Mr. Minister, Ladies and Gentlemen. First, let me thank the Minister for the invitation to give this public lecture as a part of the activities of Health Promotion Week. I recall very vividly the conference held here in Port of Spain in 1992 when the Caribbean Charter on Health was drafted as a result of a very broad consensus among a wide range of Caribbean stakeholders. That Charter outlined six main strategies for its implementation and the first was "formulating healthy public policy." I would place this lecture within the context of a contribution to the definition of a healthy public policy.

At a very abstract level, a healthy public policy might involve any action by the policy-makers—usually the constitutional government that would benefit the wellbeing of citizens. Thus, there must be a healthy public policy that affects, for example, transportation, education, agriculture, mining, and every sector that has any impact on our lives. But the accepted limits—and I acknowledge that these limits have been set by those concerned with health—have been in relation to the health of people. We address those policies that are beneficial as far as the health of people is concerned. Let me make a distinction very early. Healthy public policy is not the same as good health care policy.

I believe and I hope I will show that it is important for those concerned with the development of a society to pay particular attention to the health of its citizens. I hope, also that you will agree with me that public debate about these issues is important for generating the kind of interest that will affect policy.

Why have I called this Health and Development Revisited? It is because I wish to review with you the changes that have taken place in my own thinking about development, as well as the advances in concepts and empirical research that have taken place since I addressed this issue in 1989 in the Eric Williams Memorial Lecture. When I spoke to you eleven years ago, we were just coming to the end of one of the world's very severe economic issues. There were fears of collapse of the international financial system and there was widespread discomfiture with the posture of the major multilateral financial institutions. There was a feeling that the emphasis was on the preservation of the system and less attention was being given to the effect of the crisis on

* Pan American Health Organization, Pan American Sanitary Bureau, Regional Office for the Americas of the World Health Organization.

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the lives of ordinary people. Many of us felt that the financial institutions were imposing draconian measures to restore international financial stability with the result that the social infrastructure of the countries suffered. Every country in the Caribbean had undergone, to a lesser or greater degree, some form of structural adjustment and suffered the pains it produced. It was popular to call the eighties the lost decade in the sense that during that period, the Region as a whole had retrogressed in almost every area to the situation that had obtained at the end of the seventies.

But even then, I was cautiously optimistic and was pleased to note, that in spite of the difficult times they were facing, the Caribbean governments appeared to be protective of expenditure in the health sector. I related mainly to the Caribbean situation and drew most of my references from our own experience. I referred to Dr. Eric Williams' felicitous characterization of development as the face of man tribute. But over the last eleven years there has been more clarity about what does constitute development, and a better conceptualization of the features of that face to which Dr. Williams referred. Tonight, I will draw on the experience I have gained in the wider Americas, but first I will describe the situation of health in the Caribbean, relating it to that of the Americas, then I will argue the case for considering that health is of critical importance for human development. If I had to note the major difference with my lecture of eleven years ago, it would be that I am now on firmer ground in articulating a broader and more exciting concept of what is meant by human development and the place of health. I am now more cautious about using the term "development" loosely, and I try always to qualify it.

My data on health come exclusively from those produced by the countries of the Americas and which are analyzed and collated by the Pan American Health Organization. I will use the traditional indicators of mortality and morbidity with the full realization that it might be better to have some finer measures of health. This is a problem that bedevils all who work in the social sector—to find good indicators. Let me outline some of the approaches that have been taken to find such indicators of the healthy state that are more often valued in their absence than enjoyed positively when they are present.

First, we can elucidate the general perception of the individual as to the state of his or her health. These self-evaluations are very much a reflection of life experience and cultural reality, as well as depending on the form and means of communication. Good or poor health does not have the same meaning to all people as every physician knows. However, it is true that self-evaluation of health status corresponds well with subsequent mortality or morbidity. It is also probable that those persons who are less well informed about health, and perhaps for reasons of income have less contact with the health services, are more likely to report themselves in better health.

Health status can also be adduced through anthropometric measures since indicators such as height or body mass index give some idea of previous nutritional status. Self-reporting of illness or difficulties in functioning has also been used as a measure of health status. I regret that there is no systematic collection of these metrics for the Caribbean countries, and even basic nutritional and anthropometric data are gathered infrequently. I will therefore, rely for comparison, on the traditional indicators of morbidity and mortality against a demographic background.
There is no doubt that the overall population health status of the Caribbean has improved steadily and continues to improve. Our total population is increasing, but the annual population growth rate has slowed considerably in recent years. The crude birth rate of about 20 per thousand population is 20% lower than it was 15 years ago, and the fertility rate has fallen over the same time period by 28% to 2.3 children per woman. The crude death rate is also falling. There has been a constant and impressive increase in life expectancy at birth, which has risen to 72.6 years—about five percent higher than it was 15 years ago. This is resulting in a change in our population profile. While the population over the age of sixty years was about 4.3% of the total population fifty years ago, that figure has now doubled. There has been a steady reduction in the numbers in the younger age group as fertility falls, thus, we can predict a steadily aging population with an increase in the dependency rates—that is the ratio of the elderly to the young. This change is most noticeable in Barbados where about 14 percent of the population is now over the age of 60 years. These demographic factors mean that the Caribbean as a whole will be facing increasing demands for care services to address the needs of an aging population.

