

# **FAO Statistical Yearbook 2013**

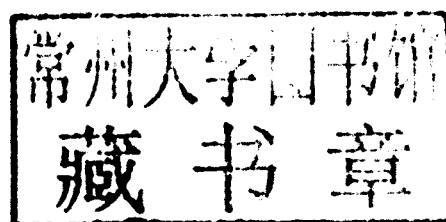
World food  
and  
agriculture



# FAO STATISTICAL YEARBOOK

2013

World Food and Agriculture



Food and Agriculture Organization of the United Nations

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# Foreword

Good statistics are needed to monitor the progress of development. The better the data, the better policies can be designed to protect vulnerable populations. And, without good data, it is impossible to evaluate or determine the impact of policies.

There are 867 million chronically undernourished people in the world today. Seventy percent of the world's food insecure live in rural areas, and 60 percent of the world's population rely on agriculture for their livelihoods. The need for quality data on agriculture and food security is as pressing as ever.

Where do people live? Do they have access to land and water? How much formal schooling or training do they receive? How much do countries invest in agricultural innovation? What products do they export or import? How is agriculture affecting their forests, soils and waterways?

Employing data from global statistical providers, including FAO, this publication presents a visual synthesis of the major trends and factors shaping the global food and agricultural landscape and their interplay with broader environmental, social and economic dimensions. In doing so, it strives to serve as a unique reference point on world food and agriculture for policy-makers, donor agencies, researchers and analysts as well as the general public.

The data cycle revolves around three key activities: building the capacity of countries to improve their collection and use of data; collecting data in a timely and efficient manner; and disseminating this information through meaningful products.

Based on key resources, such as FAO flagship publications and others, the FAO Statistical Yearbook is the result of a global collaborative effort among countries, international organizations and resource partners. In addition to FAO's traditional domains – forestry, fisheries, agricultural production, trade, and resources – this edition of the yearbook features two new datasets: greenhouse gas emissions and investment.

This global yearbook is just one of the instruments used to disseminate information to a wider public. Regional statistical yearbooks, which highlight major trends in a particular area of the world, are also available. All of the data can be accessed electronically through the FAOSTAT data platform.

FAO is deeply committed to helping countries strengthen their statistical systems as, for example, collecting gender-disaggregated data. FAO and international partners are implementing a Global Strategy to Improve Agricultural and Rural Statistics, to address weaknesses in basic data and information availability in developing countries, as well as emerging data and information needs. This long-term project builds on three major pillars: producing a minimum set of core data and determining national priorities; integrating agricultural statistics into national statistical systems; and fostering the sustainability of agricultural statistics through governance and statistical capacity development.

We will continue to support these three activities – collection, dissemination and capacity building – to improve agriculture and food security statistics, and to advance the fight against hunger and poverty.

**José Graziano da Silva**  
FAO Director-General

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# How to use this book

## *The structure*

The 2013 FAO Statistical Yearbook continues the process that began with the 2012 edition. The book has been created from beginning to end with the statistical software R and the typesetting language  $\text{\LaTeX}$ : from data retrieval, to data processing, indicator construction, and blueprint-ready pdf file for distribution. This technique has circumvented the traditional route of manual production, involving costly software licences, significant labour costs and inefficiencies associated with a lack of integration.

The book is divided into four thematic parts, in an attempt to present the full spectrum of issues relevant to the subject matter:

**Part 1 The setting** measures the state of the agricultural resource base by assessing the supply of land, labour, capital and inputs, and examining the pressure on the world food system stemming from demographic and macroeconomic change.

**Part 2 Hunger dimensions** gauges the state of food insecurity and malnutrition, measuring the multitude of dimensions that give rise to hunger and shape undernourishment.

**Part 3 Feeding the world** evaluates the past and present productive capacity of world agriculture, together with the role of trade in meeting changing food, feed and other demands.

**Part 4 Sustainability dimensions** examines the sustainability of agriculture in the context of the pressure it exerts on the environment, including the interaction of agriculture with climate change, and how it can provide ecosystem services through the bio-based economy.

Several page spreads are used to present each thematic issue. Each spread contains visualizations of the data in maps and charts, along with text providing background to the salient issues and an assessment of current trends. Tables are provided at the end of each part. A list of indicators used throughout the book and a section on concepts and methods can be found in Part 5.

#### *Country definitions and classification*

Parts 1, 3 and 4 follow the M49 list from the United Nations Statistics Division. This can be found at “geographical regions for statistical use” (see “Table: Country list” or <http://unstats.un.org/unsd/methods/m49/m49regin.htm>). Part 2 adapts the Millennium Development Goals country classification with the exception of the sections “Poverty”, “Education and health” and “Natural and human-made risks”, which apply M49.

Developing regions, which are referred to throughout the book, consist of Africa, the Americas excluding Northern America, Latin America and the Caribbean, Asia excluding Japan, and Oceania excluding Australia and New Zealand. Developed regions are Northern America, Europe, Japan, Australia and New Zealand.

South Sudan declared independence on 9 July 2011. When available, data for the Sudan and South Sudan are shown separately. In the tables, the Sudan (former) is also reported. Based on the data available, the assessment presented in the map of the Sudan and South Sudan reflects the situation up to 2011 of the Sudan (former).

