*FACTS ABOUT...*

# *Agricultural Productivity*

## The Problem

There is more than enough food in the world to feed every person. Yet for more than a billion people whose only food and income comes from the crops they grow, when the crops fail, there is simply no money to buy food from others. In fact, in many rural areas, where 70 per cent of the poorest 1.2 billion in the world live and work, agricultural productivity is declining sharply. Much of this is due to land degradation, which affects to some degree as much as two thirds of the world's agricultural land.

In many cases, declining agricultural productivity forces people to encroach on forests, grasslands and wetlands, creating a downward spiral of further environmental degradation and poverty. Recognizing that improving agricultural productivity is essential to the sustainable development goal of reducing both poverty and stress on the environment, United Nations Secretary-General Kofi Annan has called on the Johannesburg Summit to focus on reversing land degradation as one of five key areas where tangible results can and must be achieved.

In addition to the problems posed by climate change, droughts and floods, there are a host of causes that contribute to the unsustainable use of land resources and, consequently, poverty. These include the lack of tenure security of the poorest to land and common property natural resources such as pasture, rivers and forest.

The problems on the farm are compounded at the national level for developing countries. The demands of trade liberalization have caused many developing countries to reduce their tariffs, which has opened the door to new, cheap imports. At the same time, high tariffs and subsidies to farmers in developed countries have made it impossible for agricultural products to compete in developed country markets.

Plant genetic resources are essential to sustain agriculture and food security. According to the UN Food and Agriculture Organization (FAO), humans have used some 7,000 species for food throughout history. Today, no more than 120 cultivated species provide around 90 per cent of our food. In addition, most of the biodiversity of these cultivated species has been lost in the twentieth century.

The International Treaty on Plant Genetic Resources for Food and Agriculture was adopted in November 2001 to address the conservation of plant genetic resources, their sustainable use, and the fair and equitable sharing of benefits arising from their use, including monetary benefits resulting from commercialization. This binding international treaty provides for farmers' rights, and establishes a multilateral system to exchange the genetic resources of some 64 major crops and forages important for global food security.

## Key Statistics

- About 11 per cent of the world's land surface is used for crop production. While there is still some room for expansion of agricultural land in Latin America, sub-Saharan Africa and some countries in East Asia, there is virtually no additional land available for agricultural expansion in South Asia, the Near East and North Africa.
- Arable land per person is shrinking. In developing countries, it declined from 0.32 hectares/person in 1961/63 to 0.21 in 1997/99, and it is projected to decline further to 0.16 hectares/person in the year 2030.
- Soil erosion is responsible for about 40 per cent of land degradation worldwide, much of it caused by tilling land for agriculture.
- Agriculture is the largest user of water in developing countries. Agriculture represents about 70 per cent of total global freshwater withdrawals. In Africa, the Middle East and South Asia, close to 90 per cent of all water withdrawals are for agriculture. In OECD countries, industry accounts for the greatest share of water withdrawals.
- About 20 to 30 per cent of irrigated land in the developing world has been damaged by water-logging or salinity, and some 12 million hectares of irrigated land may have gone out of production.
- An estimated 250 million people have been directly affected by desertification — the

degradation of drylands — and nearly 1 billion are at risk.

- Public resources for agriculture are declining. Official development assistance for agriculture has declined by almost 50 per cent in real terms in the 1990s.

### What Needs to Be Done

The economic benefits of reducing the number of hungry, enabling them to be more productive, is in the order of $120 billion per year, according to FAO estimates. And yet, according to the same estimates, only $24 billion of additional public investment in agriculture and rural development is needed annually to halve hunger in the world. Investments are proposed for, among other things, integrated land management and water use, management of marine and forest ecosystems, and biodiversity preservation.

An outcome of the 1992 Earth Summit, the United Nations Convention to Combat Desertification provides a framework to develop actions to fight desertification, yet it has never received sufficient funds to be implemented. One proposal under consideration at the Johannesburg Summit is to allow the Global Environment Facility to finance the implementation of the Convention.