

Dataset Information:

Title	Land Use
Abstract	The FAOSTAT Land domain contains data on thirty-three land use categories. It also contains data on forest carbon stock in living biomass, derived from the FAO Global Forest Resource Assessments (FAO FRA). Data are available by country and year, with global coverage and annual updates. The domain covers the period 1961–2014 for agricultural land and 1990–2014 for forest.
Supplemental	The FAOSTAT Land domain includes categories of land use for agricultural and forestry activities. Agricultural statistics are especially useful for market management/monitoring, production forecasts and policy-making in agricultural and food sectors.
International Standards	<p>The FAOSTAT Land domain is compliant with the System of Environmental-Economic Accounting Central Framework (SEEA CF), as well as with the System of Environmental-Economic Accounting for Agriculture Forestry and Fisheries (SEEA AFF), in terms of:</p> <ol style="list-style-type: none"><u>Definitions</u>: consistent with those included in the SEEA CF and the SEEA AFF, based on FAO definitions;<u>Classifications</u>: it follows the SEEA CF and the SEEA AFF Land Use Classification based on FAO;<u>Applicability</u>: data can be directly used to compile the SEEA CF Tab. 5.15 “Physical asset account for forest and other wooded land” and the SEEA AFF Table 4.8, “Physical asset account for land use.” <p>The FAOSTAT Land domain is compliant with the Framework for the Development of Environmental Statistics (FDES 2013) as FAO and SEEA CF land use categories are reported as methodological guidance in FDES Component 2, Environmental Resources and their use, Sub-Component 2.3: Land, Topic 2.3.1: Land Use. Furthermore Area under Land Use categories is defined by FDES as Core set/ Tier 1 statistics. (FDES, Table 4.2, “The Core Set of Environmental Statistics”).</p>
Creation Date	1961
Last Update	2016
Data Type	Land use statistics
Category	Agriculture; Forestry
Time Period	1961–2014
Periodicity	Annual
Geographical Coverage	World
Spatial Unit	Country
Language	Multilingual (EN, FR, ES)

Methodology and Quality Information:

Methods	<p><i>Overview</i></p> <p>Thirty three land use categories are included in the Land domain as <i>Items</i>, grouped in terms of data coverage as follows:</p> <ol style="list-style-type: none">"Country area", "Land area", "Agricultural area", "Arable land and Permanent crops", "Arable land", "Permanent crops", "Permanent meadows and pastures", "Inland water", and "Total area equipped for irrigation," with data since 1961;"Forest", "Other land", "Primary forest", "Planted forest", and "Other naturally regenerated forest," with data since 1990;"Agricultural area actually irrigated", "Temporary crops", "Temporary meadows and pastures", "Fallow land (temporary)", "Permanent meadows and pastures - Cultivated" and
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"Permanent meadows and pastures - Naturally growing," with data since 2001;

d) "Agricultural area organic, total", "Agricultural area certified organic", "Agricultural area in conversion to organic", "Arable land organic, total", "Arable land area certified organic", "Arable land area in conversion to organic", "Permanent crops organic, total", "Permanent crops area certified organic", "Permanent crops area in conversion to organic", "Permanent meadows and pastures organic, total", "Permanent meadows and pastures area certified organic", and "Permanent meadows and pastures in conversion to organic," with data since 2004;

e) "Area of arable land and permanent crops under protective cover," with data since 2007.

Data sources

Data are collected from FAO member Countries through the annual **FAO Land use and irrigation questionnaire**. Official information may be complemented with statistics from national statistical yearbooks and other official publications and information from governmental data portals. Supplemental information may be derived from national and international sectoral studies and reports.

