

Challenges of Sustainable Development

AUGUSTO LOPEZ-CLAROS*

If carried to excess, civilization will prove as prolific a source of evil as it had been of goodness when kept within the restraints of moderation.

—Bahá'u'lláh

Abstract

This paper examines some of the building blocks of sustainable development. Economic growth is seen as having contributed to global prosperity in the post-war period, but there are emerging concerns that growth may soon conflict with environmental constraints. The role of and the interactions among conservation, technology, international cooperation, and human values are analyzed. Whether we find the collective will to act now to stem the tide of future crises or we wait for catastrophe to force change upon us is seen as the central question of our time. A move toward sustainable development could well usher in a new stage in the evolution of the human race, one likely to involve a quantum leap forward in terms of our collective achievements as a human family.

* The author is Director of Global Indicators and Analysis, World Bank. The views expressed in this paper are the author's own and do not necessarily reflect those of the organization for which he works. The author is indebted to Arthur L. Dahl for his insightful comments on earlier versions of this paper. Arthur has been a mentor to the author on these issues and for this the author is deeply grateful. Words of appreciation are also due to the late William S. Hatcher for the countless hours of delightful conversations on these and related issues during the many years we lived in Russia, and to Ali Nakhjavani, for his warm, constant encouragement and wise counsel over the years. Neither of them, nor Arthur, is responsible for this paper's limitations.

Résumé

L'auteur examine certains des éléments qui servent de fondement au développement durable. La croissance économique est perçue comme ayant contribué au développement d'une prospérité mondiale durant la période de l'après-guerre; cependant, des préoccupations croissantes se font sentir selon lesquelles la croissance pourrait bientôt se heurter à des contraintes environnementales. L'auteur analyse les rôles respectifs de la conservation de la nature, de la technologie, de la coopération internationale et des valeurs humaines, ainsi que leurs interactions réciproques. Allons-nous développer une volonté collective suffisante pour dès maintenant tâcher d'endiguer la vague de crises qui s'annoncent ou allons-nous attendre que des catastrophes nous contraignent à changer nos façons de faire? Cette alternative est vue comme étant la question centrale de notre époque. Un changement de cap vers le développement durable pourrait bien marquer une nouvelle étape dans l'évolution de la race humaine, une étape susceptible de constituer un progrès décisif en ce qui concerne nos réalisations collectives en tant que grande famille humaine.

Resumen

Este ensayo examina algunos de los elementos fundamentales para edificar el desarrollo sostenible. El crecimiento económico se observa como haber contribuido a la prosperidad global en el periodo post-guerra, pero hay preocupaciones emergentes de que el crecimiento pronto podrá estar en conflicto con restricciones ambientales. El rol de y las interacciones entre la conservación, la tecnología, la cooperación internacional y los valores humanos, son analizados. Sea que encontremos la voluntad colectiva por actuar en este momento para refrenar la marea de futuros crisis o que esperemos que la catástrofe obligue que cambiemos, es visto como la pregunta central de nuestro tiempo. Un movimiento hacia el desarrollo sostenible podría marcar el comienzo de una nueva etapa en la evolución de la raza humana, una que probablemente envuelva un salto cuántico en términos de nuestros logros colectivos como una familia humana.

A SENSIBLE DEFINITION

A broadly accepted definition of "sustainability" is that put forward by the Brundtland Commission (formally known as the World Commission on Environment and Development) convened by the United Nations a quar-

ter of a century ago, which states that sustainable development “meets the needs of the present without compromising the ability of future generations to meet their own needs” (*Report 43*). To those who attempted to give operational meaning to this intuitively sensible definition in the following years, it soon became clear that sustainability was not a goal to be reached, but rather a balance to be maintained across space and time, in which there are complex interactions at play between the environment, the economy, institutions, and human values.

A good practical example of sustainability at work can be seen in the Nordic countries’ approach to budgetary management. These countries have been running budget surpluses for many years because they face the emerging problem of an aging population. If the state is to provide pensions and social protections in the future that will be broadly equivalent to those enjoyed by its citizens today, it must begin to save now. Citizens of Nordic countries have agreed to have their governments spend less than they collect in taxes today so that the standard of living of future generations will not be jeopardized. Thus, contrary to the habits of many other industrialized countries, which over the past twenty years and with particular intensity during the latest financial crisis have sometimes run sometimes large budget deficits and accumulated rising levels of public debt, the Nordics have firmly integrated into public financial management the policy that present generations cannot compromise “the ability of future generations to meet their own needs” (*Report 43*) and have done so with the full support of voters. This example highlights the importance of good governance that has earned public trust in finding solutions appropriate to specific problems of sustainability.

More recently, environmental concerns have figured prominently in discussions about sustainability and sustainable development, with economists and policymakers highlighting the importance of economic growth for promoting rising living standards and further reducing poverty, and environmentalists arguing that the benefits of growth should be viewed against the background of pressures on limited resources. A senior British economist recently wrote: “With the environmental situation reaching crisis point, however, it is time to stop pretending that mindlessly chasing

economic growth is compatible with sustainability” (Jackson 43). This debate raises a complex set of issues concerning sustainable consumption and production, the distribution of wealth and increasing income disparities, the distinction between growth and development, and the extent to which growth is necessary for prosperity. Underlying all of these factors is the issue of governance, how we manage the planet we live on within the diverse societies and cultures into which humanity has evolved, and the globalized economy that provides for our material needs, in all their complexity and at their multiple levels of operation, to go from the present situation toward a sustainable and equitable future.

TWO KEY QUESTIONS ABOUT DEVELOPMENT

Two questions are at the heart of the debate on the meaning and the implications of sustainable development. Taking as a starting point the period immediately following the creation of the United Nations in 1945, the questions are: What have been the fruits of economic development, and is humanity better off today according to some objective criteria? The first one deals with the issue of what has actually happened to development during the past half century.

There are several reasons why 1945 is a sensible starting point to address these questions. As noted below, this was the time when economic and social development began to be perceived as a special responsibility of the international community. This realization is partly reflected in the creation of the World Bank and the International Monetary Fund (IMF), the two premier international financial organizations charged with the task of promoting development. For instance, the Articles of Agreement of the IMF state that its aim is “to facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy” (Article I, section ii).

It was only under the auspices of the United Nations that a system of national accounts was created, which made it possible to compile interna-

tionally comparable economic output statistics based on common methodologies. This achievement, in turn, allowed the expansion of the debate on development from heated and often misinformed ideological struggles based on faith and opinion to more objective exchanges anchored in hard numbers and quantitative indicators.

The second question relates to the more fundamental issue of whether humanity—notwithstanding progress achieved during the postwar period—is presently on a sustainable development path, as defined by the Brundtland Commission. As we shall see below, while the answers to these two questions are unusually complex, the debate has acquired a renewed urgency in recent years, with many voices suggesting that the entire future of the planet is “in the balance” (Gore).

DEVELOPMENT SUCCESSES?

Development as a global objective for improving human welfare is a relatively recent concept. It was first embodied in the United Nations Charter, which stated: “The United Nations shall promote higher standards of living, full employment, and conditions of economic and social progress and development” (Chapter IX, Article 55). In time, at least among practicing economists in academia and policymakers in government, “development” came to be seen as improved economic opportunity through the accumulation of capital and rising productivity. The implicit assumption was that economic growth would lead to a rise in living standards, increases in life expectancy, reduced mortality, a reduction in the incidence of poverty, and so on—all worthy social goals.

Between 1950 and 2011, world gross domestic product (GDP) per capita expanded at an annual average rate of 2.1 percent, and this expansion—although with considerable regional variations¹—was associated with a

1. For instance, Asia grew at 3.4 percent, but sub-Saharan Africa at 1 percent. Other regions include: Western Europe (2.8 percent), Latin America (1.6 percent), Eastern Europe (2 percent), the former Soviet Union (1 percent), and United States, Canada and Australia (2.2 percent). For a comprehensive set of economic and social indicators see, for instance, *World Development Indicators*, a series issued

remarkable evolution in three key indicators of human welfare. In the half-century between 1960 and 2011, infant mortality fell from 140 to 37 per 1000 live births; average life expectancy at birth rose from fifty-three to seventy years, a 32 percent increase which is nothing short of spectacular; and adult illiteracy fell from 53 to 16 percent. Equally impressive was the sharp drop in the incidence of poverty. Data from a World Bank study show that between 1981 and 2010—a period that includes the globalization phase of the twentieth century—the share of the world's population living in extreme poverty fell from 52 to 21 percent.²

While this progress still left about 1.3 billion people living under harsh conditions,³ the existence of a positive trend was undeniable and, against the low expectations of the late 1940s, was a welcome development. As noted by Richard Cooper, performance “in the period 1950–2000 can only be described as fantastic in terms of the perspective of 1950, in the literal

periodically by the World Bank, available online at www.worldbank.org and published annually in hard copy. The GDP is a measure of the market value of all goods and services produced within the country in one year. GDP growth, therefore, is no more than the rate at which this variable increases in value from one period (typically a year) to the next.

