# Sustainable Development: From Brundtland to Rio 2012

### **Background Paper\***

prepared for consideration by the High Level Panel on Global Sustainability at its first meeting, 19 September 2010

September 2010 United Nations Headquarters, New York

<sup>\*</sup>Prepared by John Drexhage and Deborah Murphy, International Institute for Sustainable Development (IISD)

## **Executive Summary**

The term, sustainable development, was popularized in *Our Common Future*, a report published by the World Commission on Environment and Development in 1987. Also known as the Brundtland report, *Our Common Future* included the "classic" definition of sustainable development: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." Acceptance of the report by the United Nations General Assembly gave the term political salience; and in 1992 leaders set out the principles of sustainable development at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil.

It is generally accepted that sustainable development calls for a convergence between the three pillars of economic development, social equity, and environmental protection. Sustainable development is a visionary development paradigm; and over the past 20 years governments, businesses, and civil society have accepted sustainable development as a guiding principle, made progress on sustainable development metrics, and improved business and NGO participation in the sustainable development process. Yet the concept remains elusive and implementation has proven difficult. Unsustainable trends continue and sustainable development has not found the political entry points to make real progress. As a result, climate change has become the de facto proxy for implementation of the sustainable development agenda; but the framework of the climate change negotiations are not always the appropriate forum for broader strategic discussions of sustainable development.

While sustainable development is intended to encompass three pillars, over the past 20 years it has often been compartmentalized as an environmental issue. Added to this, and potentially more limiting for the sustainable development agenda, is the reigning orientation of development as purely economic growth. This has been the framework used by developed countries in attaining their unprecedented levels of wealth, and major and rapidly developing countries are following the same course. The problem with such an approach is that natural resources are in imminent peril of being exhausted or their quality being compromised to an extent that threatens current biodiversity and natural environments.

Addressing this challenge calls for changes at the consumer level in developed countries. Developed countries have the wealth and technical capacity to implement more sustainable policies and measures, yet the required level of political leadership and citizen engagement is still a long way off. The lack of action in developed countries is compounded by economic growth in developing countries that follows the resource-intensive model of developed countries. Without change and real action to address levels of consumerism and resource use in developed countries, one can hardly expect a receptive audience among developing countries when attempts are made to direct attention to their economic development practices. More sustainable development pathways are needed in both developed and developing countries; which require a level of dialogue, cooperation and, most importantly, trust that simply is not reflected in today's multilateral institutions or regimes.

There is a huge gap between the multilateral processes, with their broad goals and policies; and national action, which reflects domestic political and economic realities. A huge constituency around the world cares deeply and talks about sustainable development, but has not taken serious on-the-ground action. Deep structural changes are needed in the ways that societies manage their economic, social, and environmental affairs; and hard choices are needed to move from talk to action.

While some would argue that we have failed on sustainable development, 20 years is a relatively short time frame to implement the required changes in such a daunting area. The needed systemic changes will require a revolution in the way the world does business. This will have an impact on lifestyles and consumption patterns—especially so in developed countries, but also for the growing middle class in developing countries.

The recent financial crisis and the beginning of the decline of trust in the liberalization and globalization model could mean some renewed receptivity for a new sustainable development paradigm. A new model could chart a development path that truly is concerned with equity, poverty alleviation, reducing resource use, and integrating economic, environmental, and social issues in decision making. The opportunity is ripe to move beyond incrementalism to real systemic change.

# **Table of Contents**

1.0 Introduction	6
2.0 The Origins of Sustainable Development	7
3.0 The 20 Years since Rio	9
3.1 Acceptance of sustainable development as a guiding principle	9
3.2 Progress on sustainable development metrics	11
3.3 Improvements in partnering with stakeholders	12
3.4 Difficulties in implementing sustainable development	13
3.5 Sustainable development has found a de facto 'home' in climate change	13
4.0 20 Years Later: How does sustainable development	14
4.1 Some progress on sustainable development	14
4.2 But unsustainable trends continue	15
4.3 What underlies the less than expected progress on sustainable development	16
5.0 Moving Ahead	19
References	22

# Abbreviations and Acronyms

CBD Convention on Biological Diversity

CSD Commission on Sustainable Development

CSR Corporate Social Responsibility

GDP gross domestic product
GNP gross national product

GRI Global Reporting Initiative

IMF International Monetary Fund

IPCC Intergovernmental Panel on Climate Change

MDG Millennium Development Goal NGO non-governmental organization

OECD Organization for Economic Co-operation and Development

UN United Nations

UNCED United Nations Conference on Environment and Development

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

WBCSD World Business Council on Sustainable Development WCED World Commission on Environment and Development

WSSD World Summit on Sustainable Development

WWF Worldwide Fund for Nature WTO World Trade Organization

### 1.0 Introduction

Sustainable development is a noble and necessary aspiration. It is a visionary development paradigm; and over the past 20 years governments, businesses, and civil society have committed to sustainable development goals. Maurice Strong, former Secretary-General of the Rio Summit, remarked in 1998 that sustainable development "has been embraced by people throughout the world." Despite recognition of and commitment to the principles of sustainable development, action has not moved beyond the margins and certainly has not led to the core changes needed to support a transition to sustainable development.

The term, sustainable development, was popularized in *Our Common Future*, a report published by the World Commission on Environment and Development (WCED) in 1987. Also known as the Brundtland report, *Our Common Future* included the "classic" definition of sustainable development: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, p. 43). Acceptance of the report by the United Nations (UN) General Assembly gave the term political salience; and in 1992 leaders set out the principles of sustainable development at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, also referred to as the Rio Summit and the Earth Summit.

Sustainable development is a fluid concept and various definitions have emerged over the past two decades. Despite an on-going debate on the actual meaning, a few common principles tend to be emphasized. The first is a commitment to equity and fairness, in that priority should be given to the improving the conditions of the world's poorest and decisions should account for the rights of future generations. The second is a long-term view that emphasizes the precautionary principle, i.e., "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" (*Rio Declaration on Environment and Development*, Principle 15). Third, sustainable development embodies integration, and understanding and acting on the complex interconnections that exist between the environment, economy, and society. This is not a balancing act or a playing of one issue off against the other, but recognizing the interdependent nature of these three pillars.

Despite a general acceptance that sustainable development calls for a convergence between the three pillars of economic development, social equity and environmental protection; the concept remains elusive. Since the Brundtland report and the Rio Summit, governments and organizations have taken up sustainable development as a desirable goal and developed metrics for sustainable development, but implementation has proven difficult. Matthews and Hammill (2009: 1119) note that main problem since the Rio Summit has been "in designing the move from theory to practice. Here the tenacious grip of technological, political and other constraints becomes clear."

Uptake of sustainable development has also been hampered by development being defined primarily as economic growth. This has been the framework used by developed countries in attaining their unprecedented levels of wealth, and it should be no surprise that major developing economies are following the same course. The problem with such an approach is that natural resources are in imminent peril of being exhausted (whether in terms of supply [e.g., oil reserves] or quality [e.g., air or water pollution]).

