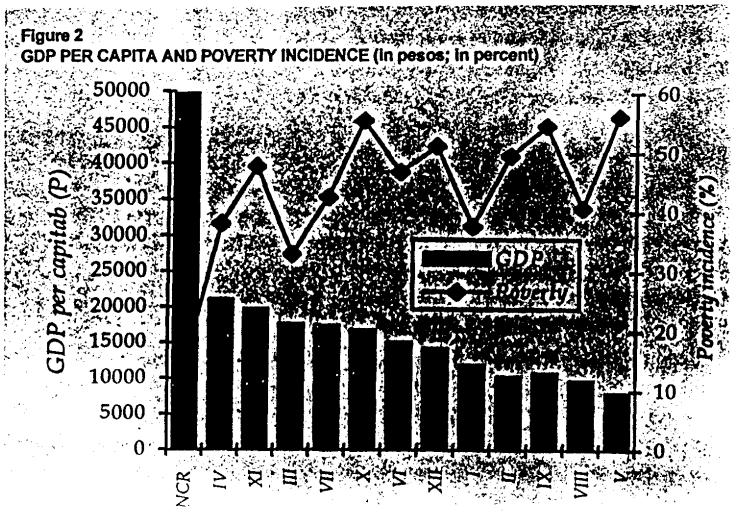
difference is that the gaps between regions become smaller because of the diminishing importance of the additional income above the poverty threshold for human development. (See Appendix 1.1 for the methodology.)

Based on GDP per capita, the poorest regions are Bicol, where poverty incidence (Table 4) is also highest, Eastern Visayas, Cagayan Valley, and Western Mindanao. Some areas, such as Southern and Northern Mindanao, rank high or above average in terms of GDP per capita, but badly perform in terms of poverty alleviation. This points to a situation where the fruits of production in those regions fail to redound to the benefit of their inhabitants. This is also seen in Figure 2. If a higher GDP per capita always translates into lower poverty incidence, then the line representing poverty incidence would be uniformly rising as regional GDP per capita falls. Figure 2 clearly shows that this is not always the case.

▮ Political freedom and people's right to participate in social decisions

This is the last component of human development. This is a typically sensitive diplomatic issue across countries, and international editions of the *HDR* have stopped trying to evaluate the political systems of other countries for their democratic qualities. Nonetheless, political freedom and participation in human development remain as the principal channels for expressing and realizing oneself in the community. In the Philippines, this component is especially important because the country has committed to pursuing economic development through democratic processes.

Figure 2
GDP PER CAPITA AND POVERTY INCIDENCE (in pesos; in percent)



Some may object to the inclusion of particular forms of political process (democratic and participatory forms) as components of human development. After all, these are merely *means* to well-being, not outcomes, and are culturally relative. Chapters 5 and 6 of this *Report* contain a closer discussion of the importance of people's participation in governance and some suggestions for measuring the extent and quality of this participation. Even here, however, it may already be argued that politics and social decisionmaking are distinctly human activities that call for autonomous personal involvement. Human development becomes parochial when the scope for human decisionmaking is restricted and human affairs are reduced to matters of the gut. The intrinsic value of freedom is such that, regardless of the choices that people ultimately make, a widening of the *scope* of potential choices represents a welfare improvement.[9]

The *Human Development Report* (1992) puts it aptly: "If growth is seen... not as an end in itself but as a part of human development, democracy cannot be set aside. Growth-oriented strategies can sometimes afford to be blind to democracy. People-oriented development strategies cannot. They must be based on popular participation — in economic, social, and political life." (UNDP 1992:27)

The Human Development Index

In sum, the components of human development are human capabilities, namely, longevity and health, knowledge, income, and political freedom and participation. The country and its various regions have been ranked according to each of these capabilities with varying results. Typically, one region does well in some respects but less in others. Which ones do worse and

Box 1.1
COMPUTING THE HDI

Constructing and computing for a human development index (HDI) has been established and gradually developed by the United Nations Development Programme in the various editions of the *Human Development Report*. Broadly, it involves specifying dimensions along which development may be measured. These are: longevity, state of knowledge, and income.

Suppose there are n areas or regions involved, and Z_{ik} denotes the score of the ith region on the kth dimension (k = 1,2,3). Some regions will rate highest on the kth criterion and others will rate lowest. Denote these scores respectively as Z_k^{max} and Z_k^{mink}. For each region i, a *deprivation ratio* for criterion k, namely D_{ik} may then be defined as follows:

$$D_{ik} = (Z_k^{max} - Z_{ik})/(Z_k^{max} - Z_k^{min}) \qquad (1)$$

which merely measures how well or how poorly, relative to others, the region i fares on the kth criterion. It is obvious D_{ik} has a value of zero (i.e., zero deprivation) if region i has the highest score for k and a value of one for the worst performer. The *average deprivation ratio* of the region, represented as D_i, is simply the average of the D_{ik} over all k criteria:

$$D_i = (D_{i1} + D_{i2} + D_{i3})/3 \qquad (2)$$

The higher the score, the worse it is for the region. For example, a region that performed worst on *all* three criteria would have an average ratio exactly equal to one. Finally, the *human development index* for region i, denoted as H_i is computed simply as the difference between one and the average deprivation ratio, that is:

$$H_i = 1 - D_i \qquad (3)$$

The higher the H_i (or the lower the D_i which is the same thing), the better is the region's rating on human development. In more recent years, some refinements have been made when computing for HDI at the international level. Series that are sensitive to income distribution and gender inequalities, among others, are now available for some countries (UNDP 1992). Empirical equivalents to some metaconcepts have also been revised. Since the 1991 HDR, for example, "knowledge" has been measured not simply by adult literacy but by mean years of schooling as well.

