



# The State of Food Insecurity in the World

# 2003

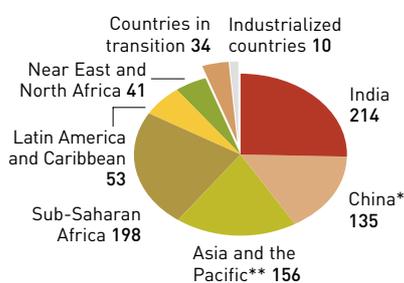
## Counting the hungry: latest estimates

**F**AO'S LATEST ESTIMATES show that 842 million people were undernourished worldwide in 1999–2001. This figure includes 10 million in the industrialized countries, 34 million in countries in transition and 798 million in developing countries.

A closer look at the estimates reveals some encouraging signs of progress. A number of countries in the developing world have reduced hunger steadily since the World Food Summit (WFS) baseline period of 1990–1992. In 19 countries, the number of chronically hungry people declined by over 80 million between 1990–1992 and 1999–2001. The list of successful countries spans all developing regions, with one country in the Near East, five in Asia and the Pacific, six in Latin America and the Caribbean and seven in sub-Saharan Africa.

Unfortunately, this is not the situation in most other countries. Across the developing world as a whole, the number of chronically hungry people declined by only 19 million between the WFS baseline period of 1990–1992 and 1999–2001. Analysis of more recent

**Undernourished, 1999–2001**  
(millions)



\* includes Taiwan Province of China  
\*\* excl. China and India

Source: FAO

trends makes the prospects look even bleaker. From 1995–1997 to 1999–2001 the number of undernourished actually increased by 18 million.

The WFS goal of reducing the number of undernourished people by half by the year 2015 can now be reached only if this recent negative trend can be reversed and if annual reductions can be accelerated to 26 million per year, more than 12 times the average annual decrease of 2.1 million achieved so far.

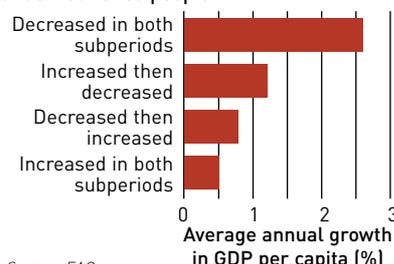
## Analysing the keys to progress and reversals in reducing hunger

In attempting to analyse the factors that fuel progress in reducing hunger, a combination of six indicators proved most successful at differentiating among countries grouped according to their performance during the periods from 1990–1992 to 1995–1997 and from 1995–1997 to 1999–2001. These indicators include population growth, GDP growth per person, health expenditure as a proportion of GDP, the proportion of adults infected with HIV/AIDS, the number of food emergencies and the United Nations Development Programme's Human Development Index (itself a composite of many economic and social indicators).

In the countries that succeeded in reducing hunger throughout the nine-year period, GDP per capita grew at an annual rate of 2.6 percent – more than five times higher than the rate in countries where undernourishment increased in both subperiods (0.5 percent). The most successful countries also exhibited more rapid agricultural growth (3.3 percent per year compared to only 1.4 percent for the countries where hunger increased throughout the decade), lower rates of HIV/AIDS infection (3.3 percent compared with an average of 5.9 for all other groups) and slower population growth.

## Trends in undernourishment and GDP

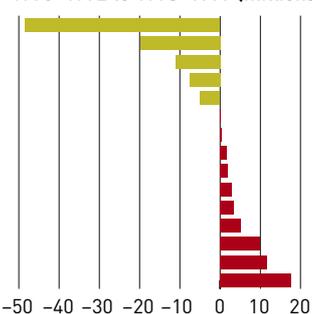
Countries where the number of undernourished people:



