

The image features a person walking away from the viewer on a wide, unpaved dirt road. The person is wearing a yellow hat, a backpack, and dark clothing. In the background, there are large, rugged mountains with significant snow cover under a blue sky with scattered white clouds. The top of the image has a dark blue header with a faint white grid pattern resembling a dome or a stylized globe.

# The Road to 2050

Sustainable Development  
for the 21<sup>st</sup> Century





# The Road to 2050

Sustainable Development  
for the 21<sup>st</sup> Century



THE WORLD BANK  
Washington, D.C.

© 2006 The International Bank for Reconstruction and Development / The World Bank

1818 H Street, NW  
Washington, D.C. 20433 USA  
Telephone 202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)  
E-mail: [feedback@worldbank.org](mailto:feedback@worldbank.org)

All rights reserved.

The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the Board of Directors of the World Bank or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

#### **Rights and Permissions**

The material in this work is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The World Bank encourages dissemination of its work and will normally grant permission promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, telephone 978-750-8400, fax 978-750-4470, [www.copyright.com](http://www.copyright.com).

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, World Bank, 1818 H Street, NW, Washington, DC 20433, USA, fax 202-522-2422, e-mail [pubrights@worldbank.org](mailto:pubrights@worldbank.org).

Cover photo: © Rob Howard/CORBIS.

All other photos courtesy of Kirk Hamilton and the World Bank Photo Library.

A FREE PUBLICATION

# CONTENTS

Foreword      v

Acknowledgments      vi

Part One — The Vision      1

    Section 1: A Wealthier More Equitable World by 2050      1

        The World in 2050      3

        The Challenges Ahead      5

Part Two — The Challenges      7

    Section 2: Managing Natural Wealth Sustainably      7

        Evidence on the Importance of Natural Resources      9

        Natural Resources and Wealth Accumulation      10

        Some Conclusions on Natural Resources and Sustainability      11

    Section 3: Improving Governance      14

        The Case for Better Governance      15

        Social Accountability—Working on the Demand Side      17

        Lessons and Challenges on Social Accountability      19

    Section 4: Socially Sustainable Development      21

        Where We’ve Come From      23

        Putting Communities in the Driver’s Seat      24

        Safeguards      24

        Social Analysis      24

        Participation and Civic Engagement      25

        Violent Conflict      25

        Global Implications of Local Conflicts      26

    Section 5: Agricultural Productivity and Competitiveness      28

        A New System for Productivity and Competitiveness      30

        From Research and Development to Innovation Systems      31

        Realigning International Agricultural Research to Meet New Challenges      32

Building a Foundation for Global Cooperation in Agricultural Knowledge	33
Section 6: The Challenge of Addressing Climate Change	35
Scientific Understanding of Climate Change	36
Mitigation of Greenhouse Gas Emissions	38
Adaptation to Climate Change	40
Financing Needs and Sources	41
Part Three — The Response	43
Section 7: Bridging from Local to Global	43
Sustaining Natural Wealth	44
Improving Governance through Increasing Transparency	45
Socially Balanced Development	45
Boosting Agricultural Productivity and Competitiveness	46
Managing Climate Risks	47
Issues without Passports—The Need for Global Issues Management	48
Boxes	
5.1 Impact of the Consultative Group on International Agricultural Research on prices, production, land use, and trade	29
6.1 End-use technologies and practices	39
Figures	
1.1 Historical and projected population	2
1.2 Historical and projected GDP	2
2.1 Shares of wealth by income group, 2000	9
2.2 Shares of natural wealth in low-income countries	10
2.3 Decomposition of genuine saving in Bolivia, 2003	11
3.1 Key constraints to business, by Region	15
3.2 Conditions for social accountability	19
4.1 Ratings for World Bank projects addressing social development themes, 1972–2002	22
5.1 India—Poverty reduces as yields increase	29
5.2 Overview of agriculture innovation systems	32
5.3 Scope of the International Assessment of Agricultural Science and Technology for Development	34
6.1 The global climate models for the twenty-first century	37

## FOREWORD



Long-term thinking produces better short-term decisions. By envisioning the world of 2050 we can pinpoint the critical choices that will need to be made now if our vision of a wealthier, more equitable, more sustainable world is to be achieved.

We see several dimensions to the challenge. The first is achieving better management of natural resources—this is a particular concern in low income countries, which are highly dependent on these resources. Stronger governance is an essential ingredient, cutting across all development domains. Social development is key—cohesive, inclusive, accountable institutions build stronger societies and minimize social conflict. Feeding 9 billion people while reducing pressures on other natural resources will require a major boost to agricultural productivity and competitiveness. Climate change will pose additional risks in all these domains—environmental, social, agricultural—and will require major changes in global governance.

Looking forward, we see a growing need for global issues management. Whether the issue is climate change, emerging infectious diseases, failed states or loss of biodiversity, it is clear there is a growing list of problems that do not stop at national borders. International institutions such as the World Bank need to bridge the gap between global priorities and national and local perspectives—they are mutually dependent.

Our optimistic vision of 2050 is achievable, but only if governments, civil society, business, and the development community work together, building action-oriented coalitions that can make a real difference. We look forward to the journey.

*Ian Johnson and Steen Jorgensen*  
*Environmentally and Socially Sustainable Development*  
*The World Bank*

## ACKNOWLEDGMENTS



This work was prepared under the leadership of Ian Johnson and Steen Jorgensen, with contributions from Ian Bannon, Kirk Hamilton, Sergio Jellinek, Daniel Kaufmann, Eija Pehu, Kristyn Schrader, Robert Watson, and Melissa Williams.





# The Vision

## SECTION 1

### A Wealthier More Equitable World by 2050

A long-term perspective on development offers some grounds for optimism. While gross domestic product (GDP) growth has been uneven across countries and over decades, developing countries have enjoyed significant growth in life expectancy and levels of education since 1960. If GDP growth in developing countries can return to the rates of the 1960s and 1970s, then we can foresee a significantly changed world by 2050—a world at once more wealthy and more equitable.

Aiming for this involves both creating opportunities and overcoming constraints. For the environment and natural resources, there are clear risks tied to growth. But there are also unexploited opportunities to transform natural capital into produced, human, and social capital. Governance is a major constraint on development today, and rectifying this will require both institutional reforms and the mobilization of civil society. Development must encompass the goals of cohesion, inclusion, and accountability if social

well-being is to rise and conflicts are to be avoided. New agricultural technologies must fill an impending gap between population growth and food supply—other sectors, including energy and water supply, face similar challenges. Further movement is required on the “aid and trade” agenda. And climate change risks must be reduced through mitigation and adaptation.

Consider a vision of the world of 2050. The United Nations medium population projection suggests that world population could be 9 billion, up from 6 billion today (Figure 1.1). Almost all that increase will show up in the cit-

ies and towns of developing countries. With 2 percent growth of per capita GDP in rich countries (the average over the past 20 years) and 3.3 percent in low- and middle-income countries (an optimistic figure, representing the growth experienced in the 1960s and 1970s), world income would be more than \$135 trillion, up from \$35 trillion today. With these growth rates, 40 percent of world income in 2050 would be earned in low- and middle-income countries—twice their share today (Figure 1.2).

