

# BIODIVERSITY AND AGRICULTURE

## In Attainment of the Millennium Development Goals

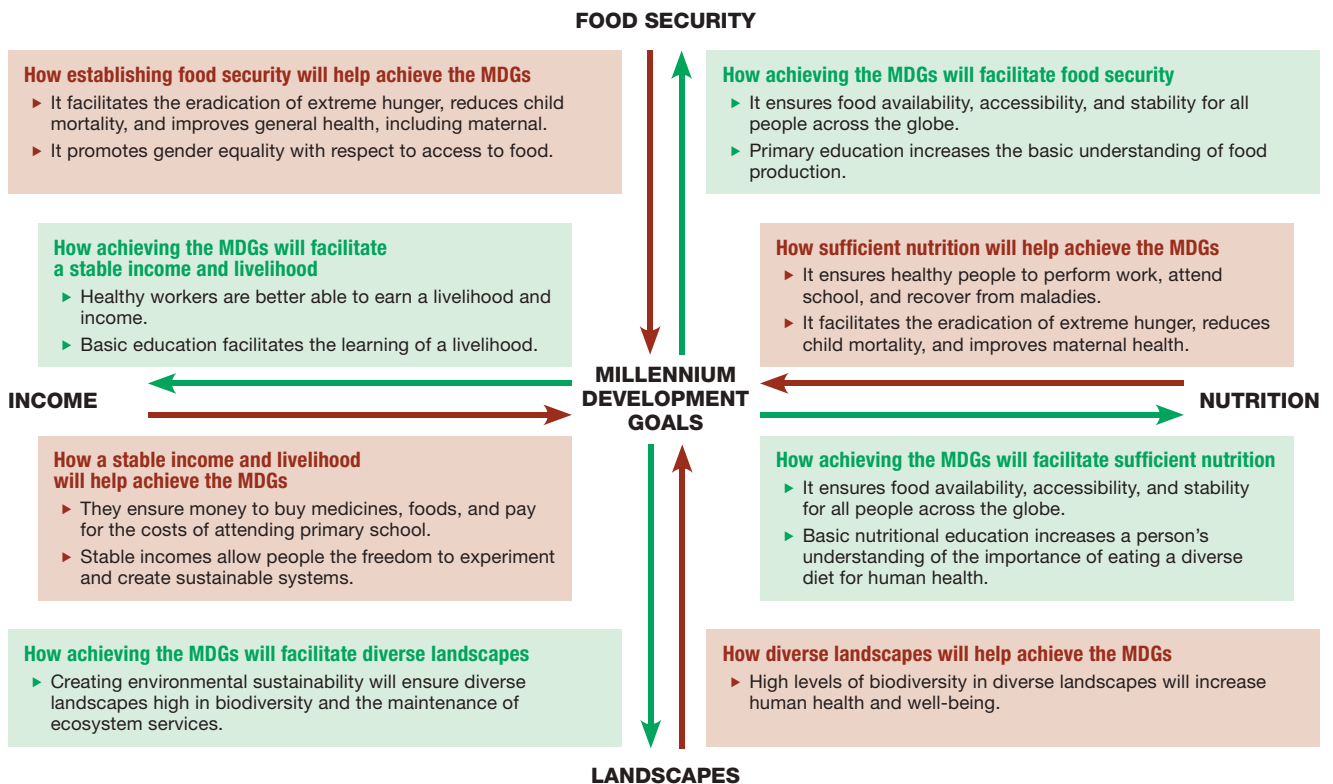
When the Millennium Development Goals (MDGs) were adopted by the 191 member states of the United Nations a global responsibility was initiated. The aim is to create a safe, healthy, equitable, and sustainable world by 2015. Biodiversity at all three levels (genes, species and ecosystems) and agriculture are two vital components of achieving these goals.

There are eight goals:

1. Eradication of extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensuring environmental sustainability
8. Develop a global partnership for development

In a world where 75 percent of poor people depend on agriculture to survive, agriculture is a vital tool for achieving the MDGs.<sup>1</sup> Biodiversity as the foundation of agriculture, provides important benefits from enhancing human well-being to ensuring food security, sufficient nutrition, stable income and livelihoods, and diverse landscapes. The conservation and sustainable use of biodiversity are essential for maintaining these benefits and are indispensable in the attainment of all the MDGs. Figure 1 describes the links between achieving the MDGs and establishing food security, sufficient nutrition, stable income and livelihoods, and diverse landscapes.

