II SUSTAINABLE DEVELOPMENT – AN ASIAN PERSPECTIVE

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Sustainable development is a multidimensional concept

If one is writing a paper on sustainable development, one should begin by trying to understand what the expression "sustainable development" means. Unfortunately, this is an expression that is impossible to pin down. The Brundtland report[2] tells us that there are more than 60 possible definitions of sustainable development. Of these, the preferred one defines it as "satisfying present needs without compromising the ability of future generations to meet their own needs". This is not a very satisfactory definition. Present needs can reasonably be defined and quantified but future needs are impossible to anticipate. Anticipation of the ability of future generations to meet these needs is even more difficult.

History is replete with examples of "bad predictions". There is even a book on the subject.[3] The list include the prediction of Thomas Watson, Chairman of IBM in 1943 that there would be a world market "for about five computers", noted surgeon Alfred Velpeau's 1839 dismissal of anesthesia with the words, "Knife and pain are two words in surgery that must forever be associated", and the *New York Times* argument in 1939 that "The problem with television is that the people must sit and keep their eyes glued to a screen: the average American family hasn't time for it." According to such predictions, in the year 2000, mail would be delivered by pneumatic tube and there would be disposable clothing and robot armies. Among the most bizarre of the predictions was that in the *Ladies Home Journal*, which proclaimed that by 2000, the letters "C", "X" and "Q" would disappear from the alphabet.

Technological advances can ease resource constraints in several ways …

None of this has happened. While the above is in the realm of bad predictions in general, predictions have been just as bad in the unsustainable development category. The classic example, of course, is the bleak Malthusian prediction of population growing geometrically and food production increasing arithmetically. In a superficial sense, a population graph tends to fit the Malthusian prognosis. However, there are caveats. First, population growth resulted from drops in infant mortality and increases in life expectancy, both associated with improvements in the quality of life

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[2] World Commission on Environment and Development, *Our Common Future* (Oxford, Oxford University Press, 1987).

[3] Laura Lee, *Bad Predictions* (Rochester, MI, Elsewhere Press, 2000).

rather than misery and death.[4] Second, the long-term decline in fertility and its inverse correlation with income increases was also unanticipated. For instance, the average annual rate of world population growth is expected to slow from 1.6 per cent during the period 1975-1999 to 1.2 per cent in 1999-2015[5] and, while the world's population is increasing, it will probably stabilize at around 11 billion beyond 2010. Perhaps more important, having failed to anticipate advancements in technology, especially agricultural technology, Malthus was wrong about the increase in food production being unable to keep pace. Agricultural productivity has increased, not only in developed countries but also in developing ones. Between 1979-1981 and 1996-1998, the food production index went up by 74 per cent in low-income countries and by 100 per cent in middle-income countries.[6] Across different geographical regions, the increase was the lowest in Latin America and the Caribbean and in sub-Saharan Africa. But even there, the increase in the index was over 50 per cent.

… while resource scarcity is often a relative matter

Perhaps the most articulate exposition of the modern-day Malthusian idea was made in the early 1970s by Paul Ehrlich and associates.[7] The Club of Rome document followed.[8] There was the spectre of famines with hundreds of millions of people starving to death and mankind breeding itself into oblivion. Nothing of the sort has happened and the dramatic negation of the Malthusian nightmare was in the famous bet between Ehrlich and Simon.[9] In less dramatic terms, the economic counter-arguments can also be found in Julian Simon.[10] First, natural resources, even supposedly non-renewable ones, are not a constraint because a supply shortage leads to higher prices and substitution by alternative sources. Second, innovation and new technology continuously lead to the discovery of new reserves. Third, technology leads to cost reductions in exploiting resources and efficiency in use. Fourth, diminishing returns do not set in because land, labour, capital and technology encounter supply-side shifts. Fifth, population is itself an asset and an increase in population spurs invention and a search for new technologies.