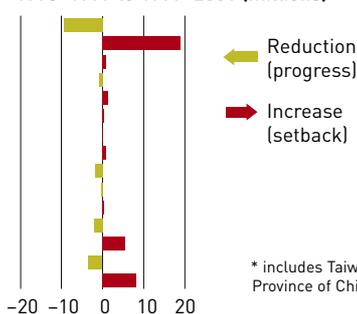
Source: FAO

## Changes in numbers of undernourished in developing subregions

1990–1992 to 1995–1997 (millions)



1995–1997 to 1999–2001 (millions)



\* includes Taiwan Province of China

Source: FAO

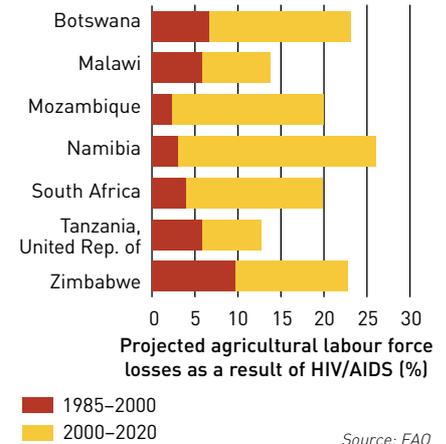
# Undernourishment around the world

## Food insecurity and HIV/AIDS: when short-term food emergencies intersect a long-wave crisis

HIV/AIDS causes and exacerbates food insecurity in many ways. Most of its victims are young adults who fall ill and die during what should have been their peak productive years. They leave behind a population overbalanced with the elderly and the young, many of them orphans. The impact on farm production and household food security is often devastating. By the year 2020, the epidemic will have claimed one-fifth or more of the agricultural labour force in most southern African countries.

While HIV/AIDS has become a major cause of hunger, the reverse is also true. Hunger accelerates both the spread of the virus and the fatal course of the disease. Hungry people are driven to adopt risky strategies in order to survive. Incorporating HIV prevention, nutritional care for people living with HIV and AIDS, and AIDS mitigation measures into food security and nutrition programmes can help reduce the spread and impact of HIV/AIDS. Indeed, when short-term food emergencies intersect the long-wave HIV/AIDS crisis, household food security is likely to be the single most important HIV prevention strategy and AIDS mitigation response.

## Projected labour losses due to HIV/AIDS, southern Africa



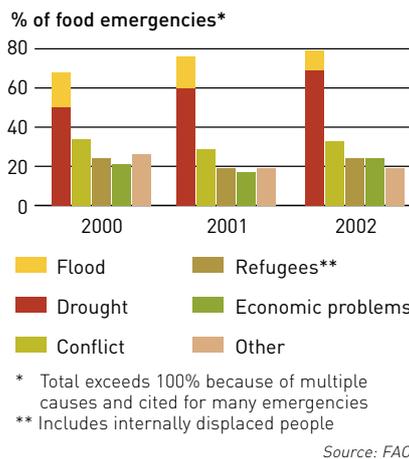
## Water and food security

Water and food security are closely related. Reliable access to water increases agricultural yields, providing more food and higher incomes in the rural areas that are home to three-quarters of the world's hungry people.

If water is a key ingredient in food security, lack of it can be a major cause of famine and undernourishment, particularly in food-insecure rural areas where people depend on local agriculture for both food and income. Drought ranks as the single most common cause of severe food shortages in developing countries. For the three most recent years for which data are available, drought was listed as a cause in 60 percent of food emergencies.