Addressing this challenge calls for changes at the consumer level in developed countries. Developed countries have the wealth and technical capacity to implement more sustainable policies and measures, yet the required level of political leadership and citizen engagement is still a long way off. The situation reflected by President

George H. W. Bush in 1992 prior to the Rio Summit that "The American way of life is not negotiable", has not drastically changed.<sup>1</sup>

This is compounded by another real and growing threat to the planet's wellbeing—economic growth in developing countries that follows the resource-intensive model of developed countries. Without change and real action to address levels of consumerism and resource use in developed countries, one can hardly expect a receptive audience among developing countries when attempts are made to direct attention to their economic development practices. More sustainable development pathways are needed in both developed and developing countries; which require a level of dialogue, cooperation and, most importantly, trust that simply is not reflected in today's multilateral institutions or regimes.

There is a huge gap between the multilateral processes, with their broad goals and policies; and national action, which reflects domestic political and economic realities. A huge constituency around the world cares deeply and talks about sustainable development, but has not taken serious on-the-ground action. Deep structural changes are needed in the ways that societies manage their economic, social and environmental affairs; and hard choices are needed to move from talk to action.

This paper, prepared as background for the work of the United Nation Secretary-General's High-level Panel on Global Sustainability, assesses the evolution in the thinking and practice on sustainable development. The paper first reviews the origins of sustainable development, and then looks at progress on sustainable development in the 20-plus years since the Brundtland report and the Rio Summit. This is followed by an analysis of why headway on sustainable development has been less than expected; and the concluding section provides thoughts on moving forward.

## 2.0 The Origins of Sustainable Development

The theoretical framework for sustainable development evolved between 1972 and 1992 through a series of international conferences and initiatives. The UN Conference on the Human Environment, held in Stockholm in 1972, was the first major international gathering to discuss sustainability at the global scale. The conference created considerable momentum, and a series of recommendations led to the establishment of the UN Environment Programme (UNEP) as well as the creation of numerous national environmental protection agencies at the national level. The recommendations from Stockholm were further elaborated in the 1980 World Conservation Strategy—a collaboration between the International Union for the Conservation of Nature, the World Wildlife Fund (WWF), and UNEP—which aimed to advance sustainable development by identifying priority conservation issues and key policy options.

In 1983, the UN convened the WCED, chaired by Norwegian Prime Minister Gro Harlem Brundtland. Comprised of representatives from both developed and developing countries, the Commission was created to address growing concern over the "accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development." Four years later, the group produced the landmark publication *Our Common Future* (or the Brundtland report) that provided a stark diagnosis of the state of the environment. The report popularized the most commonly used definition of sustainable

<sup>&</sup>lt;sup>1</sup> This quote was attributed to President Bush during a press conference before the Rio Summit. An Atlantic article cites it without a source. See http://www.theatlantic.com/unbound/polipro/pp9904.htm.

development: "Development that meets the needs of current generations without compromising the ability of future generations to meet their own needs" (WCED, 1987, p. 45).

The Brundtland report provided the momentum for the landmark 1992 Rio Summit that laid the foundations for the global institutionalization of sustainable development. Marking the twentieth anniversary of the Stockholm Conference, the Earth Summit adopted the *Rio Declaration on Environment and Development* and Agenda 21, a global plan of action for sustainable development. The Rio Declaration contained 27 principles of sustainable development, including principle 7 on "common but differentiated responsibilities," which stated: "In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command." Agenda 21 included 40 separate chapters, setting out actions in regard to the social and economic dimensions of sustainable development, conservation and management of natural resources, the role of major groups, and means of implementation. In Agenda 21, developed countries reaffirmed their previous commitments to reach the accepted UN target of contributing 0.7 percent of their annual gross national product (GNP) to official development assistance, and to provide favourable access to the transfer of environmentally sound technologies, in particular to developing countries.

Three seminal instruments of environmental governance were established at the Rio Summit: the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the non-legally binding Statement of Forest Principles. Following a recommendation in Agenda 21, the UN General Assembly officially created the Commission on Sustainable Development (CSD) later that year. The Rio Summit was very successful from a political standpoint: it had the world's attention and active engagement and attendance by virtually every national leader. Its challenges lay in two areas: first, too much of an emphasis on the "environment pillar" in the negotiations and secondly, all too little implementation of goals established under Agenda 21, particularly those related to development aid and cooperation.

Since that time a number of important international conferences on sustainable development have been held—including the 1997 Earth Summit+5 in New York and the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. These meetings were primarily reviews of progress; and reported that a number of positive results had been achieved, but implementation efforts largely had been unsuccessful at the national and international level. The UN General Assembly noted in 1997 (paragraphs 4 and 17) that "the overall trends with respect to sustainable development are worse today than they were in 1992" and "much remains to be done to activate the means of implementation set out in Agenda 21, in particular in the areas of finance and technology transfer, technical assistance and capacity-building." In his 2002 report on implementing Agenda 21, United Nations Secretary-General Kofi Annan confirmed that "progress towards reaching the goals set at Rio has been slower than anticipated" and "there is undoubtedly a gap in implementation" (United Nations Economic and Social Council, 2002, p. 4). Regrettably, initiatives following the seminal Rio Summit have not attracted the attention, commitment, and resources required for effective implementation of sustainable development. This is a problem with multilateral agreements, in that commitments at the international level do not reflect the processes and realities in countries, where multiple stakeholders—including government, businesses, and non-governmental organizations (NGOs)—need to be engaged in action.

The negotiations at the WSSD in 2002 demonstrated a major shift in the perception of sustainable development—away from environmental issues toward social and economic development. This shift, which was driven by the needs of the developing countries and strongly influenced by the Millennium Development Goals

GSP1-6

(MDGs)<sup>2</sup>, is but one example of how sustainable development has been pulled in various directions over its 20-plus year history. Defining and implementing sustainable development has had to deal with the tensions between the three pillars, and the prevailing "influences" at different points in time. Ironically, it could be said that WSSD succeeded where Rio failed, but failed where Rio succeeded. The WSSD did make a constructive change by focusing considerably more attention on development issues, particularly in integrating the MDGs with sustainable development principles and practices. However, the political timing was simply not there: the political leadership was not engaged because the world, led by the United States, was more focused on security issues around terrorism, weapons of mass destruction, and Iraq. Unfortunately, the seeds planted in 2002 fell upon arid land.

At and since the Rio Summit, sustainable development has found its most prominent "hook" (at least in terms of media and political attention) around the issue of climate change. Responses to address climate change, both mitigation and adaptation, are linked to sustainable development. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2007, chapter 12.1.1) pointed out the iterative relationship between climate change and sustainable development, and that the two can be mutually reinforcing. In many respects, the UNFCCC has become an international proxy for discussions around sustainable development, and a potential means to channel required funding and technology from developed to developing countries. While climate change is certainly one manifestation of the broader challenge of sustainable development, the scale and complexity of the broader sustainability challenge means that it cannot be adequately addressed in the confines of the climate change negotiations.

### 3.0 The 20 Years since the Rio Summit

The theoretical frameworks were laid for sustainable development with the Brundtland report and at the Rio Summit, and the thinking and practice on sustainable development has evolved over the past two-plus decades. The concept has been useful in framing approaches to development and growth; but sustainable development has largely remained an idea and conceptual framework.

### 3.1 Acceptance of sustainable development as a guiding principle

Since the Brundtland report and the Rio Summit, sustainable development has transitioned from being an interesting yet at times contested ideal, to a concept that enjoys widespread endorsement by international institutions, governments, businesses, and civil society. The nearly universal adoption of sustainable development as a guiding principle is, in part, due to its flexibility. It allows various stakeholders to adapt the concept to their own purposes. This strength, however, is also a liability because various interpretations have led to confusion and compromised implementation.