Infant mortality rate, which is a crude reflection of the efficiency of the public health services, is also falling steadily in every country. Whereas 32 children of every 1,000 live births died before their first birthday fifteen years ago, this figure is now 22. The childhood killers, such as measles and malnutrition are no longer the major threat that they once were. The Caribbean was the first subregion to eliminate measles and the widespread campaign to "make measles history" was famously successful. I was particularly gratified to note an interesting vignette in an article I wrote some time ago entitled, "of measles and men." I noted that it was fitting that the call to eliminate measles from the Caribbean and the Western Hemisphere came from the Minister of Health of the Bahamas—the very place where the old world tourists first landed, bringing with them their guns, their horses and a wide array of diseases new to the native people.

The Caribbean countries have also committed themselves to eliminate German measles, which is far from an innocuous disease. However, no mention of infectious diseases can omit AIDS. The Caribbean is the region with the highest prevalence rate after Africa and the disease epidemic shows no signs of abatement.

It is perhaps invidious to make comparisons, but it is noteworthy that the Caribbean countries have better health statistics than the Americas as a whole, and certainly better than those for the Latin American countries taken as a group. There is obviously no simple explanation for this fact, and one can propose the level of education and income as causes, but I have argued elsewhere that in spite of the relatively high costs of infrastructure, small island states do better than their continental counterparts. Jeffrey Sachs postulates that having a sea coast or a major waterway is an important factor in the health and economic development of countries. Whereas tropical countries do less well economically than temperate ones, the tropical countries with access to major water communication do better than the others.

By all measures of population health the Caribbean countries appear to do well, and in spite of the economic ups and downs, show constant improvement in the standard indicators. I do not wish to be a Cassandra, but a worrying phenomenon is appearing, at least in some
countries of Latin America. It seems that there is a small, but definite loss of life expectancy as a result of an increase in adult mortality, which is mainly due to violence and accidents. We have not noticed this yet in the Caribbean, but we should look for it. Overall, the picture is satisfactory. Yet when I visit countries or read of the wars and rumors of wars as applied figuratively to the health sector, there seems to be a measure of disaffection and disgruntlement that is not in keeping with the data I have just described. It is important to emphasize that there is no real incongruence between the two. First, population data are not necessarily a good reference point for how individuals feel about the capacity of the health system to respond to their individual demands. While the state of good health may not cause much reflection or introspection by the individual, the advent of any untoward symptom usually calls for an immediate response. It is a universal truth that it is the nature and rapidity of response to perceived illness that colors the public perception of the quality of the health services, and less to their resolutive capacity.

In addition, the locus of attention to symptoms is changing. Whereas some decades ago some seventy to eighty percent of episodes of disease were treated in the home, and no more than 10 to 15% entered the formal care system, the situation is changing. The omnipresence of information about what can be done and the vigorous, although often unconscious, propaganda by the health industrial complex, seeks to increase the number of episodes that should be treated in the formal care system. In addition, knowledge of the technology power of makes every citizen wish to have access to that technology. Because of the finiteness of human life and the growth of the notion of the magical technological imperative, citizens demand every possible intervention to extend life. The idea is abroad that death represents some kind of failure. I shall return to this point later in relation to human development.

And now to fit these perspectives about health within the context of human development. When I spoke here eleven years ago, I related health primarily to the economic aspect of development, and like most others, saw the acquisition of wealth as the most prominent of the features of man's face. Since then, and thanks to the pioneering genius of Mahbub Ul Haq, we have begun to define the other features much better. He sought to capture in what Amartya Sen calls a vulgar measure, the essential requisites for human beings to be able to enlarge their choices and expand their capabilities. This measure is the famous Human Development Index which was seen as an indicator that incorporated these essential capabilities, that at the most basic level, are to lead long healthy lives, to have the means to acquire knowledge, and to have access to the economic resources for a decent standard of living. There was no illusion about his wish to establish some alternative to GNP as a measure of national development.

