"The Institutional Organization of Irrigation in Spain and the Mediterranean countries".

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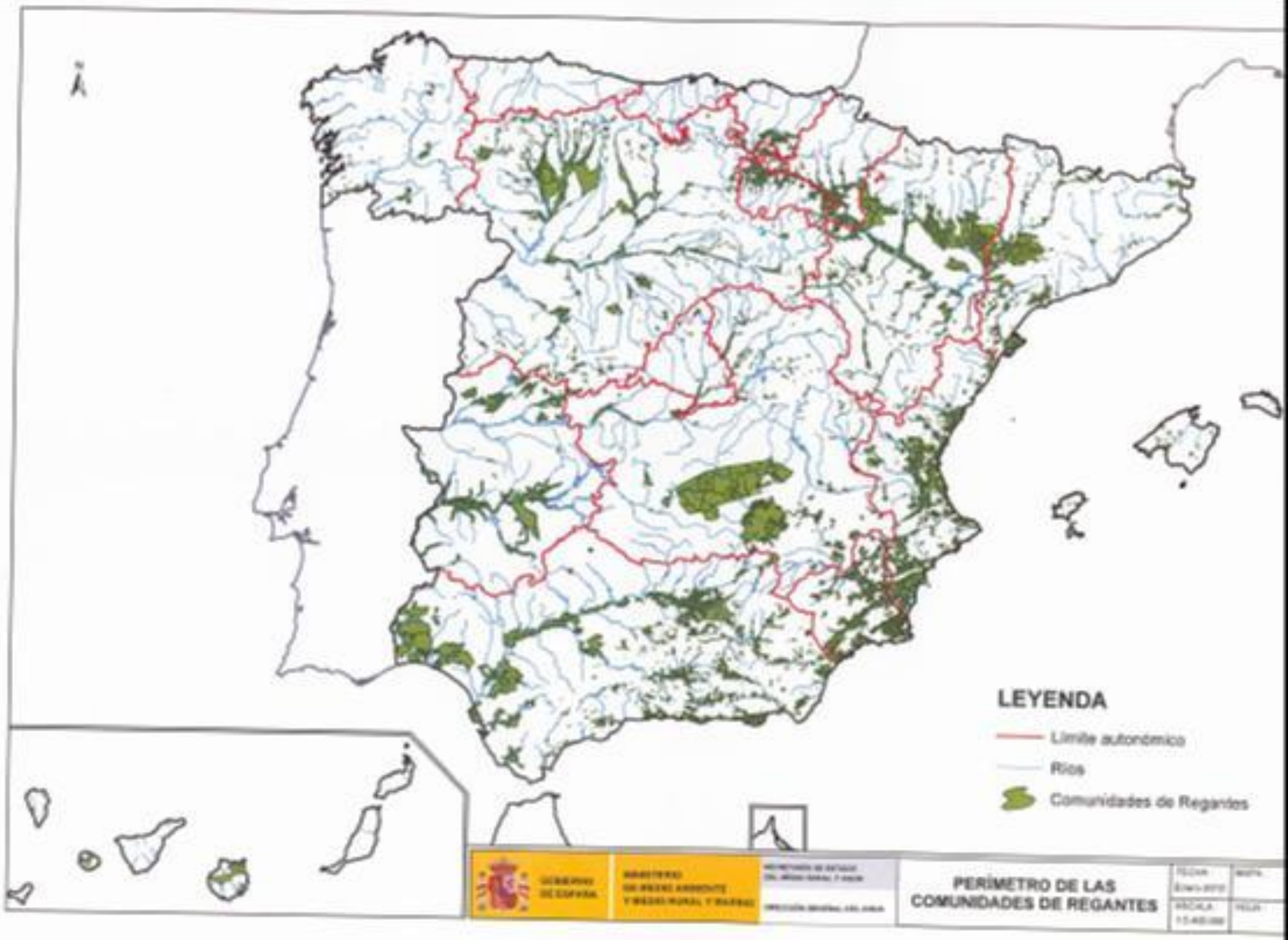
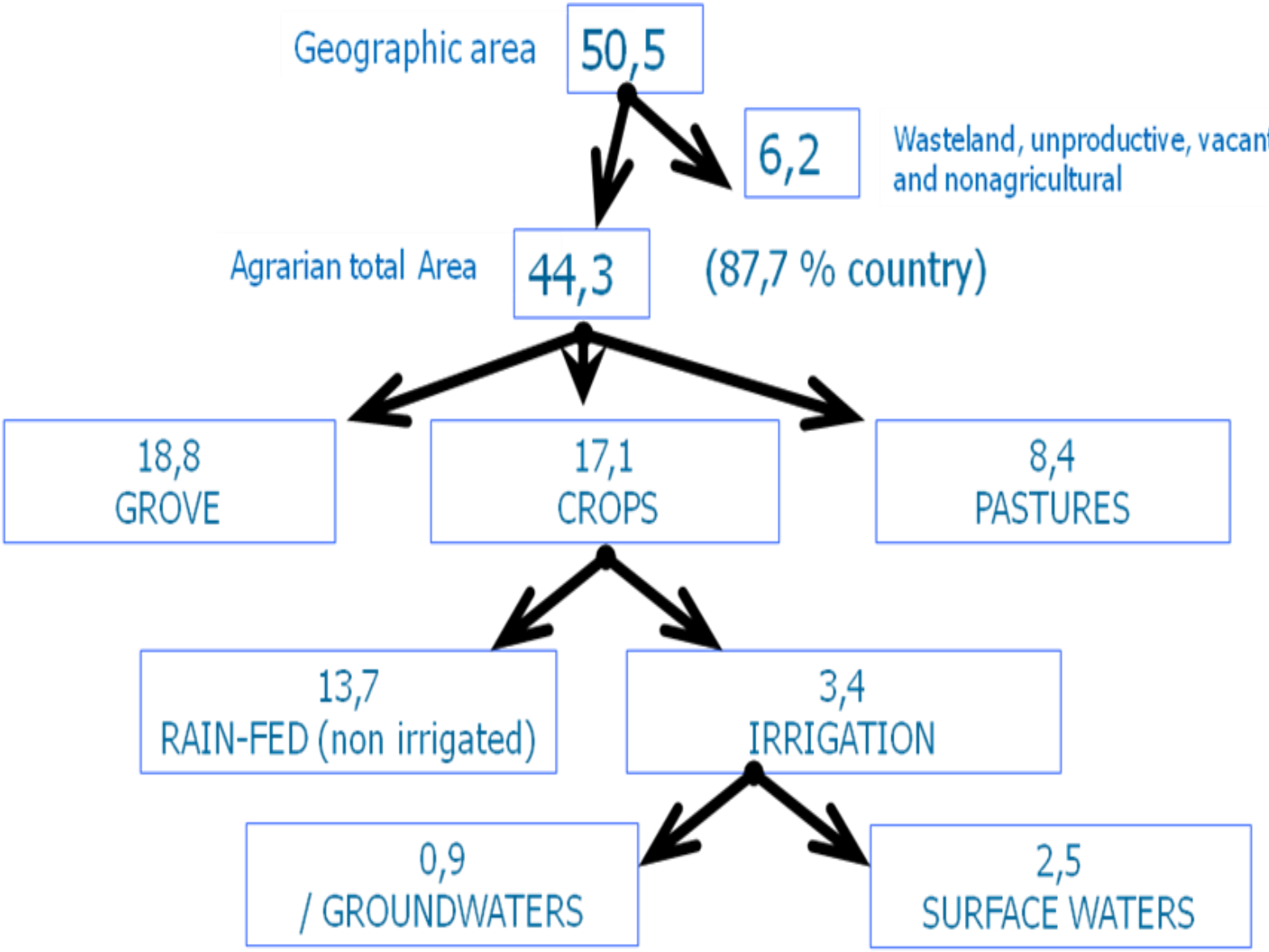
1. IRRIGATION IN SPAIN

