Agro-MAPS : Global Spatial Database of Agricultural Land-use Statistics

Agro-MAPS is an interactive web-based information system on land use which contains statistics on primary food crops, aggregated by sub-national administrative districts, on crop production, area harvested and crop yields. The database was originally developed as a joint initiative by FAO, IFPRI (the International Food Policy Institute), SAGE (The Center for Sustainability and the Global Environment) and CIAT (The International Center for Tropical Agriculture) to support a variety of applications being developed separately by the three institutions. Agriculture is a major source of employment and use of land in many developing countries. The raw statistics and directly derived information available through Agro-MAPS therefore represent a limited, yet very important component of land use.

Agro-MAPS permits regional to global overviews of crop production statistics and their spatial variation with a sub national level of detail. Agro-MAPS data are obtained mainly from published reports on national agricultural censuses, usually carried out every 5 to 10 years, or from annual estimates reported in published sources. The data are subject to minor pre processed in order to ensure overall consistency and enhance accuracy of the final integrated database. This includes (i) replacement of non-standard crop names and statistic descriptions with standardized FAO unique identifier codes (ii) conversion when necessary, of data on 'production', 'area harvested' and 'yield' to standardized reporting units (i.e. metric tons, hectare and metric tons per hectare, respectively). Where possible, differentiation is made between 'not reported' and true 'zero' values. Basic meta-data, including citation of original sources, are included.

Agro-MAPS contains data aggregated at the first and second levels of administrative subdivision below the national level. The statistical tables include unique identifier codes (NUTS for European countries, and SALB for most other countries) for the administrative districts in each country. The codification schemes allow ready visualization of the tabular data as maps. Emphasis has been placed on compiling recent data; however, data covering multiple years are also available for many countries. Data for a total of 134 countries (130 countries at admin1 level and 59 countries at admin2 level), from six geographic regions (Africa, Asia, Near East in Asia, Latin America and the Caribbean, North America and Oceania) and representing approximately 92 percent of the world's land surface, are currently available in Agro-MAPS. It is planned to improve further Agro-MAPS contents and coverage through distributed updating of site contents by partner institutions.

Access to the latest Agro-MAPS data is facilitated through an Interactive web site. Users can interactively browse the database and download statistical data in a variety of output formats (csv, dbf, xml) as well as the related shapefiles. Users can also create, for a selected country or region, thematic maps showing the spatial distribution of crop production, area harvested and yields, by year (or for the latest year for which data are available). Data distributions can be examined and display legends subsequently modified dynamically.

The system can also generate interactively maps showing locally important crops or user-definable crop groupings, based on relative contributions of individual crops or crop groups to the total harvested area for a given administrative unit.