[9] Hence, suppose a person actually chooses x from among the available alternatives x, y, and z. It can be argued that this same person becomes deprived if he or she were confronted only with x and y, even though the preferred alternative x is still available. (It should be noted that others do not always agree that this represents a deprivation; they argue that "irrelevant alternatives" do not matter. See, for example, Arrow (1954) and Sen (1982).

Table 6
HUMAN DEVELOPMENT INDICES: INTERCOUNTRY COMPARISONS, 1990

	Country	Life Expectancy (Years) 1990	Adult Literacy (%) 1990	Mean Years of Schooling 1990	Real GDP per cap (PPP) $US	Human Development Index (HDI)
1	Canada	77.0	99.0	12.1	18,635	0.982
2	Japan	78.6	99.0	10.7	14,311	0.981
6	USA	75.9	99.0	12.3	20,998	0.976
34	South Korea	70.1	96.3	8.8	6,117	0.871
40	Singapore	74.0	85.0	3.9	15,108	0.848
51	Malaysia	70.1	78.4	5.3	5,649	0.789
69	Thailand	66.1	93.0	3.8	3,569	0.685
79	China	70.1	73.3	4.8	2,656	0.612
80	Philippines	64.9	93.5	7.0	2,269	0.600
98	Indonesia	61.5	77.0	3.9	2,034	0.491
121	India	59.1	48.2	2.4	910	0.297
135	Bangladesh	51.8	35.3	2.0	820	0.185

which ones do better? Policymakers and planners will instinctively know that one area is "poorer" than another without always having to back up this judgement with data. People are often able to grasp a reality without having to measure it. Human development is probably such a concept and any attempt to pin it down with numbers will always be provisional.

Still it is useful and informative to substantiate judgement and gut feel with data. This is what the computation of a *human development index* (HDI) does. The HDI is nothing more than a *combined measure* that seeks to capture all the human development factors mentioned above (except political participation, the measurement of which is still experimental). The HDI for each region is computed according to a formula, yielding a single number that allows countries or regions to be ranked in relative terms on a scale with a maximum value of one and a minimum value of zero. Box 1.1 describes the procedure in more detail.

The HDIs for various countries are computed in the international editions of the *Human Development Report* which appear annually. In those indices, the Philippines ranks as medium in human development, with an HDI value of 0.6 in 1990 (Table 6). This means the country is more than halfway between the best and the worst performers in the world. The country's rank would probably improve further if the HDI were to include an index for political freedom.

In what components does the Philippines fare well or worse? Table 6 shows that the Philippines ranks high in terms of literacy and schooling. Its achievements in this sector are superior even to those of Singapore. On the other hand, life expectancy and incomes are lower. It is worthwhile to compare the country to Thailand and China, where educational attainment is lower but life expectancies and GDP are significantly higher.

The table also shows that some countries have lesser mean years of schooling than the Philippines but have higher literacy rates. In Singapore, literacy is 88 percent but mean years of schooling is only 3.9 years. This most likely reflects the poor quality of education inputs in the Philippines, i.e., effort in education is high without corresponding satisfactory results.

But the main contention in this *Report* is that national averages, while already useful, mask further disparities across regions and groups of the population.

The main effort taken in this *Report*, therefore, is to compute HDI for the various regions of the Philippines. Information on national averages are bound to conceal wide regional disparities in distribution. It would be more useful for makers and students of policy if the achievements and deficiencies in human development were to be given a geographical focus. This local focus becomes more important in the light of recent political changes in which a large amount of the functions and finances that impinge on human development had been devolved to the local government units (province, city, municipality, and barangay) and their leaders.

If the HDI is computed for the regions as if they were individual countries,[10] how would they fare? The results are shown on Table 7. Most of the underlying data have already been discussed in the tables containing regional statistics on life expectancy, educational attainment, and income.

The lopsidedness of the distribution is striking. Metro Manila would have an HDI comparable to that of South Korea and better than that of Malaysia. It is the only region that would be considered as having a "high" HDI by international standards (greater than 0.8). On the other extreme, Eastern Visayas (Region VIII), Central Mindanao (Region XII), and Western Mindanao (Region IX) would be regarded as having "low" levels of human development (below 0.5). In particular, the worst performing region, Western Mindanao, would do worse than the Solomon Islands and only slightly better than Zimbabwe and Myanmar (Burma). All the other regions would fall in the range of "moderate" human development.