- Irrigation covers an area of 3.3 million ha, accounting for **14.5% of the *useful agricultural area* (UAA) and 6% of the total Spanish.**


LEYENDA
Límite autonómico
Ríos
Comunidades de Regantes
PERÍMETRO DE LAS COMUNIDADES DE REGANTES

- In the 90’s, the volume of irrigation water used by farms was 24,250 million of m^3 per year. With irrigation modernization, this water demand has been reduced and in times of drought periods, reaching 63% (15,300 million of m^3 / year. INE) as it is the first water demand in suffering restrictions.



Fuente: ESYRCE 2011. MAGRAMA

10^6 hectares

The Spanish Statictic Institute on June 27, 2012 gives the following information:

Origin of Water volumes

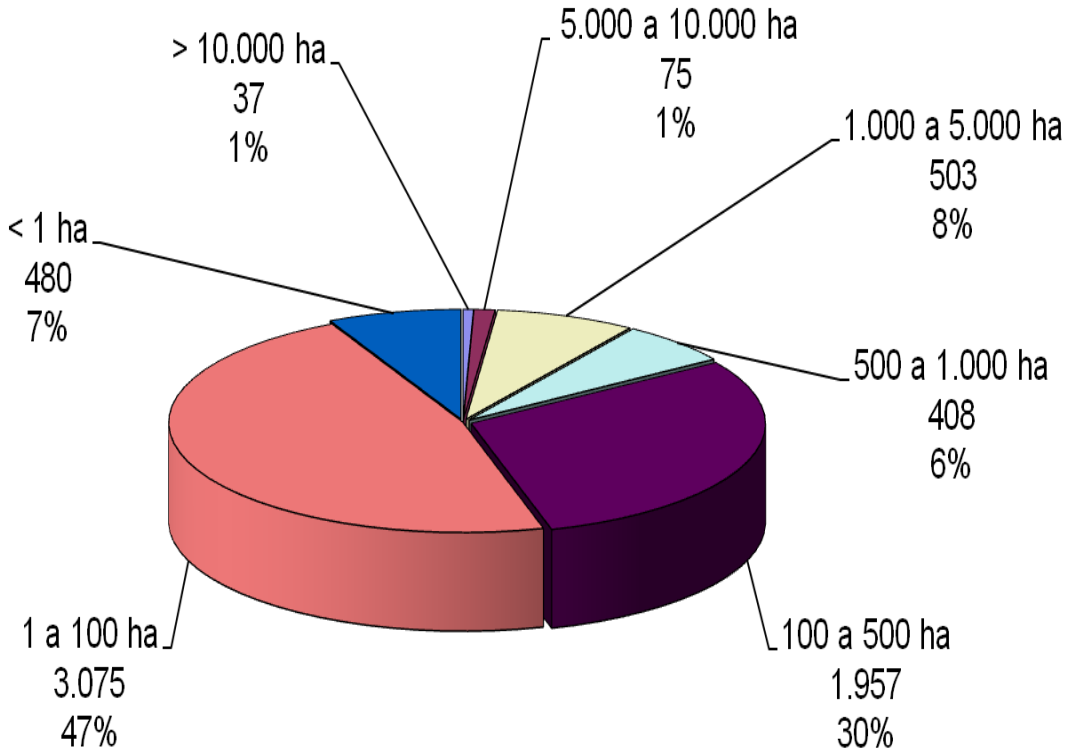
Unit: thousand m^3

2010		%
Surface waters	14,474,666	81.1
Groundwaters	3,168,585	17.7
Desalinated, treated...	208,710	1.2
Total	**17,851,961**	**100.0**

- The economic significance of the changes in irrigation is very important. **Irrigation comprises about 14% of the total area under cultivation, but means nearly 60% of Spanish agricultural final production since the relationship between the average production of a hectare of dryland and irrigated is 1 to 6.5.** The interest of irrigation as a productive activity responds for the fact that they are at the base of the food system. Also, it generates 30% of necessary wages deemed for the agricultural sector, which represents about 600,000 jobs in irrigation.

- Most Spanish irrigation is integrated in **Irrigators Communities**. Across the country, the National Irrigation Plan has identified 2,596,731 ha of irrigable area managed by 7,196 irrigators communities and other types of irrigation collective and 1,164,303 ha. individually farmer-managed irrigation, representing a total of 3,761,034 irrigable hectares.

NUMBER OF IRRIGATORS COMMUNITIES



- The chart below is quite interesting to see the significant irrigation improvement and modernization done in recent years.