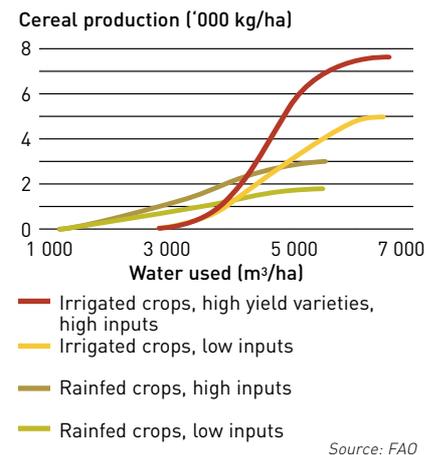
By ensuring an adequate and reliable water supply, irrigation in-

## Causes of food emergencies in developing countries



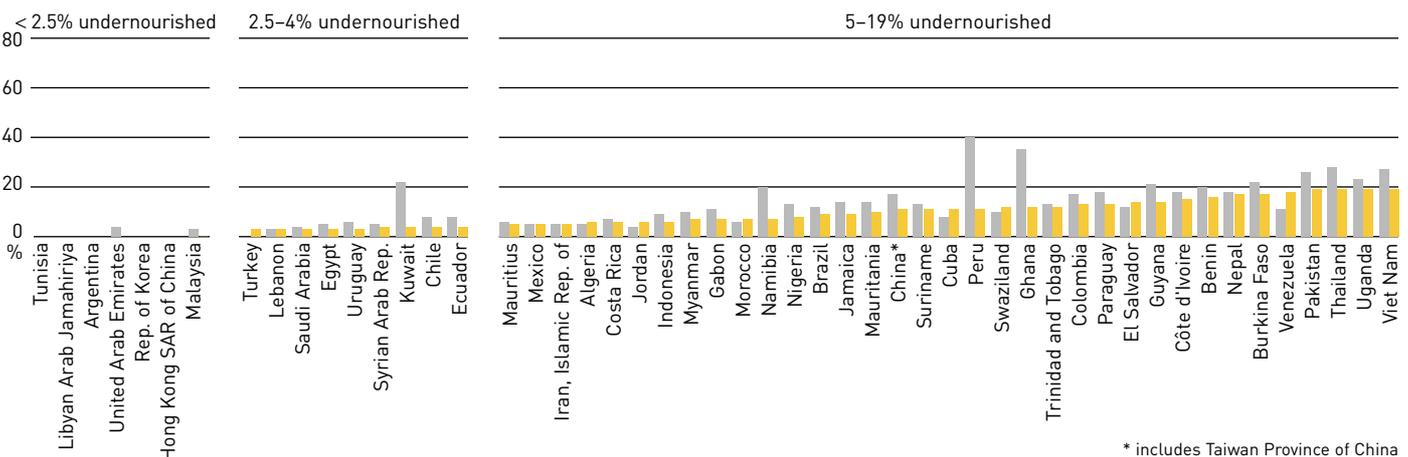
creases yields of most crops by 100 to 400 percent. Although only 17 percent of global cropland is irrigated, that 17 percent produces 40 percent of the

## Yields and water requirements of irrigated and rainfed agriculture



world's food. Data show that where irrigation is widely available, undernourishment and poverty are less prevalent.

## Proportions of undernourished in developing countries, 1990-1992 and 1999-2001



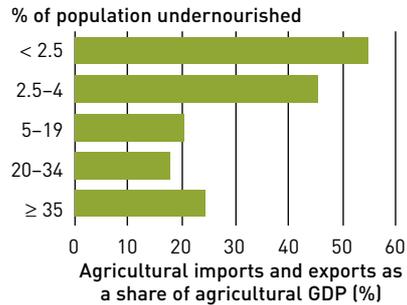
# Special feature: trade and food security

## The importance of agriculture and agricultural trade in food security

Agriculture accounts for much of the trading activity of developing countries, particularly those that are most food-insecure. For the developing countries as a whole, agricultural products represent around 8 percent of both exports and total merchandise trade. For the countries where hunger is most prevalent, the share rises to over 20 percent.