If per capita incomes in low- and middle-income countries do rise at 3.3 percent a year, the average income in these countries would be \$6,300 by 2050. Basic human needs for shelter, food, and clothing could be more than met. And people would be healthier and more skilled. Even pessimistic estimates place life expectancy in 2050 in today’s low- and middle-income countries at 72 years (up from 64 today) and under-five mortality at 17 per 1,000 live births (down from 85 per 1,000 today). Adult illiteracy rates could be less than 5 percent, a fifth of today’s 25 percent.

In 2050, more than 65 percent of the population will live in urban areas. Unless current trends are reversed, the number of slum dwellers lacking tenure security and access to services—currently estimated at 934 million—will double to 2 billion. If city dwellers are to enjoy healthy and productive lives, their need for infrastructure, housing, and social services will have to be met. But this demand also presents a great opportunity. Because most of these infrastructure and housing investments have yet to be made, they could be de-

Figure 1.1 Historical and projected population

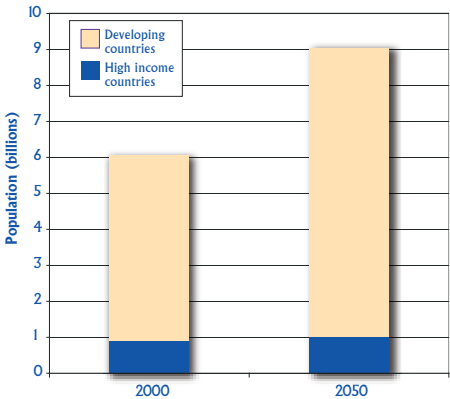
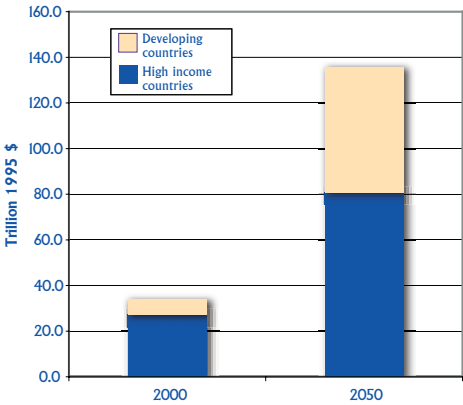


Figure 1.2 Historical and projected GDP



signed to contribute to environmentally sustainable urban environments.

The nature of growth in the rich world is also an issue. Today, 80 percent of global GDP goes to only 20 percent of the world's people. Consumption patterns for energy, water, food, manufactured goods, and services are highly skewed and will remain so for the near future. Are those patterns sustainable? Probably not, for as incomes in developing countries grow, consumption will increase to meet people's expectations.

A world with \$135 trillion in GDP simply cannot rely on current production and consumption patterns. If subsidies, mispricing, and inadequate taxation of environmentally damaging products continue to provide the wrong incentives for consumers and producers in the rich world, and if the developing world emulates the consumption patterns in rich countries, we can expect great damage to the environment and its ability to sustain growth. A major transformation, starting in the rich world, will be needed to decouple growth and environmental impacts and to radically change the composition of the world's output toward high-input efficiency and environmental responsibility. Future patterns of consumption and production must become a part of the global public policy dialogue.

This paper considers the challenges we will face if this optimistic outcome is to be achieved. What are the possible consequences of a much larger scale of human activity? Thinking about the long term can pinpoint some of the critical decisions that must be taken

soon to prevent undesirable outcomes much later.

## THE WORLD IN 2050

At the assumed growth rates, the total GDP of developing countries in 2050 will be twice that of industrial countries today. This change raises some stark questions: How resource-intensive will these economies be? How energy- and carbon-intensive? How pollution-intensive?

We can draw some tentative conclusions by looking across industrial and developing countries today. Economies restructure as they grow, with most growth occurring in service sectors, which are less harmful to the environment. Services could constitute 60 percent of GDP in developing countries in 2050, but that figure would still be 10 percentage points lower than in industrial countries today. It is therefore possible that primary and industrial sectors will have a significant weight in the economies of developing countries.

Higher incomes will almost certainly reduce pressure on local biomass as an energy source. But the energy substituted may be carbon-intensive; historically, each 1 percent increase in GDP has led to a 1 percent increase in carbon dioxide (CO<sub>2</sub>) emissions. Technical progress and structural change can make a difference, however. From 1980 to 1996, the average CO<sub>2</sub> emitted per dollar of world GDP fell by 12.5 percent.

If present trends continue, the world of 2050 will also be much less biologically diverse. Part of the challenge is to reduce the number of poor communities dependent on fragile ecosystems. Particularly important is finding the financing to preserve biodiversity, both through protective expenditures and through compensation to communities that may have to restrict their exploitation of natural areas for the benefit of their countries and the world as a whole. Ecotourism can help pay for preservation, as can new approaches such as systems of payments for environmental services.

Many decisions in the near term will have long-term consequences. Much of the infrastructure built in the next 20 years will still be with us in 2050. Perhaps more important, some choices are irreversible or can be reversed only with great difficulty. Species loss is an often-cited example of this. Carbon dioxide, once emitted, has an atmospheric adjustment time of more than 100 years. Climate change will reduce the quantity and quality of water in most arid and semiarid regions in addition to increasing the frequency of floods and droughts worldwide. With almost any degree of warming, climate change will decrease agricultural productivity throughout the tropics and subtropics, it will increase the incidence of vector- and waterborne diseases and heat stress mortality, it will make hydropower less reliable in some regions, and it will adversely affect biodiversity at the species and ecosystem levels.

Incomes and pressures on the global environment are now distributed very unequally and therefore need global so-

lutions. Poor countries suffer four times the incidence of environmental disease found in rich countries. Dealing with indoor air pollution and hygienic practices could have a major effect on the global burden of disease. Poor people have little voice in the decisions that affect them. Poor households depend on the quality of local natural resources for their livelihood. Poor countries and poor households are inordinately at risk from natural disasters. Small island states, South Asian countries, and Sub-Saharan Africa are all particularly vulnerable to global climate change, which is aggravated by consumption patterns in rich countries.

Meeting the targets of the Millennium Development Goals (MDGs) for 2015 is an essential step on the road to a prosperous and sustainable world and potentially the basis for a virtuous cycle of growth and human development in poor nations. Faster growth is the key to meeting the targets, and the payoffs will be great. Faster growth means less extreme poverty, less child malnutrition, and faster progress on many of the other MDGs. But the benefits of that growth must be widely spread, and it must be environmentally and socially responsible.

What will it take for such steady gains in income to materialize? Macroeconomic stability will need to be sustained. Massive infrastructure will have to be financed and built, with investment expenditures in developing countries rising from today's \$200 billion a year to nearly \$1.5 trillion in 2050. And technological progress will be required across a whole range of sectors.