2. See Chen and Ravallion, “More relatively-poor people in a less absolutely-poor world.” World Bank, Development Research Group, Policy Research Working Paper 6114, available at www.worldbank.org. The poverty data can be found at <<http://databank.worldbank.org/data/download/WDI-2013-ebook.pdf>>

3. Poverty is defined by the World Bank as living on less than \$2 per day; for extreme poverty the threshold is lowered to \$1.25 per day. The number of people living in extreme poverty in 1981 was 1.94 billion, or 660 million more than in 2010. Nevertheless, while accepting such figures, Joseph Stiglitz makes the valid point that “life for people this poor is brutal,” with malnutrition endemic, life expectancy well below the global average, and medical care scarce or nonexistent. See Stiglitz, *Making Globalization Work*, p. 10).

sense that if someone had forecast what actually happened he would have been dismissed by contemporaries as living in a world of fantasy There is, to be sure, much work to be done, since too many people still live in poverty. But it is also necessary to note success when there has been success, to avoid drawing erroneous conclusions" (39).⁴ The observation that economic growth had been the main engine of poverty reduction and other improvements in human welfare has led many to ask themselves what could be done to accelerate growth everywhere, particularly in Africa, where the incidence of poverty actually rose during this period.⁵ The question acquired particular urgency among policymakers in the developing world, given the pressing needs to continue to make progress in improving living standards, against the background of rising expecta-

4. Many critics of development practices during the past half-century will tend to focus on the unfinished agenda, the fact that, notwithstanding the gains made during this period, there is still too much poverty in the world and that this poverty coexists uncomfortably with rising income disparities. Some of these critics call into question the very approach to development taken by such institutions as the World Bank, the IMF, and aid agencies of the large donor countries, which also happen to be the largest shareholders of these two development organizations. Often calls are made for "a new development model," although it is not spelled out what that development model should consist of and, equally importantly, whether such calls have any practical, conceptual, and political underpinnings. For a particularly incisive, well-thought-out, non-dogmatic, and unusually pragmatic analysis of the problems of the fifty-eight poorest countries in the world and what the international community can do about them, see Paul Collier's *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*.

5. A report prepared by the United Nations Development Program for the 2008 United Nations General Assembly shows that the Millennium Development Goal of halving world poverty between 2000 and 2015 is within reach, largely because between 1990 and 2005 China brought 475 million people out of poverty, compared to an increase of 100 million during the same period in sub-Saharan Africa. See "Number of poor rises," *The London Financial Times*, 12 Sept. 2008.

tions among their respective populations.

In a highly influential book published in 2002, the American economist William Easterly states that he cares about economic growth because “it makes the lives of poor people better . . . [and] frees the poor from hunger and disease” (8). He then proceeds to show that growth improves infant mortality, that, for instance, in Africa 500,000 deaths could have been averted if growth in the decade of the 1980s had been 1.5 percent higher. The above insights, in turn, contributed to an intense debate among professional economists and policymakers about the relative importance of various factors, policies, and institutions in creating the conditions for sustained growth.⁶ What is their relative importance? How do they interact with each other? How successful have countries been in identifying and adopting them?

A recent and impressive contribution to the ongoing debate is the 2008 study published by the Commission on Growth and Development of the World Bank, chaired by Michael Spence, Nobel economics laureate.⁷ Two aspects of this report make it a particularly valuable source of insight. First, the twenty-one commissioners who prepared this study brought together a rich variety of perspectives, drawn from decades of experience in government, academia, and the business world, both in a developed- and developing-country context. Second, the report benefitted from a wide-ranging process of consultation with leading experts on a broad array of issues, including the role of fiscal policy, education, geography,

6. One area that has received particular attention has been the role of technology and innovation. Economic output is no longer just a function of capital and labor but, increasingly, knowledge and the acquisition of new knowledge, a point of view eloquently supported in the Bahá'í writings. As early as 1875 'Abdu'l-Bahá placed “the expansion of the frontiers of knowledge” at the basis of “Europe’s progress and civilization.” See 'Abdu'l-Bahá, *The Secret of Divine Civilization*, p. 10.

7. See *The Growth Report: Strategies for Sustained Growth and Inclusive Development*, released in May 2008 and available at www.growthcommission.org. *The Growth Report* was funded by the World Bank, several industrial country aid agencies (Australia, Canada, the United Kingdom), and some private foundations.

trade, technology, institutions, and interactions with the environment. The commission examined the experiences of thirteen countries in which, beginning in 1960, the annual average rate of economic growth was recorded to be at least 7 percent over a period of twenty-five years or more, and identified those factors, common or country-specific, that contributed to such remarkable economic performance.

An economy that grows at an average annual rate of 7 percent doubles in size roughly every ten years. The thirteen economies examined were those of Botswana, Brazil, China, Hong Kong, Indonesia, Japan, Malaysia, Malta, Oman, Singapore, South Korea, Taiwan, and Thailand. During the periods of high growth, these economies exhibited some common features, including full exploitation of the opportunities afforded by the world economy through trade, foreign investment and inward technology transfer, macroeconomic stability, and high rates of saving. On the whole, their reasonably competent governments were able to avoid some of the terrible mistakes that have been so costly in other countries, such as subsidizing energy consumption, using the civil service as “employer of last resort,” neglecting infrastructure, imposing price controls, and underestimating the importance of education as a key driver of the development process.

‘Abdu’l-Bahá, the son of the Founder of the Bahá’í Faith and the head of the Bahá’í Faith during the period 1892–1921, was an extremely perceptive observer of the contemporary economic and political challenges confronting Middle Eastern societies. In an insightful treatise examining a range of development issues written in 1875, He is explicit in His support of the benefits of interaction with the rest of the world. He chides nineteenth-century Iranian society for its inwardness and suspicion of the “new systems and procedures” (‘Abdu’l-Bahá 13) and “progressive enterprises” (13) that have made such an enormous contribution to the development of other nations. “Were the people of Europe harmed by the adoption of such measures? Or did they rather by these means reach the highest degree of material development?” (13) He asks searchingly. He is equally compelling in His recognition of the importance of good governance, saying in reference to “ministers of state and representatives” that

“administrative skill and wisdom in the conduct of their office raises the science of government to new heights of perfection” (20–21).

The commission is unambiguous in the benefits it attaches to economic growth: “Growth is not an end in itself. But it makes it possible to achieve other important objectives of individuals and societies. It can spare people *en masse* from poverty and drudgery. Nothing else ever has. It also creates the resources to support health care, education, and the other Millennium Development Goals to which the world has committed itself. In short, we take the view that growth is a necessary, if not sufficient, condition for broader development, enlarging the scope for individuals to be productive and creative” (*Growth Report* 1). The report continues by saying that “in a very poor country, it is arithmetically impossible to reduce poverty without growth. There is no one to redistribute from. Conversely, if everyone is poor, growth will reduce poverty regardless of how it is distributed. But some kinds of growth reduce poverty more effectively than others . . . The expansion of smallholder farming, for example, cuts poverty quickly, raising incomes of rural cultivators and reducing the price of the poor’s food bill. Growth in labor-intensive manufacturing also raises the incomes of the poor. The expansion of capital-intensive mining industries, on the other hand, can result in jobless growth, making little impression on poverty” (1).

Professor Spence was even more direct in his public pronouncements at the time that the report was released, saying that “*The Growth Report* also kills off once and for all the misguided notion that you can lift people out of poverty in the absence of growth” (1). He also noted that India needed “to grow at a fast pace for another 13–15 years to catch up to where China is today,” and that it was expected that some six hundred million people in China presently working in agriculture would need to move into more productive jobs in urban areas and that, therefore, as has happened in the past twenty years in China, “growth will lift many more people out of poverty in the coming decades” (14).

Notwithstanding the unanimous consensus among the distinguished authors of *The Growth Report*, their views are by no means universally shared, particularly among scientists and experts laboring on environ-

mental issues. This is how the editors of a special issue of *New Scientist* put it: “Growth to most economists is as essential as the air we breathe: it is, they claim, the only force capable of lifting the poor out of poverty, feeding the world’s growing population, meeting the costs of rising public spending and stimulating technological development—not to mention funding increasingly expensive lifestyles. They see no limits to that growth, ever” (Daly 46). The essence of the arguments put forward by environmentalists is that “our economy is now reaching the point where it is outstripping Earth’s ability to sustain it. Resources are running out and waste sinks are becoming full. The remaining natural world can no longer support the existing economy, much less one that continues to expand” (46).

A more cogent statement of conventional economists’ view on natural resource use reads as follows:

Production uses up natural resources, in particular energy. Is it true, as is sometimes alleged, that exponential growth in the economy will eventually use up the fixed stock of resources? Well yes, it is true in the limited sense that current theories suggest the universe will one day run down. However, this seems more of a concern for a course in astrophysics, or perhaps theology, than for a course in economics. Over any interesting horizon, the economy is protected from resource-depletion disasters by two factors. First, technical progress permits us to produce more using fewer resources. For example, the energy efficiency of room lighting has increased by a factor of 4,500 since Neolithic times. Second, as specific resources come into short supply, their prices rise, leading producers to shift toward substitutes. (Dornbusch *et al.* 89)

This logic notwithstanding, the economic impact of the sustained rise in energy prices as fossil fuel extraction becomes more expensive, and comparable rises in prices for food and raw materials, as well as the rising cost of natural disasters linked to climate change, suggest that global resource limits are producing shortages that now require some rethinking

about the basic assumptions that have justified our focus on growth in recent decades. As the head of the European Central Bank stated in 2009: “We live in non-linear times: the classic economic models and theories cannot be applied, and future development cannot be foreseen” (Seager 1–2). In this context, it is understandable that efforts are underway to explore prosperity without growth,⁸ or the implications of a steady-state economy.⁹

A SUSTAINABLE DEVELOPMENT PATH?