This concept of human development has, if anything, gained more moral and practical force over the last ten years, and the notion of development agencies or development specialists being concerned only with economics is passé or at least passing. Others have tried to refine Mahbub Ul Haq's concepts, but the core remains the same. The Nobel Prize winner, Amartya Sen, who helped Ul Haq to create the Human Development Index, has defined development in terms of expanding a set of freedoms. Freedom itself is a liberating state. As he says:

The effectiveness of freedom as an instrument lies in the fact that different kinds of freedoms interrelate with one another, and freedom of one type may greatly keep in advancing freedom of other types.
The freedoms are important in and of themselves, but they also are supportive one to another. Sen gives a brilliant analysis of the various types of freedoms, but I see a close relationship between them and the core elements of human development proposed ten years ago.

I will use my own interpretation of these choices or freedoms and posit that they are essentially health, education, economic growth, a safe and healthy environment, and a set of people freedoms similar to civil rights described by Lord Bryce. These rights were related to personal property, freedom of worship, and the all important political rights. Health has its own intrinsic importance and each one of us values it and relates well to its original derivation. The Anglo-Saxon word "hal," from which health is derived, means to be whole and complete. But in addition, we must advocate that this state of ours at the individual level and the state of health at the population level, are important for society if it is to exercise other options, such as economic growth and the access to the means of acquiring knowledge.

That individual health is important for productivity is intuitively obvious. Provided that productivity is related to some physical or mental output, then the unhealthy state must cause a reduction of such output and there are numerous microeconomic studies that point to this fact. The treatment of anemia leading to increased work, as was shown seventy years ago by Giglioli in Guyana, the impact of disease such as malaria on reducing income and days of illness causing a fall in output and income, all serve to make the point. Heights of individuals which presumably reflects their past nutritional status is closely correlated with their incomes, and this finding holds both in developed as well as developing countries with the effect being considerably sharper in the developing countries.

But perhaps the most important new finding is at the macroeconomic level. There is the clear demonstration that if one takes life expectancy as a measure of the extent to which society invests in population health, then there is a clear causal relationship between such investment and a country's future economic growth. There are now good empirical data to substantiate the claims made 40 years ago that expenditure in health, is an investment. Another crucial finding is that there is a lag period of about 10-15 years between the investment in health as reflected in the change in life expectancy, and the impact on economic performance. There is no doubt that the wealth of nations may be created in part by the health of nations.

It is also interesting to note that there is a stronger causal relationship between health and economic growth than in the reverse direction. Of course, the impact of poverty on health has been known for years, if not centuries, and the ill health of the poor has been the spark for many social reform movements. I must add here that it is questionable to group the poor, as is usually done, purely by income levels. It is better to regard poverty as representing a deficiency or lack of one or more capabilities, of which income is only one. There are several examples of widely varying health status among populations with similar low incomes, and superior health status in populations that were economically poorer than the comparison group. Afro-Americans have higher incomes than peasants in Kerala, India, but some of the health indicators are worse. Infant mortality rate in Washington, D.C. is higher than in Trinidad and Tobago.

It is not only absolute income that is an important determinant of the health of populations, but income inequality within countries and between countries is also associated with
poor health, and this is found at all levels of income. Thus it is not only the fact that one is poor, but that one's income in relation to others in society, impacts on health.

While the causal relationship between health and economic wellbeing has now been firmly established, there is less certainty about the mechanisms by which this causation is effected. At the personal micro level it is relatively easy to accept that the healthier individual or population has higher labor productivity. Let me note, that at the personal level it is customary to measure the effect of a reduction of physical capacity caused by ill health on the individual's ability to earn. It is less customary to estimate the economic benefit of restoration of the healthy state. The economic benefit of the reinsertion of an individual into society where he or she can be a contributor rather than a consumer is rarely measured. This is one of the reasons why the economic benefits of personal care medicine are usually ignored.

More recently it has been argued that a healthier population that lives longer has a greater propensity, to save, and the increase in natural savings is one of the mechanisms by which countries, economies grow.

Another attractive hypothesis relates to the effect of population changes and what has been called the demographic dividend. This has been suggested as a major contributor to the economic miracles that occurred in Asia. As mortality rates fall, fertility falls as well. The fall in mortality is most marked among the most vulnerable groups such as young children so we have first an increase of young dependents and subsequently of persons of working age. Thus productivity of society increases as this wave passes through the productive years. Of course, as they age and the dependency rate increases, the returns of this demographic dividend become less and less. The Caribbean countries are coming to the end of the transition, but it is doubtful that they benefitted optimally from this dividend because the rates of unemployment have been so chronically high. I recall participating seven years ago in a study on "Building National Consensus on Social Policy" in this country in which the overwhelming concern was the high levels of unemployment. The country would not have been able at that time to benefit optimally from improvement in population health.