## THE CHALLENGES AHEAD

Growing to a world economy of \$135 trillion poses enormous risks to the natural environment, and the risks are greatest in developing countries. Investment decisions in the near future must factor in those risks and provide some insurance against undesirable surprises. Some of the most difficult issues will involve trade-offs between preserving natural systems and pressing forward with development. Truly global issues will require collective action on an unprecedented scale.

Sustained growth is the key to realizing a world without poverty by mid-century. What will fuel this growth, and what will support it? For all countries, investments in human capital, including health, will be essential. But this growth and development depend, in turn, on critical inputs, particularly water and energy. Supplying energy, water, and sanitation, not to mention transport and communications, will require major infrastructure investments. It is increasingly clear that investments in electricity, water supply, and sanitation underpin not only growth in incomes but growth in healthfulness and reductions in mortality as well, particularly for children under the age of five.

With rising incomes and population growth, the demand for food could double by 2050. Higher incomes will shift the pattern of demand toward higher-protein foods, with consequences for fisheries, aquaculture, and livestock husbandry. Sustaining agriculture will require close attention to land and water degradation, nutrient manage-

ment, integrated pest management, conservation, and the institutions that can engender better practice. Adapting to climate change is another key priority. New agricultural technologies will drive this growth, but technology alone cannot do the job. Agricultural growth also requires better markets, better infrastructure (especially rural roads), better rural financial services, and better policies, phasing out the ones that discriminate heavily against agriculture.

Acting now also means making progress on the “aid and trade” agenda. Development assistance, partnered with good governance in recipient countries, can be a powerful engine for growth. But research suggests that the benefits from expanding trade by reducing the trade barriers faced by developing countries could dwarf development assistance. By 2015, annual income gains from expanded trade could equal \$350 billion in developing countries (compared with current aid flows of roughly \$50 billion), while increasing incomes in rich countries by \$170 billion.

These factors—human capital, energy, infrastructure, agricultural productivity, aid and trade—will clearly be essential underpinnings for achieving a wealthier, more equitable world by 2050. In what follows we discuss the cross-cutting issues that are key to making this vision a reality:

- **What is the role of natural resources in development?** Section 2 depicts the composition of the wealth of nations and draws conclusions on sustainability.

- **How important is governance for development?** Section 3 presents the evidence on governance reforms and creating the demand for better governance.
- **How do we build cohesion, inclusion, and accountability within developing societies?** Section 4 builds the case for socially sustainable development.
- **How will we feed a world of 9 billion people?** Section 5 presents the challenges inherent in boosting agricultural productivity and competitiveness.
- **How do we buffer the poor against the worst effects of climate change?**

Section 6 looks at the impending challenges in mitigating greenhouse gas emissions and adapting to climate change.

- **Can we bridge the gap from local to global?** Section 7 summarizes the challenges we foresee—in natural resource management, governance, social development, food and agriculture, and climate change—and makes the case for global issues management to deal with the expanding array of development issues that are truly global in scope.





# The Challenges

## SECTION 2 Managing Natural Wealth Sustainably

**C**an poverty reduction be sustained? The end of the twentieth century saw a renewed commitment to ending poverty, as embodied in the Millennium Development Goals. However, deep concerns remained that current rates of depletion and degradation of natural resources may undermine any progress to date. Achieving sustainable outcomes will require sustaining the total wealth—produced, human, institutional, and natural—on which development depends.

The exploitation of commercial natural resources in the form of minerals, energy, farmland, forests, and fish stocks can contribute to development. However, it is important to understand the indirect role played by many other natural resources in the development process. These roles include biodiversity conservation, nonextractive uses (such as ecotourism), and the regulatory and cultural services provided by forests and other natural assets. As the Millennium Ecosystem Assessment documented, protecting and enhancing

the environmental services provided by natural resources is a key challenge, particularly in developing countries.

Natural resources are special economic goods because they are not produced. As a consequence, they will yield economic profits—rents—if properly managed. These rents can be an important source of development finance, and countries like Botswana and Malaysia have successfully leveraged natural resources to bolster growth.

There are no sustainable diamond mines, but there are sustainable diamond-mining countries. Implicit in this statement is the assumption that it is possible to transform one form of wealth—diamonds in the ground—into other forms of wealth, such as buildings, machines, and human capital. Achieving this transformation requires a set of institutions capable of managing the natural resource, collecting resource rents, and directing these rents into profitable investments. Resource policy, fiscal policy, political factors, institutions, and governance structure all have roles to play in this transformation.

Exhaustible resources, once discovered, can only be depleted. Consuming rents from exhaustible resources is therefore literally consuming capital, which motivates a well-known policy rule for sustaining development: invest resource rents in other forms of capital.

Living resources are unique because they are a potentially sustainable source

of resource rents—truly a gift of nature. Sustainable management of these resources will be the optimal policy, but the question of the optimal stock size is complex.

Land resources are potentially sustainable if managed well. Land is particularly important in the poorest countries because it is a direct source of livelihood and sustenance for many poor households.

Natural resources play three basic roles in development:

- The first role, mostly applicable to the poorest countries and poorest communities, is that of local natural resources as the basis of subsistence.
- The second role is as a source of development finance. Commercial natural resources can be important sources of profit and foreign exchange. Rents on exhaustible, renewable, and potentially sustainable resources can be used to finance investments in other forms of wealth. In the case of exhaustible resources, these rents must be invested if total wealth is not to decline.
- The third role is as the source of environmental services—watershed protection and pollination, for example—that underpin many other economic assets. The value of agricultural land is closely tied to the value of the environmental services supporting its productivity.



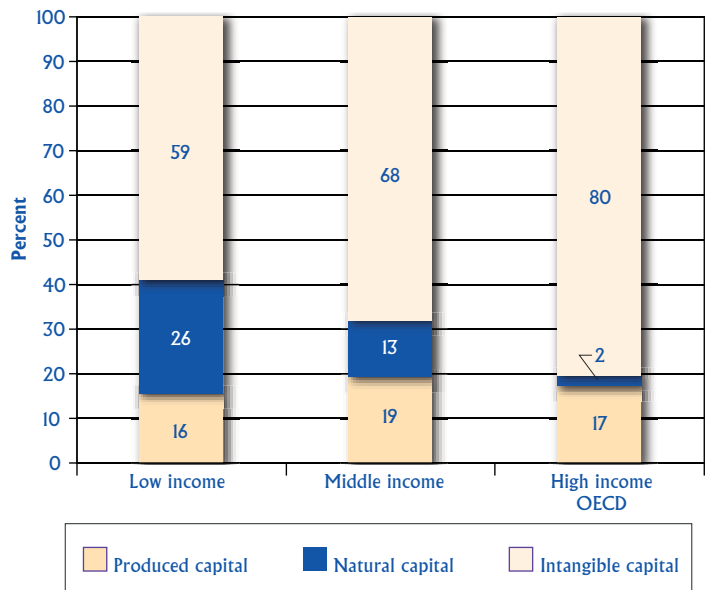
## EVIDENCE ON THE IMPORTANCE OF NATURAL RESOURCES

Figure 2.1 provides summary information on the shares of natural resources in the total wealth of industrial and developing countries. A high share of natural wealth does not automatically imply that natural resources are important for growth, but it does at a minimum imply that these resources are important for current well-being.