In parallel to the encouraging trends in development noted above, scientists began to ask themselves whether the processes underlying our development path were sustainable. Even if one accepts that remarkable progress has been made during the past half century in improving the lot of vast segments of humanity, are the processes and the policies that have produced these trends sustainable?

Regrettably, the answer increasingly seemed to be negative. Among environmentalists, the focus was on climate change, biodiversity loss, and pollution. That fact that the earth has self-correcting mechanisms, and that the physical processes underpinning changes in the environment have huge inertia, does not invalidate the growing consensus in the scientific community that, at the margin, the trends are not sustainable. For example, global carbon dioxide emissions from fossil fuels have sharply accelerated since 2000, reflecting a quickening in the pace of growth of the global economy,¹⁰ a sharp rise in energy consumption in China, and the weak-

8. See Jackson, *Prosperity Without Growth: Economics for a Finite Planet*.

9. See Dietz and O'Neill, *Enough is Enough: Building a Sustainable Economy in a World of Finite Resources*, 2013.

10. According to *World Economic Outlook*, published by the IMF, the average annual global economic growth between 2000 and 2003 was 3.3 percent before accelerating quickly to 5.0 percent during the period 2004–2007. This pickup in the pace of economic growth was associated with a remarkable increase in the price of oil and other commodities.

ening of natural carbon sinks, such as forests and seas.¹¹ Not surprisingly, large volumes of the Arctic ice have melted, and accelerated ice-sheet flow in Greenland glaciers is contributing to a rise in sea levels. Satellite observations of the Arctic ice cap show a significant reduction in the ice cover, with a record decrease in 2012 to less than half the area typically occupied four decades ago.¹² In 1996 the volume of ice melted in Greenland was 22 cubic miles (92 cubic kilometers). By 2005 this figure had risen to 53 cubic miles (221 cubic kilometers).¹³

Even when world economic growth came to a halt in 2009 because of the global financial crisis, these perturbing environmental trends were not reversed since the present scale of human activity was only marginally and temporarily affected, and world economic growth has again taken off. In the absence of other measures aimed directly at reducing emissions, only a sustained, deep economic depression such as that experienced during the 1929–1933 period might have had an impact on the pace of accumulation of carbon dioxide emissions. However, even the most pessimistic analysts do not forecast a return to the severe economic dislocations of the Great Depression that, as is well known, were greatly intensified by policy mistakes on the part of the economic authorities. Furthermore, expecting an economic depression to help temporarily mitigate the challenges of global warming is hardly a commendable solution considering the incalculable social costs involved.

But even beyond purely environmental concerns, there are other forces at work that are already having a major impact on our system's institutional underpinnings, forces that have been at the center of the progress

11. In the twenty-year period 1980–2000, CO₂ emissions rose at an average rate of 1.6 percent per year. By 2004, however, they were rising by 5.4 percent, with Asia and North America leading the way.

12. See Vidal and Vaughan, "Arctic sea ice shrinks to smallest extent ever recorded," *The Guardian*, 14 Sept. 2012.

13. For some impressive photos of declining ice cover see <http://www.nasa.gov/arcticice_decline>. The Arctic ice cap has diminished from 7.5 million square kilometers in 1980 to only 4.3 million in 2007.

achieved during the past half-century. Key among these factors is population growth and its corresponding pressures on resources. According to *World Energy Outlook 2012* published by the International Energy Agency, energy demand will grow by a third by 2035, reflecting the addition of 2.2 billion people to the world's population and the corresponding needs for housing, transportation, heating, illumination, food production and waste disposal, as well as the push for sustained increases in the standards of living.¹⁴ Because the mothers who will bear these 2.2 billion children are already alive today, this expected increase in the world's population—barring some unexpected calamity—will materialize and will be largely concentrated in urban environments in developing countries.

Beyond the inevitable pressures on resources, rapid population growth in the next couple of decades will lead to a broad range of challenges for governments, businesses, and civil society. For instance, in the Middle East and North Africa, high fertility rates and the highest rates of population growth in the world will put enormous strains on labor markets. These countries already suffer from the highest rates of unemployment in the world. Simply to prevent these levels from rising further it will be necessary to create well over 100 million new jobs within the next decade and a half, an extremely tall order. The failure to significantly increase the number of jobs so far has led to major political and social instability in the region.¹⁵ In sharp contrast, the populations of countries such as Italy, Japan, and others in the industrial world will continue to shrink, a demographic trend which, in turn, will put a huge strain on public finances as states attempt to cope with growing numbers of pensioners putting major pressures on budgetary resources.

Powerful demonstration effects are also at work. The spread of instant communication through the Internet has led billions of people in China, India, Latin America, and other parts of the developing world to aspire to lifestyles and patterns of consumption similar to those prevailing in the

14. See *World Energy Outlook 2012*, Executive Summary, p. 1. <www.iea.org>.

15. This was anticipated in Lopez-Claros and Pletka, "Without reforms, the Middle East risks revolution," *International Herald Tribune*, 8 Apr. 2005.

industrial world. Furthermore, these populations are often unwilling to postpone such aspirations and increasingly expect their governments to deliver rising levels of prosperity, implicitly pushing for a more equitable distribution of the world's resources. At present, 20 percent of the world's population, living in the thirty richest countries, consume over 80 percent of the world's goods and services.

As if these demand pressures were not enough, there are emerging supply constraints as well. World cereal production per person has been on a downward trend since the late 1980s. It is estimated that by 2025 the number of people living in regions with absolute water scarcity will have risen to 1.8 billion. Climate change, soil erosion, and overfishing are expected to diminish food production and are known to have been a driving force in the major surge in food prices during the past years.

Thus, the fundamental development question we face is how to reconcile the legitimate aspirations of citizens in the developing world with the high economic growth rates that in the postwar period have led to such remarkable improvements in the global standards of living, and with the challenges of an economic system under severe stress as a result of the pressures put on it by that very economic growth. Paul Collier persuasively argues that "development is about giving hope to ordinary people that their children will live in a society that has caught up with the rest of the world. Take that hope away and the smart people will use their energies not to develop their societies but to escape from it—as have a million Cubans" (12).

SEARCHING FOR A SOLUTION

Not surprisingly, there is a raging debate in policymaking circles, in the pages of academic journals, and in the international press about how to confront the challenges of economic development. In particular, how can resolution be found between the tensions caused by pressures on the environment resulting from scarce resources associated with economic growth, and the unsatisfied needs of millions of poor people all over the

world?¹⁶ One popular approach in this debate argues roughly as follows: “The planet is not salvageable as long as international capitalism prevails, with its focus on growth and profits at all costs and predatory resource capture. If we are truly concerned about helping the poor rather than the rich, we need a new development model.” (George 50)¹⁷ Susan George, for instance, advocates “ecological Keynesianism” (50), drawing parallels with the Allied response to fascism during the Second World War and the swift transformation of the economy to a war footing. A massive shift of resources and priorities by governments to deal with the upcoming environmental catastrophes is necessary, a sort of third way “between red-in-tooth-and-claw capitalism and a worldwide uprising as unlikely as it is utopian” (50).

Too often the debates about the enormous limitations of the present economic system take place against complete ignorance of the awful historical record of the alternatives tried during the past century. This point was well made by John Gray, a professor emeritus of economics at the London School of Economics and author of *False Dawn: The Delusions of Global Capitalism*, during a fascinating online conversation sponsored by the Templeton Foundation titled “Does the Free Market Corrode Moral Character?” Gray writes:

The moral hazards of free markets do not mean that other economic systems are any better. Centrally planned systems have corroded character far more damagingly and with fewer benefits in terms of efficiency and productivity. The planned economies of the former Soviet bloc only functioned—to the degree they did at all—because

16. *The Growth Report* addresses this issue thus: “Preventing climate change (or ‘mitigation’ as the experts call it) is better than palliating its effects. But how can we cut carbon emissions to safe levels by mid-century while also accommodating the growth of developing countries? At the moment, the debate has reached a conceptual impasse” (p. 10).

17. For further insight see, for instance, the articles by Susan George and Andrew Simms, *New Scientist*, spec. issue. 18 Oct. 2008.

they were riddled with black and grey markets. Corruption was ubiquitous. In the Marxian model, the greed-fuelled anarchy of the market is replaced with planning based on altruism. But actual life in Soviet societies was more like an extreme caricature of laissez-faire capitalism, a chaotic and wasteful environment in which each person struggled to stay afloat. *Homo homini lupu*—man is wolf to man—was the rule, and altruism the exception. In these conditions, people with the most highly developed survival skills and the fewest moral scruples did best. (Gray n. pag.)