<sup>&</sup>lt;sup>2</sup> The UN Millennium Declaration was adopted in 2000 and committed countries to reach eight Millennium Development Goals by 2015. The eight goals included: halving extreme poverty, halting the spread of HIV/AIDS, providing universal primary education, eliminating gender disparity in education, reducing the under-five mortality rate, reducing the maternal mortality rate and achieving universal access to reproductive health, developing a global partnership (to address the needs of the poorest countries, to further an open non-discriminatory trade system, and to deal with developing country debt); and ensuring environmental sustainably (by integrating sustainable development into country policies and programs, reducing biodiversity loss, improving access to safe drinking water and sanitation, and improving the lives of slum dwellers) (UN, 2010).

Nonetheless, sustainable development has been integrated into the operations and governing mandate of many prominent international organizations. These include the World Bank (2010), which has affirmed a commitment to "sustainable globalization" that "enhances growth with care for the environment"; the International Monetary Fund (IMF, 2010), with a commitment to "sustainable economic growth"; as well as the World Trade Organization (WTO, 2010) which endeavours to contribute to sustainable development through the pursuit of open borders and the removals of barriers to trade. Sustainable development is also a prominent component of the MDGs, which have been widely endorsed by national governments and the world's foremost development organizations since they were adopted at the Millennium Summit in 2000.

Sustainable development has also gained currency in the private sector—often in the form of the corporate social responsibility (CSR) agenda. Several voluntary initiatives have been formed over the past 20 years, including the World Business Council on Sustainable Development (WBCSD), Global Compact, Equator Principles, Global Reporting Initiative, and Extractive Industries Transparency Initiative. In addition, various major international NGOs, such as WWF, Oxfam International, and Friends of the Earth, have increased the scale and sophistication of their involvement in sustainability principles. Local NGOs around the world have taken up the cause of sustainable development.

The widespread currency of the issues is evident in the sustainable development strategies of 106 national governments in 2009 (UN General Assembly, 2010, p. 11). Local governments have also responded, with over 6,400 local governments in 113 countries involved in local Agenda 21 activities in 2001 (International Council for Local Environmental Initiatives, 2002, p. 4).

While the concept is widely accepted and sustainable development has been adopted as a desirable goal by many institutions, governments, businesses, and NGOs; the term sustainable development suffers from definitional ambiguity or vagueness (IPCC, chapter 12.1.2). The dominant view of governments and businesses is that sustainable development is continued economic growth made more environmentally sensitive in order to raise living standards globally and break the link between poverty and environmental degradation. Economic growth is seen as part of the solution, and markets and technology will produce a richer world that is more ecologically stable (Hopwood, Mellor and O'Brien, 2005). Developed country adherence to this view is being matched by the major developing economies of the Republic of Korea, China, and India; where growing wealth is being followed by efforts to improve environmental performance. Spending on environmental protection in China's 2010 budget is projected to rise by more than 20 percent, clean energy measures in India amount to over US\$1 billion, and close to 80 percent of the Republic of Korea's stimulus funding was directed to the implementation of its Green New Deal (Robins, Clover and Sarawanan, 2010: pp. 3-6).

Others view sustainable development as a balancing act between the economy and the environment—meaning that the economy is an entity that is separate from the environment, where the latter inevitably loses out (Caccia, 2001). Some critics accuse the business community of using sustainable development as a way to paint environmentally destructive practices green—a rationalization for economic growth without due concern for environmental or social imperatives (Corporate Watch, 2006; Greenpeace, 2010).<sup>3</sup>

Some NGOs and academics have argued that sustainable development does not go far enough to create the required lifestyle, consumption, and behavioral changes—that radical changes are needed in the world's economic order. "Deep ecology" critics argue that the concept of sustainable development is too human-centric, and the paradigm of sustainable development does not adequately challenge the consumer culture.

<sup>&</sup>lt;sup>3</sup> See Najam (1999) for a discussion of the rise of the WBCSD representing "greenwashing" or a greening of business.

<sup>&</sup>lt;sup>4</sup> There are a variety of views from NGOs and academics ranging across the entire spectrum of sustainable development.

**GSP1-6** 

Others question if sustainable development should continue to support economic growth at all, given the physical limits of the global ecosystem; while others have suggested that the concept does not give enough attention to the poor and their acute vulnerability to environmental degradation (Adams, 2008).

The concept has also become synonymous for some with particular political agendas: in that those most vocal in support of sustainable development often come with political agendas that, at least in North America, are often associated with the left wing of the political spectrum. On the other hand, many developing countries see sustainable development as an ideology developed by developed countries for the purpose of imposing stricter conditions and rules on development aid and international trade.

And yet, despite all these detractors, one could argue that sustainable development might be the only "paradigm" of development left standing. With the recent fiscal and financial crises, and the loss of faith in the pure economic growth model of the Washington Consensus, there is renewed interest in the potential of sustainable development as an effective framework and tool to address these core structural challenges.<sup>5</sup>

### 3.2 Progress on sustainable development metrics

Progress has been made on sustainable development metrics. Since the Brundtland report and the Rio Summit, researchers in universities, environmental organizations, think tanks and national governments have furthered the measurement of progress on sustainable development. Indicators have been developed to supplement and enhance the default measure of progress, gross domestic product (GDP), which is a measure of a country's overall official economic output in the formal sectors. These indicators aim to reflect a broader understanding of what constitutes progress, and seek to refine the conceptualization of wealth, capital, and development. Examples include the Human Development Index developed by the United Nations Development Programme (UNDP) and the gross national happiness indicator of Bhutan. Other measures focus more specifically on the state of the natural environment, including the WWF's Nature's Living Planet Index and the Happy Planet Index of the New Economics Foundation.<sup>6</sup>

The Organisation of Economic Co-operation and Development (OECD) and the International Institute for Sustainable Development developed the Bellagio STAMP (SusTainability Assessment and Measurement Principles) as a set of guiding principles to measure and assess progress towards sustainability under the OECD's *Measuring the Progress of Societies* program. This initiative involves UN organizations, national governments, and civil society organizations in the development of alternate measurements of human progress that more accurately account for social and environmental factors.<sup>7</sup> Several countries have developed sustainable development indicators to supplement economic indicators.

Many companies report on sustainability, including through CSR reporting. More than 1,500 organizations from 60 countries have used the guidelines from the Global Reporting Initiative (which works in cooperation with the

<sup>&</sup>lt;sup>5</sup> The Washington Consensus was initially coined in 1989 by John Williamson to describe a set a policy prescriptions that should constitute the standard reform package for debt-wracked Latin American countries by the IMF, World Bank and U.S. Treasury Department. See Williamson (1989). The term has become associated with neoliberal economic policies and globalization.

<sup>&</sup>lt;sup>6</sup> See the WorldWatch Institute's (2008) *State of the World 2008: Innovations for a Sustainable Economy* for a comprehensive list of alternate indicators and measures of societal progress.

<sup>&</sup>lt;sup>7</sup> The *Measuring the Progress of Societies* website provides an overview of sustainable development indicators in OECD countries. See http://www.oecd.org/pages/0,3417,en\_40033426\_40033828\_1\_1\_1\_1\_1,00.html.