Figure 2.1 classifies the total wealth of nations into three broad components across low-, middle-, and high-income countries. Produced capital is the familiar blend of buildings, machines, and infrastructure that is measured in standard national accounts. Natural capital is the value of agricultural land, forests, and subsoil resources such as minerals and energy. Intangible capital is the value of everything else—human capital, social capital, and the quality of institutions and governance. The underlying estimates of total wealth per capita are nearly \$440,000 in high-income countries, nearly \$28,000 in middle-income countries, and less than \$8,000 in low-income countries.

Intangible capital is by far the largest share of total wealth in all countries. For the poorest countries, however, natural capital is a larger share of total wealth than produced capital. This suggests that properly managing natural resources must be a key part of development strategies, particularly since the

Figure 2.1 Shares of wealth by income group, 2000



Source: *Where is the Wealth of Nations?* World Bank 2006. Oil states excluded.

poorest households in these countries are usually the ones that depend on these resources the most.

This analysis also shows how the share of natural resources in total wealth declines as incomes rise. This does not mean they are unimportant or that they can be exploited indiscriminately—food, fiber, minerals, and energy are essential for economic activity and well-being. Rather, this demonstrates how intangible assets become proportionately much more important as countries develop, with the productivity of people increasing along with the quality of their institutions. In fact, the value of natural capital per person actually rises with income, from roughly \$2,000 per capita in low-income countries to nearly \$9,000 in high-income countries.

From a development perspective, a key message of Figure 2.1 is that natural resources make up a significant share of the total wealth in low-income countries—25 percent—and that this is substantially larger than the share of produced capital. Sound management of these natural resources can support and sustain the welfare of poor countries and of poor people in those countries as they move up the development ladder.

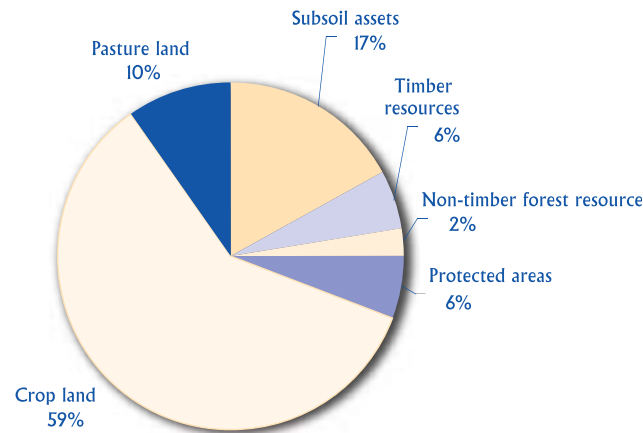
Figure 2.2 breaks down the natural wealth of low-income countries into its component parts. The striking fact is the overwhelming importance of agricultural land in these countries—nearly 70 percent of total natural wealth. Sustaining development in these countries will necessarily entail careful management of the land resource. Boosting the productivity of agricultural land will also help reduce pressure on other resources, particularly forests.

## NATURAL RESOURCES AND WEALTH ACCUMULATION

Saving is a core aspect of development. Without the creation of a surplus for investment, there is no way for countries to escape a state of low-level subsistence. Saving is measured in national accounts as the difference between income and consumption—what is saved is by definition that which is not consumed. But standard national accounts do not measure the *dissaving* associated with the depletion of natural resources.

Adjusted net or “genuine” saving measures the true level of saving in a country after accounting for depreciation of produced capital, for investments in human capital (as measured by education expenditures), for depletion of minerals, energy, and forests, and for damages from local and global air pollutants. An important body of economic

Figure 2.2 Shares of natural wealth in low-income countries



Source: *Where is the Wealth of Nations?* World Bank 2006. Oil states excluded.

theory suggests that if current net saving is negative in a given country, then its future welfare must decline. In other words, if we care about sustainability we need to be concerned about the net rate of wealth creation.

Resource dependence complicates the measurement of saving effort because depletion of natural resources is not visible in standard national accounts. Countries can believe they are on a sustainable path, when in fact they are running down their total wealth. Figure 2.3 looks at genuine saving in Bolivia to illustrate this point.

This Figure makes the importance of resource depletion and pollution damages clear in any assessment of wealth creation in a resource-dependent economy. While investments in human capital partly offset the value of depreciation of produced capital, the depletion of natural resources (mostly natural gas

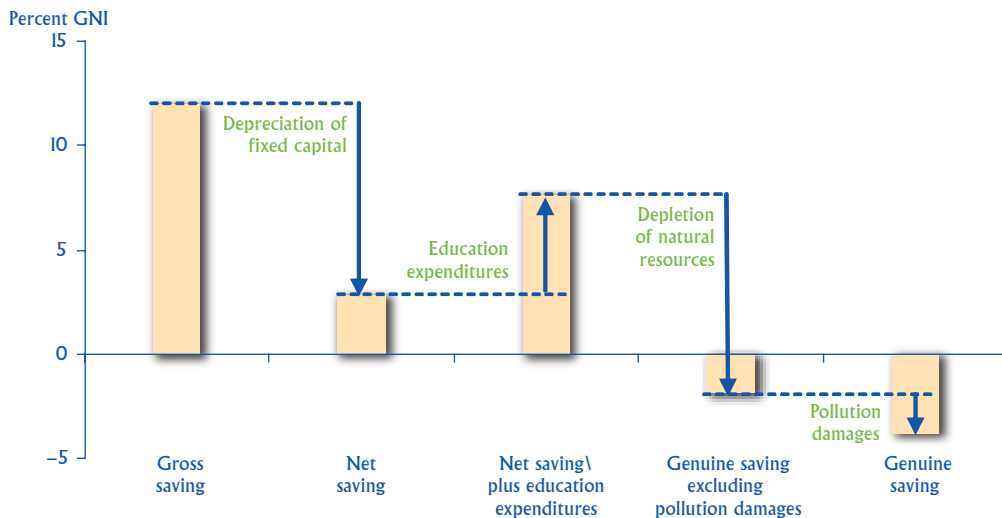
in this instance) plus damages from local and global air pollutants results in a negative net saving rate—total wealth in Bolivia actually declined in 2003.

Decision makers in Bolivia presumably believed that the rate of wealth creation in the country was nearly 12 percent of gross national income in 2003—this is what was reported in the national accounts. But a fuller analysis highlights the extent to which depletion and damage to the environment affect the bottom line on wealth creation.

## SOME CONCLUSIONS ON NATURAL RESOURCES AND SUSTAINABILITY

If development is approached as a process of portfolio management, then the figures make clear that both the size

Figure 2.3 Decomposition of genuine saving in Bolivia, 2003



Source: *Where Is the Wealth of Nations?*, World Bank 2006.

and composition of the portfolio vary widely across levels of income. Managing each component of the portfolio well and transforming one form of asset into another efficiently are key facets of development policy.