It is curious how expectations about environmental degradation are often exaggerated. Some 50,000 horses were used in London's transport

[4] See Mark Skousen, *The Making of Modern Economics: The Lives and Ideas of the Great Thinkers* (Armonk, NY, M.E. Sharpe, 2001).

[5] UNDP, *Human Development Report 2001* (New York, Oxford University Press, 2001).

[6] World Bank, *World Development Report 2000/2001: Attacking Poverty* (New York, Oxford University Press, 2001).

[7] Paul R. Ehrlich, *The Population Bomb* (New York, Sierra Club, 1968).

[8] Dennis and Donella Meadows, eds., *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (New York, Universe Books, 1972).

[9] There was a US$ 1,000 bet that prices of five key commodities would be lower in 10 years. Julian Simon won his bet, but had no takers for his subsequent bet on the prices of any other resources.

[10] Julian Simon, ed., *The State of Humanity* (Cambridge, Mass., Blackwell Publishers, 1995) and Julian Simon, *The Ultimate Resource 2* (Princeton, NJ, Princeton University Press, 1996).

system in 1900 and 1,000 tons of dung were produced every day. The most important issue then was what could possibly be done with this mammoth quantity of dung and whether London would be buried under heaps of it.[11] The eventual replacement of horses was completely unanticipated.

Economic growth and environmental preservation are not necessarily mutually exclusive

Stated differently, the doomsday argument can be separated into four interrelated strands.[12] First, natural resources are becoming exhausted. Second, population is increasing, which will eventually lead to a food shortage. Third, species (flora and fauna) are becoming extinct. Fourth, air and water are becoming polluted. Having commented on the first two, one need only add that fears about the third and fourth arguments are greatly exaggerated.[13] More significantly, economic growth does not cause environmental degradation. Instead, growth frees resources that can be used to further the cause of environmental protection. Not that Lomborg has not been criticized: the Union of Concerned Scientists offers the following critique by experts: These separately written expert reviews unequivocally demonstrate that on closer inspection, Lomborg's book is seriously flawed and fails to meet basic standards of credible scientific analysis. The authors note how Lomborg consistently misuses, misrepresents or misinterprets data to greatly underestimate rates of species extinction, ignore evidence that billions of people lack access to clean water and sanitation, and minimize the extent and impacts of global warming due to the burning of fossil fuels and other human-caused emissions of heat-trapping gases.[14] Fair enough. Clean water and sanitation are important. The Millennium Development Goals adopted by the General Assembly in 2000, which follow, are important.[15]

An exploration of the Millennium Development Goals

Under Goal 1, the first target is to halve, between 1990 and 2015, the proportion of people whose income is less than US$ 1 a day. This is a measurable and tangible target and, other than the proportion of the population below the threshold of US$ 1 a day, the poverty gap ratio and the share of the poorest quintile in national consumption are other possible indicators. A further target is to halve, between 1990 and 2015, the proportion of people who suffer from hunger, measured as the prevalence of underweight children or the proportion of the population below minimum levels of dietary energy consumption.

[11] Gavin Weightman and Steve Humphries, *The Making of Modern London 1815-1914 (*London, Sidgwick and Jackson, 1984).

[12] See Bjorn Lomborg, "The truth about the environment", *The Economist*, 2 August 2001.

[13] The arguments are developed further in Bjorn Lomborg, *The Skeptical Environmentalist: Measuring the Real State of the World* (Cambridge, Cambridge University Press, 2001). This book also demolishes several popular environmental myths.

[14] < http://www.ucsusa.org/environment/lomborg.html > .

[15] See IMF, OECD, United Nations and World Bank, *A Better World for All: Progress towards the International Development Goals* (Washington, 2000).

Under Goal 2, the target is to ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. Among the possible indicators are the net enrolment ratio in primary education, the proportion of pupils starting grade 1 who reach grade 5 and the literacy rate of 15- to 24-year-olds.