Table 7
REGIONAL HDIs IN 1991 AS COMPARED TO OTHER COUNTRIES*

HIGH HDI		
USSR		0.873
	NCR	0.871
S. Korea		0.871
Malaysia		0.789
MEDIUM HDI		
Thailand		0.685
Syria		0.665
	Region IV	0.665
Libya		0.659
Sri Lanka		0.651
	Region III	0.647
China		0.612
	Region VII	0.608
Peru		0.600
	Region VI	0.580
	Region I	0.574
Mongolia		0.574
Lebanon		0.561
	Region XI	0.550
Gabon		0.545
	Region X	0.541
Guyana		0.539
Algeria		0.533
	Region V	0.515
	Region II	0.500
LOW HDI		
El Salvador		0.498
Nicaragua		0.496
Indonesia		0.491
	Region VIII	0.487
Honduras		0.473
Vietnam		0.464
	Region XII	0.447
Solomon Islands		0.434
	Region IX	0.410
Zimbabwe		0.397
Myanmar		0.385

*Figures for other countries pertain to 1989.

National Standards

It may be argued that the proper standard to measure a region of the country would be to bring it up against other regions, rather than against other countries.[11] In

[10]This means that their incomes, life expectancy, and educational attainment statistics are compared with the best and worst performing among all countries. In addition, an "international poverty line" is used rather than the region's own poverty line.

[11]This is not entirely a valid argument since the bias in a cross-country comparison could go either way. The top performers would pull the maximum standards upward, tending to make the region look worse, while the bottom performers would pull the

Table 8
REGIONAL HUMAN DEVELOPMENT INDICES
Inter-regional Comparison, 1980 and 1991

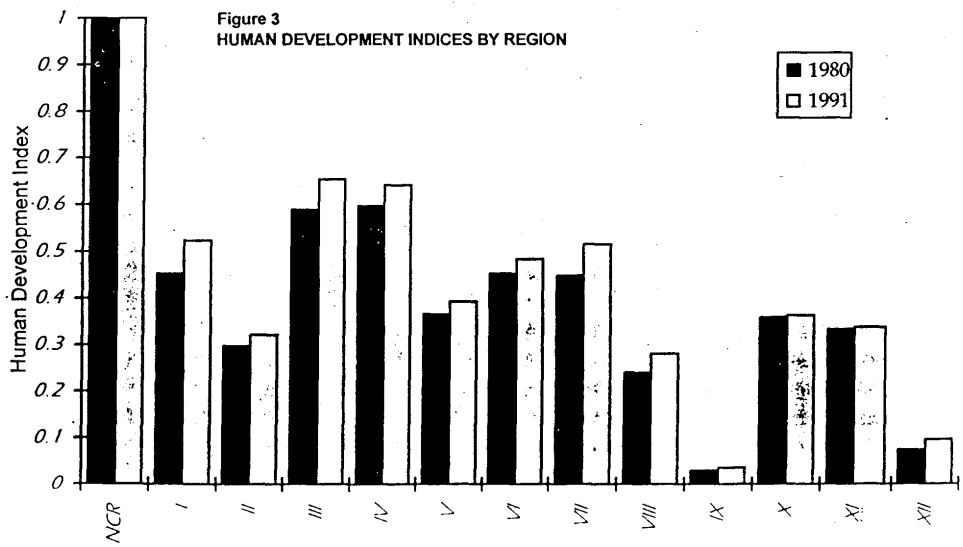
Region		1980	1991	Rank 1980	Rank 1991
National Capital Region		1.0000	1.0000	1	1
I	Ilocos	0.4522	0.5228	4	4
II	Cagayan Valley	0.2967	0.3202	10	10
III	Central Luzon	0.5880	0.6531	3	3
IV	S. Tagalog	0.5968	0.6431	2	2
V	Bicol	0.3641	0.3923	7	7
VI	W. Visayas	0.4515	0.4825	5	6
VII	C. Visayas	0.4471	0.5146	6	5
VIII	E. Visayas	0.2387	0.2794	11	11
IX	W. Mindanao	0.0296	0.0358	13	13
X	N. Mindanao	0.3563	0.3613	8	8
XI	S. Mindanao	0.3309	0.3367	9	9
XII	C. Mindanao	0.0740	0.0963	12	12

this section, therefore, HDIs are computed using levels of longevity, educational attainment, and income actually attained by some regions in the country as minimum and maximum standards. This is done for 1980 and 1991 to see whether changes in HDI levels and ranking among the regions have occurred within that decade. The results are shown in Table 8 and Figure 3.

