



GAEZ
Global Agro-ecological Zones



**IIASA, in collaboration with FAO,
prepare to launch a new website with global, regional and
local information on actual and potential crop production**

Global Agro-ecological Zones (GAEZ) Interactive Data Access Facility

New comprehensive GAEZ information is a milestone for the improvement and dissemination of knowledge about current and future productivity potentials of land. GAEZ helps identify land and water limitations and provides insight in current yield and production gaps and their causes.

This information is of critical importance for rational natural resource management, effective land use, responsible investment in land development, and for making progress towards sustainable agricultural development, especially with regard to global climate change and the need for adaptation and mitigation.

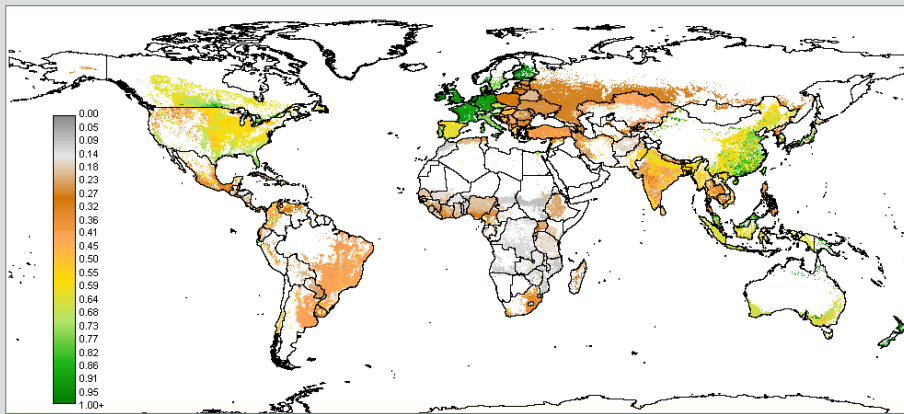
This new GAEZ assessment is the third global assessment performed by IIASA and FAO, and is an ambitious and comprehensive assessment of crop production. It was made possible by rapid

developments in information technology which have produced increasingly detailed global databases of vital geographical layers.

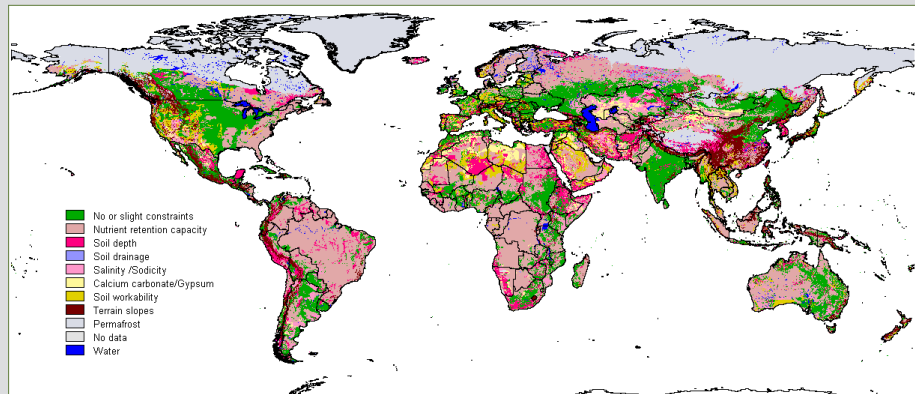
The purpose of the newly developed GAEZ Portal is to widely share the rich GAEZ database and results as a public global good in an interactive web-based mode.

The dedicated GAEZ Portal will support better informed decision making regarding natural resource management, effective land use and responsible investment in land development, helping to achieve food security and sustainable agricultural development.

The GAEZ Portal allows interactive access to and visualization of data, providing the user with various analysis and download options.



Yield gap ratios comparing actual crop production with potentials achievable in current cultivated land with advanced farming



Soil and terrain constraints for high input farming

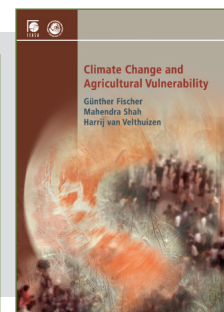
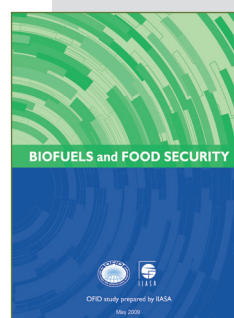
The data covers five thematic areas, at 5 arc-minute resolution with global coverage:

- **Land resources**, including soils, terrain, and land cover;
- **Agro-climatic resources**, including agronomically relevant climatic indicators;
- **Suitability and potential yields** of some 280 crops/land utilization types under alternative management for historical, current and future climates;
- Geographical patterns of **actual yields and production** statistics for major commodities;
- **Yield gaps**, providing differences between land potentials and actual yields and production.

The GAEZ Portal is targeted to the needs of decision makers, planners and experts responsible for addressing today's pressing challenges of food production and food security. The aim is to assist in planning for new challenges of climate change, reversing natural resources degradation, and resolving issues of land competition concerning food, energy and biodiversity.

GAEZ has been the basis for various major studies such as: the special report on Climate Change and Agricultural Vulnerability, prepared for the World Summit on Sustainable Development in Johannesburg (IIASA, 2002), a major study on Biofuels and Food Security (IIASA, 2009), and a recent application in

the World Bank report on "Rising Global Interest in Farmland- Can it Yield Sustainable and Equitable Benefits", (World Bank, 2010) .



See <http://www.iiasa.ac.at/Research/LUC/index.html>

Further information

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About IIASA (www.iiasa.ac.at)

IIASA is an international scientific institute that conducts research into the critical issues of global environmental, economic, technological, and social change that we face in the twenty-first century. Our findings provide valuable options to policy makers to shape the future of our changing world.

Located in Laxenburg, Austria, IIASA is independent and funded by scientific institutions in Africa, the Americas, Asia, and Europe.