



ENVIRONMENT

The indicators in the *Environment* section measure the use of resources and the way human activities affect the natural and built environment. They include measures of environmental goods (forests, water, cultivatable land) and of degradation (pollution, deforestation, loss of habitat, and loss of biodiversity). Sustainable development and poverty reduction require efficient use of environmental resources. These indicators show that growing populations and expanding economies have placed greater demands on land, water, forests, minerals, and energy resources. But new technologies, increasing productivity, and better policies can ensure that future development is environmentally and socially sustainable.

Nowhere are these risks and opportunities more intertwined than in the global effort to mitigate the effects of climate change. At the December 2011 United Nations Conference on Climate Change in Durban, South Africa, all 194 participating countries adopted the Durban Platform for Enhanced Action, which sets the direction of climate negotiations. The platform calls for parties to negotiate a legal agreement on climate change no later than 2015 that would apply to all countries and be effective by 2020. Negotiators also launched a Green Climate Fund that will eventually channel billions of dollars a year to developing countries for adaptation to and mitigation of climate change.

As documented in *World Development Report 2010: Development and Climate Change* (World Bank 2009j), climate change is already eroding development gains and causing disruptions to social and economic systems in some countries. Continued rise in temperature, accompanied by changes in precipitation patterns, is projected for this century, and more frequent, severe, and prolonged climate-related events such as floods and droughts are also projected—posing risks for agriculture, food production, and water supplies. Poor countries and the poorest people in all countries are the most vulnerable to the

impacts. Understanding climate change is thus key for development policy. Because uncertainty increases with climate change, better climate information is critical for wise development decisions.

This year's *Environment* section includes two new tables on information related to climate change. Table 3.11 presents data on carbon dioxide emissions by economic sector, which shows how differences in industrial structure and production technologies affect the production of carbon dioxide and how these patterns have changed. Table 3.12 presents data on climate variability, exposure to impact, and resilience.

Other indicators in this section describe land use, agriculture and food production, forests and biodiversity, water resources, energy use and efficiency, natural resource rents, urbanization, environmental impacts, government commitments, and threatened species. Table 3.8 adds newly available data on the share of the population with access to electricity.

Where possible, the indicators come from international sources and are standardized to facilitate comparison across countries. But ecosystems span national boundaries, and access to natural resources may vary within countries. For example, water may be abundant in some parts of a country but scarce in others, and countries often share water resources. Land productivity and optimal land use may be location specific, but widely separated regions can have common characteristics. Greenhouse gas emissions and climate change are measured globally, but their effects are experienced locally, shaping people's lives and opportunities. Measuring environmental phenomena and their effects at the subnational, national, and supranational levels and incorporating these values in national income accounts and other statistical frameworks remain major challenges for economists, environmentalists, and statisticians.