Forest data

The **Global Forest Resource Assessment** (FRA, 2015) is the source of forest data disseminated in FAOSTAT. FRA data cover 1990, 2000, 2005, 2010 and 2015. Gap filling for deriving a complete time series 1990–2015 was performed as follows. Intermediate years were estimated using linear interpolation performed by the FAO Statistics Division. Missing data at the beginning or at the end of the time series were imputed by maintaining the value of the nearest FRA data. FRA data on Carbon density and area were first imputed in the same manner described above for deriving a complete time series 1990–2015, and then multiplied (stock density times area) to obtain carbon stock. Regional average values of carbon density were used in case of missing national data. Data for the element "Carbon stock in living biomass" are available only for the item "Forest". Data for the element "Area" are available for the item "Forest" and for the three subcategory items "Planted forest", "Primary forest" and "Other naturally regenerated forest". Complete country data are available in Country reports from the latest (2015) and previous FAO FRA assessments.

Irrigated land

The Land use dataset includes two items: "Total area equipped for irrigation" (1961–2014) and "Agricultural area actually irrigated" (2001–2014). Concepts and definitions for "Total area equipped for irrigation" are harmonized with those in AQUASTAT. AQUASTAT and FAOSTAT data for "Total area equipped for irrigation" are regularly reconciled for coherency. Information for "Agricultural area actually irrigated" is derived mainly from official data.

Organic land

Data from the Research Institute of Organic Agriculture (FiBL) and the Mediterranean Organic Agriculture Network, (MOAN) are used on a regular basis as secondary sources to complement primary data on **Organic land**.

Data Collection Method	FAOSTAT Land Use and Irrigation Questionnaire, http://www.fao.org/economic/ess/ess-home/questionnaires/en/
Completeness	100%
Useful Links	http://www.fao.org/forestry/fra/fra2015/en/ http://www.organic-world.net/index.html http://moan.iamb.it/ http://www.fao.org/nr/water/aquastat/main/index.stm

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COUNTRY NOTES

Australia	"Agricultural area" refers to the total area of all agricultural establishments (farms); "Temporary crops" refers to all crops both temporary and permanent; "Temporary crops irrigated" refers to all crops both temporary and permanent that are irrigated.
Austria	"Land area" and "Inland water" data have been revised since 2008. The new data are compliant with the methodology applied by the Federal Office of Meteorology and Surveying.
Bulgaria	Since 2003, the data provided on "Total area equipped for irrigation" are the result of the Farm Structure Survey relating to "Irrigable area".
Canada	Data for the category "Permanent Crops" largely correspond to the area on farms that is used for "Forest and Woodland". Until the year 2005, this category also includes the data for other land in farms not classified elsewhere. The area used to cultivate fruit and fiber crops - which is less than one percent of the land in crops - is included in the "Arable Land" category.
China mainland	FAO FRA Forest data for "China, mainland" also include the forest data for "China, Hong Kong SAR", "China, Macao SAR" and "China, Taiwan Province". Same data are also reported under the entry "China".
Croatia	Since 2005, data for "Agricultural land" include kitchen gardens in addition to arable land, gardens, orchards, olive groves, vineyards, meadows and pastures. During the period 1996 to 2004, the agricultural land was recalculated following the principle: non-cultivated arable land was separated from the arable land and gardens; other state-owned land not used for agricultural production – data derived from cadaster – was separated from the areas of meadows and pastures. As of 2013, data on "Permanent meadows and pastures" include common land that was previously not included in the survey methodology. Data on "Agricultural area organic" may not match the sum of "Arable land", "Permanent crops" and "Permanent meadows and pastures" organic areas because they include other agricultural land organic.
Czechia	Data on "Agricultural area organic" do not match the sum of "Arable land", "Permanent crops" and "Permanent meadows and pastures" organic because they include other agricultural land organic.
Czechoslovakia	Since 1993, Czech Republic (now Czechia) and Slovakia are shown separately. Data on "Forest area" (for the years 1990-1991) have been calculated by adding the "Forest area" of each country.
Cyprus	With the exception of the total "Country area", which include all Cyprus, data refer only to the area under governmental control.
Dominican Republic	Data on "Agricultural area organic, total" do not include the crops grown for the local market (Secretaria de Estado de Agricultura, Oficina de Control Orgànico, Santa Domingo, Dominican Republic, www.agricultura.gob.do as reported by the Research Institute of Organic Agriculture–FiBL).
Ecuador	Since 2014, the methodology for calculating the land use categories has been revised and the sample framing of <i>the agricultural area survey has been reformulated. This has resulted in data differences in particular</i> for "Permanent meadows and pastures".
Estonia	In the years prior to 2003, the area under "Permanent pastures" excludes the grassland area cultivated for more than 5 years (Environment in figures 2003",

