

AGRICULTURE

SYNTHESIS OF THE INFORMATION COLLECTED

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- **Sources**
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- **Analysis of the information**
 - Agriculture water requirements
 - Treated waste water reused for agricultural purposes
 - Drained area as percentage of cultivated land
 - Area equipped for irrigation: total
- **Conclusions**

SOURCES

- Most countries use one or two sources of information
- Sources used in all countries are mostly the same:
 - Ministries of Agriculture, Water and Environment
 - National Statistics Offices / Institutes or equivalent
 - Water Agencies
 - Hydrographical Confederations
- Most countries have an Agrarian Census

INDICATORS (I)

- Agriculture indicators were selected from FAO Aquastat Database, see:
 - <http://www.fao.org/AG/AGL/aglw/aquastat/main/index.stm>

INDICATORS (II)

- AGRICULTURE WATER REQUIREMENTS
 - Amount of water used in agriculture expressed in 10^9 m³ / year
- TREATED WASTE WATER REUSED FOR AGRICULTURAL PURPOSES
 - Quantity of treated wastewater which is reused in a given year
 - Wastewater treatment is the process to render wastewater fit to meet applicable environmental standards for recycling or reuse

INDICATORS (III)

- DRAINED AREA AS PERCENTAGE OF CULTIVATED LAND
 - The irrigated and non-irrigated cultivated area that is drained as percentage of the total cultivated area
 - Drained area is defined by FAO as the area equipped with artificial or natural subsurface or surface drains to remove excess water from the land surface and/or the upper soil layer. It is complementary to irrigation systems to increase productivity.
- AREA EQUIPPED FOR IRRIGATION: TOTAL
 - Sum of the drained part of the area equipped for irrigation and of the drained part of non-irrigated land area

ANALYSIS OF INDICATORS (I)

- AGRICULTURE WATER REQUIREMENTS
 - Most countries use only one source
 - Data series from 1990 to 2006 aprox
 - All countries have data and use this indicator (except one)

ANALYSIS OF INDICATORS (II)

- TREATED WASTE WATER REUSED FOR AGRICULTURAL PURPOSES
 - Most countries use only one source
 - Data series from 1991 to 2006 aprox
 - Only two countries use this indicator

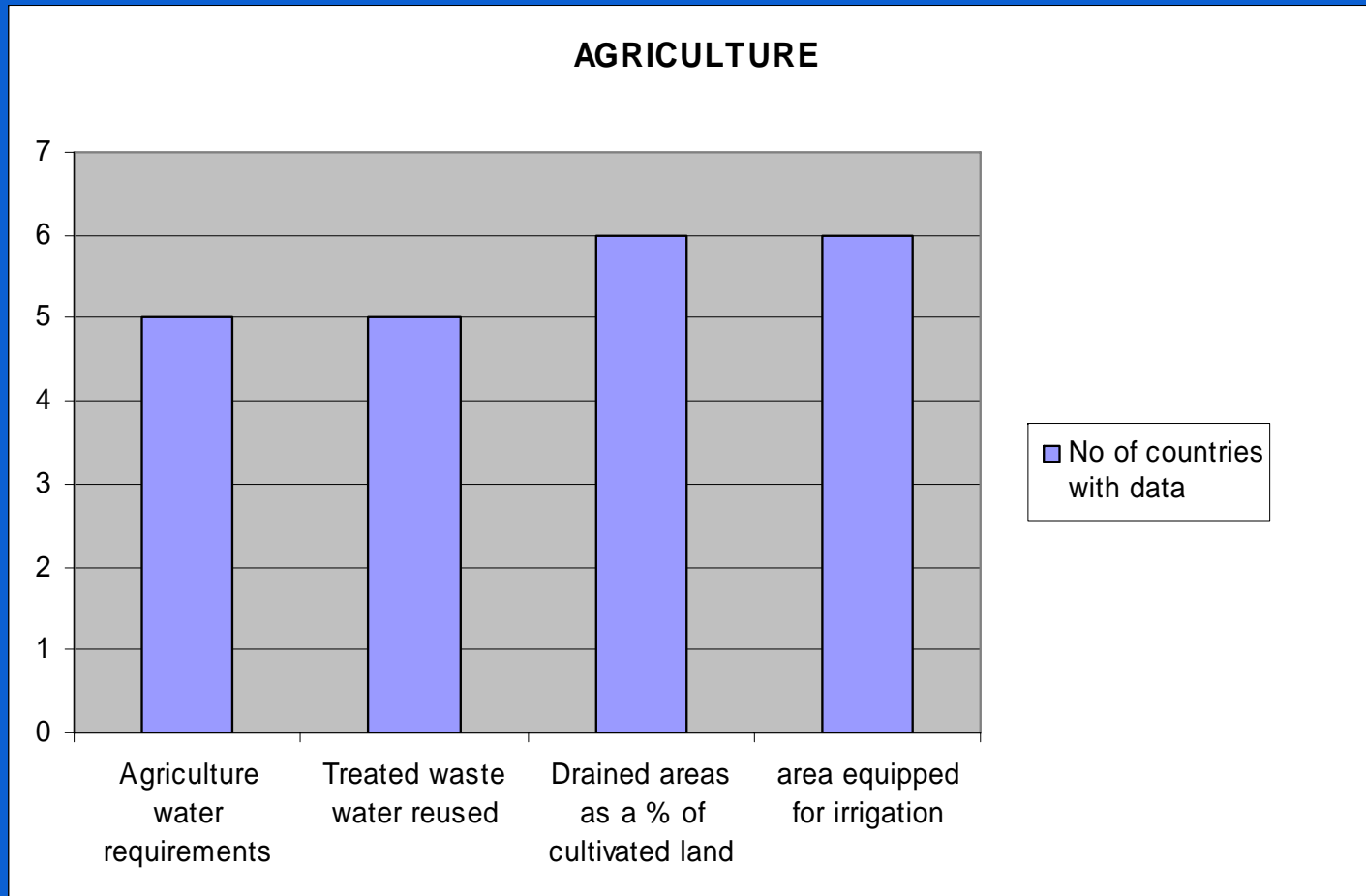
ANALYSIS OF INDICATORS (III)

- DRAINED AREA AS PERCENTAGE OF CULTIVATED LAND
 - One or two sources of information used
 - All except one provided data
 - This indicator has not been understood, most countries interpreted it as irrigated area
 - Not clear what is included in cultivated surface

ANALYSIS OF INDICATORS (IV)

- AREA EQUIPPED FOR IRRIGATION:
TOTAL
 - All except one provided data
 - Most countries but one provided data only for one or two years
 - None of the countries have crossed information for water sources and irrigation systems

ANALYSIS OF INDICATORS (V)



ANALYSIS OF INDICATORS (VI)

- Other indicators suggested:
 - Water demand for agriculture compared to agrarian GDP
 - Efficiency index of irrigation water use
 - Surface equipped with modern irrigation systems
 - Price per cubic meter of marketable agricultural water
 - Marketable agricultural water cost recovery rate
 - Percentage of rationing: available water over the water demand in the summer season
 - Percentage of billing collection: total amount collected over billed amounts of water
 - Water wasted in the distribution net
 - Surface water volume used for irrigation
 - Groundwater volume used for irrigation

CONCLUSIONS

- Agriculture has been a key element in the economic and social development of Mediterranean countries
- There is more information on agriculture than other topics
- There are no big differences on units, data series used and information provided in each country
- Most countries have plans that improve irrigation efficiency and reduce water consumption