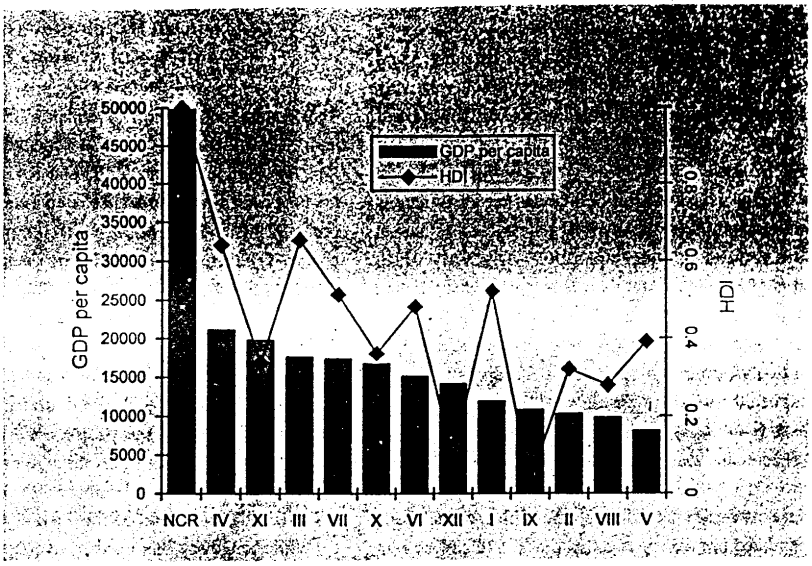
How Regions Fare in Human Development

As expected, the NCR ranked highest overall and in terms of each variable. This may be attributed to the concentration of economic activity, infrastructure, educational and health facilities in the capital. Southern Tagalog (IV), Central Luzon (III), Central Visayas (VII) and the Ilocos (I) ranked second to fifth, respectively. This order changed only slightly in a decade. Central Visayas (VII) improved its rank relative to 1980, when it was behind Western Visayas. This is accounted for primarily by an improvement in GDP per capita (partly reflecting Cebu's growth in recent years) and a higher literacy rate compared to a decade ago. The

Figure 3
HUMAN DEVELOPMENT INDICES BY REGION



minimum standards downward, tending to make the region look better. In the case of the Philippines, the absolute values of HDIs for the region are higher when compared to other countries than in an interregional comparison. This means that there were even more countries which did worse than the worst performing region in the Philippines.



lowest human development indices are found for Eastern Visayas (VIII), Central Mindanao (XII), and Western Mindanao (IX).

It is interesting to contrast this ranking with that of GDP per capita, on the one hand, and that of official poverty incidence, on the other (Tables 4 and 5). In Table 4, poverty incidence in each of the regions is presented for the years 1985, 1988 and 1991, using the new official measure. The trend in poverty incidence for those years showed some improvement between 1985 and 1988, and slightly worsened between 1988 and 1991.[12]

There is some discrepancy between the rankings of the "worst-off" regions under an HDI ranking and under a poverty-incidence ranking. For example, Bicol (V) is recorded as having the highest poverty incidence and, therefore, being the worst off region. On the other hand, it is not at the bottom but somewhere in the middle (seventh) in the HDI rankings. This apparent discrepancy is accounted for by the relatively higher educational attainment and life expectancy variables (where it ranked fifth and seventh, respectively) despite the region's relatively low average incomes.

On the other extreme, the GDP per capita for Western Mindanao (IX) is not particularly low (it is lowest for Bicol), yet this region performed worst in terms of HDI, while Bicol did not rate as poorly. Why? Again it is primarily because of non-income variables. Life expectancy in Region IX is the lowest for the entire country (55 years); so are the rate of literacy (81 percent) and the mean years of schooling (5.3 years). Poverty incidence in Region IX is a high 55 percent, which suggests that income in the region is distributed very unevenly.

Finally, how well is GDP per capita, the income variable, related with the human development index? Does high GDP always correlate well with high human development? This is not an easy question, but somehow, an answer may be seen in Figure 4, where regions are again arranged according to decreasing GDP.

Generally, regions with higher products have higher HDIs. Metro Manila, Southern Tagalog, Central Visayas, for example, have higher HDIs than Bicol, Cagayan Valley, or Western Visayas. But there are exceptions. If the hypothesis were always true, then HDI would, more or less, uniformly decline with GDP.

[12]There has been an increase in the absolute number of poor families between 1988 and 1991 from 25 million to 29 million. Expressed as a proportion, the incidence increased from 45.5 to 46.5 percent of the total population. As a proportion of families, the incidence has barely changed. The reason is an increase in average family size from 5.91 to 6.02 between the two years.

As the figure suggests, however, better GDP per capita does not always translate in a high HDI. Regions IX and XII show HDIs that do not correspond with relatively high per capita product; while Ilocos (I) and even Bicol (V) have HDIs that seem respectable relative to their low incomes.

The principal conclusion that can be drawn here is that economic development largely influences human development, but there are aspects of poverty which rapid growth will not readily solve. Certainly, the kind of growth that occurs and the redistribution of its benefits will matter. Other aspects are equally relevant. In particular, access to basic services such as education and health care — as well as social-cultural influences — may either aggravate or mitigate deprivation with respect to incomes. A blind spot of this sort may be built into official poverty-threshold computations since these computations presume, among others, that legally mandated provisions of social services (e.g., free education up to high school) are indeed available when in fact they may not be. In terms of the ranking of the regions, the HDI yields a distinct message. The indicators and the overall index itself graphically depict the deprivation of the country's southern regions. Western and Central Mindanao, and the poorer parts of the Visayas (Eastern) are consistently the worst performers on all human development indicators. Purely income-based measures tend to mask this since some Mindanao regions are also large producers. The indices suggest, however, that production is either occurring inequitably, or there are some needs besides income which the people in those parts do not receive adequately. All Mindanao regions and all Visayas, except Central Visayas, may be classified as having "low" human development levels. In Luzon, the low performers are Cagayan Valley and Bicol, while Central Luzon and Southern Tagalog may be regarded as having "moderate" levels. As if to underscore the disparity, only the National Capital Region rates as having a "high" HDI.