	Statistical office of Estonia). Data on "Agricultural area organic" may include agricultural land organic other than "Arable land", "Permanent crops" and "Permanent meadows and pastures" organic.
Ethiopia PDR	Since 1993, Eritrea and Ethiopia are shown separately. Data on "Forest area" (for the years 1990-1992) have been calculated by <i>adding the "Forest area" of each country.</i>
Finland	Since 2000, the "Permanent Pastures" category only refers to natural meadows and grazing land in-use (The 2004 Yearbook of Farm Statistics, Information Centre of Ministry of Agriculture and Forestry, Finland).
France	Data exclude the overseas departments (French Guiana, Guadeloupe, Martinique and Réunion).
Germany	The "Agricultural area" excludes the area under bogs and heaths which was approximately 1782 (1000 ha) in the year 2004, 1746 (1000 ha) in the year 2008 and 1668 (1000 ha) in 2009 and 1836 (1000ha) in 2010. According to the Country classification this area should be included under "Agricultural area" (more information on http://www.destatis.de).
Greenland	"Country area" refers to area free from ice.
Hungary	Since 2010, the data relating to "Permanent Meadows and Pastures" exclude the unutilized grassland area.
Indonesia	Concepts and definitions of the national land use classification are not entirely coincident to those of the FAO Land use and irrigation questionnaire.
Iran, Islamic Rep. of	Data of "Permanent meadows and pastures" refer to rangelands in "good" and "fair" conditions, thus excluding "poor" condition rangelands.
Isle of Man	Data for "Temporary meadows and pastures" refer to temporary grasslands in use for less than 10 years.
Israel	Data for the categories "Country area" and "Land area" include the Golan Heights.
Latvia	As of 1995, land use statistics have been re-calculated to exclude the unutilized agricultural area.
Montenegro	As of 2013, data collection for Agricultural area statistics follows the methodology of the Agricultural Census and Sampling Surveys after a long-standing method of calculating crop area statistics based on cadastral data. The change affects the data comparability over time.
Netherlands Antilles	The federation of the Netherlands Antilles formally dissolved on October 10, 2010. However, the data relating to the former Dutch Caribbean dependency (Curaçao, Sint Maarten (Dutch part), Bonaire, Saint Eustatius and Saba) are still disseminated under the heading Netherlands Antilles (former).
New Zealand	Until 2001, the "Arable land" category also include other land in farms and the "Permanent meadows and pastures" category also include the fallow land as well as the arable fodder.
Oman	The category "Temporary meadows and pastures" refer to the area of perennial fodder crops.
Pacific Islands	As of 1991, data for the Republic of the Marshall Islands, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia and the Republic of Palau are shown separately. Data of the "Forest area" in 1990 is

