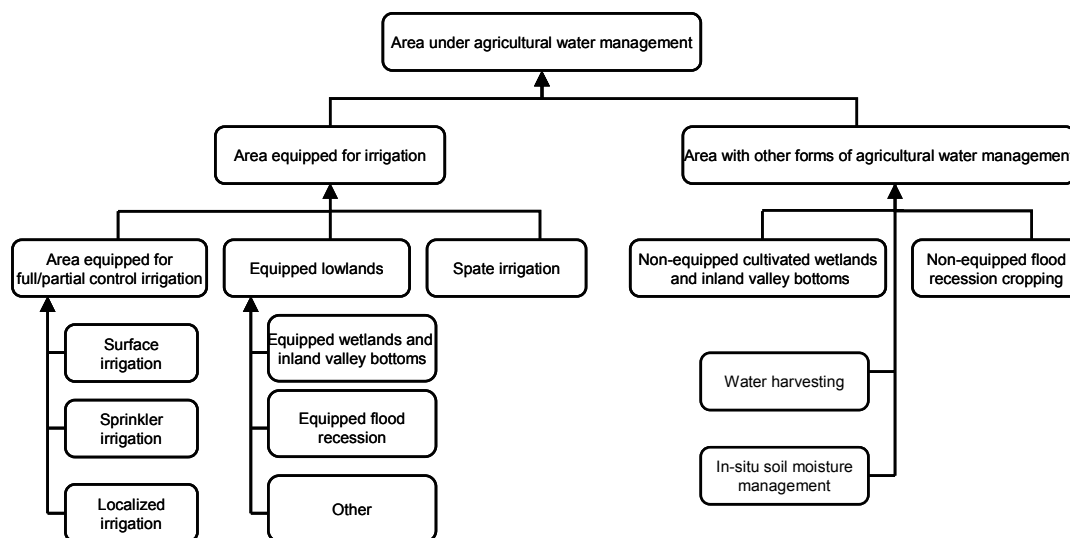


# Glossary

In this section an overview is given on the meaning of the main variables as used in these web-pages. In general, the meaning of the variables is the same as used in FAO's AQUASTAT-programme. The irrigation areas reported on the irrigation map refer to the area defined below under "Area equipped for irrigation" and shown in the following diagram:



Unfortunately, an exception has to be made when statistics are derived from EUROSTAT since EUROSTAT uses some similar variables names that have however a different meaning. These differences are also described below in the last two definitions.

## ***Cultivated area (ha)***

Area under temporary (annual) and permanent crops. This refers to the physical area cultivated meaning that land which is cultivated twice a year is counted only once.

## ***Area equipped for irrigation: Full control surface irrigation (ha)***

Surface irrigation systems are based on the principle of moving water over the land by simple gravity in order to wet it, either partially or completely, before infiltration. They can be subdivided into furrow, borderstrip and basin irrigation (including submersion irrigation of rice). Surface irrigation does not refer to the method of transporting water from the source up to the field, which may be done by gravity or by pumping. Manual irrigation using buckets or watering cans should also be put here.

## ***Area equipped for irrigation: Full control sprinkler irrigation (ha)***

A sprinkler irrigation system consists of a pipe network through which water moves under pressure before being delivered to the crop via sprinkler nozzles. The system basically simulates rainfall in that water is applied through overhead spraying. Therefore, these systems are also known as overhead irrigation systems.

***Area equipped for irrigation: Full control localized irrigation (ha)***

Localized irrigation is a system where the water is distributed under low pressure through a piped network, in a pre-determined pattern, and applied as a small discharge to each plant or adjacent to it. There are three main categories: drip irrigation (where drip emitters are used to apply water slowly to the soil surface), spray or microsprinkler irrigation (where water is sprayed onto the soil near individual plants or trees) and bubbler irrigation (where a small stream of water is applied to flood small basins or the soil adjacent to individual trees). To refer to localized irrigation, the following terms are also sometimes used: micro-irrigation, trickle irrigation, daily flow irrigation, drop-irrigation, sip irrigation and diurnal irrigation.

***Area equipped for irrigation: Full control - total (ha)***

This is the sum of surface irrigation, sprinkler irrigation and localized irrigation. The text uses indifferently the expressions “full control” and “full/partial control”.

***Area equipped for irrigation: Equipped lowland areas (ha)***

The land equipped for irrigation in lowland areas includes: (i) Cultivated wetland and inland valley bottoms (IVB), which have been equipped with water control structures for irrigation and drainage (intake, canals, etc.); (ii) Areas along rivers, where cultivation occurs making use of water from receding floods and where structures have been built to retain the receding water; (iii) Developed mangroves and equipped delta areas.

***Area equipped for irrigation: Spate irrigation (ha)***

Spate irrigation can also be referred to as floodwater harvesting. It is a method of random irrigation using the floodwaters of a normally dry watercourse or riverbed (wadi). These systems are in general characterized by a very large catchment upstream (200 ha - 50 km<sup>2</sup>) with a “catchment area: cultivated area” ratio of 100:1 to 10 000:1. There are two types of floodwater harvesting or spate irrigation: 1) floodwater harvesting within streambeds, where turbulent channel flow is collected and spread through the wadi in which the crops are planted; cross-wadi dams are constructed with stones, earth, or both, often reinforced with gabions; 2) floodwater diversion, where the floods - or spates - from the seasonal rivers are diverted into adjacent embanked fields for direct application. A stone or concrete structure raises the water level within the wadi to be diverted to the nearby cropping areas.

***Area equipped for irrigation: total (ha)***

Area equipped to provide water to crops. It includes areas equipped for full control irrigation, equipped lowland areas, and areas equipped for spate irrigation. It does not include non-equipped cultivated wetlands and inland valley bottoms or non-equipped flood recession cropping areas.

***Area actually irrigated (ha)***

The area which is actually irrigated at least once in a given year. Often, part of the equipped area is not irrigated for various reasons such as lack of water, absence of farmers, land degradation, damage and organizational problems. It only refers to physical areas, meaning that irrigated land that is cultivated twice a year is counted once.

***Irrigation potential (ha)***

Area of land which is potentially irrigable. Country/regional studies assess this value according to different methods, for example some consider only land resources suitable for irrigation, others consider land resources plus water availability, others include in their assessment economic aspects (such as distance and/or difference in elevation between the suitable land and the available water) or environmental aspects, etc. Whatever the case, it includes the area already under agricultural water management.

***Irrigable area (ha)***

This term is used in the EUROSTAT statistics with the following meaning: The maximum area which could be irrigated in the reference year using the equipment and the quantity of water normally available on the holding. The meaning is therefore similar to the term *area equipped for irrigation* as used elsewhere in the report. However, the total irrigable area may differ from the sum of the areas provided with irrigation equipment since the equipment may be mobile and therefore utilisable on several fields in the course of a harvest year; capacity may also be restricted by the quantity of water available or by the period within which mobility is possible.

***Irrigated area (ha)***

In general this term refers in the report to the *area equipped for irrigation*. EUROSTAT however uses this term in the following meaning: Area of crops which have actually been irrigated at least once during the 12 months prior to the survey date. The definition used by EUROSTAT is therefore similar to the *area actually irrigated* as used elsewhere in the report.