Under Goal 3, the target is to eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels of education no later than 2015. The indicators that can be used are the ratio of girls to boys in primary, secondary and tertiary education, and of literate females to males among 15- to 24-year-olds, the share of women in wage employment in the non-agricultural sector and the proportion of seats held by women in the national parliament.

Under Goal 4, the target is to reduce by two thirds, between 1990 and 2015, the under-5 mortality rate. Obvious indicators include the under-5 mortality rate, the infant mortality rate and the proportion of 1-year-old children immunized against measles.

Under Goal 5, the target is to reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio. Possible indicators are the maternal mortality ratio and the proportion of births attended by skilled health personnel.

The first target under Goal 6 is to have halted by 2015 and begun to reverse the spread of HIV/AIDS, measured by HIV prevalence among 15- to 24-year-old pregnant women, the contraceptive prevalence rate and the number of children orphaned by HIV/AIDS. The second target is to have halted by 2015 and begun to reverse the incidence of malaria and other major diseases, measured by prevalence and death rates associated with malaria, the proportion of the population in malaria-risk areas using effective malaria prevention and treatment measures, the prevalence and death rates associated with tuberculosis and the proportion of tuberculosis cases detected and cured.

Social achievements are predicated on sustained economic growth, which, in turn, depends on several other preconditions

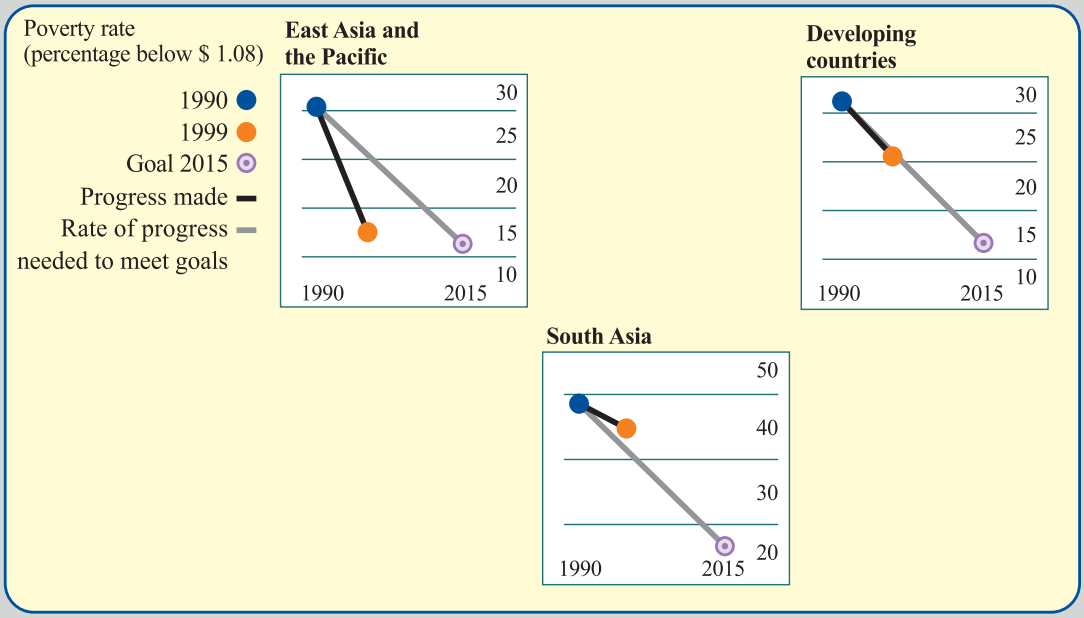
Asia's track record in human development indicators is spectacular, but this is more valid for East Asia than for South Asia. This is evident from the six figures that follow, one for each of the first six goals.[16]

What are the prerequisites for attaining, or moving towards attaining, these goals? An obvious requirement is growth. Without growth, no poverty reduction is possible.[17] In the presence of misgovernance, or gross

[16] Reproduced from < http://www.developmentgoals.org > .