United Nations Global Compact) to produce sustainability reports. Over 1000 reports were submitted to the initiative in 2008, a 46 percent increase from 2007 and 2008 (Global Reporting Initiative, 2010).

There has been considerable progress and success in measuring sustainable development, but GDP still dominates headlines and is the main barometer by which the media and citizens gauge growth and the success of politicians. GDP is the de facto universal metric for "standard of living," with elections still mostly won or lost on the basis of the state of a country's GDP.

### 3.3 Improvements in partnering with stakeholders

Stakeholder participation is a success that emerged from the Rio Summit and has gained momentum over the past 20-plus years. There was tremendous argument about NGO participation in the preparations for Rio (Kirwin, 1994), but such participation is now taken for granted. Since the creation of the CSD in 1992, civil society organizations, including NGOs and business, have been represented by nine major group sectors and participate in the CSD with the overall purpose of informing the Commission's decision-making processes.

Most governments realize how much NGOs can contribute to issues; and some governments work closely with NGOs and business, and include representatives on their delegations to meetings of various environmental treaties. A particularly positive development over the past 20 years is the increased collaboration and networking among NGOs from developed and developing countries. NGOs have also experienced a crossfertilization of interests in various issues, including environment, development, human rights, women's rights and social issues (Khor, 1997).

Business also plays an important role, with actions by the WBCSD—which represents more than 200 chief executive officers from some of world's largest companies—moving industry from the periphery to the center of the sustainable development debate. Business has become more proactive by encouraging the CSR movement and using its investment in sustainable ways. But these initiatives are voluntary and involve relatively few companies. Runnalls (2008, p. 23) notes that "The majority of jobs worldwide are provided by small and medium-enterprises for which these concepts are foreign" and "it is a real challenge to begin to involve the new centers of economic decision-making in the BRIC countries (Brazil, Russia, India and China)."

Work is needed to find a more effective means to engage NGOs and business in sustainable development negotiations and implementation. The financing, technical, and management expertise of the business sector will be critical to meeting sustainable development goals. Business will be more inclined to make sustainable development or green investments the more governments, in whatever appropriate form, are able to effectively address risks associated with such investments. More effective means of involving critical non-government actors, particularly in the private sector, in implanting sustainable development is clearly a "bottom line" for sustainable development to have any chance of real and lasting success.

### 3.4 Difficulties in implementing sustainable development

The concept and idea of sustainable development is widely accepted, and good progress has been made on sustainable development metrics; yet the implementation of sustainable development has been largely unsuccessful. The world has made little progress in implementing programs and policies to improve the lives of the poor (Moyo, 2009), and the integration of the three pillars of economic development, social development, and environmental improvements remains a challenge. Sustainable development is not easy and will take considerable time and effort.

Many of the consensus-driven UN summits have resulted in broad documents, policies, and goals; and the action plans tend to be "sprawling documents that offer something for everyone" (Victor, 2006). Hodas (2010, p. 29) notes that high-level international meetings—such as under the CSD and UNFCCC—"avoid concrete discussion about how to shift to a more sustainable, low carbon world economy" and "international talks increasingly become disconnected from real-world policy."

Efforts to implement sustainable development have taken place in an environment of mainstream economic planning and market-based investment, in a manner that will not disrupt overall growth. As such, implementation has not moved beyond slow incremental steps to transformative action. The WBCSD argued that there is a lack of leadership and each sector waits on the others, limiting real progress toward sustainable development. They note that "politicians tend not to run for office on promises of making the price of goods reflect their real (higher) costs for the sake of sustainable development; consumers tend not to demand to pay such higher costs; business tends not to lobby lawmakers for higher prices (Holliday, Schmidheiny and Watts, 2002, p. 18).

Some developing countries argue that lack of financial and technological resources, and unfair terms of trade have plagued their implementation of sustainable development. Many poor people and poor countries do not have adequate access to technology, lacking the resources, infrastructure, quality of governance, and business environment necessary to stimulate sustainable development (Economic Commission for Africa, 2002).

While national governments have developed sustainable development strategies and plans, and local governments have been involved in initiatives, these actions have not led to fundamental changes. Chasek, Downie and Brown (2010, pp. 37-38) report that few countries have lived up to their Rio commitments, stating that National Agenda 21 efforts led to "increased academic debate, heightened public awareness and minor adjustments in the system of national accounts and taxation rules, but they have not fundamentally altered the way we mange and measure our national economy."

Part of the reason for the lack of implementation is that actions have tended to emphasize the symptoms of environmental degradation and not the underlying source of the problem. Jim MacNeill (2007, p. 5), former Secretary General of the Brundtland Commission, asserted that we are still struggling with an issue raised in the Brundtland report: the institutions and policies we put in place to address sustainable development issues were "not only weak but they had been directed one way or another to tackle the symptoms of environmental degradation and to ignore its sources. The sources, of course, are to be found in government (and corporate) fiscal, tax, budget, trade, energy, agriculture and other policies and in the values underlying them." Government have not taken down the silos between departments to find the complex, integrated answers.

### 3.5 Sustainable development has found a de facto "home" in climate change

While sustainable development was supposed to have an institutional home in the Commission for Sustainable Development, it has not been harnessed effectively by national governments as a vehicle for implementation. The CSD has focused on environment and has not promoted effective integration of the three pillars of sustainable development. In addition, other institutions and processes—MDGs, a proliferation of environmental treaties, strong global economic institutions—have cornered different parts of the sustainable development paradigm. As a result, climate change has emerged as the de facto proxy for addressing sustainable development issues.

In many respects climate change has determined what a sustainable development approach to implementation would look like. The IPCC (Sathaye *et al.*, 2007, p. 699) states that "It is no longer a question of whether climate change policy should be understood in the context of sustainable development goals; it is a question of how."

Sustainable development and climate change share strong complementary tendencies: they are multi-sectoral, they both require international cooperation to solve the problem, and the problem is inter-woven through economic and technological development in increasingly complex networks.

Defining sustainable development is difficult, and responses to climate change, if appropriately addressed, can help to concretely manifest sustainable development. While not all climate change actions are synonymous with sustainable approach (there are some conflicts, such as plantation forestry), the broader long-term approach—on forestry, energy, technology, and consumption patterns—would easily be incorporated in a sustainable development framework.

The climate change negotiations could benefit from a broadened discussion that is informed by the integrative thinking of sustainable development. For example, mitigation could be addressed within a broader discussion of energy and economic growth. Adaptation could benefit from a broader understanding of "resilient development;" and measurement, reporting and verification (MRV) talks could be addressed in the context of a broader appreciation of issues related to "transparency and accountability."

One of the results of climate change becoming the de facto proxy for sustainable development—and this was evident in Copenhagen—is that climate change has become home to other agendas. Many of the broader strategic development issues, such as poverty alienation and demographic challenges, need to be addressed for climate change to be effectively addressed. But the framework of the climate change negotiations are not the always the most appropriate forum for such broader strategic discussions.

# 4.0 20 Years Later: How does sustainable development measure up?

### 4.1 Some progress on sustainable development

The global implementation of sustainable development remains a challenge, but there is evidence of progress. Advances have been made on poverty alleviation, with the world on track to meet the MDG goal of halving the proportion of people whose income is less than US\$1 per day—but this is due to economic success in Asia; little progress was made in sub-Saharan Africa. Access to energy is improving, and progress has been made on electrification in all developing regions; although rates in South Asia and sub-Saharan Africa remain one-half to one-quarter of those in the rest of the world (UN Economic and Social Affairs, 2006).