While the analysis of wealth sheds light on sustainability, it is also directly relevant to the question of growth. As noted earlier, growth is essential if the poorest countries are to enjoy increases in well-being. Growth will be illusory, however, if it consists primarily of consuming the assets, such as soil nutrients, that underpin the economy.

The linkage between measured changes in real wealth and future well-being only holds if our measures of wealth are suitably comprehensive. This is the prime motivation for expanding the measure of wealth to include a range of natural and intangible capital. This richer picture of the asset base also opens the door to a range of policy interventions that can increase and sustain growth.

The notion of development as portfolio management is powerful. Certain assets in the portfolio are exhaustible and can only be transformed into other productive assets, such as infrastructure or human capital, through investment of resource rents. Other assets are renewable and can yield sustainable income streams. Economic analysis can guide decisions concerning the optimal size of these assets in the portfolio. Some assets, such as produced capital, depreciate over time. National savings can be used to invest in natural assets, produced capital, or human capital. The choice of investment will depend on the asset with the highest marginal

return on investment, a standard tenet of public finance.

Each year some 10–20 developing countries have negative genuine saving rates. What should the policy response be? Monetary and fiscal policies affect saving behavior, and public sector dissaving can be a key target of policy. If investment in human capital is measured as saving, then efforts to increase effective education expenditures can boost overall saving. For natural resources, the general prescription is not to simply reduce exploitation but rather to reduce incentives for overexploitation, which will typically entail reforms in the resource sectors.

The policy responses to questions of natural resources and sustainability break down according to the different roles that natural resources play in development:

- For poor communities dependent on natural resources for subsistence, there is growing evidence that efforts to devolve ownership and control of local resources to communities—to nature conservancies or forest user groups, for example—can have important impacts on income and well-being. This generally means building capable local institutions to manage and share benefits from the resource base.
- For countries with commercial natural resources, the economic benefits from these resources can be maximized through incentive structures that reduce overextraction (tradable fishing rights, for example), transparent mechanisms for allocating resource rights, suitable instru-

ments (royalties, corporate taxes) for revenue collection, transparency concerning resource revenue generation, and budgetary processes that can direct resource revenues into productive investments.

- For natural resources that are the source of environmental services, the key concern is that many of these services are provided as externalities—that is, the provider of the benefit is distinct from the beneficiary. Thus owners of upland forests may be unaware of the benefits (in the form of stream flow regulation, for

example) that the resource provides to lowland farmers. One solution to this sort of problem is to set up payment schemes from beneficiaries to providers. Preserving environmental services could also entail a larger role for management at the landscape and watershed scale. The external nature of many environmental services means that they may be at risk when development decisions are being made—this puts a premium on programs to identify, quantify, and value these services more systematically.



## SECTION 3

### Improving Governance

Good governance is increasingly understood to be an important factor determining economic performance. If the optimistic vision of a richer, more equitable world by 2050 is to be achieved, improving governance must play a key role. While in many countries there is an obvious need for improved macro-level governance—the performance of national institutions—the welfare of poor households and poor communities is closely tied to governance at the local level. Voice and accountability at the local level are powerful tools for sustainable development. Improving governance is not only about building and strengthening public and private institutions—the supply side. It is also about building citizen engagement and voice—the demand side.

Governance can be defined as the traditions and institutions by which authority in a country is exercised for the common good. This includes the process by which those in authority are selected, monitored,

and replaced—the political dimension, the government’s capacity to effectively manage its resources and implement sound policies—the economic dimension, and the respect of citizens and the state for the country’s institutions—the institutional respect dimension. In contrast, corruption is defined more narrowly as the abuse of public office for private gain.

## THE CASE FOR BETTER GOVERNANCE

Research shows that countries can derive a very large “development dividend” from better governance. A country that improves its governance from a relatively low level to an average level could almost triple the income per capita of its population in the long term and could similarly reduce infant mortality and illiteracy.

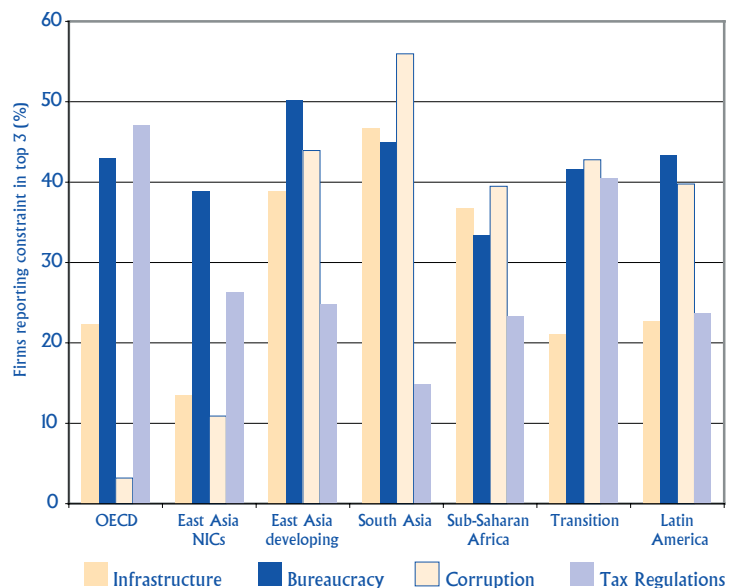
Governance also matters for a country’s competitiveness and for income distribution. In the case of corruption, research suggests it is equivalent to a major tax on foreign investors. In many developing countries, corruption represents a “regressive tax” on the household sector as well: to gain access to public services, lower-income families pay a disproportionate share of their incomes in bribes compared with higher-income groups, and they often end up with less access to such services because of corruption.

Poor governance in the natural resource sectors appears to be a major explanation for the “natural resource curse,”

whereby over several decades resource-rich countries have registered poorer growth performances than resource-poor countries did. Corrupt natural resource institutions can give favored groups access to resources, while rent-seekers pocket the revenues from natural resource exploitation—revenues that could be financing productive investments for the country. Rent-seeking displaces productive economic activity, with consequent effects on growth.

Figure 3.1 illustrates the main constraints faced by businesses in different regions of the world. Corruption tops the list in South Asia, Sub-Saharan Africa, and transition economies, while it is a close second in Latin America and developing East Asia. Bureaucracy is a serious constraint on governance everywhere, including in countries that belong to the Organisation for Eco-

Figure 3.1 Key constraints to business, by Region



Source: Executive Opinion Survey 2004, World Economic Forum.

nomic Co-operation and Development (OECD). Tax regulations constitute a severe constraint in OECD and in post-socialist transition countries, in contrast with regions such as South Asia, where they rank low as an impediment relative to the other constraints.

Similarly, infrastructure is a major constraint in Africa and developing Asia, in contrast to the East Asian tigers and, to an extent, to Latin America and the transition economies. This does not imply that in these regions it is unimportant to focus on infrastructure investments, since this type of survey gives only a relative ranking across different constraints for each country. But the fact that infrastructure was not rated at the top in so many countries—in Latin America, Africa, transition economies, and others that suffer from infrastructure problems and are in dire need of investments—is a sure sign of the extent to which some other factors, largely governance and corruption, impose even more severe constraints on business development.