These countries trade heavily in agricultural products because agriculture is the mainstay of their economies. The share of agricultural production traded on international markets is larger, however, in the countries with the least hunger. This reflects the fact that agriculture in these countries is more

## Integration in agricultural trade and undernourishment, 1996–2000



Source: FAO

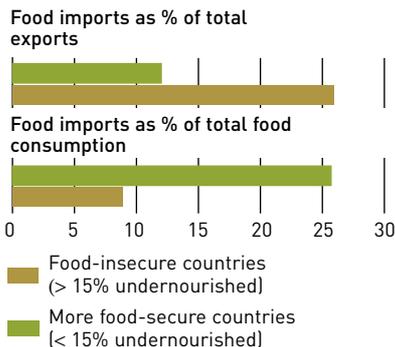
productive, more competitive and better integrated into world markets. And it suggests that more robust agricultural growth can contribute both to reduced hunger and to increased integration in international trade.

## Does trade openness harm food security?

In general, engaging in agricultural trade is associated with less hunger, not more. Poor access to and integration with international markets limit the ability of countries where hunger is widespread to import enough food to compensate for shortfalls in domestic production.

Countries where more than 15 percent of the population go hungry spend more than twice as much of their export earnings on food imports as do more food-secure countries. But their poverty and limited trading activities constrict both their export earnings and their ability to buy more food on

## Food trade and food security, 1990–2000



Source: FAO

international markets. As a result, these countries import less than 10 percent of their food, compared with more than 25 percent in more food-secure countries.

## Issues of the Doha Round

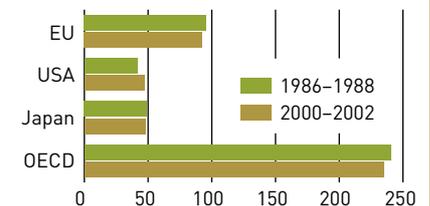
The Agreement on Agriculture (AoA) negotiated as part of the Uruguay Round included provisions to reduce price supports in developed countries. But transfers to agriculture in developed countries have diminished slowly, if at all. In 2002, direct support to farmers added up to US\$235 billion, almost 30 times the amount provided as aid for agricultural development in developing countries.

Draft proposals tabled in the current Doha Round include several measures intended to address the concerns of developing countries. One provision would allow developing countries to identify “special products” for which domestic production is critically important to food security and rural development. These products would be subject to lower tariff cuts in the countries concerned.

Some WTO members have emphasized that food security, rural development and the environment cannot be addressed without maintaining and supporting domestic agricultural production.