What has caused the low HDI among these regions? In Regions IX and XII, the causes are war and loss of security, remoteness of many areas, poor infrastructure and lack of educational and health facilities, clashing cultural beliefs and practices, and unequal distribution of wealth, for in fact these regions are relatively rich.

Human Development and Social Systems

The demand for a measure of human welfare or level of human development is really a demand for a *bottom line.* By itself, the concept of human development does not propose any new strategies or approaches to development. Instead, it proposes a common yardstick against which to measure the performance of whole economies and societies — regardless of ideologies, institutions, strategies, and cultural norms — in relation to the objective which they invariably claim to pursue, namely, raising people's welfare. Human development demands that any ideology, vision, strategy, or program claiming to work for the people must be subject to measurement in human terms through prolonging and improving the quality of human life and enriching knowledge, income, and political freedom.

While longevity, knowledge, livelihood, and freedom are irreducible concerns for rich and poor countries alike, their specific meanings will differ from one society to the next. For a poor country, the nature of human development concerns is more stark and obvious. A set of *minimum basic needs* must be met for a human being to function. This cannot be denied without denying the humanity of the person. In these circumstances, longevity and health may be understood as simply preventing early death by securing adequate nutrition and avoiding disease; the demand for knowledge may simply be attaining useful elementary or high school education; livelihood may deal not so much with job fulfillment but more with having a basic access to an income adequate to subsist; and finally, political participation is exercising basic rights without fear of intimidation. *In short, minimum basic needs are the content of human development in the context of a poor country or region.*

By contrast, these same concerns will have a different content when applied to richer countries. Therefore, "each country will have its own human agenda, but the basic principle should be the same — to put people at the centre of development and to focus on their needs and their potential. Human development spans the full range of human needs and ambition" (UNDP 1992:13).

Human development, in principle, is closely related to economic development, but the two do not always

move in the same direction. While its urgency may be most evident in countries and regions considered economically poor, there are certain dimensions (e.g., the environment, humanizing work, political freedom) in which even more affluent societies may not always rate the highest. For an individual, income from work or livelihood is a basic capability in itself, as well as a means to acquire other basic capabilities (e.g., access to education or health). Beyond a certain point where fundamental capabilities are secured, however, more income contributes less to well-being. Other achievements may become more important. Similarly, at the country or regional level, increase in income contributes more to human development when the country or region is poor than when it is already affluent.

Because it represents a *bottom line,* human development cannot and need not make hard-and-fast prescriptions about the character of social systems required to raise human well-being. Nothing in the concept of human development presumes that a society which greatly relies on markets and private enterprise will contribute more toward human development than a society which is based on large-scale planning and government intervention. Similarly, there is still an ongoing debate on whether autocratic political regimes (such as those in Singapore and, until recently, South Korea) perform better in terms of human development (e.g., education, health, and incomes) than democratic systems.

The experience and history of other societies have much to say. For example, the final failure of socialist experiments in Eastern Europe in the past decade is a powerful argument for preferring economic activities coordinated through the markets. In the 1970s, the Philippines' poor growth and equity due to the government's large-scale involvement in the economy also led to a consensus regarding benefits to be had from market-led development. The abuse of power that prevailed under the Marcos regime led many people to turn away from one-man rule.

In general, it is more practical for communities and societies to shape their own visions, institutions, and strategies in a way that most effectively contributes to human development. Still, some aspects of human development must be recognized and observed if any social undertaking is to contribute to genuine human development. Among these aspects are:

- A PRIORITY TO ELIMINATE ABSOLUTE POVERTY. Human development applies to all; therefore, the attainment of basic capabilities must be assured for all. Though it may be debated if society should really seek to equalize economic *outcomes*, it is not debatable that society should strive to equalize basic human *opportunities* and *capabilities*. Any inequality that results from differences in effort, talent, creativity, business acumen, and even wealth is not incompatible with human development, but inequality based on the denial of basic capabilities to others is. For this reason, the agenda for human development always includes, as a first step, the elimination of poverty through rising incomes among the poor and provision of basic social services. It should also include the equalization of opportunities between the sexes (Appendix 1.3).

  There are actually two priorities here: the first is providing a framework that will sustain the growth in incomes of the people. The second is making affordable to people the other minimum basic needs that will immediately improve their lot and enable them to participate in the mainstream of the economy.
- SUSTAINABILITY. The expansion of choices and capabilities for the present generation should not be at the expense of future generations. The present generation must set limits to the exploitation of the natural environment, lest it deprive future generations of their own choices. From a human viewpoint, the state of the environment is not part of a *bottom line* measure; after all, if a deteriorating environment is detrimental to human existence, it should ultimately be reflected in poorer health and shorter lives, a lower capacity to learn, and declining incomes.