Better governance is not a luxury that only rich countries can afford. It is misleading to suggest that corruption is due to low incomes and to invent a rationale for discounting bad governance in poor countries. In fact, the evidence points to the causality being in the direction of better governance leading to higher economic growth. A number of emerging economies, including the Baltics, Botswana, Chile, and Slovenia, have shown that it is possible to reach high standards of governance without yet having joined the ranks of wealthy nations.

While it is true that institutions often change only gradually, in some countries there has been a sharp improvement in the short term. This defies the view that while governance may deteriorate quickly, improvements are always slow and incremental. For instance, there has been a significant improvement since 1996 in the “voice and accountability” indicator in countries ranging from Bosnia, Croatia, and Ghana to Indonesia, Serbia, and Sierra Leone. And the improvements exhibited by some African countries in a short period of time challenge the “Afro-pessimists.”

A common fallacy in thinking about governance is to focus solely on the failings of the public sector. The reality is much more complex, since powerful private interests often exert undue influence in shaping public policy, institutions, and state legislation. In extreme cases, “oligarchs” capture state institutions. And many multinational corporations still pay bribes in some countries, undermining public governance in emerging economies. There are also weaknesses in the nongovernmental sector. Further, traditional public sector management interventions have not worked because they have focused on technocratic “fixes” rather than real institutional reform.

When it comes to governance reforms, historical and cultural factors are far from deterministic—witness, for instance, the diverging paths in terms of governance of neighboring countries in the Southern Cone of Latin America, the Korean peninsula, the transition economies of Eastern Europe, and Southern Africa. There are reform strategies that offer particular promise. The



coupling of progress on improving voice and participation—including through freedom of expression and women's rights—with transparency reforms can be especially effective.

Increases in transparency can be particularly catalytic for change. A partial list of transparency reforms would include:

- Public disclosure of assets and incomes of politicians
- Public disclosure of political contributions
- Public disclosure of draft legislation and parliamentary votes
- Enactment and effective implementation of conflict-of-interest laws
- Public blacklisting of firms guilty of bribes in public procurement
- Enactment and effective implementation of freedom-of-information laws
- Freedom of the media, including the Internet
- Fiscal and public financial transparency
- Transparent and competitive procurement.

The challenge of governance and anti-corruption confronting the world today strongly argues against “business-as-usual.” A bolder approach is needed, and collective responsibility at the global level is called for. The rich world must not only deliver on its aid and trade liberalization promises, it must also lead by example. OECD countries should ratify and effectively implement the 2003 UN Convention against Corruption and should take steps, as Switzerland is starting to do, to repatriate assets looted and stashed abroad

by corrupt officials. And transnational corporations should refrain from bribery and support improving governance practices in host countries. As for the international financial institutions and donors, there is a need to anchor aid decisions within a governance framework. Improving transparency will be key. However, none of this can work unless countries themselves take the lead in improving governance.

## SOCIAL ACCOUNTABILITY— WORKING ON THE DEMAND SIDE



As donors increasingly focus on improving governance, it is becoming clear that democratic elections, legislative oversight, and administrative and financial mechanisms are needed but are not enough to increase the transparency and accountability of the public sector and service providers. Elections, in and of themselves, are a weak and blunt instrument with which to hold governments accountable. Improvements in administrative and financial systems certainly help, but they are insufficient unless they are accompanied by increased demand from citizens and other stakeholders for better access, quality, and responsiveness in the delivery of public services.

The *2001 World Development Report* on poverty recognized accountability as an integral component of empowerment and hence poverty reduction. The need to strengthen accountability relationships between policy makers, service providers, and clients was at the core of

the *2004 World Development Report* on making services work for the poor. The donors' interest and support for social accountability derives from their interest in promoting poverty reduction and sustainable development. After concentrating for many years on the supply side of public sector and governance reforms, the development community now takes a more comprehensive approach by focusing also on citizen engagement to enhance public sector accountability and performance—the demand side of governance.

Social accountability is about affirming and operationalizing direct accountability relationships between citizens and the state. It therefore refers to the broad range of actions and mechanisms that citizens can use to hold the state to account, as well as actions by the government, civil society, the media, and other social actors to promote or facilitate these efforts. The concept of social accountability underlines both the right and the corresponding responsibility of citizens to expect and ensure that the government acts in the best interests of its citizens. The obligation of government officials to be accountable to citizens derives from notions of human rights and the need for citizens to understand and play an active and responsible role in exercising those rights—an important part of building citizenship.

Over the past two decades, it has become clear that empowerment is critical to poverty reduction. For such efforts to be sustainable, the poor must move from being passive recipients of government and donor aid (beneficiaries) to empowered actors (agents) in shaping

decisions that affect their livelihoods and welfare. The degree to which a person or group is empowered is influenced by agency (the capacity to make informed choices) and opportunity (the institutional context in which choice is exercised). By providing critical information on rights and entitlements and by introducing mechanisms to enhance citizen voice and influence on policy makers and service providers, social accountability initiatives enhance these two key determinants of empowerment. Of particular importance is the potential of social accountability to empower social groups who are systematically excluded from political, social, and economic development, such as women, young people, ethnic or other minorities, and the extreme poor.

Efforts by citizens and civil society groups to hold governments accountable have traditionally included a range of social actions, such as public demonstrations and protests, advocacy campaigns, investigative journalism, and public interest litigation. In more recent years, a new generation of social accountability has emphasized direct dialogue and negotiations with government counterparts and service providers, relying on the use of participatory methods, expanded data collection and analysis, and enhanced spaces and opportunities for citizen and civil society engagement with state and political actors.

Social accountability mechanisms can contribute to improved governance and genuine democracy by enhancing the capacity of ordinary citizens to obtain information, voice their needs, and demand accountability between elections.

By involving citizens and civil society in monitoring government performance, by enhancing transparency and information disclosure, and by exposing government failures and misdeeds, social accountability mechanisms are potentially powerful tools against public sector corruption.

A number of new tools and approaches have emerged in recent years to operationalize this increasing focus on social accountability. These include, among others, public participation in policy making, participatory budgeting and public expenditure tracking mechanisms, and participatory performance monitoring and evaluation using such tools as citizen report cards and community score cards.