Even when the data are shown, many persons have difficulty in accepting the argument that policy-makers should consider the economic returns from investing in individual and population health. Part of the reluctance stems from an unwillingness to move beyond the "consumption value" of health as Paul Schultz puts it. There seems to be something almost sacred about health, perhaps derived from our religious convictions and the notion that health is a God-given capability that has its own intrinsic value. There is reluctance to consider the economic value of health. Conversely, financial planners who understand the language of returns on investment are only now getting the kind of data which allow a judgment on the economic benefits of health. Finance planners listen when we cite studies, such as one which showed that an increase in life expectancy of about two and a half years over a 5-year period, contributed to income growth of about 2% per year. Part of the problem also lies with the health sector itself and the difficulty in establishing good measures of health particularly at the individual level. Self-perception is not the kind of variable that lends itself easily to statistical analysis.
Education is another one of the needs for human development. Education, in terms of formal inculcation of information, is a proxy for the knowledge that comes from internalization of information. It is knowledge that is highly individual and that gives us the capacity to extend our options. The relationship of health to education is clear both in the sense that even, or especially at an early age, health, or lack thereof, affects the ability to learn. I do not have to elaborate here in the Caribbean on the effect of early malnutrition on the further development of physical and cognitive capability, as well as social functioning. The effect on social functioning may persist into adulthood and relate to the ability to establish and maintain good social relations. Attention is being paid increasingly to this ability to maintain social cohesion in a society, and the concept of social capital is being developed as a quantity which, although difficult to measure at present, may, like physical and human capital, be important ingredients for economic growth.

The relation between health and the physical environment has been known for ages. The micro-environment is the one which occupies most attention the presence of diarrheal diseases in children, and the occurrence of subtle lead poisoning in some of the major cities of the Americas, are still living proof of the lack of basic sanitation and the presence of atmospheric pollution that impair health. It is less clear that an unhealthy population as measured by the usual indicators is more or less likely to despoil the environment. Rather than the health of the population, it is more the knowledge of the presence of disease and the health of the environment itself, that has economic implications.

The relation between health and the people freedoms I have mentioned above are more difficult to quantify. I have argued that the health of the population as well as the health inequalities within the population, are likely to affect national domestic security and thereby reduce or delimit the opportunity for individuals to enjoy the other essential freedoms.

If I can summarize the argument, so far, health at the individual and the population level enhances economic growth. It is complementary to education that also contributes to economic growth by itself. Conversely, wealth makes for better health although it is not only absolute wealth, but relative wealth, that is important for health. All three are interrelated and together make for the enlarging of options that is the essence of human development. A similar case can be made for the other features of that face of man, such as the environment and people freedoms. They all interact and complement one another. Healthy public policy must address how they are all provided.

When I look at the Americas as a whole, I have reason to be optimistic. The health situation is improving, there is every indication that the fears of economic melt down in Latin America and the Caribbean as a result of contagion from the Asian crisis did not materialize. It would seem that all the major economies are growing and there is more capital investment and less inflow of the highly volatile capital that makes for financial fragility. But there are a few storm clouds that must be a cause of worry. The first is the extent to which globalization will work to the benefit of the great mass of our people, or whether it will perpetuate and worsen the economic inequality that will affect our health negatively. Globalization is a highly complex phenomenon, but I like to think of it as essentially driven by information flows and epitomized by the local effects of events that take place distantly.
The rapid flow of information has created global markets that know no national boundaries. In these global markets money is traded almost as a commodity itself and not as a facilitator of exchange. The dominant form of social organization is market capitalism that is efficient, no doubt, in satisfying the needs of the few for accumulation of wealth, but is impotent for distribution to fulfill the social needs of the many. These inequalities lead to ill health.

We sometimes think we have discovered some new truth in agonizing over this feature of markets. In 1776 The Economist wrote a brilliant critique of Adam Smith's famous Inquiry Into the Nature and Causes of the Wealth of Nations. It said inter alia:

"Wealth of Nations" shows how self-interest tamed by sympathy and constrained by economic rivalry leads to a widespread prosperity that Mr. Smith calls "universal opulence." Mr. Smith, with a skill that justifies his reputation a master rhetorician, next argues that what is true for individuals is equally true for nations.

But it goes on to cite an aspect that we often forget.

In fact Mr. Smith envisages a wide and expanding range of government expenditures. All are motivated either by specific failures of the market to meet society's needs, or else by the spirit of economic equality that infuses his work.

It is this balance of market and government that we are still trying to get right.