### *Aggregations*

Two types of aggregations are used in the book: sum and weighted mean. Two restrictions are imposed when computing the aggregation: i) the sufficiency condition – the aggregation is computed only when sufficient countries have reported data, and the current threshold is set at 50 percent of the variable and the weighting variable, if present; and ii) the comparability condition – as aggregations are usually computed over time, this condition is designed to ensure that the number of countries is comparable over several years; under the current restriction the number of countries may not vary by more than 15 over time.

### *Data presentation conventions*

The cutoff date for the data is 31 December 2012.

- When country data have not been reported for the reference year, an asterisk (\*) on the year label indicates that the value for the most recent year available is shown. For example, 2008–2010\* means that the most recent value for the period from 2008 to 2010 is shown. When a growth rate is computed, the specified interval always refers to available data.
- A billion is 1 000 million.
- A trillion is 1 000 billion.
- A blank means that data are not available or that aggregates cannot be calculated because of missing data for the years shown.
- In tables, 0 or 0.0 means zero or a number that is small enough to round to zero at the displayed number of decimal places.
- A ~ in the maps refers to the range specified in the class intervals.



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# 1

## The Setting

### Introduction

More than 3 billion people – almost half of the world's population – live in rural areas. Roughly 2.5 billion of these rural people derive their livelihoods from agriculture. For many economies, especially those of developing countries, agriculture can be an important engine of economic growth. Approximately three-quarters of the world's agricultural value added is generated in developing countries, and in many of these, the agriculture sector contributes as much as 30 percent to gross domestic product (GDP). According to the World Bank, 1 percent growth in GDP from agriculture increases the expenditures of the three poorest deciles by at least 2.5 times as much as 1 percent growth from the rest of the economy. Agriculture can also provide an important haven against global economic and financial turmoil, often more effectively than other sectors.

A look back through history reveals that growth in agriculture has tended to be followed by wider economic development. From the industrial revolution that began in the United Kingdom of Great Britain



and Northern Ireland in the eighteenth century and spread to other now developed countries, through to more recent examples in China or Viet Nam, growth in agriculture has always been the precursor to the rise of industry and services.

In many poor developing countries, primary activities such as agriculture still constitute the backbone of the economy. However, the sector often faces many challenges. A profound and prolonged lack of investment in agriculture is evident in many countries. Notably, infrastructure is missing or weak in rural areas, agricultural productivity is stagnant, and lack of opportunities for income diversification combines with poorly functioning markets to undermine economic growth. There is often a gender divide. Although women make significant contributions to the rural economy, they often have less access to productive resources than men, and families often rely on children's work for survival.

Downward trends in the global economy are slowly turning, with improved accessibility to financial resources. Agriculture is reaping the benefits of technological innovation, and there is also a growing recognition among governments and donor agencies that agriculture must be the mainstay of any development agenda and of policies promoting economic growth. The reaffirmation of the sector's role in development and growth provides fresh impetus for fostering investments that raise productivity and incomes in agriculture.

Within this context, FAO – together with international partners – is promoting the Global Strategy to Improve Agricultural and Rural Statistics. This multi-year, collaborative project builds capacity in developing countries to produce and use agricultural and rural statistics for more effective food security, sustainable agricultural and rural development policies, and helps ensure that information is available to farmers and policy-makers when and where they need it.



## Key Resources

### The State of Food and Agriculture

The State of Food and Agriculture, FAO's major annual flagship publication, aims at bringing to a wider audience balanced science-based assessments of important issues in the field of food and agriculture. Each edition of the report contains a comprehensive, yet easily accessible, overview of a selected topic of major relevance for rural and agricultural development and for global food security. This is supplemented by a synthetic overview of the current global agricultural situation.

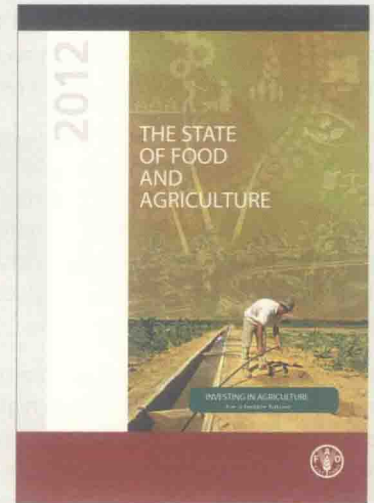
2012: Investing in agriculture for a better future

2010-11: Women in Agriculture, Closing the gender gap for development

2009: Livestock in the balance

Publication cycle: Annual

Webpage: [www.fao.org/publications/sofa](http://www.fao.org/publications/sofa)



### Looking Ahead in World Food and Agriculture

How will the world feed itself in 2050? This volume, which is a compilation of papers authored by world-class experts, addresses this very question. Agricultural and food demand is expected to slow over the next decades, following slowing population growth and rising incomes. However, population will still grow considerably in the coming decades, and require world agricultural production to increase substantially by 2050. Other areas explored in the volume are natural resources – notably land and water – as well as capital, investment and technology.

Webpage: [www.fao.org/economic/esa/esag/en/](http://www.fao.org/economic/esa/esag/en/)