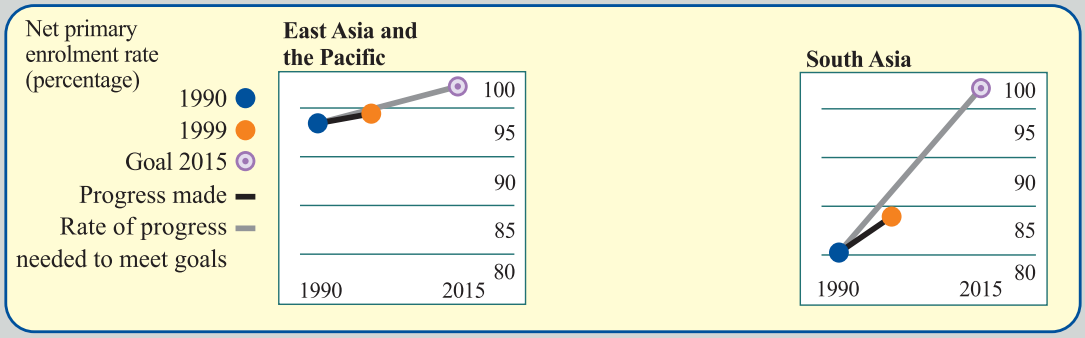
[17] The correlation between growth and poverty reduction has been documented for many countries, in a cross-country as well as time series sense. In the 1980s and 1990s, the most obvious examples are China, Viet Nam and India. Because income distribution typically tends to be log normal, income increases are often associated with sharp drops in poverty from around 30 per cent of the population to around 15 per cent. Thereafter, poverty reduction becomes more difficult.

Figure I. Poverty ratios



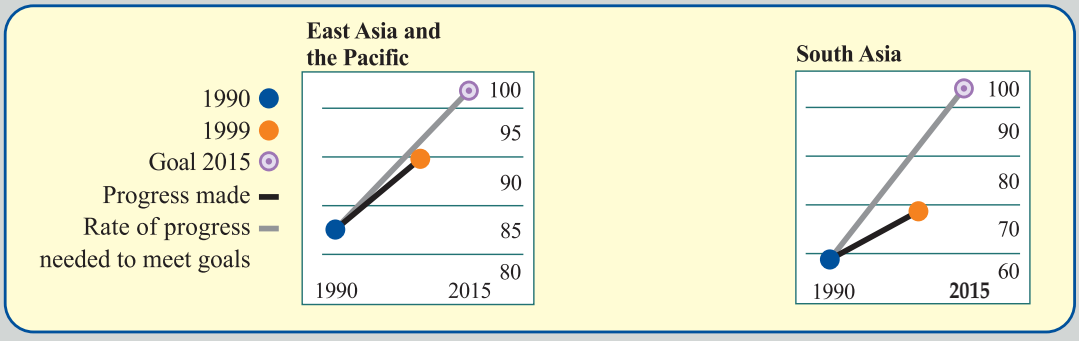
Source: < http://www.developmentgoals.org >.

Figure II. Indicators of education



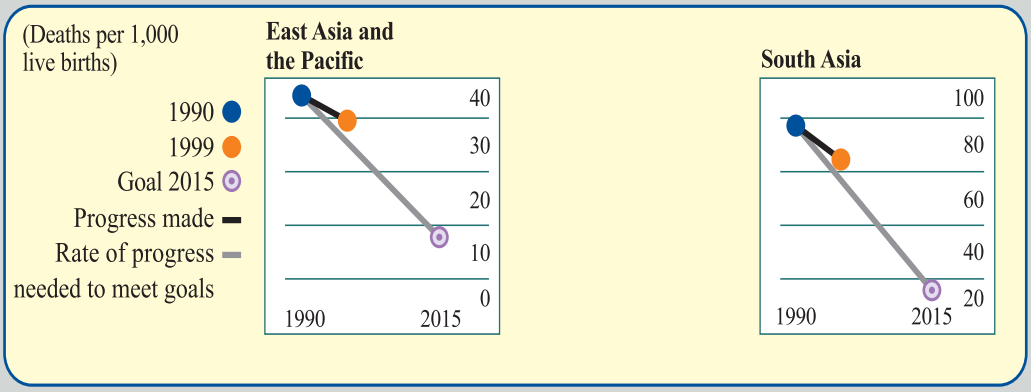
Source: < http://www.developmentgoals.org >.