Equally insightful are the comments by the French philosopher Bernard-Henri Levy:

First, if the market corrupts, the various negations of the market corrupt absolutely. Look at fascism. And look at that other hatred of the market that preceded and followed it: Communism. I doubt that anyone would posit Communism as the fulfillment of character and soul for its victims or agents. Second, if it is necessary to choose, if these corruptions must be ranked, it is patently obvious that the Communist or the fascist corruption through the negation of the market is significantly deeper, deadlier, and more irreparable than the first. That was obvious for fascism from the start, and it eventually became obvious for Communism too. I think back to the long journey I made through Central and Eastern Europe just after the fall of the Berlin Wall. I can still hear my Czech, Polish, Bulgarian, Hungarian, and East German friends explaining to me that the Communist era, those long decades in a society not at all governed by the rules of the market, had caused them, in their hearts and souls, to develop a certain number of vices, even defects—and that they themselves did not know how long it would take to get rid of them. (Levy n. pag.)

As someone whose work took him to Russia within a few months of the collapse of the Soviet Union and who lived and worked there for the next four and a half years, I can fully support the assessments made by Gray

and Levy. Of course, the Bahá'í writings themselves are unequivocal in highlighting the inadequacies of communism as a system for the organization of human affairs. Shoghi Effendi, the Guardian of the Bahá'í Faith during the period 1921–1957, writes eloquently about the huge costs for humanity associated with theories and policies “which deify the state and exalt the nation above mankind, which seek to subordinate the sister races of the world to one single race, which discriminate between the black and the white, and which tolerate the dominance of one privileged class over all others...” (*Promised Day* 113).

It is imperative that we refrain from fruitless debates about the relative merits of particular economic “systems” and not succumb to the temptation of seeing contemporary problems (for example: poverty, income disparities, and climate change) as being purely manifestations of systemic failure. The reality is considerably more complex. Countries which have been successful in boosting income per capita, in broadening the range of available opportunities for their respective populations, and in reducing the incidence of poverty are those where successive governments have taken a pragmatic approach to policy formulation and implementation, taking the best of an otherwise rich menu of options and doing so in a context fairly free of useless, tired debates about whether the approach being followed was faithful (or not) to a particular ideology capitalist, Marxist, or otherwise.

One can characterize as “unjust” the fact that South Korean citizens today have an income per capita that is fifteen times higher than that of their fellow brothers and sisters in Ghana, but one cannot neglect the equally sobering fact that as recently as 1960, Ghana was actually ahead of South Korea in this key indicator.¹⁸ To attribute these differences to

18. In 1950, income per capita (in 1990 US dollars) in Ghana was equivalent to \$1,122, but only \$770 in South Korea. By 1998, income per capita in Ghana was \$1,244, but had risen to \$12,152 in South Korea. By 2012, the gap had widened at a rapidly accelerating pace. (See Maddison, *The World Economy: A Millennial Perspective*). No reliable data is available for the Democratic Republic of Korea (North Korea), the last and longest centrally planned totalitarian nightmare. With

“injustice” or to try to explain them in light of some inherent flaw in the “capitalist” system is misleading and not particularly helpful. It is misleading because it fails to explain why some economies, such as those of Chile, Ireland, Malaysia, New Zealand, Singapore, South Korea, Taiwan, and all the Nordics—the list is much longer—have done so well, “capitalism” notwithstanding.¹⁹ This approach is unhelpful because it neglects the role of good governance and policies in precipitating constructive processes of change. For example, to say to any of the heads of state of Bolivia during the past thirty years that the country’s poverty is the result of grave injustices in the capitalist system begs the question of why its next-door neighbor, Chile, has done so much better in improving living conditions. Furthermore, the comparison completely sidesteps the issue of poor governance and corruption and the extent to which those factors are largely responsible for Bolivia’s poverty.²⁰

South Korea is a developed country, and Ghana and most of the sub-Saharan African countries are not. The human beings living in these countries are all God’s creatures. But the key challenge of development is identifying the factors, policies, and institutions that have led, in the case

famine estimated to have caused in excess of three million casualties during the past decade and a half and thousands of young women sold into prostitution across the border in China, the contrast with South Korea is painfully eloquent.

19. I deliberately use the word in quotes because I am not sure that the term can be defined meaningfully, just as I cannot say, for example, if Sweden is a “capitalist” country.

20. According to a report in *The Economist* (“Chile: Destitute No More,” 18 Aug. 2007), “poverty has fallen further, faster, in Chile than anywhere else in Latin America. Sustained economic growth and job creation since the mid-1980s are the main explanations, though it helps that poorer Chileans are having fewer children than in the past.” The data show that while poverty rates in Latin America between 1990 and 2006 fell from about 48 percent to 39 percent, the drop in Chile over the same period was far more dramatic: from 38 percent to 13 percent. The authors add: “Chile has a chance of all but abolishing poverty in the next few years.”

of South Korea, to high levels of per capita income, highly educated populations with skilled labor forces that are able to operate on the frontiers of technology, where economic activity takes place in a context of relative openness and transparency, with clear and predictable rules, where corruption is relatively rare, and where the government is periodically legitimized through the electoral process. In the case of Ghana, the opposite of the foregoing factors has led to all the ills and tragedies that are in full evidence when one travels throughout the “developing” world. It is useless to pretend that there is no difference. It is important to distinguish between the individual (all are equal before God as Bahá'u'lláh wonderfully expresses in the phrase, “The earth is but one country and mankind its citizens,” 250) and the policies or systems they live under, which range from the enlightened to the deplorable, and which go a long way to explaining why some countries are rich and prosperous and others are poor and lacking in opportunity. From this perspective, poverty and underdevelopment have little to do with culture and more with what happens when economies malfunction or when the technological infrastructure that drives them has broken down or is no longer relevant for the time and the place.

The problems of poverty, lack of opportunity, and lack of concern for the environment have little to do with the presence or absence of “capitalism” and much more to do with weak institutions and systems of incentives that often misdirect resources or create huge, wasteful distortions. Honest and thoughtful leaders are needed who will have credibility with the public and who will build institutions, improve the regulatory framework, manage scarce resources more effectively, and so on. The following example is a useful illustration. The primary mechanism of distribution in most modern societies is the government budget and the tax policy that underlies it. One of the more interesting experiences in this area is how the Nordic countries have managed to develop an economic model based on the provision of an extensive safety net (which involves relatively high levels of taxation) *and* managed to remain among the most competitive economies in the world, thereby disproving the fallacy that “less government” is always better because high taxes will discourage private initia-

tive. Not at all; what matters is how the collected taxes are used. If they are often stolen or otherwise misused, then, yes, high taxes will kill the private sector which, in turn, will find ways not to pay them. But if, as in the Nordics, the tax revenue goes to supporting education, to improving the country's infrastructure, to enhancing the skills of the population, and to providing basic services, then not only will people and businesses pay the taxes, but societies will flourish, as the case of South Korea illustrates.

While good governance is obviously critical at the national level, the issue does highlight one significant institutional failure in the globalized economy of today. There is no international mechanism to define ethical parameters or otherwise regulate the behavior of multinational corporations at the global level. Since the economies of the largest companies and financial institutions are larger than those of most national economies, this lack of regulation is a significant gap as it leaves room for rapacious resource extraction, neglect of the environment, tax avoidance, and exploitation of poor workers, among other vices. The power of business lobbies is even hard for the governments of large countries to resist, not to mention for governments that are weak, ineffective, or open to corruption. As a result, the private sector is often excluded from participation in governance mechanisms. Yet business needs a level playing field at the global level for its innovation and competitiveness to work effectively in support of sustainability.²¹

It is simplistic just to call for a new development model. Quite aside from the practical problems associated with giving operational meaning to such calls, we have learned by now that not only is there no "magic bullet" to ensure sustainable development, but the ingredients of success are many in number, vary from country to country in their relative importance (depending on their stage of development), and evolve over time. Furthermore, the issue has nothing to do with "capitalism"—a useless and stale concept in terms of its ability to help us understand better how to

21. See Dahl, "The competitive edge in environmental responsibility," pp. 103–10, in Lopez-Claros et al., *The Global Competitiveness Report 2004–2005*.

tackle world poverty or many of the large number of global problems we currently face.

A more promising approach to this subject is to frame the discussion of world poverty—how to reduce it and how to do so in a context of respect for the environment—in terms of the identification of critical factors needed to generate processes of growth for the poor within a sustainable framework, without entering into a largely fruitless debate about the role of “capitalism” in helping (or not helping) us to get there. That debate may have been relevant and perhaps even interesting thirty years ago, but the world has moved on and governments are increasingly judged by voters not for the extent of their ideological purity but rather for the real results of their policies, just as Shoghi Effendi suggested they should be. This we should all celebrate. His eloquent call for setting aside ideological disputes in discussion of social and economic development in favor of pragmatism and common sense is captured in his statement that “legal standards, political and economic theories are solely designed to safeguard the interests of humanity as a whole, and not humanity to be crucified for the preservation of the integrity of any particular law or doctrine” (*World Order* 42).

In the longer term, we do need research into new economic policies that are more altruistic and cooperative, create meaningful employment, and reduce poverty. Such principles imply a profound transformation, not so much in the mechanisms of the economy but in the values that underlie it and in the institutions, both private and public, through which it operates. At the moment, a greater focus at the community level, with new economic models and experiments for development and poverty elimination driven from the bottom up, may be more fruitful than the present aid approach to development that is driven from the top down.

A CREATIVE AGENDA

At present, creative solutions are far more likely to focus on practical actions that can be taken to address the core challenge of sustainable development as defined earlier in this article. In particular, in our view, they are likely to involve actions on at least four fronts.