Evolution of Irrigation Systems in Spain

IRRIGATION SYSTEM	Before 2000		2011 year	
	Hectares	%	Hectares	%
Flooding (gravity)	1,973.336	59	1,031,669	30
Sprinkling and others	802,712	24	783,487	22
Dripping	568,588	17	1,658,317	48
TOTAL	3,344,636	100	3,473,473	100

Source: PNR 2001 y encuesta sobre superficies y rendimientos de Cultivo

1.4 Classification of irrigation systems in Spain

- **A) The traditional irrigation.**

The White Paper on Water differentiates traditional or historical irrigation, those executed prior to the year 1900.

In a generic sense, the historical irrigation area in Spain is around 1,075,000 ha.

One of the main problems of this irrigation is its extreme smallholding.

B) The public initiative irrigation.

- This Irrigation was developed in the twentieth century by Public Administration initiative or aided by it.

- It is reaching a total of **1,518,000 ha**, usually spread through the most fertile valleys of the great plains and interfluves with better fitness for irrigation.

C) The individual private irrigation.

- These irrigations are those that have been developed by private initiative through administrative concessions of public water or private water farms. They occupy a total area of about **1,168,000 ha**

2. INSTITUTIONAL ORGANIZATION OF IRRIGATION IN SPAIN.-

2.1. Introduction.

- In terms of management structure, from the twenties of the last century, in Spain there is a decentralized organization based on the **River Basin Authorities**. These territorial bodies exercise the powers of the state water policy respecting the river basin as the spatial scope of action.

- The 1978 Constitution divides major powers among Central Government and **Regional Governments**, apart from other **Local Government** powers.

2.3 The Spanish Federation of Irrigators Communities (FENACORE)

- The Spanish Federation of Irrigators Communities in Spain is a non-profit association, which gathers the organizations dedicated to the administration of the water in order to irrigate, both surface and groundwater. It was founded in 1955

- This National Federation is very proud of having maintained along the years its political independence, which has allowed them to work in favour of the Irrigators with governments of very different ideas.

- With an always-constructive disposition, toughness and dialogue capacity, the National federation has become an important group of decision in the hydraulic policy of the country.

- Along this last half century, FENACORE has been growing in the Spanish Public life. Nowadays.

- There are Irrigators Communities federated in all the Spanish provinces, which means around 2 million hectares, it means more than the 60% of the Spanish irrigation.

2.4. The Irrigators Communities.

- These entities have the character of Public Law Corporations, affiliated to the Water River Basin and, additionally to ensure compliance with the Statutes and Ordinances, should monitor the proper order of water use.

- Irrigators Communities are prominent in the water institutional Organization in Spain. To the extent that its structure has transferred to all users.

- And this has been possible because of the versatility and **flexibility** of its structure and functioning, able to adapt to different types of irrigation: traditional or new, with ground or surface water, with abundance or scarcity of resources, ...

Here are some advantages of organizing irrigation management in User Communities:

I.- Independence. Avoiding contamination of water policy. The self-organization of users through Consortia, Irrigators Communities... has worked for centuries living with different political regimes that have occurred throughout history.

2.- The versatility and flexibility of its structure and functioning, able to adapt to different types of irrigation systems: traditional or new, with ground or surface waters, with an abundance or scarcity of resources.

3.- The Irrigators Communities do great work for the Administration, managing and making peace on water use.

4.- The character of Public Law Corporation. It is compatible with a private management in the Community which should be more efficient and effective.

5. Make easier the collection of the operational and exploitation water costs for the Government. The cost recovery.

6. Control and limit the abuses in the use and administration of water under the control of the Community which watch over the general interest.

7. Allow law enforcement to the daily management of water.

8. Allow users to participate in governing bodies, management and participation of the River Basin Authorities assuming responsibility.

