www.fao.org

Agriculture

Key facts

Projections indicate that although growth rates in population and agriculture will slow, growth in food production will continue to exceed population growth.

Arable land per person is shrinking. It has decreased from 0.38 hectares in 1970 to 0.23 hectares in 2000, with a projected decline to 0.15 hectares per person by 2050.

South Asia is using 94 percent of its potentially arable land. In contrast, in sub-Saharan Africa only 22 percent of potentially arable land is under cultivation.

Rainfed agriculture is practised on 80 percent of the arable land. Irrigated agriculture produces 40 percent of the world's food crops on the remaining 20 percent.

Between 1974 and 2008 the area cultivated using conservation agriculture grew from just under 3 million hectares to more than 105 million hectares.

In sub-Saharan Africa women contribute between 60 and 80 percent of the labour for food production, both for household consumption and for sale.

About 32 percent of livestock breeds are under threat of extinction within the next 20 years. About 75 percent of the genetic diversity of agricultural crops has been lost since 1900.

Livestock production currently accounts for some 40 percent of the gross value of world agricultural production, and its share is rising.

Worldwide, it is estimated that over half a million tonnes of banned, obsolete and unwanted pesticides are threatening the environment and human health.

Achieving sustainable gains in agriculture

FAO's Agriculture Department is helping countries achieve sustainable gains in agriculture to feed a growing world population, while respecting the natural environment, protecting public health and promoting social equity. The department helps farmers to diversify food production, reduce the drudgery of farming, market their products and conserve natural resources.

Using progressive techniques to produce food

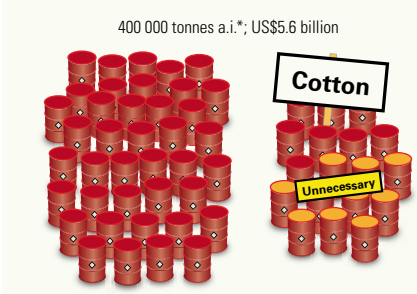
FAO is promoting conservation agriculture to achieve sustainable and profitable agriculture and protect the environment at the same time. Conservation agriculture uses progressive techniques including zero or minimum tillage, direct seeding, intensive crop rotation and continuous soil cover to protect the land from sun, wind and rain. Increased organic matter in the soil provides greater resilience to drought and enhances responses to mineral fertilizers. Animals are often integrated to diversify production and help recycle nutrients. Conservation agriculture – practised on more than 105 million hectares, mainly in North and South America and increasingly in Southern Africa and South Asia – is adaptable to farms of all sizes.

Reducing pesticide dependency

FAO promotes Integrated Pest Management to reduce dependency on chemical pesticides. Today millions of farmers have been trained in the method and thousands have become trainers themselves. A number of international agreements help countries address plant health and the human and environmental risks posed by pesticides. The aim is to prevent the spread of pests that threaten plants and plant products, encourage good practices in pesticide management and give importing countries the power to decide whether or not they want to receive certain banned or severely restricted chemicals.

Annual pesticide usage in Asia

(without Japan, Near East and Commonwealth of Indepedent States)



*a.i. = active ingredient

Source: FAO-EU IPM Programme for Cotton in Asia 2004

Better tools and improved markets

In developing countries about one-third of the land – two-thirds in Africa – is cultivated by human labour. FAO is working to reduce the drudgery of farm work, especially for women, who do most of the work related to food production but often have poorer tools. It also promotes the use of energy-efficient equipment. Farmers need markets to sell their produce and earn a reasonable return. FAO helps farmers diversify, process and market their crops to increase family income.

©FAO/Giulio Napolitano

Women at work in the fields, Bangladesh.

Improving and protecting plants and animals

Farmers and breeders rely on genetic resources for improving the quality of their products and the productivity of their farms. Conservation and sustainable use of these resources through plant breeding and a strong seed system is critical in order to increase agricultural production and meet the challenges from climate change and growing food demands. Continued access to plant genetic resources and a fair and equitable sharing of the benefits arising from their use is essential for food security. The International Treaty on Plant Genetic Resources for Food and Agriculture, adopted in 2001, is a major milestone in this area. FAO is involved in building international awareness, supporting capacity building and sharing knowledge for conservation and use of plant genetic resources.

Because of strongly expanding demand, livestock is expected to provide half the total value of food production worldwide by 2020. FAO is helping countries to use improved technologies to meet this demand, and to develop policies and standards to protect public health and natural resources.

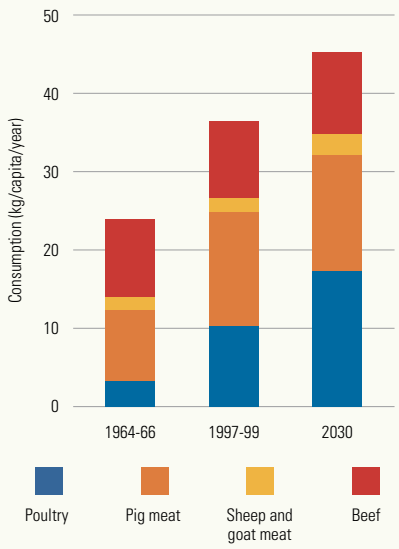
FAO's Emergency Prevention System for Transboundary Animal and Plant Pests (EMPRES) is at the forefront of the global fight to prevent, contain, control and eliminate the world's most serious livestock diseases, some of which also affect human health. It keeps a watchful eye on newly emerging diseases and works towards improving tools to fight animal diseases. Its strategy is to control diseases at their source and prevent their spread. When outbreaks occur, rapid deployment teams provide veterinary and other technical support. The complexity of transboundary animal diseases requires a coordinated approach, and FAO has developed joint initiatives with the World Health Organization and the World Organisation for Animal Health. This has proven useful with avian influenza, Rift Valley fever, African swine fever, foot-and-mouth disease, *peste des petits ruminants* and other animal disease outbreaks.

The plant health component of EMPRES initially focused on the desert locust, a migratory pest that moves rapidly in large swarms, devastating crops in its path. But other species of locusts also pose serious threats in wide areas of Asia and Africa, and FAO is now using its successful desert locust management model to combat these pests. It is applying similar monitoring mechanisms to another cross-border plant threat: a new virulent strain of wheat stem rust. It is also promoting the use of environmentally sound control technologies. Global cooperation is key to reducing the world's vulnerability to these plant threats.

©FAO/Johan Spanner

The world's appetite for meat is insatiable.

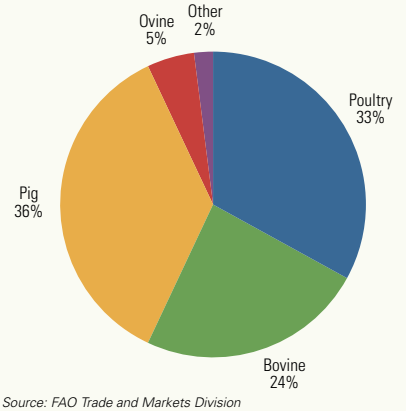
World average meat consumption per person, 1964-66 – 2030



Livestock production is increasing to meet the growing demand for meat.

Source: FAO

Sources of the world's meat supply in 2007



Source: FAO Trade and Markets Division

Food and Agriculture Organization
of the United Nations
Viale delle Terme di Caracalla
00153 Rome, Italy

Telephone: (+39) 06 57051
Fax: (+39) 06 57053152
E-mail: FAO-HQ@fao.org

Media enquiries:
Telephone: (+39) 06 57053625
Fax: (+39) 06 57053729