	calculated by adding the "Forest area" of each trust territory.
Poland	As of 2002, "Agricultural land" consists exclusively of the land area covered within the agricultural holdings.
Puerto Rico	As of 1998, "Arable land" also includes the area under "Fallow land". Prior to 1998, "Fallow land" is included under the "Permanent meadows and pastures" (Facts and figures on Agriculture in Puerto Rico 1996", Office of Agricultural Statistics and "Census of Agriculture, 1998", USDA, National Agricultural Statistics Service, United States of America).
Russian Federation	The "Country area" excludes the portion of land under the White Sea and the Azov Sea.
Saint Helena	Data for Saint Helena include those for Ascension and Tristan da Cunha.
Samoa	In 1989 the "Permanent crops" category was adjusted to reflect the decrease of the area under coconut plantations.
South Sudan and Sudan	"Country area", "Land area", "Inland water" and other land are not available for these countries. However, Sudan (former) data relating to the above mentioned land categories have been included in the regional, continental and world total.
Serbia	Land use categories, other than "Country area", "Land area" and "Forest area", exclude figures for Kosovo and Metohia.
Serbia and Montenegro	Land use categories, other than "Country area", "Land area" and "Forest area", exclude figures for Kosovo and Metohia for the period 1999–2005.
South Sudan	Data for "Arable land and Permanent crops" refer to all cropped areas as well as to the abandoned and fallow agricultural land.
Slovenia	As of 2008, data collection methodology has been revised to use multiple sources such as land use register, orthophoto interpretation, farmers' updates of land parcel information system (LPIS) and field measurements made by Ministry of Agriculture Fishery and Forestry, (MAFF).
Swaziland	Due to the use of different data sources and overlaps in definitions and classifications, the sum of the areas of all land use categories may exceed the "Total land area". Examples of such instances include forest and agriculture land with tree cover - such as rubber plantations, permanent tree crops, range land and agro-forestry and shifting cultivation areas.
Switzerland	The category "Agricultural area" also includes the agricultural areas other than the utilized agricultural area (UAA) such as: agricultural area in scattered forests, pastures in forests and summer pastures. "Permanent meadows and pastures – naturally growing" is calculated as a residual: "Agricultural area" - ("Arable land and Permanent crops" + "Permanent meadows and pastures – Cultivated"). The summer pastures occupy most of the area under this category; however the "Permanent meadows and pastures – naturally growing" (and its main land use category "Permanent meadows and pastures") may include pastures in forests and other agricultural areas. This methodological issue should be taken into consideration in data analysis (for instance, annual change should be interpreted with caution and it would be appropriate to consider trends over a 5-10 years period). "Agricultural area organic, total": refers to organic area in the agricultural utilized area (UAA).

Tunisia	Data of "Temporary crops" for the period 2004-2008 include temporary meadows and pastures.
Turkey	Data of "Agricultural area organic" include the collection and harvesting from plants grown naturally in areas which have not been treated with prohibited inputs (Turkish Ministry of Agriculture).
Ukraine	The "Country area" exclude the portion of land under the Azov Sea.
United Arab Emirates	In 2009, the "Permanent crops" category was adjusted to reflect the decrease of the area under date palm plantations.
United Republic of Tanzania	The "Permanent meadows and pastures" category only refers to the area suitable for livestock grazing (that is, not infested with tsetse fly)(Agricultural sector development strategy": Ministry of Agriculture, United Republic of Tanzania, www.kilimo.go.tz).
United States of America	As of 2008, "Country area" and "Land area" have changed from previous time series (Statistical abstract of US 2010, U.S. Geography <i>Division U.S. Bureau of Census</i>).
Uruguay	The "Country area" is the sum of departments and of the artificial lakes of Río Negro. <i>The "Land area" is defined as the Country area minus the artificial lakes of Rio Negro (Yearbook of Uruguay).</i>
USSR	The "Country area" includes the White Sea (9 million hectares) and the Azov Sea (3.73 million hectares). As of 1992, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan <i>are shown</i> separately in Asia, while Belarus, Estonia, Latvia, Lithuania, Moldova, the Russian Federation and Ukraine are shown separately in Europe. Data of "Forest area" (for the years 1990-1991) have been calculated by adding the "Forest area" of each independent country.
Yugoslavia SFR	As of 1992, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Slovenia are shown separately. Data of "Forest area" (for the years 1990-1991) have been calculated by adding the "Forest area" of each independent country.
American Samoa; Gabon, Gambia, Ghana; French Guiana; Guinea Bissau; Marshall Islands; Micronesia Fed. States of ; Mozambique;	Due to the use of different data sources and overlaps in definitions and classifications, the sum of the areas of all land use categories may exceed the "Total land area". Examples of such instances include forest and agriculture land with tree cover - such as rubber plantations, permanent tree crops, range land and agro-forestry and shifting cultivation areas.