CONSERVATION

First, we will have to invest in conservation and in redressing some of the damage done to the environment through decades of neglect. According to the Earth Policy Institute, about US\$100 billion should be spent annually to protect topsoil in croplands, to stabilize water tables, to restore fisheries, and to protect biological diversity. This sum of money is not particularly large in relation to the size of the global economy—it is less than one-seventh of 1 percent of world GNP—and it is certainly not large in relation to the huge amounts of money made available by governments in some of the largest countries to deal with the short-term effects of the 2008–2009 global financial crisis. It is also less than 6 percent of annual world military expenditure.²²

A key finding of the latest scientific work on climate change is that the annual cost of introducing control measures for greenhouse gases is far smaller in comparison to the potential cost of uncontrolled climate change. The Intergovernmental Panel on Climate Change (IPCC) of the United Nations estimates that stabilizing greenhouse gases by 2030 would slow global economic growth by slightly more than 0.1 percent per year. The risks of inaction, however, are huge, and estimates of the economic cost associated with an increase from 2.5 to 4.5 degrees Celsius in temperatures suggest economic damage approximating 1.5 percent of global GDP annually by 2100, with some estimates going even higher.²³ Furthermore, the impact is significantly different across some regions, with India and Africa being most affected. There will also be a need to invest in energy infrastructure not only to replace aging capacity and to meet growing global energy demand but also to boost efficiency.

22. The United States accounts for 57 percent of total world military expenditures. Between 1998 and 2012, its military spending rose from \$280 billion to \$682 billion.

23. For instance *The Economics of Climate Change: The Stern Review* commissioned by the United Kingdom government concluded that a rise in temperatures of 2 to 3 degrees Celsius could reduce global economic output by 3 percent, whereas a rise of 5 degrees Celsius would result in up to 10 percent of global output being lost, with the losses in developing countries being even higher.

TECHNOLOGY

Obviously, technology can play a key role. More efficient use of energy has reduced the size of energy consumption in global GDP by more than 30 percent in the past 20 years. Much more can be done in this area, particularly by resorting to new technologies of energy renewal and conservation, including greater use of solar and wind power and alternative fuels. There is encouraging evidence that the auto industry is finally catching up to rapidly changing consumer demand as evidenced by an increasing number of electric and hybrid cars on the market, since the rewards could potentially be very large. Simultaneously, a number of studies, under the general heading of “geo-engineering,” are underway in leading research centers to identify human interventions that could either remove carbon dioxide from the atmosphere or reduce the amount of sunlight that comes to the earth. These new technologies have a strong potential for unintended consequences, but could, after careful assessment, play a necessary, complementary role in other measures aimed at precipitating inevitable changes in human behavior that have been too slow in coming.²⁴

Of course, given the magnitude of the challenges we face—particularly climate change—care must be taken not to overstate the case for new technologies and the time it will take for these new technologies to have a measurable impact. Indeed, many in the scientific community think that it is quite misguided to think that a combination of greater energy efficiency and the development of appropriate green technologies will allow eco-

24. Among the many novel alternatives being explored is the use of peridotite, a carbon-eating rock that, in the case of the Omani desert, for instance, is known to absorb tens of thousands of tons of carbon dioxide every year. Scientists at Columbia University argue, in a recent issue of *Proceedings of the National Academy of Sciences*, that drilling and fracturing of the rock could increase its absorption rate 100,000-fold. (See “Eating Carbon,” *The Economist*, p. 87).

conomic growth to continue unimpeded in coming decades.²⁵ There is the additional danger that undue emphasis on “technological fixes” will result in complacency, since politicians will always be receptive to solutions that do not appear to involve sacrifices on the part of voters, unlike carbon taxes, or changes in patterns of consumption or lifestyles.

Defining progress in terms of technological breakthroughs that only benefit privileged minorities at the expense of the well-being of humanity as a whole and the planet itself is not only unjust, but it ignores the potential that can come from making science and technology accessible to the poor and from empowering them to set their own priorities and to use technological innovation to resolve their own problems. Clearly, there is tremendous potential associated with indigenous technologies that will help communities create their own technological breakthroughs in keeping with local conditions. Strengthening communities at the grass roots has enormous potential to stimulate myriad forms of development from the bottom up.

The Growth Report lucidly defines our challenge: “We do not know if limits to growth exist, or how generous those limits will be. The answer will depend on our ingenuity and technology, on finding new ways to create goods and services that people value on a finite foundation of natural resources. This is likely to be the ultimate challenge of the coming century. Growth and poverty reduction in the future will depend on our ability to meet it” (12). In this respect it is noteworthy to highlight Shoghi Effendi’s allusions to the scope of further advances in “human inventions and technical development” (*World Order* 204) including those aimed at “the exploitation of the unused and unsuspected resources of the planet” (204).

25. See the interview with environmental activist David Suzuki, who unhesitatingly states: “They [the economists] believe humans are so creative and productive that the sky’s the limit, that if we run out of resources, we’ll go to the moon, mine asteroids or harvest sunlight in space and microwave it to Earth. They think the whole universe is there as a potential resource.... Limitless resources are a fool’s dream that we can never achieve.” (“We Should Act Like the Animals We Are,” *New Scientist* 44).

He makes specific reference to the earth's "unimaginably vast resources" (204), which "[a] world federal system ... liberated from the curse of war and its miseries" (204) will be able to exploit and put at the service of mankind. He also refers to "the exploitation of all the available sources of energy on the surface of the planet" (204), acknowledging the essential role that energy plays in economic development, and thus the challenge to our present economy from the rising costs and risks of shortages from our over-dependence on unsustainable fossil fuels.

While this technological potential undoubtedly exists in the long term, its development will require global institutional arrangements, efficiencies of governance, financial resources, and a culture of change in political and social systems, all of which are lacking at the present time. The immediate issue for sustainability is not so much the ultimate limits and technological possibilities, but rather it is our present slow pace of change when faced with growing social and environmental challenges. There are technological solutions for most environmental problems, but they are not being applied at anywhere near the speed necessary to avoid future crises. Environmental degradation continues and social tensions are rising, especially among the young.

INTERNATIONAL COOPERATION

The third crucially important element of a strategy aimed at generating a sustainable development path will have to be a significant strengthening of the current mechanisms of international cooperation, which have turned out to be completely inadequate to the global challenges that we face. The process of globalization is unfolding in the absence of equivalent progress in the creation of an international institutional infrastructure that can support it and enhance its potential for good. There is no global environmental authority. Policy in this area is being set via ad hoc approaches involving elements of international cooperation, voluntary compliance, and large doses of hope.

In the absence of a body having jurisdiction over the global environment with corresponding legal enforcement authority, the international

community has, de facto, abdicated management of the world's environment to chance and the actions of a few well-meaning states. The global economy has no lender of last resort. There is no reliable, depoliticized mechanism to deal with financial crises. Whether a country receives or is refused an IMF bailout in the middle of a financial meltdown is a function not of a transparent set of internationally accepted rules but rather of several other factors, including whether the IMF's largest shareholders consider the country to be a strategic ally worth supporting. Furthermore, there is no international legal framework to ensure that global business enterprises are socially, environmentally, and economically responsible. There is no agency charged with the responsibility for giving legal meaning to the noble principles enshrined in the Universal Declaration of Human Rights. According to the United States Department of State, there are forty-four nations with the capacity to build nuclear weapons. Nuclear proliferation remains yet another example of global institutional failure.

Whether we focus our attention on climate change and the broad range of associated environmental calamities, nuclear proliferation, the workings of the world's financial system, or focus on growing income disparities, the fact is that major planetary problems are being neglected because we do not have effective problem-solving mechanisms and institutions strong enough to deal with them. Or, put differently, a range of inherently global crises cannot be solved outside the framework of global collective action involving supranational cooperation and a fundamental rethinking of "national interest."

The reality is that existing institutions are incapable of rising to the challenges of a rapidly changing world because they were designed for another era. Indeed, the United Nations itself and its associated infrastructure of specialized agencies, which were created to attend to a variety of global problems, find themselves increasingly unable to respond to crises, sometimes because these agencies lack the appropriate jurisdiction or mandate to act, at times because they are inadequately endowed with resources, and often because they simply do not know what to do. Shoghi Effendi characterized this dilemma with penetrating insight when he said, as far back as 1931, that "the fundamental cause of this world unrest is

attributable . . . to the failure of those into whose hands the immediate destinies of peoples and nations have been committed, to adjust their system of economic and political institutions to the imperative needs of a rapidly evolving age" (*World Order* 36).

The nation state is in deep crisis. At its core, the nation state is defined by a geographical border within which elected governments—at least in the context of democracy—are responsible for safeguarding the interests of citizens, improving the quality of available services, managing scarce resources, and promoting gradually rising living standards. However, as made abundantly clear by recent events in the financial markets and, more generally, by the onward march of globalization, the economic system is now no longer confined to national borders but straddles them in a way that is increasingly forcing governments to relinquish control in a growing number of areas. Indeed, one of the main lessons to emerge from the 2008-2009 global financial crisis, as noted by Peter Mandelson, a former European Union Commissioner, is that "a global economy needs global economic governance" (n. pag.). The same can be said for the environment.