The scope for enhanced social accountability will vary in each country context, depending on a range of factors related to the enabling environment. The effectiveness of social accountability efforts will depend critically on bridging

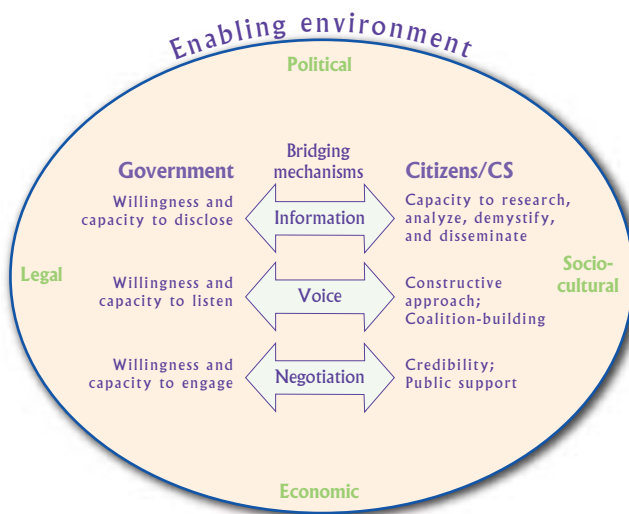
mechanisms between the government and citizens and on the willingness and the capacity of state and civil society actors to engage constructively (Figure 3.2). In order to be effective, social accountability mechanisms often need to be preceded or complemented by efforts to enhance both the willingness and the capacities of key actors.

## LESSONS AND CHALLENGES ON SOCIAL ACCOUNTABILITY

Social accountability shows considerable potential to promote governance, improve development effectiveness, and empower citizens, especially those who are poor and marginalized. A number of lessons are emerging from the experience of the World Bank and other donors with social accountability.

- Social accountability is about more than tools—it is about reforming

Figure 3.2 Conditions for social accountability



political and institutional cultures, changing mindsets, strengthening civil society capacity, building citizenship, and above all helping to construct a new set of state-citizen relations.

- Both supply and demand sides matter. Social accountability is about strengthening bridging mechanisms. The demand for accountability by citizens must be matched not only by the willingness of the government and service providers but also by their ability to respond to civic demands.
- Access to information is vital. The quality and accessibility of public information and data are key determinants in the success of social accountability mechanisms. A common element of almost all successful efforts is the role of an independent media.

Although we have made a promising start in developing new approaches to strengthen social accountability, much remains to be done in making this agenda a part of the core business model in development institutions. Over the coming years, attention will need to focus on:

- Mainstreaming social accountability across operational and analytical work, particularly in building ownership in client governments
- Strengthening the evidence base on the positive impact of social accountability on governance and sustainable development outcomes
- Training and encouraging innovation on social accountability
- Strengthening donor coordination and international networks of social accountability practitioners.



## SECTION 4

### **Socially Sustainable Development**

For decades the main development debates focused on economic development, underlined by a belief that economic growth was enough to solve the complex problems of poverty and income inequality. Today development practitioners and theorists have shifted toward a new approach that incorporates the social dimensions of economic activity—from including all segments of society to encouraging more transparent and accountable institutions. Social development tools enabled development practitioners to consult people directly about poverty. Their own voices tell us that poverty is about more than low income—it is also about vulnerability, exclusion and isolation, unaccountable institutions, and powerlessness.

Increases in income are not enough to sustain poverty reduction. Sustainable change requires social change—with systematic attention to embedded social, political, and economic exclusion, to social cleavages

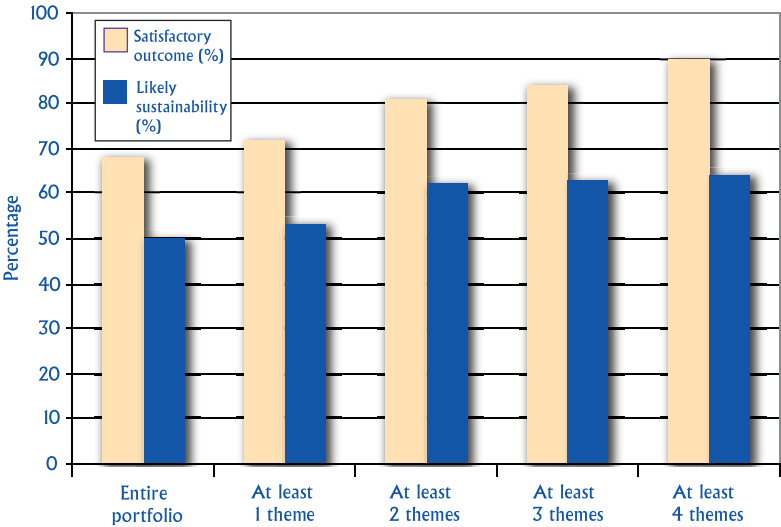
that can lead to violent conflict, and to support for transparent and responsive institutions. Social and economic development are two sides of the same coin. Sustainable social development can be achieved only on the basis of social inclusion, cohesion, and accountability. In its broadest sense, social development is about putting people at the center of development efforts.

Supporting positive social change requires an understanding of power dynamics, culture, and value systems, as well as the informal and formal structures of societies. What is critical is that the social effects of economic measures be factored into policy decisions. More significantly, economic interventions that take into account social dimensions appear to be more effective—and sustainable. This insight is based on a review of 4,000 World Bank development projects across the world over 30

years, which found a strong positive association between including social development themes and project success. The more that social factors are included, the more successful projects are in reducing poverty and the more sustainable is the positive change (Figure 4.1).

Social development also matters for growth. Growth depends on an efficient use of resources. If institutions systematically exclude certain groups from economic opportunities, so that people have no access to employment or livelihoods or are discriminated against, the result is wasted resources and reduced growth. Research shows that some social development indicators, particularly those related to social cohesion, correlate positively with foreign direct investment and that lower initial conditions of cohesion hamper growth. Studies of civil wars show that

Figure 4.1 Ratings for World Bank projects addressing social development themes, 1972–2002



incomes are on average 15 percent lower at the end of a conflict than they would have been otherwise. There is also ample evidence that more inclusive, cohesive, and accountable institutions in a given year correlate with higher growth in the following decade.

## WHERE WE'VE COME FROM

In the 1970s and early 1980s, the major objective of social scientists in development institutions was to improve project effectiveness. As the adverse social impacts of large-scale development projects became more evident and the understanding of poverty more complex, approaches and tools were developed to incorporate the social considerations and the views of the poor into project design. The mid-1990s saw a flurry of conceptual and organizational changes—foreshadowed by the 1995 UN World Summit on Social Development—that put social development concepts and practitioners into the mainstream of development efforts.

Since 1997, the social development agenda has evolved around five key axes:

- Social analysis—from project-based analysis to broader social analysis of projects, policies, and country strategies to enhance poverty outcomes and social change
- Participation—from consultation and individual beneficiary involvement in project implementation to

empowerment involving community-driven development (CDD), civic engagement, and social accountability

- Vulnerability—from a concern with marginal and disadvantaged groups to a broader concern with social vulnerability and exclusion and the policies and institutions that affect these groups
- Institutions—from the analysis of formal institutions and rules to a focus on local-level institutions, social capital, and formal and informal rules
- Conflict—from post-conflict physical reconstruction to rebuilding the social and economic fabric of societies torn apart by conflict, a conflict-sensitive approach to development, and increasing concern with conflict management and prevention

Evolving good practice, as reflected in the World Bank's social development strategy, for example, suggests that social development is based on three operational principles: inclusion, cohesion, and accountability. Inclusive institutions promote equal access to opportunities, enabling everyone to contribute to social and economic progress and share in its rewards. Cohesive societies enable women and men to work together to address common needs, overcome constraints, and consider diverse interests—they resolve differences in civil, nonviolent ways, promoting peace and security. Accountable institutions are transparent and respond to the public interest in an effective, efficient, and fair way.