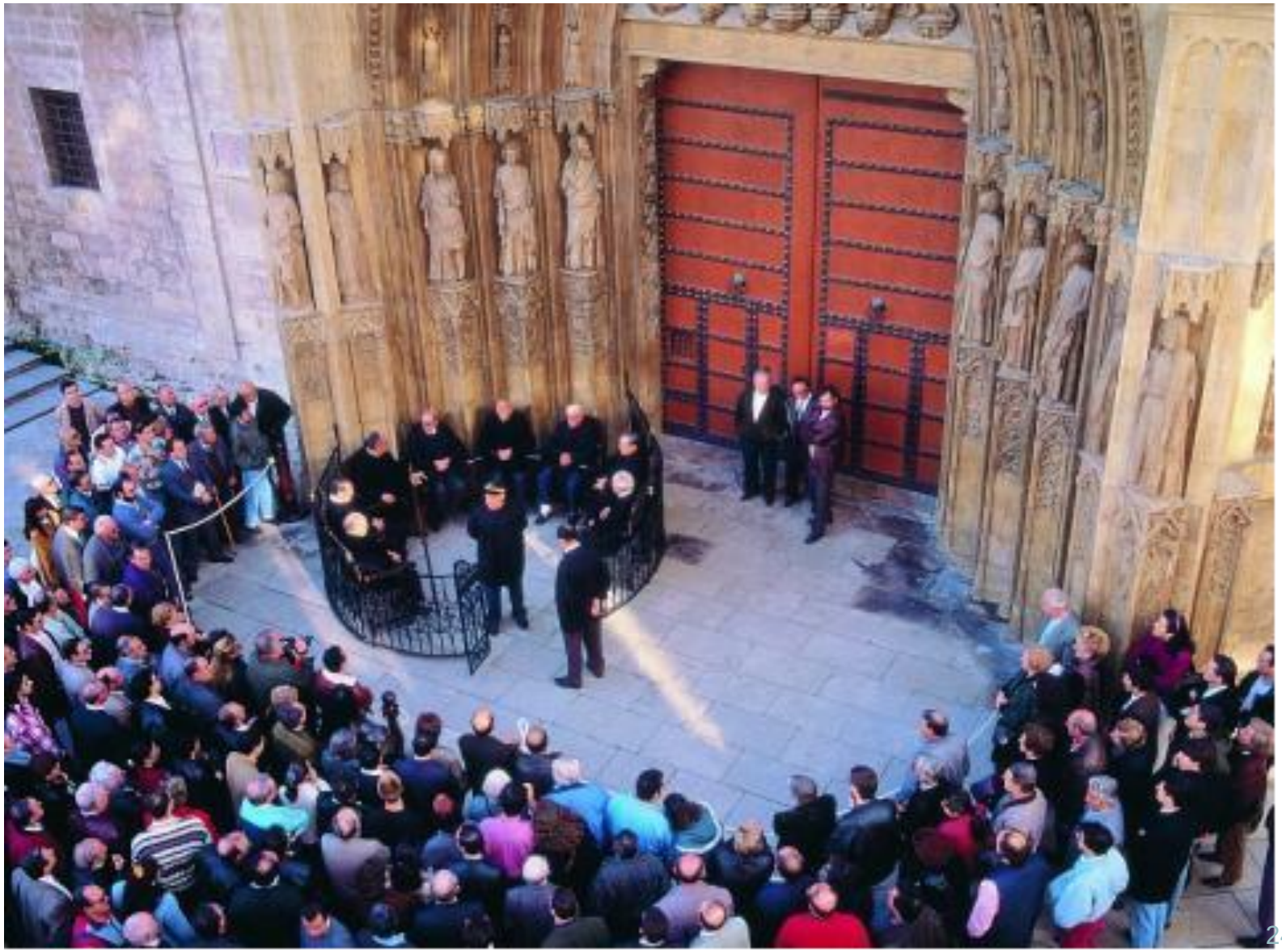
9. Provide that the concession holder of public water domain be a single entity and not each individual user.

10. Make easier water management, distributing equitably, and pacifying the water use.

11. Flexible, open and democratic Model.

12. Facilitate to the State ensuring the Principle of Subsidiarity: "*small is beatifull*" which allows to manage those who are the closest to the person concerned.

2.5 The case of the Water Court of Valencia´s fertile lowlands.



- The teacher Mr. Llamas asked me to stop to comment on the case of the Water Court of Valencia's fertile lowlands. It is without any doubt the oldest Europe's justice institution that exists today. For over a thousand years, every Thursday (except from Christmas to Epiphany, January 6th), the bell rang at noon on Miguelete tower, the eight Trustees, who form the Water Court, go to the Apostles Gate of Cathedral City for its establishment.

- According to historians, it was around 960 of the Christian era, under the reign of Abderrahman III, when it was set as we know, and so, without interruption, it has come down to us.

The Court functioning is as simple as effective:

- Once a violation of the ordinances is produced, the Canal's Guardian summons the offender to appear before the Water Court next Thursday.