Figure III. Ratio of girls to boys in primary and secondary school (percentage)



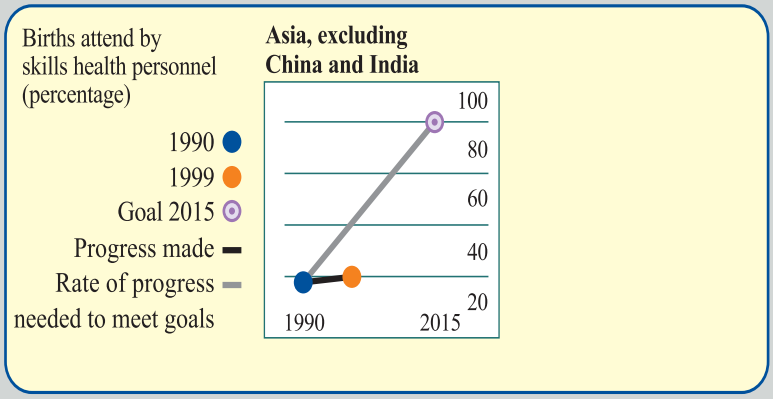
Source: < http://www.developmentgoals.org >.

Figure IV. Infant mortality rates



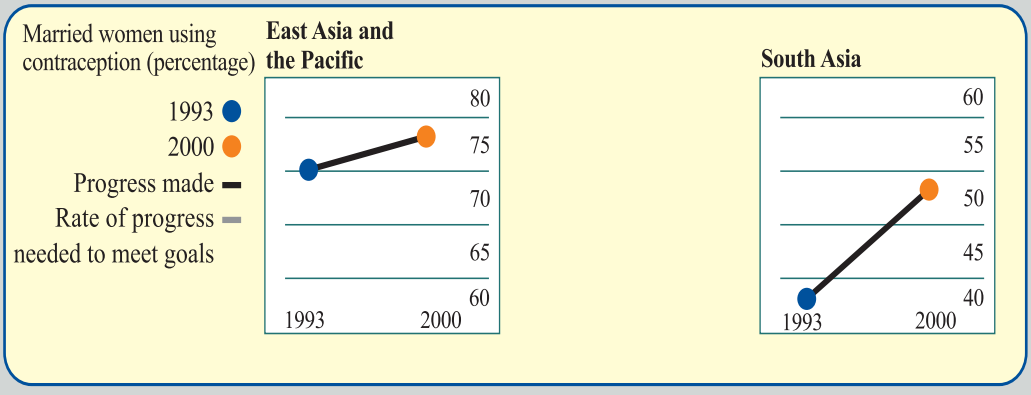
Source: < http://www.developmentgoals.org >.

Figure V. Maternal mortality indicators



Source: < http://www.developmentgoals.org >.

Figure VI. Indicators for HIV/AIDS



Source: < http://www.developmentgoals.org >.

inequalities in income distribution, growth alone may not be sufficient to improve health or educational outcomes or to help to reduce gender biases in such outcomes. Typically, social sector delivery has been through public sector monopolies.[18] Not only are such delivery systems not accountable to users, by virtue of being monopolies, but they also lead to inefficiency. In addition, success is measured through expenditure rather than through improvements in outcomes. Even when there is a need to retain State financing and subsidies for the poor, innovative mechanisms that delink State financing from State delivery, and thus introduce competition, are possible. Hence growth and internal reforms that improve governance are key. In addition to the endogenous factors, there is the exogenous environment, that is, growth also requires the continued existence of an open trading environment which is free not only in the movement of goods and services but also of factor inputs such as labour and capital.[19]

While the first six development goals are measurable, tangible and desirable, the last two are vague, and the seventh especially so.