  Still, from a human development perspective, it makes sense to be concerned with the environment for two reasons. First, a good deal of the damage to human existence caused by environmental degradation is slow-acting and difficult to detect (e.g., the effect of lead pollution on the future intelligence of children). Second, an important amount of damage to the environment is

irreversible or takes a very long time to redress (e.g., regeneration of the rain forest). For these reasons, it is prudent not to wait for the bad effects to manifest; action should be taken to prevent them. This makes monitoring of the state of the environment necessary.

- A GUARANTEE OF POLITICAL RIGHTS AND PARTICIPATION. Political rights and participation are part of human well-being. Therefore, the expansion of choices for and capabilities of a few should not lead to the denial of choices for the many. The rights of others to attain their choices should be observed. There must be an effective system by which people can influence political decisions, especially those that directly affect them.

From these aspects, regardless of the ultimate shape or type of social arrangements, human development should move in the direction of social and economic *equity, participation* and *sustainability.*

The succeeding chapters of this *Report* shall inquire into the reasons for the current state of human development in the different regions of the country along the lines already suggested here. Chapter 2 deals with the state of income, Chapter 3 with the state of human capital, and Chapter 4 with environment. Chapters 5 and 6 deal with political participation and governance.

Appendix 1. 1
ADJUSTING GDP PER CAPITA

The adjusted GDP per capita used in the text is an adjusted figure using the poverty threshold, as suggested in the various editions of the *Human Development Report*. Suppose the per capita income or product of region i is y_i and the national per capita poverty threshold is y^*. Now determine the integer k so that $(k - 1)y^* < y_i < ky^*$. Then the adjusted GDP per capita w_i is obtained according to the formula:

$$w_i = y^* + 2(y_i - y^*)^{1/2} + 3(y_i - 2y^*)^{1/3} + \ldots + (k + 1)(y_i - ky^*)^{1/(k+1)}$$

For example, in 1991 the regional product per capita of Region X was w_{10} = P16,722, while the national poverty threshold per capita was y^* = P7,350. By inspection it can be seen that 16,722 is not more than twice the poverty threshold, that is,

$$(1 \times 7350) < 16{,}722 < (2 \times 7350)$$

Therefore, $k = 2$, and one needs to go further than the second term in the formula such that:

$$w_{10} = 7350 + 2(16{,}722 - 7350)^{1/2} + 3(16{,}722 - 14{,}700)^{1/3} = 7{,}581.55$$

Expression (1) is meant to represent the judgement that the effect of an already high income is to reduce the effect on welfare of further additions to income.

Appendix 1.2
ON STATISTICAL DIFFICULTIES AND FUTURE WORK

The use of regional GDP per capita to represent incomes for the regions is an important shortcoming of the regional HDIs used in this *Report*. While on a national scale, there may be a close relationship between incomes earned and output produced, this may not always be true at the regional level. Fish caught in Palawan may be recorded as output for the region, but the incomes may be earned in Navotas. To that extent, the representation of regional incomes may even be overstated for many poor regions, tending to give a better picture than warranted. And yet, the regional GDP figures are currently the only variables related to income regularly available at the regional level, although some work is underway to gradually provide provincial income accounts. It may also be possible to use income data from the family income and expenditure surveys to better represent regional incomes and, perhaps, also provincial incomes.

The second point has to do with the completeness of the index. It is an implicit and unfortunate assumption of an interregional comparison that the NCR represents the goal other regions ought to emulate. This seems to go against the common belief of those who have lived in the metropolis that it is far from being a model for human development. Part of this owes to the partial and preliminary character of the HDI used. It excludes an important human need for a clean and safe environment. If such a component were included in the HDI, then it is likely that the gap between the NCR and other regions that have managed to better preserve their environment (perhaps earning less income as a consequence) would be significantly narrowed. On the other hand, even the standards set by the metropolis are hardly extravagant. Even the incomes used in the computations were adjusted, so that the preponderance of income at the expense of other important concerns was surely mitigated. The poor performance of other regions relative to such a standard is only a measure of how much more needs to be done.

Two major steps need to be taken further to develop the HDI and make it more useful. First, it would be most helpful to construct an index at the *provincial level.* This is desirable not only to have a closer definition of the problem, but also to have provincial data that would correspond more closely to a definite locus of authority and decision. Public authorities and institutions would, thus, be held more accountable for the results. The second step would be to include finer or more up-to-date information on the dimensions of human development. Malnutrition and morbidity might be finer measures of physical well-being than simple life expectancy. As discussed, the quality of the environment should be included in the measure. This has not been attempted at this time due to the need to further develop other indices and the desire to make regional statistics compatible with those computed at a cross-country level.

Finally, there is concern as to the continuity of the data series used in this *Report.* The timing of the present *Report* is fortunate in that it comes soon after a population census and income and expenditure surveys were conducted. These data series, however, are not always available. Population censuses are a decade apart, while income and expenditure surveys are typically undertaken only every three years. The one scheduled for 1994, in fact, is unlikely to push through for lack of budget.