Let me now turn more specifically to Trinidad and Tobago where the indicators of population health have improved and continue to improve, and where for some time you have been engaged in a process of health services reform. However, I am sure I will hear here the same concerns about the difficulties in ensuring that there is good access to personal care services and that government expenditure on health both in absolute terms and in terms of percentage of GDP, should increase. The last datum I obtained was for 1994 and showed health expenditure as 3.4% of GDP as opposed to the Caribbean average of 5.4%. I was also intrigued to note several data from your Ministry of Planning and Development. For every year since 1995 the expenditure in health has been considerably below the budgeted amount, which I must note has been increasing over the past two years.

But the good news seems to be that the economic situation has been good for the past six years and the prospects are getting better. Official data show that your GDP is growing at a handsome rate—5.7% in the first nine months of 1999, and the unemployment rate is now 11.7%—the lowest level in almost 20 years.

It is here that I would invite you to think of the health of the public policy that you will undoubtedly adopt as you seek to spend more of the new wealth to improve health. You will do this not only for moral reasons, but because you think that it is good for future economic growth and the human development of your citizens. The cry will be to correct the deficiencies in the personal care system, and the advocates of that approach will point out that your expenditure on health is below the Caribbean and American average. In the budget presentation, the Prime
Minister said, "it is not possible to attain true human development if we do not have access to quality health care."

I am sure that there will be advocates for employing one or another new managerial tool for increasing the efficiency of the system so that it can respond more efficiently and effectively to the health needs of the citizens for that quality health care. There will be no lack of voices to persuade the political decision-makers of the need for more personal care services, and there will be the practical politics of meeting the expressed or divined needs of the citizens. In this quest for the holy grail of the system that will ensure the health of all and satisfy that face of human development, I would invite you to consider some of the evidence related to investing in health as seen only through the lens of providing personal care services and making a perfunctory nod towards health promotion and disease prevention. No country in the world has satisfied and no country will ever be able to satisfy the demands of its citizens for personal health care services. In the USA the expenditure on health approaches 15% of GDP and there is still dissatisfaction with much of the care and the large numbers of citizens without any care.

All I ask is that the public be invited to take stock of what will produce better health for all citizens and not necessarily better health care for all citizens. There is almost no limit to the so called "better health care" as rich countries like the USA have found out. I am fond of quoting a distinguished ethicist, Daniel Cohen, who agonized over the ever spiraling costs of American health care. He wrote:

> Medical progress has meant the near banishment of fatalism. Given enough time, money, scientific research and clinical ingenuity—it is widely believed—no disease, no disability, no stressful psychological state is beyond cure or amelioration. Our aspirations and hopes are at first made credible by medical progress; then as they move closer to realization, they come to have the status, and the insistence, ordinarily accorded to need. This is the transformation of desire or aspiration into putative need.

This is what I would ask you to guard against as you spend your new wealth in improving the health of your citizens. There must be some societal engagement in establishing what are the real needs. We know well what are the determinants of that health that are so important for human development. We know that it is the physical and social environment and behavior that contribute most to the health of people, important though the care services may be for humanitarian as well as political reasons. I hope that the new wealth will address some of those determinants as well as the care services.

And it is in this context that I wish to refer to the problem of AIDS that I mentioned before. There is no doubt about the nature of human suffering caused by this disease and also the difficulty our governments have in purchasing the kinds of medication that have so successfully reduced mortality in North America. There must be an aggressive approach to prevention of the disease. Karl Theodore estimates that if the current epidemic remains unchecked, in five years, Trinidad and Tobago will face a minimum loss of GDP equivalent to 6.4% per year, which translates into a figure of about TT$1.6 billion or just what is being spent on health from all sources right now. This is a remarkable and frightening statistic. Thus, there is urgency in seeing that the health promotion activities you carry out this week take account of
the kind of investment you must make, starting from the practices you promote that will stop the epidemic. It is here that we need, and need now, a strong visible hand of government.

Mr. Minister, I hope I have outlined to your satisfaction the main interrelationships between health and human development. I hope I have provoked some thinking about what direction your public policy might take in health as you benefit from an economic situation that may or may not have been derived in part from the good health of your citizens. What is sure is that if it does not result in the enhancement of the human capital and stimulate the development of essential freedoms, it will not be sustainable. But perhaps these are things that you know already and as Khalil Gibran has the prophet say,

You would know in words that which you have always known in thought.

And

No man can reveal to you aught but that which already lies half-asleep in the dawning of your knowledge.

I hope that health and human development are now fully awake in your knowledge and will stimulate you not only to debate, but also to advocate for the healthy public policy that is an essential strategy of health promotion.