The environment is a topic of greater priority for governments and business than it was 20 years ago, and there are some efforts to integrate environmental considerations more effectively into economic decision-making. Examples include legislative efforts in various developed countries to place a price on carbon, a growing recognition of the value of eco-system services to business and society, and efforts to measure progress toward sustainable development. The environment—and climate change in particular—continues to be rated a top concern for citizens in many countries (Pew Research Centre, 2010), despite the recent economic downturn and the hubris of the Copenhagen Climate Change Conference.

Concerns over environmental degradation and increasing pollution have led to increased investment in green technologies. The Montreal Protocol has been successful in phasing out ozone-depleting substances, and atmospheric concentrations of these substances have either levelled off or decreased since the protocol came into effect in 1989. UNEP's Global Trends in Sustainable Energy Investment 2010 reports that in 2009, for the

second year in a row, both the United States and Europe added more power capacity from renewable sources such as wind and solar than conventional sources like coal, gas, and nuclear. And globally, investment in renewable energy power capacity (excluding large hydro) in 2009 was comparable to that in fossil-fuel generation, at around US\$100 billion each (UNEP, SEFI and Bloomberg New Energy Finance, 2010, p. 12). Ecocity development is occurring in North America, Europe, China, and the United Arab Emirates—and includes such features as water conservation, energy efficient building, smart grids with renewable energy, LED street lights, and walkability (Biello, 2008). Over recent decades both developed countries and emerging economies have made progress in reducing the rate of resource extraction per unit of GDP (OECD, 2008).

### 4.2 But unsustainable trends continue

Despite this progress on sustainable development, negative trends continue to prevail. Economic growth since the Rio Summit has been fed by unprecedented resource and material consumption and related environmental impacts. Large portions of the natural world have been converted to human use, prompting concerns about the ability of the world's natural resource base to sustain such growth. While the world has made some progress on decoupling natural resource extraction from economic growth, the absolute consumption of resources is projected to increase long into the future. OECD countries as a group figure substantially in both global resource use and raw materials supply, and many non-OECD countries (especially the large developing economies of Brazil, China, India, Indonesia and South Africa) are catching up (OECD, 2008). The vast consumption gap between the rich and the poor is expressed through a widely know measure: "roughly 80 percent of the natural resources used each year are consumed by about 20 percent of the world's population" (Matthews and Hammill, 2009, p. 1118).

Incomes and wealth also reveal a large and growing gap between the rich and poor. Rising income inequality has been observed in most countries over the past two decades (IMF, 2007, pp. 138-143), especially so in middle-and high-income countries, where the incomes of richer households have increased relative to the those of the middle class and poorer households (ILO, 2008). Global inequality has been declining, and the world is a less unequal place than it was 25 years ago, but this is largely a result of successful development in China and India (Frieden, 2007, p. 48). Overall the world remains extremely unequal, with the richest 1 percent of the world's population owning 40 percent of the worlds' wealth; while the poorest 50 percent have barely 1 percent of world wealth (Davies *et al*, 2006).

Increasing consumption, combined with population growth, mean that humanity's demands on the planet have more than doubled over the past 45 years (WWF, 2008, p. 2). These impacts are revealed in a number of disturbing trends. Global biodiversity continues to decline, and species in all groups with known trends are, on average, being driven closer to extinction. For example, fishery stocks are at the point of collapse, with around 80 percent of the world marine fish stocks for which data is available are fully exploited or overexploited (Secretariat of the CBD, 2010, p. 48). The Millennium Ecosystem Assessment reveals that the provision of many critical ecosystem services—such as water, biodiversity, fibre, and food—is being compromised due to the impact of human development (Hassan *et al.*, 2005). Scarcity of and competition over freshwater is a growing concern for many regions in the world, with around 50 countries currently facing moderate to severe water stress (WWF, 2008). Climate change will exacerbate water stress and other problems. Current predictions, summarized in the IPCC's 2007 assessment report, indicate that the carrying capacity of large parts of the world will be compromised by climate change. Significant political divisions threaten international progress on climate change, yet the window for action to avert the most dangerous effects of global warming is shrinking by the day.

### 4.3 What underlies the less than expected progress on sustainable development?

Sustainable development is part of the international lexicon, but the concept remains too amorphous to be clearly defined, and hence implemented.

Since the Brundtland report and the Rio Summit sustainable development have largely remained an idea and a conceptual framework. There are many acceptable views of sustainable development, and it has been taken up as a starting point or perhaps an end goal—but the implementation of sustainable development has lagged. There are a growing number of success stories in the form of concrete examples of what is happening at the local level in day-to-day development; but they are still too few in number to change overall paradigms of development and they have not been communicated well. More effective communication about what works is absolutely critical. It is not about altruistic intentions on the environment; it is about ensuring a livable world for today's and tomorrow's children.

### Sustainable development remains fundamentally an environmental issue

Sustainable development is intended to encompass environment, economy, and social issues; but is often compartmentalized as an environmental issue. In its early manifestations, sustainable development was largely a green agenda, or bringing environmental considerations in economic development.

The perception of sustainable development as an environment issue is reflected in attempts to institutionalize sustainable development in the international system. The CSD has attracted representation mainly from environment departments, meaning that parties give most attention to the environmental sectors (Chasek, 2000, p. 394). Dodds *et al.* (2002, p. 5) note that the minimal participation by ministers with portfolios other than environment has served to further marginalize the debate at the sessions and limit the CSD's impact and follow-up. This has implications beyond the CSD, as environment ministers often have less influence than ministers of finance, trade, and industry; and limited sway or jurisdiction to promote national implementation of sustainable development. Governments have not figured out how to create the needed interdisciplinary integration, often because sustainable development is seen as an environment issue or a development issue—not an integrated concept.

One reason why sustainable development is seen as the province of environment ministries and has failed to capture the attention of other ministries is that UNCED was seen as an environmental summit (and informally referred to as the Earth Summit). During the Rio negotiations, Chapter 2 of Agenda 21 (economics and trade) received barely a day's attention and was easily adopted because of a lack of representation from economic and finance ministries. The two treaties adopted in Rio, UNFCCC and CBD, were seen as environmental treaties and did not give the necessary attention to economic and social development, both of which are impacted by the treaties.

There is a certain irony in this prevalent interpretation: sustainable development has been criticized for an overemphasis on the environment, yet environmental degradation continues at much too strong a rate.

### Sustainable development has been subject to competing agendas

While sustainable development is often perceived as an environmental issue, it has been subject to competing agendas. These different agendas prevailed in the Rio Declarations and agreements, and continue to influence international discussions and relations. Developing countries' original agenda of trade liberalization, debt relief, poverty reduction, and an increase in development assistance was developmentally focused. This was lined up against the developed countries' environmentally-focused agenda of climate change, biodiversity loss,

deforestation, and declines of the world marine fisheries. Of course, the economy has always been an overriding concern (and is discussed separately in the next section of this paper).