## OECD subsidies to agriculture\*

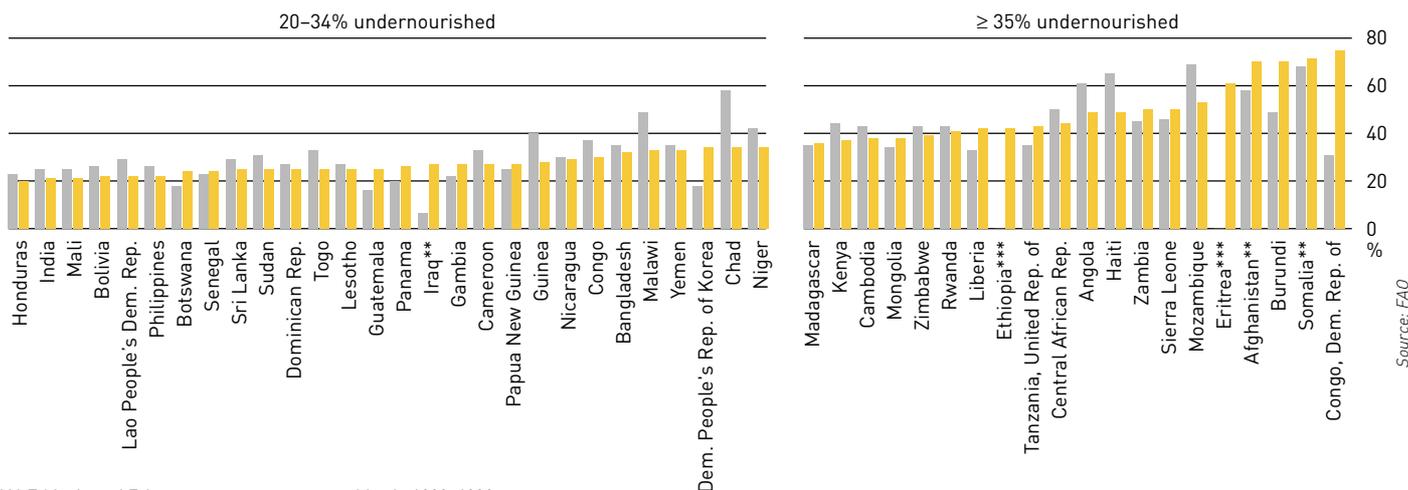
US\$ billion



\* Producer Support Estimate (PSE): the annual value of transfers from consumers and taxpayers to agricultural producers, part of an estimated US\$315 billion in total transfers to agriculture in OECD countries.

Source: Organisation for Economic Co-operation and Development (OECD)

Grey bars: 1990–1992 Coloured bars: 1999–2001 Countries grouped by prevalence of undernourishment in 1999–2001



Source: FAO

\*\*\* Ethiopia and Eritrea were not separate entities in 1990–1992

# Towards the Summit commitments

## Mapping poverty and hunger to help wipe them off the map

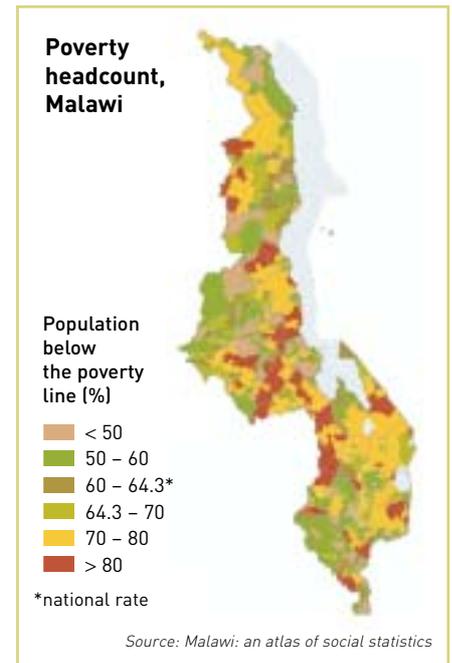
Taking advantage of recently developed techniques that generate estimates of local poverty, a number of countries have used Geographic Information Systems (GIS) technology to construct detailed poverty maps. These maps can be combined with other geo-referenced data to highlight areas where hunger and poverty overlap with other social, economic and environmental problems. Maps can be made, for example, to show semi-arid agricultural areas with high levels of goitre and female illiteracy and poor access to roads. This information can then be used to design programmes that address specific local problems.