The first target under Goal 7 is to integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources, measured as the proportion of land area covered by forest, the land area protected to maintain biological diversity, GDP per unit of energy use, and carbon dioxide emissions (per capita). The second target is to halve, by 2015, the proportion of people without sustainable access to safe drinking water, measured as the proportion of population with sustainable access to an improved water source. The final target is to have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers, measured as the proportion of people with access to improved sanitation and the proportion with access to secure tenure.

In addition to the possible dichotomy between sustainable development and social progress …

Especially since the Earth Summit in 1992, the use of the term "sustainable development" has become fashionable and almost inevitable. But what has improvement in the lives of slum dwellers to do with sustainable development, whatever its definition? The availability of safe drinking water (and sanitation) is indeed important, but what does sustainable access to drinking water mean? If the provision of drinking water and sanitation is not sustainable, are we to argue that the poor should be deprived? In short, who decides what is sustainable and what is not? While land area covered by forest, land area protected to maintain biological diversity, GDP per unit of energy use and carbon dioxide emissions (per capita) are measurable variables, who decides on the priorities and the trade-offs?

[18] This is true of physical as well as social infrastructure.

[19] This is a function of the openness of economies and those in East Asia generally exhibit higher levels of trade intensity (exports or imports as shares of GDP) than economies in South Asia. Capital flow indicators behave in a similar way. Within South Asia, the larger economies are relatively more insular than the smaller ones. However, because of liberalization and reforms, all economies in the Asian region are becoming more open over time.

… there is the internationalization of sustainable development itself

Protecting the environment is often a matter of ensuring appropriate prices and property rights, as shown in the literature on the tragedy of the commons.[20] Through appropriate prices, it is often possible to internalize the costs of negative externalities. In the absence of such internalization, it is indeed true that marginal social benefits may deviate from marginal private benefits and marginal social costs may also deviate from marginal private costs; hence the argument that national income accounting does not always take into account the costs of environmental degradation. However, decisions about marginal social benefits or costs ought to be internal to the country concerned and are a function of its stage of development. The problem with the argument about sustainable development is that it makes this a cross-border issue, which is a point to be discussed later.

To complete the statement of the Goals, the following is the eighth one.

The first two targets under Goal 8 are to develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development and poverty reduction, both nationally and internationally) and to address the special needs of the least developed countries (includes tariff- and quota-free access for exports; an enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction).

There are quantifiable targets of net ODA as a percentage of donors' gross national income, the proportion of ODA meant for basic social services (basic education, primary health care, nutrition, safe water and sanitation), the proportion that is untied, the proportion earmarked for the environment in small island developing States and the proportion meant for the transport sector in landlocked countries. The third target under Goal 8 is to address the special needs of landlocked countries and small island developing States through such indicators as the proportion of exports (by value and excluding arms) admitted free of duties and quotas, average tariffs and quotas on agricultural products and textiles and clothing, domestic and export agricultural subsidies in OECD countries, and the proportion of ODA provided to help to build trade capacity. The fourth target is to deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term using indicators such as the proportion of official bilateral HIPC debt cancelled, debt service as a percentage of exports of goods and services, the proportion of ODA provided as debt relief and the number of countries reaching HIPC decision and completion points.

There are other targets envisaged as well: in cooperation with developing countries, to develop and implement strategies for decent and productive work for youth: in cooperation with pharmaceutical companies,

[20] See Garrett Hardin and John Baden, eds., *Managing the Commons* (San Francisco, W.H. Freeman, 1977).

to provide access to affordable, essential drugs in developing countries; in co-operation with the private sector, to make available the benefits of new technologies, especially in information and communications. The indicators are the unemployment rate of 15- to 24-year-olds, the proportion of the population with access to affordable essential drugs on a sustainable basis, telephone lines per 1,000 people and personal computers per 1,000 people.