- The accused defends personally and can also provides new evidence and / or witnesses. The Court´s President and the other trustees can make all the necessary questions to get better information and, even if necessary, the trial can be suspended so that the members of the Court can go to see the facts on the place where they have been developed and in the presence of stakeholders (a visual inspection or "*Visura*").

Professor Victor Fairén Guillen, in his book *"Water Court of Valencia´s fertile lowlands and its process",* makes a rigorous and scientific study of our Court highlighting four relevant notes:

- **Concentration:** At the trial time, the Court has all necessary information to take legal action.

- **Oral Nature**: All trial proceedings are conducted orally.

- **Speed**: Perhaps it is one of the most striking features of this Court, and perhaps the most influential in its survival.

- **Economy:** The judgement scause minimal expenses. Judges forming the Court, is to say, the Trustees receive no salary for their function, not even a diet.

Laws which recognizes and confirms the existence of the Water Court of Valencia:

- The Spanish Constitution (27 December 1978).
- The Statute of Autonomy of the Valencian Community (July 1, 1982, as amended on April 10, 2006).
- The Organic Law of the Judiciary (1 July 1985), and
- The Water Law (2 August 1985). (Codified Text July 20, 2001).

3. INSTITUTIONAL ORGANIZATION OF IRRIGATION IN THE MEDITERRANEAN COUNTRIES.-

3.1 The EIC (Euro-Mediterranean Irrigators Community).

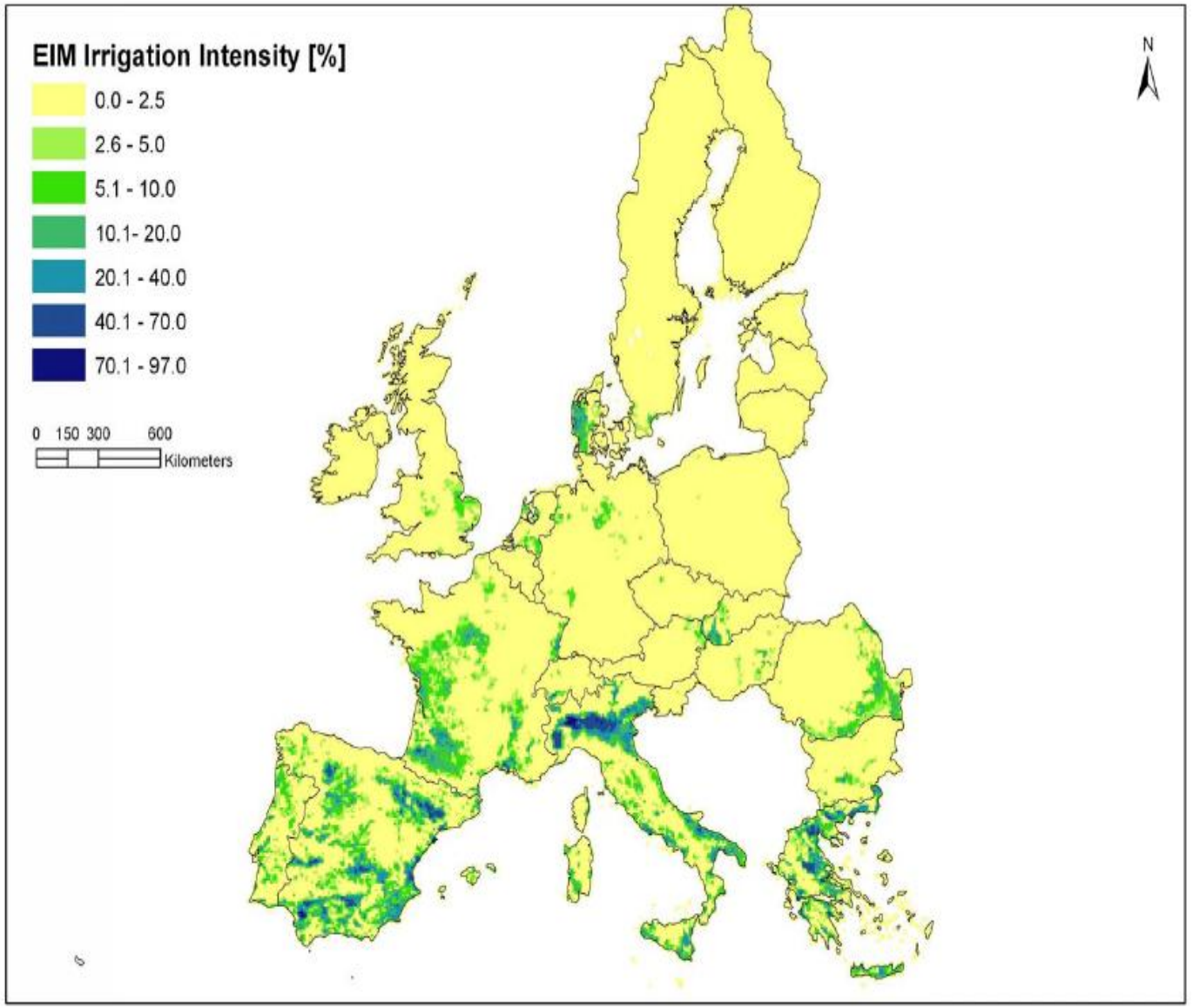


Figure 5: European Irrigation Map (EIM) - Irrigation intensity in the EU as irrigated area in % of total area calculated over a 10x10km raster. NB: the regions shown are at the NUTS 2 level.

- Exchange ideas, projects and experiences to improve institutional organization of irrigation in member countries through Irrigators Communities, Water User Associations and similar entities.