A growing number of countries are

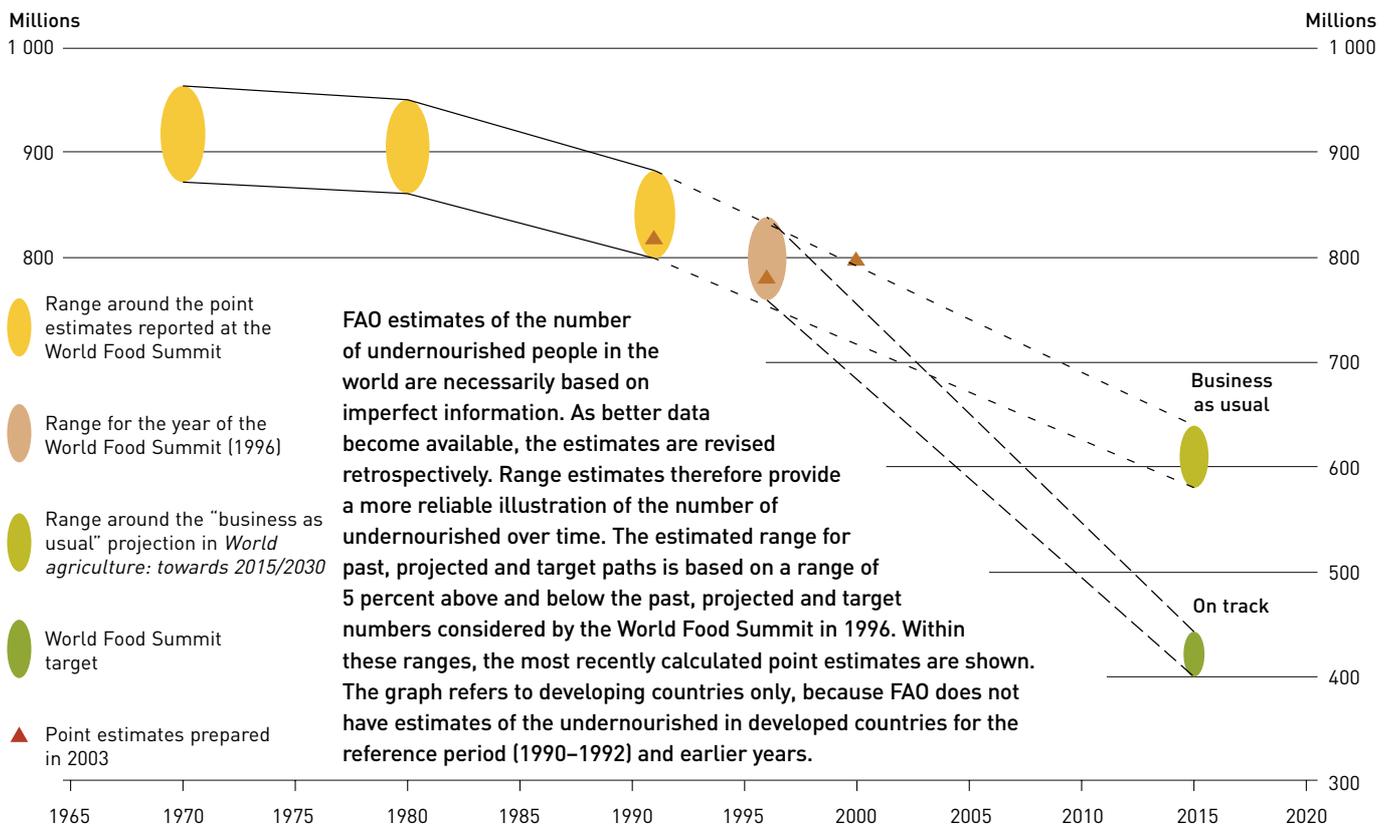
using poverty maps to target food aid and public works projects to areas where the poorest people live.

With support from IFPRI, Malawi has produced an atlas of social statistics. Poverty maps included in the atlas have been used by the World Food Programme and the Malawi Social Action Fund to target public works projects that provide employment and improve infrastructure in poor communities. Maps in the atlas are also expected to be used to assist distribution of free fertilizers and seeds in Malawi's "starter pack" programme.

Depicting how concentrations of poverty overlap different agroecological zones, major foodcrop production systems or fragile areas vulnerable to degradation can help shape effective, sustainable action to combat hunger.



## Number of undernourished in the developing world: observed and projected ranges compared with the World Food Summit target



For further information please contact:

FIVIMS Secretariat  
Economic and Social Department  
Food and Agriculture Organization  
of the United Nations  
Telephone: (+39) 06 57056782  
E-Mail: [fivims-secretariat@fao.org](mailto:fivims-secretariat@fao.org)

Nick Parsons  
Chief, News and Multimedia Service  
Information Division  
Food and Agriculture Organization  
of the United Nations  
Telephone: (+39) 06 57053276  
E-mail: [nick.parsons@fao.org](mailto:nick.parsons@fao.org)