Universal standards for players and actors of diverse capabilities and needs …

The eighth goal is sometimes just as vague as the seventh and the text is also peppered with the adjective "sustainable". However, going back to sustainable development and the seventh goal, from the perspective of Asian developing economies three kinds of problems arise. First, there is an ethical-cum-moral kind of issue. In 1996, total carbon dioxide emissions by low-income countries amounted to 2,433.8 million metric tons, compared with 10,732.1 million by high-income countries.[21] Per capita, the comparison shows a wider disparity. Low-income countries contributed 1.1 metric tons of carbon dioxide emissions, while high-income countries contributed 12.3 metric tons. The imposition of similar standards on both sets of countries, as is sometimes attempted, is patently unfair, especially in the light of the historical backlog of emissions that industrialized countries contributed in their process of economic growth. Second, while environmental degradation may be damaging, the shadow price imposed should be a sovereign decision. If 38 per cent of the population in Bhutan do not have access to improved water sources,[22] should Bhutan worry about providing water or about air pollution that might conceivably contribute to cardiovascular diseases? If 47 per cent of Nepal's children (under the age of 5) are underweight,[23] should Nepal worry about feeding them properly or about carbon dioxide emissions? Should government expenditure focus on primary education, rural health care and rural infrastructure, or on improving the environment?

… which are also subject to change as a result of ongoing development and transformation

As was mentioned earlier, priorities and objective functions change as economies develop and the best option before developed countries to further the cause of the environment is through opening up markets in developed countries. Markets in developed countries are not open. Agriculture, and textiles and garments are two obvious instances, characterized by quotas, high tariffs, tariff escalation and specific duties that convert to high ad valorem equivalents. In addition, faced with disciplines on tariffs, policy substitution takes place by resorting to non-tariff barriers through anti-dumping and anti-subsidy investigations. Not only are markets not open, they are further closed by using the bogey of the environment and sustainable development. While the General Agreement on Tariffs and Trade (GATT) and WTO are about free trade, caveats exist to free trade principles to allow for justifiable cases of damage.

[21] World Bank, op. cit.

[22] UNDP, op. cit.

[23] Ibid.

Admittedly, partial exemptions and special and differential treatment are provided for in global systems such as GATT …

Many caveats date back to the 1947 GATT articles. For example, Article XX, on general exceptions, states:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> (a) Necessary to protect public morals;
>
> (b) Necessary to protect human, animal or plant life or health;
>
> (c) Relating to the importation or exportation of gold or silver;
>
> (d) Necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to customs enforcement, the enforcement of monopolies operated under paragraph 4 of Article II and Article XVII, the protection of patents, trade marks and copyrights, and the prevention of deceptive practices;
>
> (e) Relating to the products of prison labour;
>
> (f) Imposed for the protection of national treasures of artistic, historic or archaeological value;
>
> (g) Relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;
>
> (h) Undertaken in pursuance of obligations under any intergovernmental commodity agreement which conforms to criteria submitted to the contracting parties and not disapproved by them or which is itself so submitted and not so disapproved;
>
> (i) Involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; provided that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination;
>
> (j) Essential to the acquisition or distribution of products in general or local short supply; provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of this Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist.

The language of some of these clauses, such as (c), (i) or (j), reflects the year (1947) when the Agreement was signed. Yet these clauses remain, virtually unchanged. Also virtually unchanged is clause (g), which can be used for protectionist purposes as long as national treatment is not violated. Clause (b) does not even mention national treatment.