These competing agendas underline the difficulties in integrating economic, environmental, and social concerns; and demonstrate how interpretation of sustainable development is subject to the prevailing *zeitgeist*. Over the past 20 years, the "development" side of sustainable development occasionally has been prominent. The negotiations at the WSSD in Johannesburg in 2002 saw a major shift away from environment toward human and economic development. The MDGs were highly influential in this shift; they permeated the negotiations and were reiterated through much of the Johannesburg Plan of Implementation. Following the adoption of the MDGs, all of the environmental treaties to tried associate with and implement the MDGs, wanting to benefit from the associated financing.<sup>8</sup>

The United Nations Convention to Combat Desertification, seen as the first "sustainable development convention," was negotiated primarily by development cooperation officials in the OECD countries, compared to agriculture, environment and land management officials in developing countries. While the convention took sustainable development principles into account, the duality of views between developed and developing countries led to a weak convention; again demonstrating the difficulties in integrating the three pillars. The "development" side gained little traction after Johannesburg.

The skepticism around the discussions on a "green economy in the context of sustainable development and poverty eradication"— a proposed theme for discussion at the 2012 Rio+20 conference—could be reflective of the lack of traction and progress on the development side. Some developing countries are worried that the green economy, which is not clearly defined or articulated, will replace sustainable development; or that the green economy will be a merger of economic development and environment—leaving out social equity. This debate will continue and could foster a resurgence of sustainable equity issues, led largely by developing countries (Chasek, 2010).

#### Development as economic growth continues to be the dominant paradigm

The implementation of sustainable development has been and is hindered by the reigning policy orientation of development as purely economic growth. A successful country is one that is expanding its economy and has a healthy, long-living population who become ever richer. Gustave Speth (2010) sums up this approach by noting that "Growth is measured by tallying GDP at the national level and sales and profits at the company level, and pursuit of GDP and profit is the overwhelming priority of national economic and political life."

There were huge expectations out of the Rio Summit, but these were quickly tempered, in part because of the emergence of a neoliberal economic paradigm. Post-Rio was a period of accelerated globalization and intensive interaction between nations in the areas of trade, investment, and expansion of capital markets. This dominant post-Rio paradigm was strongly influenced by the Washington Consensus, which has guided attempts to spur global economic growth for over two decades. It advocated fiscal and monetary soundness, openness to trade and investment, financial liberalization and regulation, privatization, deregulation, and secure property rights. The prevailing view has been that of sustaining economic growth, rather than sustaining the global ecosystem; and sustainable development has been subsumed under the globalization paradigm.

The priority given to the trade and globalization agenda in the major economies tended to crowd out sustainable development concerns. Speth argued that some policy makers saw the globalization paradigm as supplanting the need for international assistance and sustainable development. In addition, much time and

<sup>&</sup>lt;sup>8</sup> See for example, Convention on Biological Diversity et al. (2005) and UNEP (2005).

money has been tied up in a series of military and peacekeeping engagements in the post-Cold War period, supplanting the expected peace dividend of financial and political resources to apply to environmental and development objectives (Speth in Chasek, Downie and Welsh Brown, 2010, p. 39)

This economic growth agenda has been predominant, with the belief that markets and technology will produce a richer world that is more ecologically stable. As noted earlier, some countries have benefited from the model, such as China and Republic of Korea, and are increasing spending on environmental protection; but other countries, many in sub-Saharan Africa, have not benefited and have experienced declines in progress toward MDGs. While it is true that economic growth usually provides countries more funds to provide enhanced environmental protection, it runs the danger of being no more than a 'band-aid' solution: economic growth is inevitably associated with growing consumption, of all goods, but particularly energy. The focus on green energy and transportation investment, as seen for example in the Republic of Korea, is precisely what sustainable development calls for: addressing the core tools of development.

The United Nations, which has led international discussions on sustainable development, has never been perceived as the main international forum for discussions on economic development. The institutions governing the global economy—the Bretton Woods Institutions, World Trade Organization (WTO), Group of 8 and increasingly the Group of 20—are stronger than those promoting social equity, poverty alleviation, and environment cooperation (Halle, 2002). The notion of sustainable development has lost traction since the Brundtland report and Rio Summit because of the dominance of the economic growth agenda.

# Developed countries have not met commitments to developing countries, generating an atmosphere of distrust

The international discussions on sustainable development are permeated by a lack of trust between developed and developing countries. This is underpinned by developed countries not meeting their financial and technology transfer commitments to developing countries. An implicit deal of the Rio Summit was that developing countries would pay attention to the sustainable development agenda if developed countries increased development assistance significantly. Developed countries have failed to live up to this bargain. Most developed countries (with the exception of Sweden, Norway, Luxembourg, Denmark, and the Netherlands) have not reached the goal of allocating 0.7 percent of GDP to aid for developing countries. Although aid volumes reached their highest historical levels in 2008 at US\$121.5 billion, the economic downturn decreased these levels in 2009. Donors will fall short by the Gleneagles target by US\$17 billion; and aid to Africa is estimated to increase by US\$12 billion, well below the US\$25 billion target for Africa agreed to in 2005 (OECD, 2010).

This distrust between developed and developing countries is further exemplified in the trade negotiations. The Doha Development Round of negotiations under the WTO, which was meant to resolve long-standing disputes around developed country agricultural subsidies and other barriers to trade which greatly disadvantage developing countries, has reached an impasse. Many developing countries consider the WTO and the Doha Round as an institution (or agenda) for redistribution between rich and poor countries, and have been suspicious of hidden regulatory ambitions (e.g., labour and environmental standards) from the United States and the European Union (Erixon, 2008, p. 15).

Developing countries also question developed countries' commitment to undertake the required changes to relieve the pressure their societies place on the global environment; and are suspicious of their demands for change in developing countries. An example is a request by some developed countries that the World Bank not fund coal-fired power plants in developing countries, while the construction of such plants continues in some of these developed countries. Developed countries have taken no significant action to change production and

**GSP1-6** 

consumption patterns; and developing countries are likely to resist significant radical action without developed countries leading the way.

### Sustainable development has not been able to find the political entry points to make real progress.

The lack of implementation of sustainable development is partly a lack of entry points to make real progress. As noted, the economic agenda and economic institutions have had greater influence than those governing environmental and social issues, at both the national and international level. Environment ministries tend to be weaker departments; and they do not control the policy tools required to drive real change.

With no strong entry point for sustainable development, climate change has in many ways has become the de facto proxy for implementation of the sustainable development agenda. Implementation of actions to mitigate and adapt to climate change—such as reducing deforestation, promoting sustainable energy, improved agricultural methods—have the potential to bolster sustainable development. But this can be a limited approach for sustainable development given the current state of the climate change negotiations, and that climate change is also perceived as an environmental issue and lacks entry points. In addition, the many other agendas now under the climate change "tent" are working to weigh down prospects for a future comprehensive and binding accord. There is a critical need for a deepened understanding, at all levels, of the complex interactions between the economy, social development, and the environment.

# 5.0 Moving Ahead

While some would argue that we have failed on sustainable development, 20 years is a relatively short time frame to implement the needed changes on such a complex and challenging issue. The needed systemic changes will require a revolution in the way the world does business, and this will impact lifestyles and consumption patterns—especially so in developed countries, but also for the growing middle class in developing countries. Such changes are difficult, and have been resisted in a world that has put economic growth over environmental and social issues.

The recent financial crisis and the beginning of the collapse of trust in the liberalization and globalization model, could open the door for a new sustainable development paradigm. A new model could chart a development path that truly is concerned with equity, poverty alleviation, reducing resource use, and integrating economic, environmental, and social issues in decision making. The opportunity is ripe to move beyond incrementalism to real systemic change.

