In the 21st century, agriculture continues to be a fundamental instrument for sustainable development and poverty reduction. It deserves much greater attention from governments and international development agencies than it has received over the last 25 years. Agriculture offers new opportunities for development, but they will be different from the past.
Agriculture contributes to development in many ways

**AGRICULTURE CONTRIBUTES** to development as an economic activity, as a source of livelihoods and food security, and as a provider of environmental services.

Agriculture can be the main source of growth for the national economy in low-income countries, a provider of investment opportunities for the private sector, and a prime driver of agriculture-related industries and the rural non-farm economy. Two thirds of the world’s agricultural value added is created in developing countries. In agriculture-based countries, that is, those in which agriculture contributes more than a third of overall economic growth and where more than half of the poor population live in rural areas, agriculture generates, on average, 29 percent of the gross domestic product (GDP) and employs 65 percent of the labor force. Most of the world’s agriculture-based countries are in Sub-Saharan Africa. In these countries, industries and services linked to agriculture in value chains often account for more than 30 percent of GDP. Their competitive advantage is found mainly in agriculture and agro-industries, due to a relatively abundant natural resource base, and because levels of institutional development are often not sufficient to support more advanced industrial activities.

Three of every four poor people in developing countries live in rural areas—2.1 billion living on less than $2 a day and 880 million on less than $1 a day—and most depend on agriculture for their livelihoods. Given where they are and what they do best, promoting agriculture is imperative for meeting the Millennium Development Goal of halving poverty and hunger by 2015 and continuing to reduce poverty and hunger for several decades thereafter. Agriculture alone will not be enough to massively reduce poverty, but poverty reduction will not happen without agriculture.

Agriculture is also essential for food security. On the supply side, global food security is at risk as slowing yield growth fails to meet a burgeoning demand for food, feed and biofuel. On the demand side, increasing incomes of the poorest that depend on agriculture for their livelihoods is critical to provide increased access to food.

In using—and frequently misusing—natural resources, agriculture can create good and bad environmental outcomes. It is by far the largest user of water, contributing to water scarcity. It is a major player in underground water depletion, agrochemical pollution, soil exhaustion, and global climate change, accounting for up to 30 percent of greenhouse gas emissions.

But it is also a major provider of environmental services, generally unrecognized and unrewarded, sequestering carbon, managing watersheds, and preserving biodiversity. With rising resource scarcity, climate change, and concern about environmental costs, business as usual in the way agriculture uses natural resources is not an option. New technologies make it possible to grow crops in ways that conserve water and protect soil fertility. Also, by shifting responsibility for managing water, land, forests and soil to local communities, a better balance is achieved between agricultural growth and environmental protection.

Yet agriculture has been vastly underused for development

**WHILE AGRICULTURE** has helped drive economic growth, poverty reduction, and improvements in environmental management in many countries, there are also numerous failures to mobilize agriculture for development. In many countries in Sub-Saharan Africa, per capita agricultural growth remains anemic.

The same applies to vast areas within countries in other regions. Rapid population growth, declining farm size, falling soil fertility, and missed opportunities for income diversification and migration create distress. Policies that tax agriculture excessively and underinvest in it are to blame, reflecting the greater political influence of those who live in cities. In 1980, when many Asian countries where on the threshold of transformation, they devoted an average of over 10 percent of agricultural GDP to public investment in agriculture; African countries whose economies are based on agriculture today, by contrast, spend only four percent of agricultural GDP on public investment in the sector.

Too often, short-run responses to delivering cheap food are preferred over long-term investments in agriculture for growth.

Where smallholder farmers are predominantly women, discrimination results in failure to release their full potential in agriculture, and this contributes to low growth and food insecurity.

Underuse of agriculture for development is not confined to the agriculture-based countries. In countries with rapid growth in nonagricultural sectors, the reallocation of labor out of agriculture is typically lagging, leaving large numbers of poor people in rural areas and widening the rural–urban income gap.

In these countries, the farm population demands subsidies and protection. But weak fiscal capacity to sustain transfers large enough to reduce the income gap, combined with continuing urban
demands for low food prices, create a policy dilemma. The opportunity cost of subsidies (which are three times public investments in agriculture in India) is reduced investment for growth and social services in rural areas. Raising incomes in agriculture and the rural nonfarm economy must be part of the solution.

New opportunities and new challenges

The world of agriculture has changed dramatically over the past 30 years. Globalization, far-reaching technological and institutional innovations, and new roles for the state, private sector, and civil society define a new context for a changed agriculture. The emerging new agriculture is led by private entrepreneurs in sprawling and complex value chains linking producers to consumers and including many entrepreneurial smallholders supported by their organizations.

Staple crops and traditional export commodities also find new markets as they become increasingly differentiated to meet changing consumer demands. New uses for traditional crops, such as maize and sugar for biofuels, open new opportunities and risks, as do a plethora of newly integrated regional markets. Sharply rising food prices are creating renewed profitability for many farmers, and incentives to invest more in agriculture.

But, agriculture faces large uncertainties too. Recent record-high agricultural commodity prices are the result of the increased demands on the agricultural sector to produce food, feed and fuel. But the agricultural sector faces resource constraints, climate change and limited adoption of new technologies such as GMOs. Staple grain prices are likely to remain high relative to the past two decades, while food prices may fall from their current peak.

Agriculture faces the challenge of continuing to feed an increasingly affluent world population at affordable prices, while also generating income for the millions who depend on it as a livelihood. It faces the challenge of adapting to climate change while mitigating its own contribution to it. It must produce more, while using fewer natural resources. The challenges are formidable. But the opportunities are robust enough to meet them.

Managing the response of agriculture to rising demand will require good policy and sustained investments. An emerging vision of agriculture for development redefines the roles of producers, the private sector, and the state. In this vision, production is mainly by smallholders, who often remain the most efficient producers, in particular when supported by their organizations. The private sector drives the organization of value chains that bring the market to smallholders. The state—through enhanced capacity and new forms of governance—corrects market failures, regulates competition, and engages strategically in public–private partnerships. These new partnerships promote competitiveness in the agribusiness sector, while supporting greater inclusion of smallholders and rural workers. In this emerging vision, agriculture assumes a prominent role in the development agenda.

What is in this issue

This issue of Development Outreach gathers multiple perspectives to illustrate this new world of agriculture. It discusses innovations in institutions, technologies, and roles for the state, the private sector and producers that define the opportunities to meet these challenges and fulfill agriculture’s role in development.

The first part of the issue consists of three articles addressing the current price situation in agricultural markets. The first analyzes the policy choices facing governments as they seek to minimize the negative effects of higher food prices on low-income consumers, who spend a large share of their incomes on food. The second focuses on the longer term investments needed to seize the opportunity of higher prices, both in agriculture and in complementary sectors such as education and infrastructure. The third discusses the role of biofuels in the current situation, and their potential risks and benefits.

The second section describes the importance of agriculture as a source of livelihoods, emphasizing the importance of agriculture in raising incomes and reducing poverty, the role of agriculture as a main occupation for women, and the role of women as the principal workers in agriculture and finally, the role of the rural non-farm economy and the movement of populations beyond the farm.

The final five articles illustrate new technologies and institutional arrangements that are contributing to enhance the role of agriculture for development. These include extending the reach of financial services into rural areas, improving smallholders’ access to global markets and modern value chains, capturing the benefits from international trade, reducing the environmental footprint, and supporting science and technology. Together, they provide policy makers and donors willing to give priority to agriculture for development with promising avenues to do this successfully.

Alain de Janvry and Derek Byerlee were co-directors of the World Development Report 2008.