**Figure 1: Links between the MDGs and the benefits of biodiversity in agriculture**





## BIODIVERSITY AND THE RURAL POOR

The rural poor often feel the consequences of biodiversity loss and ecosystem disruption because they depend on local ecosystem services for their livelihoods and are less able to access or afford substitutes when these become degraded. Three out of every four poor people in developing countries live in rural areas.<sup>2</sup> In daily life, rural households depend, to varying degrees, on farming, fishing, hunting and the harvest of wild products to help meet their subsistence and cash needs, complementing this environmental income with outside sources of earnings such as wage labour.<sup>3</sup> Environmental income is the direct benefit people obtain from biodiversity and their environment. In times of crisis—during drought or economic recession, for example—even those households not normally reliant on environmental income can turn to wild products as a last resort. Ecosystems then serve the additional function of social safety nets, insuring families against absolute poverty and starvation.

## FUTURE ACTION: “AGRICULTURE FOR DEVELOPMENT”

The 2008 World Development Report, “Agriculture for Development,” emphasized the role of agriculture as a catalyst for development and achieving the MDGs. The report points out that GDP growth originating in agriculture is at least twice as effective in reducing poverty than GDP growth originating outside the sector.<sup>4</sup>

Using agriculture as the basis for economic growth will require strong political commitment, innovative policy initiatives, and a productivity revolution in smallholder farming seeking sustainable production systems. Since the future of agriculture is intrinsically tied to better stewardship of natural resources, the right incentives and investments to lighten agriculture’s environmental footprint are essential. This requires improving the asset position of the rural poor, making smallholder farming more competitive and sustainable, diversifying income sources toward the labor market and the rural non-farm economy, and facilitating successful migration out of agriculture.<sup>5</sup>

Agricultural policies in industrialized countries have a massive influence on agriculture for development. Because of their crucial importance for food production, agricultural markets in industrialized countries are heavily protected and subsidized. According to OECD data, despite recent progress made, more than one quarter of farmers’ income in OECD countries, on average, is not actually earned on markets but rather comes from a range of government subsidies and other protective measures that dominantly restrict international agricultural trade and distort markets, thus diminishing development opportunities abroad.<sup>6</sup>

Trade-distorting subsidies that lead to overproduction in agriculture are also detrimental for biodiversity, as they tend to promote agricultural production systems with high levels of mechanization and fertilizer, pesticide and water use. It is for these reasons that the 2008 World Development Report calls for full trade liberalization and the elimination of such trade-distorting support measures in industrialized countries. Removing such measures, as mandated in the Doha development agenda, the basis for the current round of trade negotiations at the World Trade Organization, is estimated to induce annual welfare gains for developing countries about five times the current rate of aid to agriculture, and has also significant potential to benefit biodiversity.

1. Consultative Group on International Agricultural Research, 2007. *Who Are We?* <<http://www.cgiar.org/who/index.html>> (18 October 2007)
2. The World Bank, 2007. *World Development Report 2008: Agriculture for Development*. The International Bank for Reconstruction and Development / The World Bank, Washington, DC.
3. Secretariat of the Convention on Biological Diversity, 2006, *Global Biodiversity Outlook 2*. Montreal: 17.
4. The World Bank, 2007. *World Development Report 2008: Agriculture for Development*. The International Bank for Reconstruction and Development / The World Bank, Washington DC: 6.
5. *Ibid*: 8.
6. Organization for Economic Co-Operation and Development, 2006. *Agricultural Policies in OECD Countries: At a Glance*. OECD, Paris. <[http://www.oecd.org/document/4/0,3343,en\\_2649\\_37401\\_36967364\\_1\\_1\\_1\\_37401,00.html](http://www.oecd.org/document/4/0,3343,en_2649_37401_36967364_1_1_1_37401,00.html)> (15 January 2008)

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