There are hopeful signs for this paradigm shift. Some countries have linked stimulus spending, set up after the financial crisis of 2008, with sectors associated with the "green economy" including renewable energy, green buildings, clean transportation, water management, and waste management. In total, approximately US\$521 billion was allocated to green activities, or 16.3 percent of total stimulus funding (Robins, Clover and Sarawanan, 2010, p. 12). The Republic of Korea, the European Union, China, Norway, Australia, and France allocated the largest percentage of their stimulus spending to green investments.<sup>9</sup>

<sup>9</sup> The percentage of the economic stimulus plans allocated to green funds was: South Korea – 78.8 percent, European Union – 63.7 percent, China – 33.3 percent, Norway – 29.7 percent, Australia – 22.6 percent, and France – 18.3 percent. The United States allocated 11.8 percent of stimulus spending to green investment; and the total amount, US\$115.7 billion was

Green stimulus spending is expected to yield significant and more sustainable economic growth opportunities, benefiting both financial recovery and environmental goals simultaneously. It is too early and too little is known about this spending to gauge its true success. Ladislaw and Goldberger (2010, p. 3) note that countries have had varying degrees of success in implementing their green stimulus programs with many of the most successful likely to be the ones who have strong policy incentives and commercial frameworks to catalyze future green investments long after the stimulus is gone.

These investments could prove to be a first step to fuel a new green economy. This move will require radical (that is, to the root) technology change, which could act as huge stimulus for economic activity. An increasing number of national and sub regional governments could use this opportunity as part of their core industrial strategy. As an example, the electrification of the transportation industry will require a massive transformation of infrastructure and how things are run, requiring huge investment and creating significant economic activity. Making this shift will be difficult and will require that we show that actions can make a difference. Moving to this new path will require:

- Taking sustainable development out of the environment "box" and considering wider social, economic, and geopolitical agendas. Many of the needed decisions and actions will take place outside the environment community in the fields of energy, security, trade and investment, and development cooperation. It will mean breaking down the silos between ministries and looking at "growth" in an integrated perspective. WSSD in 2002 had it right in that respect. What we now need is follow up in terms of strong engagement at the leadership level and with core public agencies related to finance and development.
- Fundamentally shifting how we develop and evaluate the health of economies, using a
  "Sustainable Economy" as a framework. New metrics will need to measure and report on the
  interconnectedness of various agendas—such as trade, finance, environment, and food.
- Moving to actual implementation, with real accountability. We need to go beyond the present view of sustainable development as a framework or concept, to concrete action that includes bottom-up measurable activities. This includes a shift from "reaching agreement" to "implementation." This would be in line with the OECD's new thrust in its Development Assistance Committee's work. Fifteen years of frameworks and policy dialogue is enough; it is time to implement and see if all the years of analysis and design will bear fruit.
- Encouraging transparency and accountability in actions. Accountability should be based on measuring the impact of actions, not just what actions have been taken. A reformed sustainable development system must be performance-based.
- Using partnerships between government, business and civil society to identify and test new approaches, and to scale up promising approaches. Public funding can be used to leverage sustainable private investments, but there needs to be recognition that the private sector will be more inclined to increase and sustain their investments in sustainable development financing the more they feel their voice is being heard and the more they are involved in the policy-making process.
- Effectively communicating sustainable development successes, policies, and learning. A
  communications vehicle that has effective access points will help kickstart and maintain implementation
  of sustainable development.

Buy-in from political leaders and a coherent cross-government approach are needed elements to implement sustainable development. Strong political leadership is required to address the difficult challenges; but that

alone is not sufficient. It is also incumbent that sustainable development permeates bureaucratic and corporate cultures and systems.

### References

Adams, William M., 2008. *Green Development: Environment and Sustainability in a Developing World* (third edition). London: Routledge.

Biello, David, 2008. "Eco-Cities: Urban Planning for the Future." Scientific American Earth 3.0. October.

Caccia, Charles, 2001. *The Politics of Sustainable Development*. Hammond Lecture Series, Guelph University, 1 November.

Chasek, Pamela, 2008. "Sustainable Development in the 21st Century." In Michael Snarr and D. Neil Snarr (eds.), *Introducing Global Issues*, fourth edition. Boulder: Lynne Rienner, 2008.

Chasek, Pamela, 2005. "The Negotiating System of Environment and Development: A ten-year review" in Gunnar Sjöstedt, Elisabeth Corell and Angela Churie Kallhauge (eds.), *Global Challenges: Furthering the multilateral policy process*. Sheffield, UK: Greenleaf Publishing.

Chasek, Pamela, 2000. "The UN Commission on Sustainable Development: The First Five Years." In Pamela Chasek (ed.), *The Global Environment in the Twenty-first Century: Prospects for International Cooperation*. New York: United Nations University.

Chasek, Pamela, David Downie and Janet Welsh Brown, 2010. *Global Environmental Politics*, fifth edition. Boulder: Westview Press.

Convention on Biological Diversity, Convention on International Trade in endangered Species of Wild Fauna and Flora, Convention on Migratory Species of Wild Animals, Convention on Wetlands (Ramsar, Iran 1971) and World Heritage Centre, 2005. *Achievement of the Millennium Development Goals requires the Conservation and Sustainable Use of Biological Diversity*. Montreal, 12 September. Accessed at: http://www.unep.org/greenroom/documents/CBDrelease1209.pdf.

Corporate Watch, 2006. What's Wrong with Corporate Social Responsibility? London: Corporate Watch. Accessed at: http://www.corporatewatch.org.uk/?lid=412.

Davies, James B., Susanna Sandstrom, Anthony Shorrocks and Edward N. Wolff, 2006. *The World Distribution of Household Wealth*. Helsinki: WIDER.

Dodds, Felix, Rosalie Gardiner, David Hales, Minu Hemmati and Gary Lawrence, 2002. *Post-Johannesburg: The Future of the UN Commission of Sustainable Development*. London: WHAT Governance Programme. Economic Commission for Africa, 2002. *Harnessing Technology for Sustainable Development*. Addis Ababa: Economic Commission for Africa.

Erixon, Fredrik, 2008. From Twin Towers to Fawlty Towers: The Story of the Doha Round. Brussels: European Centre for International Political Economy.

Frieden, Jeffrey, 2007. "Global Inequality: Trends and Remedies." *Harvard College Economics Review*, Spring, pp. 48-49.

Global Reporting Initiative, 2010. *About GRI: Facts and Figures about GRI Reports*. Accessed at: http://www.globalreporting.org/AboutGRI/FactSheet.htm.

Greenpeace. 2010. *Greenwashing*. Accessed at: http://stopgreenwash.org/.

Halle, Mark, 2002. Sustainable development cools off: Globalization demands summit take new approach to meeting ecological, social goals. Accessed at: http://www.iisd.org/pdf/2002/commentary\_trade\_1.pdf.

Hassan, Rashid, Robert Scholes and Neville Ash (eds.), 2005. *Ecosystems and Human Well-being: Current State and Trends, Volume 1.* Washington, D.C.: Island Press.

Hodas, David, 2010. *International Law and Sustainable Energy: A Portrait of Failure.* Widener Law School Legal Studies Research Paper, No. 10-21.

Holliday, Charles O., Stephan Schmidheiny and Philip Watts, 2002. Walking the Talk: The Business Case for Sustainable Development. San Franciso: Berrett-Koehler Publishers, Inc.