Alongside the stresses put on institutions by the accelerating pace of global change, people everywhere are showing growing dissatisfaction with the inability of politics and politicians to find solutions to wide ranges of global problems. This trend is likely to intensify and is giving rise to a "crisis of governance," the sense that nobody is in charge, that while we live in a fully integrated world, we do not have an institutional infrastructure that can respond to the multiple challenges we face.²⁶ Shoghi Effendi summarizes this predicament: "The world, to whichever continent we turn our gaze, to however remote a region our survey may extend, is everywhere assailed by forces it can neither explain nor control" (*World Order* 31).

Indeed, existing mechanisms to tackle global issues are woefully inadequate. Treaties and conventions—which are very much at the core of how

26. See the excellent discussion of these issues provided by Rischard, *High Noon: 20 Global Problems and 20 Years to Solve Them*.

the international community has confronted global challenges in the past—have proven generally ineffective to address urgent problems. For example, the Kyoto Protocol was negotiated in 1997 but only ratified in 2005. The United States, until 2008 the largest emitter of global-warming gasses in the world, now overtaken by China, is not a party to the Protocol. It was, therefore, a foregone conclusion that the goals it set for global emissions by 2012 would not be reached. Where enforcement mechanisms exist at all, monitoring and enforcement of these treaties are lax and painfully slow.

During the 1990s the United Nations took the lead role in organizing major intergovernmental conferences, beginning with the Earth Summit held in Rio de Janeiro in 1992. This was followed by conferences on social and economic development (Copenhagen), women (Beijing), population (Cairo), human rights (Vienna), and so on. These conferences, however, while generally good for raising awareness of the underlying problems, have proven to be inadequate for problem-solving. Long on declarations and in some cases deteriorating into circus-like chaos (e.g., the 2001 Durban conference on race), they have long ceased to be mechanisms for effective cooperation on the urgent problems confronting humanity. The Rio+20 United Nations Conference on Sustainable Development held in 2012 was intended to reaffirm government commitments, to define a green economy that would alleviate poverty and work for sustainability, and to obtain agreement on new international institutional arrangements. But this gathering only succeeded in making minor adjustments to existing institutions and in proposing a high-level political forum whose function is still being defined. This experience demonstrated once again that governments are incapable of addressing urgent global problems effectively within the present system.

Yet another attempt at reinforcing existing mechanisms of international cooperation was the creation in the mid-1970s of the G7, a club comprised of the world's seven largest economies. The motivation was to create a high-level body to discuss "major economic and political issues facing their domestic societies and the international community as a whole" ("What Is the G8?") The G7 has been a good forum for open debate about

global problems but not a particularly effective problem-solving group. In the public imagination, its semi-annual meetings are largely perceived as excellent photo opportunities, not as brainstorming sessions focused on particular problems requiring urgent solutions. Unlike, for instance, the 1944 Bretton Woods conference, which lasted three weeks and resulted in the creation of a new world financial system, G7 meetings are actually intended to *preserve* the status quo. Its communiqués are negotiated by deputies ahead of the Summit itself and much time is spent in getting the wording of these declarations just right. Over time, critics have pointed out some obvious deficiencies, the first being, of course, that now the G7 membership is no longer comprised of the world's seven largest economies. Italy, for instance, the industrial world's slowest-growing economy during the past twenty years, has now been overtaken by many others, including China and India.²⁷ In 1999, recognizing that the global economy had evolved since the mid-1970s, a broader grouping was created—the G20—but neither the Swiss nor the Dutch nor the Spanish were particularly happy at being excluded. Switzerland is the world's most competitive economy; the Netherlands is one of the most generous donors and, according to the Center for Global Development, one of the countries with the most development-friendly policies.²⁸ Spain, a country whose economy is three times the size of that of Argentina (a member of the G20), took great exception to being excluded from the G20 Summit, which was called by President George W. Bush for November 14–15, 2008, to discuss the global financial crisis.

27. According to the World Bank's development indicators (www.worldbank.org), Italy's GDP in 2012 is estimated to be US\$1,834 billion, compared to China's (US\$12,406 billion), India's (US\$4,184 billion), Russia's (US\$2,513 billion), and Brazil's (US\$2,356 billion), using a purchasing-power-parity measure.

28. See *Commitment to Development Index 2012*, issued by the Center for Global Development, which reports that Denmark, Norway, Sweden, Luxembourg, Austria, and the Netherlands occupy, in that order, the top six ranks. <www.cgdev.org>

Moreover, both the G7—or the G8 with Russia—and the G20 remain, in fact, official government bodies. Their deliberations bring to the table heads of state and a small coterie of civil servants, but there is no representation from the business community, and civil society representatives do not participate. Given the global nature of the problems being faced and the increasingly shared perception that their solution will require broad-based collaboration across various stakeholder groups, many of these groups suffer from a deficit of legitimacy.²⁹ They are not a fair representation of humanity, and, as such, they cannot be expected to make any important decisions on its behalf.

The multilateral agencies associated with the United Nations system have acquired a critically important role in recent decades. These agencies are repositories of knowledge and expertise and, in some cases, they have essentially taken over jurisdiction in a central area of economic governance, such as international trade through the World Trade Organization. However, they remain hampered in many other ways, including lack of access to adequate resources to finance their activities and the reluctance of many of the larger countries to cede national sovereignty in particular areas. In this respect, the European Union has, without doubt, gone further than any other country grouping in creating a supranational institutional infrastructure to support an ambitious process of economic and political integration.

Effective, credible mechanisms of international cooperation that are perceived to be legitimate and capable of acting on behalf of the interests of humanity—rather than those of a particular set of countries—are absolutely essential if the world is to meet the challenge of striking the correct balance between concern for the environment and the policies that must underpin such concern. There is also the need to ensure that the global economy develops in a way that provides opportunities for all, par-

29. The population of the G7—746 million, according to the latest World Bank estimates—accounts in 2010 for 10.8 percent of the world's population, that is, a small minority.

ticularly the poor and the disadvantaged.³⁰ It is an open question whether the existing intergovernmental system of nation states is capable of achieving this level of cooperation, or if such a system will require a more fundamental restructuring of the relationships between countries and peoples.

HUMAN VALUES

Finally, no strategy aimed at fostering the emergence of a sustainable development path would be complete without a fundamental rethinking of the human values that have driven much of the development process during the past century. A considerable body of academic research in recent years has examined the issue of the correlation between growing incomes and human happiness. The question itself might have appeared slightly quaint a couple of decades ago, when economists in academia and policymakers in government and international financial organizations more or less accepted as an article of faith that higher growth and income would always be desirable, would increase human welfare and, along with it, happiness.

Several insights, however, have contributed to a gradual change of perspective. First, however beneficial the several decades of robust, postwar economic growth might have been in improving living standards, the realization grew that the global economy was beginning to confront environmental constraints that could actually be measured. Second, psychologists, newly empowered with analytical tools developed in other sciences, were able to show that human happiness was correlated with income only up to a certain level. Money seemed to be crucially important for happiness when basic material needs had not been met. But once these needs had

30. For a sensible set of reform proposals aimed at enhancing the efficiency and responsiveness of the United Nations to some of these global challenges, see *Turning Point for All Nations*, a statement prepared by the Bahá'í International Community on the occasion of the fiftieth anniversary of the United Nations, New York, 1995.

been satisfied, the sources of happiness shifted to other concerns, reflecting deeper spiritual aspirations, including friendship, love, relationships, a sense of purpose in life, and security, among others. The level of income at which the correlation with happiness disappears has been estimated at around US\$10,000 to US\$13,000, using 1995 United States dollars and adjusting for differences in purchasing power across countries.³¹

Nobel laureate Amartya Sen suggests that societies operate better on some presumption of trust. Here we refer to the need for openness, “the freedom to deal with one another under guarantees of disclosure and lucidity” (Sen 39). Trust is tremendously important for preventing corruption and other abuses, and it is behind the frequent calls for improved transparency in governance. Experience has shown that where there is trust, citizens and businesses pay their taxes, which, in turn, enables the government to formulate policies to achieve various social ends because the resources are available to invest in these areas. As societies see the fruits of these efforts, trust in the government is reinforced and the country enters into what one can call a “virtuous cycle” of development. Of course, “vicious cycles” are also possible, such as those that have occurred

31. The interested reader can see, among others, the work by Easterlin, “Will Raising the Incomes of All Increase the Happiness of All?” *Journal of Economic Behavior and Organization*, 27 (1995), pp. 35–47; and Inglehart and Klingemann, “Genes, Culture, Democracy, and Happiness,” chapter 7 in Diener and Suh, ed., *Culture and Subjective Well-Being*, pp. 165–83. Further insightful discussion is provided by Homer-Dixon, *The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization*, pp. 192–93, and McKibben, *Deep Economy: The Wealth of Communities and the Durable Future*, pp. 30–42, 109–12. For a more technical treatment the reader may refer to Kahneman and Krueger, “Developments in the Measurement of Subjective Well-being,” *Journal of Economic Perspectives* 20.1, (Winter 2006), pp. 3–24. Kahneman is a professor of psychology at Princeton University and is the 2002 Nobel laureate in economics. The Earth Institute of Columbia University and partners recently issued the *World Happiness Report*, ed. Helliwell, Layard, and Sachs. The study of happiness (“subjective well-being”) is now considered an entirely respectable academic discipline.

during the past half-century. Thirty years ago, there was very little debate about the role of corruption in the development process. It was certainly a taboo subject in the corridors of the IMF and the World Bank, where there was a tendency to separate technical judgments about the intricacies of macroeconomic policy from value judgments about the domestic political dimension. Fortunately, there is now broad understanding that openness and transparency are key drivers of prosperity, although there is no need to frame the debate in moral, ethical, or religious terms. It is enough to see this debate as an economic efficiency issue. Where corruption is rampant, for instance, companies and individuals see paying taxes as a bad business proposition. In contrast, as noted earlier, everybody pays taxes in the Nordic countries, which have the lowest levels of corruption in the world and the highest tax burdens, because the benefits of doing so are immediately visible: superb infrastructure, a highly trained labor force, an extensive social safety net, excellent education, and so forth.