… and the World Trade Organization

The Uruguay Round negotiations provided further grist to the mill. For instance, article 3.3 of the Agreement on the Application of Sanitary and Phytosanitory Measures states:

> Members may introduce or maintain sanitary or phytosanitary measures which result in a higher level of sanitary or phytosanitary protection than would be achieved by measures based on the relevant international standards, guidelines or recommendations, if there is a scientific justification, or as a consequence of the level of sanitary or phyto- sanitary protection a Member determines to be appropriate in accordance with the relevant provisions of paragraphs 1 through 8 of article 5. Notwithstanding the above, all measures which result in a level of sanitary or phytosanitary protection different from that which would be achieved by measures based on international standards, guidelines or recommendations shall not be inconsistent with any other provision of this Agreement.

But complications can arise in the name of sustainable development relating to the environment …

International standards are usually higher than standards prevalent in developing countries and those countries have little influence in establishing the standards. The above Agreement allows standards that are even higher than such international standards, as long as the somewhat subjective test of scientific justification is satisfied. The Agreement on Technical Barriers to Trade also permits deviation from international standards, with slightly different justification. Under article 2.4, "Where technical regulations are required and relevant international standards exist or their completion is imminent, Members shall use them, or the relevant parts of them, as a basis for their technical regulations except when such international standards or relevant parts would be an ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued, for instance because of fundamental climatic or geographical factors or fundamental technological problems."

… or labour standards, among several other issues of contention …

The "shrimp-turtle dispute"[24] complicated matters further, because the WTO Appellate Body ruled in 1998 that unilateral action in the interests of protecting the environment was permissible. At the time of the third WTO Ministerial Conference, held at Seattle in 1999, it was clear that both labour and the environment were being pushed as protectionist devices by developed countries. Environmental non-governmental organizations were described as water-melons: green on the outside and red on the inside. At the time of the Doha Ministerial Conference in 2001, the European Union effectively linked the liberalization of agriculture to environment-related negotiations. The Doha

[24] The dispute was brought by India, Malaysia, Pakistan and Thailand against the United States of America (WTO dispute No. 58).

Ministerial Declaration provides for limited negotiations on the environment through "the relationship between existing WTO rules and specific trade obligations set out in multilateral environmental agreements (MEAs). The negotiations shall be limited in scope to the applicability of such existing WTO rules among parties to the MEA in question. The negotiations shall not prejudice the WTO rights of any Member that is not a party to the MEA in question." However, broader negotiations on the environment are not precluded and will undoubtedly continue to be a controversial issue as demonstrated, at the time of the Fifth Ministerial Conference held at Cancún, Mexico, in September 2003. The European Union continues to link agricultural liberalization to the environment.

… making the danger of protectionism more palpable

There are several MEAs that can be listed, for example, the Montreal Protocol on Substances that Deplete the Ozone Layer, the Vienna Convention for the Protection of the Ozone Layer, the Convention on Biological Diversity, the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. This is by no means an exhaustive list. Nor is this the place to discuss the MEAs exhaustively. Suffice it to say that WTO agreements tangentially provide for protectionism through the sustainable development bogey. Many MEAs are much more direct. Given the incompatibility between many MEAs and present WTO provisions, when this incompatibility is examined and provisions from MEAs are used to override present WTO provisions the dangers of protectionism become even more palpable.

Care has to be taken to ensure that sustainable development for some does not entail sustainable deprivation for others

The average annual rates of growth in GDP have been high in East Asia for several decades. Those rates of growth were high in South Asia in the 1990s. This is making it possible to attain the first six development goals and improvements in the indicators are also evident. Unfortunately, the seventh development goal of sustainable development works at cross purposes and curbs growth. Sustainable development from the perspective of rich developed economies becomes sustainable deprivation from the perspective of poor Asian developing economies. And since poverty ought to be unsustainable, this deprivation is also unsustainable and unacceptable. Economies that have historically been characterized by underconsumption should not be asked to curb their consumption and economic growth. Let the development sustain itself and the environment will sustain itself when the time comes. That has been the case in Western Europe, North America and Japan. Why should Asia be treated differently?