Hopwood, Bill, Mary Mellor and Geoff O'Brien, 2005. "Sustainable Development: Mapping Different Approaches." Sustainable Development 13, pp. 38-52.

Intergovernmental Panel on Climate Change, 2007. "Summary for Policymakers". in: Martin L. Parry, Osvaldo F. Canziani, Jean P. Palutikof, Paul J. van der Linden and Clair E. Hanson (eds.), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge: Cambridge University Press, pp. 7-22.

International Council for Local Environmental Initiatives, 2002. *Local Governments' Response to Agenda 21: Summary Report of Local Agenda 21 Survey with Regional Focus.* Toronto: International Council for Local Environmental Initiatives.

International Labour Organization, 2008. World of Work Report 2008: Income inequalities in the age of financial globalization. Geneva: International Institute for Labour Studies.

International Monetary Fund, 2007. World Economic Outlook 2007: Globalization and Inequality. Washington, D.C.: International Monetary Fund.

International Monetary Fund, 2010. "About the IMF." *International Monetary Fund*. Accessed at: http://www.imf.org/external/about.htm.

Khor, Martin, 1997. Effects of Globalization on Sustainable Development after UNCED. Penang: Third World Network.

Kirwin, Joe, 2004. Rio Two Years On: A Strong Reaction. Accessed at: http://jaygary.com/agenda21.shtml.

Ladislaw, Sarah O. and Nitzan Goldberger, 2010. *Assessing the Global Green Stimulus*. Commentary. Washington, D.C.: Centre for Strategic and International Studies.

MacNeill, Jim, 2007. Our Common Future: Advance or Retreat? Sustainable Development: A New Urgency. Geneva: EcoLomics International.

Mathur, Swati, 2010. "US to World Bank: Don't fund coal-fired plants." *Times of India*. 24 January. Accessed at: http://timesofindia.indiatimes.com/india/US-to-World-Bank-Dont-fund-coal-fired-plants/articleshow/5493089.cms.

Matthews, Richard A., and Anne Hammill, 2010. "Sustainable Development and Climate Change." *International Affairs 85*(6), pp. 1117-1128.

Moyo, Dambisa, 2009. *Dead Aid: Why Aid is Not Working and How there is a Better Way for Africa*. New York: Farrar, Straus and Giroux.

Najam, Adil, 1999. 'World Business Council for Sustainable Development: The Greening of Business or a Greenwash?" In Helge Ole Bergesen, Georg Parmann, and Øystein B. Thommessen (eds.), *Yearbook of International Co-operation on Environment and Development 1999/2000*. London: Earthscan Publications, pp. 65–75.

Organisation for Economic Cooperation and Development, 2008. *Measuring Resource Flows and Resource Productivity: Synthesis Report*. Paris: OECD. Accessed at: http://www.oecd.org/dataoecd/55/12/40464014.pdf.

OECD, 2010. *Development Cooperation Report*. Paris: OECD. Accessed at: http://www.oecd.org/document/62/0,3343,en\_2649\_33721\_42195902\_1\_1\_1\_1\_1,00.html

Oxfam, 2009. Empty Promises: what happened to 'development' in the WTO's Doha Round? Oxfam Briefing Paper. Accessed at: http://www.oxfam.org/sites/www.oxfam.org/files/bp131-empty-promises.pdf.

Pew Research Centre, 2010. "Environmental Issues." 22-Nation Pew Global Attitudes Survey. Washington, D.C.: Pew Research Center. Chapter 8, pp. 69-72.

Rio Declaration on Environment and Development, 1992. Accessed at: http://www.unep.org/Documents.Multilingual/Default.asp?documentid=78&articleid=1163.

Robins, Nick, Robert Clover and D. Sarawanan, 2010. *Delivering the Green Stimulus*. HSBC Global Research.

Runnalls, David, "Our Common Inaction: Meeting the Call for Institutional Change." *Environment Magazine*, 50 (6), pp. 19-28.

Sathaye, Jayant., Adil Najam, Christopher Cocklin, Thomas Heller, Franck Lecocq, Juan Llanes-Regueiro, Jiahua Pan, Gerhard Petschel-Held, Steve Rayner, John Robinson, Roberto Schaeffer, Youba Sokona, Rob Swart and Harald Winkler, 2007. "Sustainable Development and Mitigation." In Bert Metz, Ogunlade R. Davidson, Peter R. Bosch, Rutu Dave and Leo A. Meyer (eds), Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge and New York: Cambridge University Press.

Secretariat of the Convention on Biological Diversity, 2010. *Global Biodiversity Outlook 3*. Montreal: Secretariat of the Convention on Biological Diversity. Accessed at: http://www.cbd.int/doc/publications/gbo/gbo3-final-en.pdf.

Speth, James Gustave, 2010. "Towards a New Economy and a New Politics." *Solutions for a sustainable and desirable future*, Issue 5, 28 May. Accessed at: http://www.thesolutionsjournal.com/node/619.

Strong, Maurice, 1998. Fostering Investment in Sustainable Development. Speech to the Fresh Water conference, March.

United Nations, 2010. The Millennium Development Goals Report 2010. New York: United Nations.

UN Economic and Social Affairs, 2006. Trends in Sustainable Development. New York: United Nations.

United Nations Economic and Social Council, 2002. *Implementing Agenda 21: Report of the Secretary-General.* Commission on Sustainable Development acting as the preparatory committee for the World Summit on Sustainable Development, Second preparatory session, 28 January – 8 February 2002.

UNEP, 2005. *Desertification among Central Challenges to Achieve MDGs.* UNEP News Centre press release. Accessed at: http://www.unep.org/greenroom/documents/CBDrelease1209.pdf.

UNEP, SEFI and Bloomberg New Energy Finance, 2010. *Global Trends in Sustainable Energy Investment 2010.* Paris: UNEP and New Energy Finance.

UN General Assembly, 2010. Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development and analysis of the themes for the Conference: Report of the Secretary-General. The Preparatory Committee for the United Nations Conference on Sustainable Development, 17-19 May 2010.

UN General Assembly, 1997. Resolution Adopted by the General Assembly: Programme for the Further Implementation of Agenda 21. Nineteenth special session, Agenda item 8.

Victor, David G., 2006. "Recovering Sustainable Development." *Foreign Affairs*. January/February. Accessed at: http://greeneconomics.blogspot.com/2006/06/thoughts-on-sustainable-development.html.

Williamson, John, 1989. "What Washington Means by Policy Reform." In: John Williamson (ed.), *Latin American Readjustment: How Much has Happened*. Washington, D.C.: Institute for International Economics.

World Bank, 2010. "About Us." *The World Bank.* Accessed at: http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/0,,contentMDK:20040565~menuPK:1696892~page PK:51123644~piPK:329829~theSitePK:29708,00.html.

World Commission on Environment and Development, 1987. *Our Common Future*. Oxford: Oxford University Press.

World Trade Organization, 2010. "About the WTO – A Statement by the Director General,." World Trade Organization. Accessed at: http://www.wto.org/english/thewto\_e/whatis\_e/wto\_dg\_stat\_e.htm.

World Wide Fund for Nature, 2008. Living Planet Report. Gland, Switzerland.: WWF International:

World Watch Institute, 2008. *State of the World: A New Bottom Line for Progress*. New York: WW Norton and Company.