Bahá'ís would argue that the above observations suggest the need to broaden the definition of what constitutes “well-being” and investigate more closely the relationship between increasing market activity and the welfare of the people participating in the economic system. One starting point would be to establish a clearer mental demarcation between the concepts of “growth” and “development.” The first is essentially a quantitative concept that captures the expansion in the scale of the economic system, while the latter refers to qualitative changes in this system and in its relationships with the environment and other aspects of life in the community. Properly understood, economics should concern itself less with how to add to the physical dimension of the economic system and more with the long-term welfare of the community whose interests the “system” is ultimately intended to serve.

This distinction is quite fundamental. Herman Daly and John Cobb argue that the global ecosystem will change in coming decades “because it will be *physically forced* to change” (21). To give a sense of the scope for additional expansion of the global economy, they observe that, as of the early 1990s, human beings were appropriating 40 percent of the total world product of photosynthesis. An additional doubling of the human

scale would leave very little energy for all nonhuman species. Since “humans cannot survive without the services of ecosystems which are made up of other species,” it becomes clear that another doubling of the human scale would put unbearable pressures on the earth’s ecosystem, if not actually become an ecological impossibility. The doubling time of human population is projected to be about forty years. However, as currently formulated, the aim of development policy is to *increase* the average per capita consumption of global resources, thus reducing, in the absence of some major technological breakthrough, the length of time needed to double the scale of the global economy and its claims on world resources. Daly and Cobb conclude that “unless we awaken to the existence and nearness of scale limits, then the greenhouse effect, ozone layer depletion, and acid rain will be just a preview of disasters to come, not in the vague distant future but in the next generation” (144).³²

The deep interconnection between spirituality and care for the environment has been the subject of increasing exploration. James Gustave Speth, retired dean of the School of Forestry and Environmental Studies at Yale University, believes the economy to be “an inherently rapacious and ruthless system” and that “it is up to citizens to inject values that reflect human aspirations rather than just making money” (48). Al Gore dedicates an entire chapter in his extraordinarily prescient book *Earth in the Balance* to the role of spirituality in the cause of environmentalism and had this to say about the Bahá’í view:

Perhaps because its guiding visions were formed during the period of accelerating industrialism, Bahá’í seems to dwell on the spiritual implications of the great transformation to which it bore fresh witness: “We cannot segregate the human heart from the environment outside us and say that once one of these is reformed everything will be improved. Man is organic with the world. His inner life molds the

³². One should derive some comfort from the fact that depletion of the ozone layer has ceased to be a serious global environmental threat, reflecting effective international cooperation, as envisaged in the Montreal Protocol.

environment and is itself deeply affected by it. The one acts upon the other and every abiding change in the life of man is the result of these mutual reactions.” (262)

The challenges posed by the above are further elucidated in *The Prosperity of Humankind*, a statement issued by the Bahá'í International Community in 1995:

A culture which attaches absolute value to expansion, to acquisition, and to the satisfaction of people's wants is being compelled to recognize that such goals are not, by themselves, realistic guides to policy. (14)

As the experience of recent decades has demonstrated, material benefits and endeavors cannot be regarded as ends in themselves. Their value consists not only in providing for humanity's basic needs in housing, food, health care, and the like, but in *extending the reach of human abilities*. The most important role that economics must play in development lies, therefore, in equipping people and institutions with the means through which they can achieve the real purpose of development: that is, laying foundations for a new social order that can cultivate the limitless potentialities latent in human consciousness. (13) (emphasis added)

NEW HOPES FOR A CHANGING WORLD

Bahá'u'lláh's admonition that civilization, if carried to excess, “will prove as prolific a source of evil as it had been of goodness when kept within the restraints of moderation” (*World Order* 194) is an eloquent statement of mankind's most pressing contemporary predicament. One's assessment of how far humanity has evolved in the path of progress and in creating the conditions for the emergence of “an ever-advancing civilization” (Bahá'u'lláh 215) depends on the choice of the starting point. Viewed in the context of the past century, however, there can be no doubt that our

achievements have been without parallel and have set the basis for a new stage of human development, one that will greatly test our will, our intellectual resources, our ingenuity, the maturity of our political systems, and our collective imagination.

The postwar period has witnessed a rapid expansion in the scale of the global economy. This process has been fueled by rapid population growth, by a significant acceleration in the pace of scientific and technological development, and by our enhanced abilities to tap into the planet's natural resources. An additional factor that, during the past three decades has had a particularly powerful influence, has been the information and communications revolution, which has boosted productivity and catalyzed a remarkable process of global economic and social integration. Of course, reflecting the absence of adequate mechanisms for international cooperation, to say nothing of an infrastructure for global governance, these processes have been disorderly, and have coexisted with a number of trends that have brought humanity to its present predicament—the emergence of environmental limits to the very economic growth that has contributed to the alleviation of human suffering, to pulling hundreds of millions of people out of extreme poverty, and to creating greater opportunity for vast segments of the world's population.³³

Yes, the prevailing economic paradigm has serious flaws. Left to its own devices, it can lead to episodes of instability and can coexist with other perturbing trends, such as growing income disparities or the unsustainable use of non-renewable resources. There is little comfort in suggesting that, notwithstanding its shortcomings, capitalism has proved to be a far superior economic system—in terms of improving overall living standards—than its main competitor during much of the past century. The mindless Marxist experiments, which ultimately collapsed with the Berlin Wall in 1989, had turned the Soviet Union into a superbly efficient machine for the *destruction* of wealth.

A “new development model” may indeed be necessary but, pending its

33. About 65 percent of the world's population today lives in high-income or high-growth economies, compared to less than 20 percent in 1978.

formulation, we would be well advised to work within the current system, which has features that, while far from perfect, have proved resilient and, it is not difficult to guess, would in any event transfer over to any new development paradigm. Among these one would include respect for property rights, progressive taxation, the use of the government budget as a key mechanism for income distribution, universal primary education, gender equality, and, most important, the maintenance and further development of the institutions that underpin our increasingly complex global economy.

In *The Secret of Divine Civilization*, 'Abdu'l-Bahá draws a parallel between the world of politics and the physical evolution of man. Just as the latter evolves from the embryo to higher stages of complexity, "the political world in the same way cannot instantaneously evolve from the nadir of defectiveness to the zenith of rightness and perfection. Rather, qualified individuals must strive by day and by night, using all those means which will conduce to progress, until the government and the people develop along every line from day to day and even from moment to moment" (107–8).

From a Bahá'í perspective, the starting point must be the consciousness of the oneness of humankind, which will lead to the creation of laws and institutions that are universal in both character and authority.³⁴ In terms of the evolution of institutional arrangements, the most immediate need is to increase the level of trust among governments, many of which have been remarkably untrustworthy in respecting their international agreements. Without trust, international cooperation cannot advance. A focus on transparency and reduction of corruption to achieve more effective governance will also help governments to move in the right direction and reduce the significant level of tax evasion among the wealthy and businesses. Within the economic system, a stronger focus on ethical behavior and social and environmental responsibility needs to be included in corporate charters and government regulations in order to widen the accountability of business leaders. This standard then needs to be extended to the

34. See Bahá'í International Community, *The Prosperity of Humankind*.

international level where multinational corporations and financial institutions presently escape essential controls and much national taxation. Recent efforts to develop social enterprises and alternative economic relationships are encouraging signs that change is taking root in many parts of the world.