## PUTTING COMMUNITIES IN THE DRIVER'S SEAT

Although development within communities had been part of the development agenda since the 1970s, in the late 1990s donors began to recognize that community involvement and control over the planning, design, and implementation of projects could be effective—leading to a major increase in funding to community-driven projects.

CDD differs from earlier approaches in a number of ways. It entails community authority and control over decisions and resources, and it enhances local community accountability for the use of the resources. These types of operations have also provided opportunities to achieve a number of other social objectives. Rules and incentives generally promote the inclusion of women, minority groups, isolated communities, and the very poor—groups frequently excluded from development activities. Community involvement and experience builds social capital and empowers communities by allowing them to define their own needs, decide how to meet them, and control resources. Transparency and accountability mechanisms in CDD approaches in turn reduce corruption and strengthen citizen demand for greater accountability by local governments.

## SAFEGUARDS

Concern about the environmental and social impacts of development projects

has been an issue for nearly two decades. Today social safeguard policies within development institutions are sharply focused on indigenous peoples, resettlement, and cultural heritage. Over the years, attention to social safeguard issues has increased within the development community.

## SOCIAL ANALYSIS

The need to consider the impact of social factors in project appraisal has been recognized at least since 1984, and guidance on carrying out social assessments was provided by the World Bank in 1994. The major innovation was to bring social analysis and participatory processes together under a single approach, and the guidelines laid the groundwork for efforts to mainstream social assessment and participation in lending and analytical work to improve project quality.

A major effort has been initiated within the development community to clarify and formalize the purpose and key elements of social assessments and to make them more rigorous and systematic. The objectives of social assessment were to improve poverty and social outcomes by enhancing social inclusion, strengthening social cohesion, increasing social capital, and reducing adverse social impacts. Recognizing that attention to social issues is fundamental to poverty reduction and project quality but that a mandatory social assessment for individual projects along the lines of environmental assessments was not likely to be feasible, efforts shifted to



more upstream social analysis as a way to mainstream social concerns.

In recent years, social analysis work at the project level has expanded in two new directions. First, as the social development agenda gained traction, there was a clear need to move beyond the assessment of project impacts to an analysis of key social issues at the country level. To date, over 15 Country Social Analyses have been completed by the World Bank, complemented by a number of Conflict Assessments specifically targeted and designed for countries affected by violent conflict. Since 2002, poverty and social impact assessment (PSIA) of economic reforms and adjustment operations has been developed by the World Bank, the IMF, and major donors. Key aspects of this work include disaggregating social groups, undertaking stakeholder analysis, recognizing individual and institutional interests, and assessing social and political risks in order to fully understand the distributional impacts of policy reforms. More than 100 PSIAs have been undertaken across the developing world in the past four years and are now influencing the design of development policy lending.

## PARTICIPATION AND CIVIC ENGAGEMENT

In the 1970s and early 1980s, participation referred primarily to community involvement in implementation, such as building and maintaining roads and irrigation systems. The development community has since engaged more fully with nongovernmental organiza-

tions (NGOs) in both the North and the South in order to more fully reflect civil society views in development projects.

As the importance of participation to institutional accountability became more apparent, and its links to governance and development became more evident, the need to facilitate dialogue between borrowers and civil society organizations (including but not limited to NGOs) has become an important part of development assistance. Participatory processes have been adopted across development projects, in country assistance strategies, and in poverty assessments and Poverty Reduction Strategy Papers.

## VIOLENT CONFLICT

The eruption of violent conflict represents the complete breakdown of social cohesion. The interest of social development practitioners in the conflict and development agenda emerged naturally from:

- Work on vulnerability, which was clearly linked with the social impact of conflict
- A recognition in the 1990s that in the post-Cold War era the vast majority of violent conflicts occur within countries and that social exclusion, marginalization, and unaccountable institutions provide the grievances that fuel civil conflicts
- The realization that building social capital through community-driven approaches not only restores liveli-

hoods but also promotes social cohesion across communities

With a growing portfolio in countries recovering from conflict, the development community has had to clarify its engagement in post-conflict reconstruction. At the World Bank, a new operational policy has redefined the Bank's role in the context of a more comprehensive approach to development—from an approach focused on rebuilding infrastructure to one that seeks to understand the root causes of conflict, to integrate a sensitivity to conflict in donor activities, and to promote assistance that minimizes the potential causes of conflict.

Over the years, the World Bank has led the way in cutting-edge research on the links between development and conflict and has built up considerable expertise and skills in assisting countries affected by conflict. Today, it is in the forefront of international efforts to rebuild societies torn apart by conflict—from Afghanistan and the Balkans to Timor-Leste, Haiti, Liberia, Sudan, and the Democratic Republic of Congo. It is also actively engaged in countries still beset by conflict, such as Colombia, Nepal, and Somalia.

The major breakthrough was the recognition that conflict, unlike a natural disaster, is not an exogenous shock but is deeply rooted in the development process itself—in effect, conflict is a failure of development. A social development lens called attention to the fact that where conflict occurs within a country's borders, post-conflict recovery needs to be about more than the bricks and mortar of reconstruction—it needs to

focus on restoring human and social capital and on promoting social inclusion and cohesion to avoid a relapse into violence.

## GLOBAL IMPLICATIONS OF LOCAL CONFLICTS



Concern over the past two decades with global security threats has led the international community to focus increased attention on two global, interrelated issues: human security and countries affected by violent conflict or fragile or failed states.

Building on the work of Amartya Sen and others, the UN Human Security Commission proposed shifting attention from the security of the state to the security of people. It places people, rather than nation states, at the center of the security agenda. Human security focuses on empowering as well as protecting vulnerable people—seeking freedom from want as well as freedom from fear. Human security thus joins and integrates the international community's main agenda items of peace, security, and development. This agenda is wholly consistent with the principles of social development.

The challenge of meeting the MDGs has also called attention to the large share of the world's poor who, through no fault of their own, live in countries affected by violent conflict or in fragile states incapable of delivering basic services, including security.

Research from the social and economic fields has highlighted the characteristics of societies that are more resilient to conflict, including:

- Political and social institutions that are largely inclusive, equitable, and accountable
- Economic, social, and ethnic diversity—pluralism and inclusion, rather than polarization and dominance
- Growth and development that raise incomes and opportunities across society
- A culture of dialogue rather than violence.

In short, working to reduce the global threats posed by conflict and by fragile

states amounts to a restatement of social development objectives at the country level.

In addition to contributing to meeting the MDGs, social development has an important role to play at the country level in improving human security and assisting deeply divided countries avert the risk of new or renewed conflict. Promoting social structures and institutions that are more cohesive, inclusive, and accountable—the core principles of social development—can make a major contribution to reducing global poverty and ensuring the next generation inherits a more peaceful and safer world.