GAEZ Data Portal provides information at three basic levels of inputs (high, intermediate, low) on:

- agro-ecological zones
- agro-climatically attainable yields
- yield constraints
- crop calendars
- agro-ecological suitability and productivity assessment
- potential production estimates
- actual yield and production
- yield and production gaps

Productivity estimates are made for different water supply systems:

- rain-fed production;
- rain-fed production with water conservation; and
- irrigated production including a specification for irrigation types (gravity, sprinkler and drip irrigation systems)

GAEZ Data Portal

- provides interactive and dynamic web application to report on the current state and trends of agricultural production and crop suitability
- designed based on multi-dimensional, multi-temporal and multi-purpose database
- developed using standards and innovative technology
- enables and facilitates public access to data and information

www.fao.org/nr/GAEZ

The GAEZ database continues to be upgraded to improve the quality and consistency of the data. GAEZ Data Portal also continues to be improved with analytical and reporting functionality.

GAEZ forms the foundation of the natural resources assessment and perspective studies, building updates of the State of Land and Water (SOLAW) database, addressing issues pertaining to land and water scarcity for feeding the world in 2050/2080.

CONTACT:

FAO-Land & Water division
Viale delle Terme di Caracalla
00153 Rome, Italy
www.fao.org/nr/aboutnr/nrl/en/

www.fao.org/nr/GAEZ
E-mail: GAEZ@fao.org

International Institute for Applied Systems Analysis (IIASA)
Schlossplatz 1 A-2361 Laxenburg, Austria
Web: www.iiasa.ac.at
E-mail: inf@iiasa.ac.at

FAO LAND&WATER

IIASA

Data Portal

GAEZ

Global Agro-Ecological Zones

FAO and IIASA launch the new GAEZ data portal (v3.0) with global, regional and local geospatial and tabular information on agricultural resources and potential

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GAEZ
Global Agro-Ecological Zones

www.fao.org/nr/GAEZ

The Food and Agriculture Organization of the United Nations (FAO) and the International Institute for Applied Systems Analysis (IIASA) have been continuously developing the Agro-Ecological Zones (AEZ) methodology over the past 30 years for assessing agricultural resources and perspective studies.

The GAEZ modelling framework for crop potential assessment uses detailed agronomic-based knowledge to assess land suitability, potential attainable yields and potential production of crops for specified management assumptions and input levels, both for rain-fed and irrigated conditions.

GAEZ database outputs include thousands of global datasets. The tabular outputs are aggregated for current major land use/cover patterns and by administrative units, and land protection status. These outputs provide key data, knowledge and information related to availability of natural resources used in a number of applications including land evaluation, agricultural production potentials, sustainable management of natural resources, ecosystem services and ecologic and economic modeling.

The GAEZ data portal aims at making available to the public the GAEZ database covering the following five main thematic areas:

LAND & WATER RESOURCES

It includes multiple spatial layers of climate, soil, terrain, land cover, water, protected areas, population density, livestock density and accessibility.

AGRO-CLIMATIC RESOURCES

Data on climatic requirements of crop growth, development and yield formation are the basis for the compilation of GAEZ agro-climatic inventories. These inventories include agronomically relevant characteristics of prevailing thermal and moisture regimes, and growing periods. The agro-climatic inventories are an integral part of the GAEZ natural resources related data providing spatial characteristics used for estimating crop suitability and potential yields.

AGRICULTURAL SUITABILITY & POTENTIAL YIELDS

It includes data on yield constraints, crop calendars, and production potential estimates for: 11 major crop groups, 49 major crops and 92 crop sub-types subdivided into 280 crop/land utilization types (LUTs) at three basic levels of inputs (high, intermediate, low). Productivity estimates are made respectively for rain-fed farming, rain-fed farming with water conservation and gravity, sprinkler and drip irrigation systems.

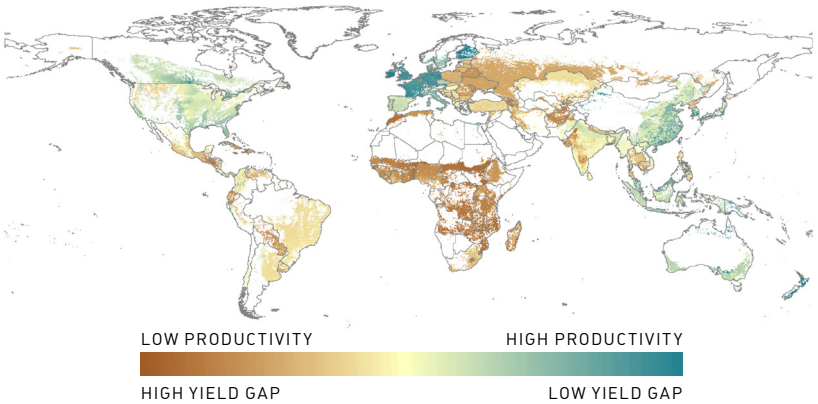
ACTUAL YIELDS AND PRODUCTION

It includes actual yields and production from downscaling. The year 2000 statistics of main food and fiber crops (statistics derived mainly from FAOSTAT and the FAO study "Agriculture Towards 2010/30"). Results are presented as crop production values, crop harvested area, yield and production for 23 major commodities.

YIELD AND PRODUCTION GAPS

It includes yield and production gaps estimated by comparing potential attainable yields and production (estimated in GAEZ v3.0) and actual yields and production from downscaling year 2000 statistics of main food and fiber crops. Yield gaps provide important information on production potentials and for identifying causes and addressing rural poverty and food insecurity issues.

YIELD GAP FOR A COMBINATION OF MAJOR CROPS



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