Appendix 1.3
GENDER-SENSITIVE HDI

The human development index (HDI) becomes even more persuasive and informative when applied to specific groups and particular areas. The discussion in the main text demonstrated how it may be applied to different regions. Here, HDI is further disaggregated according to gender to examine the problem of unequal status between women and men.

It is generally thought that the prominence gained by some women in public life and in private careers indicates the higher status accorded women in the Philippines compared with other countries. The question is whether this is reflected in more objective indicators.

Data on life expectancy (Table A.1) generally confirm observations elsewhere that when confronted with the same conditions, women live longer than men. As a whole and for each region, *life expectancy* among women is higher. Through time, owing to improvements in health, knowledge, better incomes, and provision of health services, one expects an increase in life expectancies across the board. What is striking about gender-specific statistics on life expectancies, however, is not that female life expectancy continues to be higher, but that the differences between women's life expectancies in different regions are much larger than those between men and women. A woman in Manila or Central Luzon may expect to live up to 70 years, but the life of a woman in Central or Western Mindanao may be 14 years shorter. This difference completely overshadows the "advantage" they have over men in the region.

In *schooling achievement*, the data (Table A.2) suggest that provision of universal elementary education has done much to equalize educational achievement among regions and between sexes. Women still receive less schooling than men, but the differences are slight. Through time, the average educational achievement for both sexes has increased, and the gap between them has narrowed.

The same pattern is repeated for *literacy* (Table A.3). This is not surprising, since the same factors that determine schooling determine literacy. In most regions, the differences between male and female literacy rarely exceed one percentage point, and in some cases, the ratio is more than one. In regions where illiteracy among women is substantial (such as Western and Central Mindanao, where female illiteracy is close to 20 percent), illiteracy among men is also highest, and where the gap between male and female literacy is widest.

There are no comprehensive regional data on *earnings* differences between men and women, especially for equal work performed. The data used in Table A.4 are rudimentary ones from the labor force survey taken in 1990. Since they do not standardize for equal work and qualifications, universally lower earnings for women cannot be attributed narrowly to discrimination on the job. A large part will also be due to the *kinds* of work available to women and the typically smaller number of *hours* that they can devote to regular jobs, since they must also work at home without pay. In a fundamental sense, even the latter factors may reflect inequality of opportunities among the sexes.

Appendix Table 1.3.1
LIFE EXPECTANCY, FEMALE AND MALE, 1990

	Region	Female	Male	Female as % of Male
	National Capital Region	70.2	67.1	104.62
I	Ilocos	68.1	64.5	105.58
II	CagayanValley	63.3	59.9	105.68
III	C. Luzon	70.3	66.3	106.03
IV	S.Tagalog	69.3	65.5	105.80
V	Bicol	66.9	61.8	108.25
VI	W. Visayas	67.2	63.3	106.16
VII	C. Visayas	69.1	65.3	105.82
VIII	E. Visayas	63.3	59.9	105.68
IX	W. Mindanao	56.3	53.2	105.82
X	N. Mindanao	59.9	58.4	102.57
XI	S. Mindanao	59.3	56.1	102.57
XII	C. Mindanao	56.3	58.2	105.70
	PHILIPPINES	66.7	63.1	105.70

Appendix Table 1.3.2
MEAN YEARS OF SCHOOLING BY GENDER AND REGION, 1991 (25 years and over)

Region	Female	Male	Female as % of Male
National Capital Region	9.49	9.98	95.09
I Ilocos	7.03	7.47	94.11
II CagayanValley	6.36	6.49	98.00
III C. Luzon	7.12	7.60	93.68
IV S.Tagalog	7.05	7.31	96.44
V Bicol	6.38	6.46	98.76
VI W. Visayas	6.69	6.47	103.40
VII C. Visayas	5.95	6.11	97.38
VIII E. Visayas	5.91	5.59	105.72
IX W. Mindanao	5.18	5.44	95.22
X N. Mindanao	6.86	6.65	103.16
XI S. Mindanao	6.66	6.53	101.99
XII C. Mindanao	5.59	5.98	93.48
PHILIPPINES	6.98	7.13	97.90

Compared to similar data in the past, the figures suggest that the difference in earnings between women and men may have narrowed in the last decade. This is not surprising since an increasing number of women have been joining the labor force in formal sector jobs with better pay. Nonetheless, a large gap remains. Income differentials were largest in Central and Western Mindanao and least in the Ilocos and the NCR, although even in the latter these were less than 60 percent of what men earned. The regions where differentials were greatest were also those that did poorly in the other components of HDI. It is also expected that income differentials are less for the more economically developed regions such as the NCR or Central and Southern Luzon. In the poorer regions, there are less opportunities for women to join the workforce.

Using these sets of data, HDIs may now be computed by gender and by region. The results (Table A.5) should be understood as if males and females had been segregated into different regions and compared relative to the best and the worst. The males in NCR did best, followed by females in NCR. Women in Western Mindanao were at the bottom rung. In some regions (Ilocos, Eastern, Western, and Central Visayas, and Bicol), the women appeared to do somewhat better than men, but this is small comfort since the dominant inequality remains between the richer and the poorer regions.