- To represent the members and the European irrigation at the European Union and its Institutions facilitating the participation of the users in water policies of the European Union,(impacts of the EU Water Framework Directive).

APRIL 2002 - CONSTITUENCY ASSEMBLY OF THE EURO-MEDITERRANEAN IRRIGATORS COMMUNITY (EIC)

- X National Congress of Irrigators Communities in Seville.
- Members: Italy, France, Greece, Portugal, Tunisia, Morocco, Spain, Germany.

Table 1: Irrigable and irrigated areas by country (FSS 2000, FSS2003 national sources) and irrigated areas finally used for compilation of the EIM, Agricultural water abstractions (AWA) in % of total water abstractions reported in OECD/Eurostat Joint Questionnaire (data of 2000).

Country	Country	Irrigable Area (ha) 2000	Irrigated Area (ha) 2000	Irrigable Area (ha) 2003	Irrigated Area (ha) 2003	Irrigated Area (ha) EIM	AWA (%)
AT	Austria	95240		90420	34230	35900	2.7
BE	Belgium	31970		21110	1610	1610	0.1
BG	Bulgaria			124480	79370	79370	19.6
CH	Switzerland					43820*	74.5
CY	Cyprus			44930	35410	35410	0.8
CZ	Czech Republik			39380	16450	16850	26.4
DE	Germany					234587*	2.9
DK	Denmark	446930		448810	201460	201460	2.2
EE	Estonia					0	14.9
ES	Spain	3475560	3233020	3135930	2849830	3233020	0.5
FI	Finland	88140		100480	0	0	87.8
FR	France	2633350	1575520	2233110	1656780	1575520	3.9
GR	Greece	1321340	1161000	1487210	1278950	1161000	13.7
HU	Hungary	308110	67080	242160	148680	67080	-
IE	Ireland	0	0	0	0	0	18.3
IT	Italy	3855960	2453440	2902000	1746990	2453440	1.9
LT	Lithuania			250		0	0.3
LU	Luxemburg	0	0	0	0	0	-
LV	Latvia	450	0	450	0	0	0.8
MT	Malta			2000	1850	1850	9.7
NL	Netherlands	498280		350560	62150	62150	80.1
PL	Poland			98450	46920	46920	11.8
PT	Portugal	792000		674820	229910	229912	7.8
RO	Romania			1510830	400420	400420	2.1
SE	Sweden	136730		188440	53450	53450	64.9
SI	Slovenia	2230		1880	1880	1880	5.6
SK	Slovakia	225310	110670	209060	104540	110670	
UK	United Kingdom	950[1)]		96120[1)]	96120[1)]	148019*	-
	EU27 and CH					**10158440**	

[1)] Statistics were incomplete
* National sources

THANK YOU VERY MUCH FOR YOUR ATTENTION

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