This article has argued that in confronting the challenges of climate change and the other threats which cast a shadow over mankind's future prosperity, concerted action will be necessary on a number of fronts. Some of these will demand political leadership, particularly those that may require a reallocation of government-spending priorities (e.g., toward conservation, other forms of mitigation, greater investment in the development of green technologies and alternative fuels). No strategy, however, will bear fruit without the support of others outside government. The twenty-first century has delivered a "new diplomacy," one in which the search for solutions to global problems will increasingly involve coalitions of enlightened governments, civil society organizations, and the business community.³⁵

Of course, failure to act will increase our vulnerability to multiple, interrelated crises with unforeseen costs for human welfare. Whether we find the collective will to act now to stem the tide of future crises or wait for catastrophe to force change upon us is, perhaps, the central question of our time. While it is not clear today whether we will have the wisdom to act now, a close examination of the vision of world order offered by Bahá'u'lláh shows that we certainly have the *capacity* to move to a sustainable development path and that, in doing so, we could well usher in a new stage in the evolution of the human race, one that is likely to involve a

35. In this respect it is noteworthy that the three most important initiatives of international cooperation during the past decade and a half (the Kyoto Protocol on global warming, the creation of the International Criminal Court, and the ratification of the treaty to ban land mines) have all involved close collaboration across these three key stakeholder groups. Without doubt, this will be the wave of the future.

quantum leap in terms of our collective achievements as a human family. Shoghi Effendi provided a glimpse of that magnificent potential:

National rivalries, hatreds, and intrigues will cease, and racial animosity and prejudice will be replaced by racial amity, understanding and cooperation. The causes of religious strife will be permanently removed, economic barriers and restrictions will be completely abolished, and the inordinate distinction between classes will be obliterated. Destitution on the one hand, and gross accumulation of ownership on the other, will disappear. The enormous energy dissipated and wasted on war, whether economic or political, will be consecrated to such ends as will extend the range of human inventions and technical development, to the increase of the productivity of mankind, to the extermination of disease, to the extension of scientific research, to the raising of the standard of physical health, to the sharpening and refinement of the human brain, to the exploitation of the unused and unsuspected resources of the planet, to the prolongation of human life, and to the furtherance of any other agency that can stimulate the intellectual, the moral, and spiritual life of the entire human race. (*World Order* 204)

WORKS CITED

- 'Abdu'l-Bahá. *The Secret of Divine Civilization*. Trans. Marzieh Gail. Wilmette, IL: Bahá'í Publishing Trust, 1957. Print.
- Bahá'í International Community. *The Prosperity of Humankind*. London: Bahá'í Office of Public Information, 1995. Print.
- . *Turning Point for All Nations*. New York: Bahá'í International Community, 1995. Print.
- Bahá'u'lláh. *Gleanings from the Writings of Bahá'u'lláh*. Trans. Shoghi Effendi. Wilmette, IL: Bahá'í Publishing Trust, 2005. Print.
- Commitment to Development Index 2012*. Center for Global Development, 2012. Web. 9 Dec. 2013. < www.cgdev.org. >
- "Chile: Destitute No More." *The Economist* 16 Aug. 2007. Web. 18 Dec.

2013. <<http://www.economist.com/node/9645174>>
- Collier, Paul. *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*. Oxford: Oxford UP, 2007. Print.
- Cooper, Richard N. *A Half-Century of Development*. The Weatherhead Center for International Affairs. Cambridge: Harvard UP, 2004. Print.
- Dahl, Arthur Lyon. "The Competitive Edge in Environmental Responsibility." *The Global Competitiveness Report 2004-2005*: 103-10. New York: Palgrave Macmillan, 2004. Print.
- Daley, Herman. "On a Road to Disaster." Spec. issue of *New Scientist* 2678 (Oct. 2008), 46. Print.
- Daly, Herman and John B. Cobb. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press, 1994. Print.
- Dietz, Rob, Dan O'Neill, and Herman Daly. *Enough is Enough: Building a Sustainable Economy in a World of Finite Resources*. San Francisco: Berrett-Koehler, 2013. Print.
- Dornbusch, Rudiger, Stanley Fischer, and Richard Startz. *Macroeconomics*. 9th ed. Irwin, CA: McGraw-Hill, 2004. Print.
- The Earth Institute. *World Happiness Report*. Eds. John Helliwell, Richard Layard, and Jeffrey Sachs. New York: Columbia UP, 2012. Print.
- Easterlin, Richard. "Will Raising the Incomes of All Increase the Happiness of All?" *Journal of Economic Behavior and Organization* 27 (July 1995), 35-47. Print.
- Easterly, William. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, MA: MIT Press, 2002. Print.
- "Eating Carbon." *The Economist*, 13 Nov. 2008. Web. 18 Dec. 2013. <<http://www.economist.com/node/12592256>>
- G8 Research Centre. "What Is the G8?" *G8 Information Centre*. University of Toronto. n.d. Web. 18 Dec. 2013. <http://www.g8.utoronto.ca/what_is_g8.html>
- George, Susan. "We Must Think Big to Fight Environmental Disaster." Spec. issue of *New Scientist* 2678 (Oct. 2008), 50-51. Print.
- Gore, Al. *Earth in the Balance: Ecology and the Human Spirit*. Boston: Houghton Mufflin, 1992. Print.

- Gore, Al. *Earth in the Balance: Forging a New Common Purpose*. London: Routledge (Earthscan), 1992. Print.
- Gray, John. "Does the Free Market Erode Modern Character?" A Templeton Conversation, John Templeton Foundation. Web. 18 Dec. 2013. <<http://www.templeton.org/market/PDF/Gray.pdf>>.
- . *False Dawn: The Delusions of Global Capitalism*. New York: The New Press, 2000. Print.
- Homer-Dixon, Thomas. *The Upside Down: Catastrophe, Creativity, and the Renewal of Civilization*. New York: Alfred A. Knopf, 2006. Print.
- Inglehart, Robert, and Hans-Dieter Klingemann. "Genes, Culture, Democracy, and Happiness." Eds. Edward Diener and Eunkook M. Suh. Chapter 7 in *Culture and Subjective Well-Being*. Cambridge, MA: MIT Press, 2003. Print.
- International Energy Agency. *World Energy Outlook 2012*. Paris: International Energy Agency, 2012. Print.
- International Monetary Fund. "Articles of Agreement of the International Monetary Fund." Web. 18 Dec. 2013. <<http://www.imf.org/External/Pubs/FT/AA/>>
- Jackson, Tim. *Prosperity Without Growth: Economics for a Finite Planet*. London: Routledge (Earthscan), 2009. Print.
- . "Why Politicians Dare Not Limit Economic Growth." Spec. issue of *New Scientist* 2678 (Oct. 2008), 42–4. Print.
- Kahneman, Daniel, and Alan Krueger. "Developments in the Measurement of Subjective Well-being." *Journal of Economic Perspectives* 20.1, (Winter 2006) 3–24. Print.
- Lévy, Bernard-Henri. "Does the Free Market Corrode Moral Character?" A Templeton Conversation, John Templeton Foundation. Web. 18 Dec. 2013. <<http://www.templeton.org/market/PDF/Levy.pdf>>
- Lopez-Claros, Augusto, and Danielle Pletka. "Without Reforms, the Middle East Risks Revolution." *International Herald Tribune*, 8 April 2005: n. pag. Print.
- Maddison, Angus. *The World Economy: A Millennial Perspective*. Organisation for Economic and Cooperation and Development (OECD). Paris: OECD, 2001. Print.

- Mandelson, Peter, "In Defence of Globalization." *The Guardian* 3 Oct. 2008. Web. 18 Dec. 2013. <<http://www.theguardian.com/commentis-free/2008/oct/03/globalisation.globaleconomy>>
- McKibben, Bill. *Deep Economy: The Wealth of Communities and the Durable Future*. New York: Henry Holt, 2007. Print.
- Morris, Harvey. "Number of Poor Rises in Developing Regions." *Financial Times* 11 Sept. 2008. Web. 18 Dec. 2013. <<http://www.ft.com/cms/s/0/702c72d2-801e-11dd-99a9-000077b07658.html#axzz2o1v1jjaz>>
- Rischard, J. F. *High Noon: 20 Global Problems, 20 Years to Solve Them*. New York: Basic Books, 2003. Print.
- Seager, Ashley. "Torrent of Bad News Ends Hope of 'Quick' Recession." *The Guardian Weekly* 27 February–5 March 2009, 1-2. Print.
- Sen, Amartya. *Development as Freedom*. Oxford: Oxford University Press, 1998. Print.
- Shoghi Effendi. *The Promised Day Is Come*. Rev. ed. Wilmette, IL: Bahá'í Publishing Trust, 1980. Print.
- . *The World Order of Bahá'u'lláh*. Wilmette, IL: Bahá'í Publishing Trust, 1974. Print.
- Sims, Andrew. "Does Growth Really Help the Poor?" Spec. Issue of *New Scientist* 2678 (Oct. 2008), 49. Print.
- Speth, Gus. "Swimming Upstream." Spec. issue of *New Scientist* 2678 (Oct. 2008), 48. Print.
- Stern, Nicholas. *The Economics of Climate Change: The Stern Review*. Cambridge: Cambridge UP, 2007. Print.
- Stiglitz, Joseph E. *Making Globalization Work*. Allen Lane, 2006. Print.
- Suzuki, David. "We Should Act Like the Animals We Are." Spec. issue of *New Scientist* 2678 (Oct. 2008), 44–45. Print.
- United Nations. *Charter of the United Nations*. 24 Oct. 1945. Web. 18 Dec. 2013. <<http://www.un.org/en/documents/charter/>>
- Vidal, John and Adam Vaughan. "Arctic Sea Ice Shrinks to Smallest Extent Ever Recorded." *The Guardian* 14 Sept. 2012. Web. 18 Dec. 2013. <<http://www.theguardian.com/environment/2012/sep/14/arctic-sea-ice-smallest-extent>>
- "Why Our Economy Is Killing the Planet." Spec. issue of *New Scientist* 2678 (Oct. 2008), 40. Print.

World Bank. The Commission on Growth and Development. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. World Bank Publications, 2008.

World Commission on Environment and Development. *Report of the World Commission on Environment and Development: Our Common Future*. Oxford UP, 1987.