By dividing the female HDI of a region into its male HDI, a ratio is obtained which, if it exceeds one, implies that women do better than men in that region. This is shown in the last column of Table A.5. The regions where women may be said to fare better than men are the Ilocos, Southern Tagalog, Bicol, and all of the Visayas. It seems particularly difficult to be a woman in Western and Central Mindanao.

When the unadjusted HDIs discussed earlier are adjusted for the ratio of female-male differences, the result is a gender-sensitive regional HDI. (This is obtained by multiplying the unadjusted regional HDIs with the female-male ratios in Table A.5.) The regions

Appendix Table 1.3.3
LITERACY RATE: FEMALE AND MALE, 1991
(10 years and over; in percent)

Region	Female	Male	Female as Ratio of Male
National Capital Region	98.95	99.24	0.9971
I Ilocos	95.04	96.57	0.9842
II Cagayan Valley	91.25	91.36	0.9988
III C. Luzon	97.51	98.10	0.9940
IV S. Tagalog	96.50	97.12	0.9936
V Bicol	95.24	95.38	0.9985
VI W.Visayas	93.38	92.53	1.0092
VII C.Visayas	90.93	91.07	0.9985
VIII E. Visayas	91.00	88.68	1.0262
IX W. Mindanao	80.23	82.38	0.9767
X N. Mindanao	93.35	92.52	1.0090
XI S. Mindanao	91.77	92.01	0.9974
XII C. Mindanao	81.33	84.69	0.9602
PHILIPPINES	93.37	93.70	0.9965

Appendix Table 1.3.4
AVERAGE EARNINGS, FEMALE AND MALE, 1990*
(in pesos)

Region		Female	Male	Female as % of Male
National Capital Region		2,853	5,081	56.15
I	Ilocos	1,062	2,147	59.46
II	Cagayan Valley	1,048	3,263	32.11
III	Central Luzon	1,601	3,424	46.76
IV	S.Tagalog	1,418	3,160	44.87
V	Bicol	879	2,311	38.04
VI	W. Visayas	1,008	2,626	38.38
VII	C Visayas	993	2,374	41.83
VIII	E. Visayas	788	2,037	38.68
IX	W. Mindanao	854	3,642	23.45
X	N. Mindanao	959	2,746	34.92
XI	S. Mindanao	1,245	3,232	38.52
XII	C. Mindanao	805	3,964	20.31
PHILIPPINES		1,317	3,148	41.84

*From the third quarter Labor Force Survey, 1990.

Appendix Table 1.3.5
MALE AND FEMALE HUMAN DEVELOPMENT INDEX
BY REGION, 1991

Region		Female	Male	Female as % of Male
National Capital Region		0.9976	1.0000	0.9976
I	Ilocos	0.5227	0.4879	1.0712
II	Cagayan Valley	0.3472	0.4146	0.8374
III	C. Luzon	0.6857	0.6893	0.9946
IV	S.Tagalog	0.6214	0.6209	1.0007
V	Bicol	0.4384	0.3888	1.1278
VI	W. Visayas	0.4646	0.4355	1.0667
VII	C. Visayas	0.4564	0.4281	1.0661
VIII	E. Visayas	0.2841	0.2199	1.2918
IX	W .Mindanao	0.0106	0.1758	0.0606
X	N. Mindanao	0.2898	0.3387	0.8555
XI	S. Mindanao	0.3007	0.3273	0.9186
XII	C. Mindanao	0.0290	0.3727	0.0779

Appendix Table 1.3.6
GENDER-SENSITIVE HUMAN DEVELOPMENT INDEX
BY REGION, 1980 and 1991

Region		Unadjusted HDI	Rank	Gender Sensitive HDI	Rank
National Capital Region		1.0000	1	0.9976	1
I	Ilocos	0.5228	4	0.5600	4
II	Cagayan Valley	0.3202	10	0.2681	11
III	C. Luzon	0.6531	2	0.6496	2
IV	S Tagalog	0.6431	3	0.6436	3
V	Bicol	0.3923	7	0.4424	7
VI	W. Visayas	0.4825	6	0.5147	6
VII	C. Visayas	0.5146	5	0.5486	5
VIII	E. Visayas	0.2794	11	0.3609	8
IX	W. Mindanao	0.0358	13	0.0022	13
X	N. Mindanao	0.3613	8	0.3091	9
XI	S. Mindanao	0.3367	9	0.3093	10
XII	C. Mindanao	0.0963	12	0.0075	12

where the female-male ratios are less than one (or less than 100 percent) will see their HDIs adjusted downwards. The results of this exercise are shown in Table A.6 and Figure A.1. The rankings after this adjustment do not change substantially, except for the improvement in the rating for Eastern Visayas. The already low ratings for Western and Central Mindanao and Cagayan Valley are accentuated.

Appendix Figure 1.3.1
UNADJUSTED AND GENDER-SENSITIVE HUMAN DEVELOPMENT INDICES BY REGION, 1991