



MALTA EU 2017



Global Water  
Partnership  
Mediterranean



## ROUNDTABLE : WATER AND AGRICULTURE IN THE MEDITERRANEAN

# Mediterranean irrigation and its future

*Andrés del Campo. Presidente de la EIC*

*MALTA – 22-24 March 2017  
ST. JULIANS, MALTA*

# Euromediterranean Irrigators Community



- ❖ To represent members and Euro-Mediterranean irrigation to the European Union and its institutions, as well as to International Organizations and Associations, etc.
- ❖ To exchange information, ideas, projects and experiences to improve the institutional organization of irrigation in member countries through Irrigators Communities, Irrigation Associations and similar entities.

# **Euromediterranean Irrigators Community**



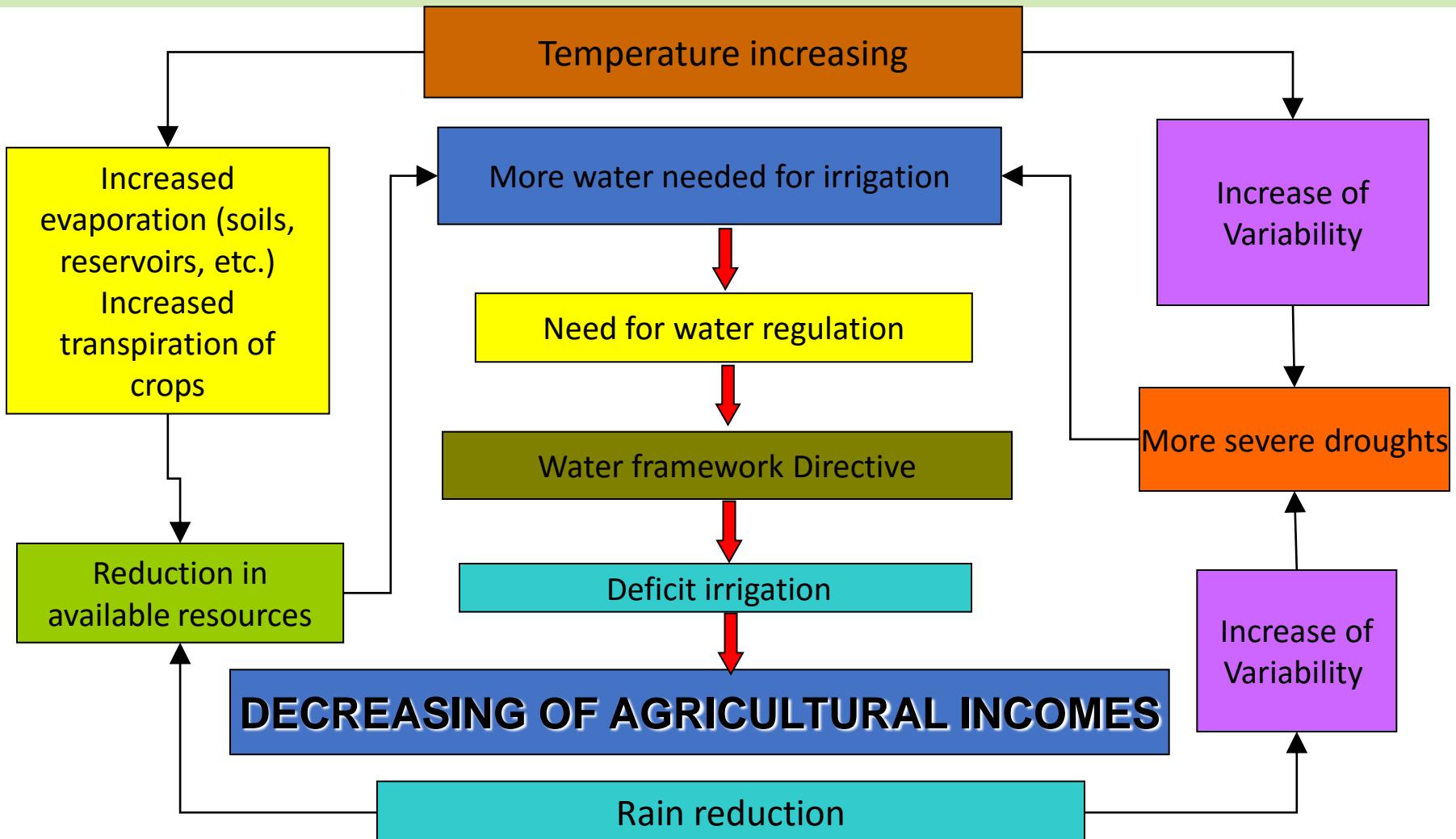
# Irrigation modernization in EU-Med countries



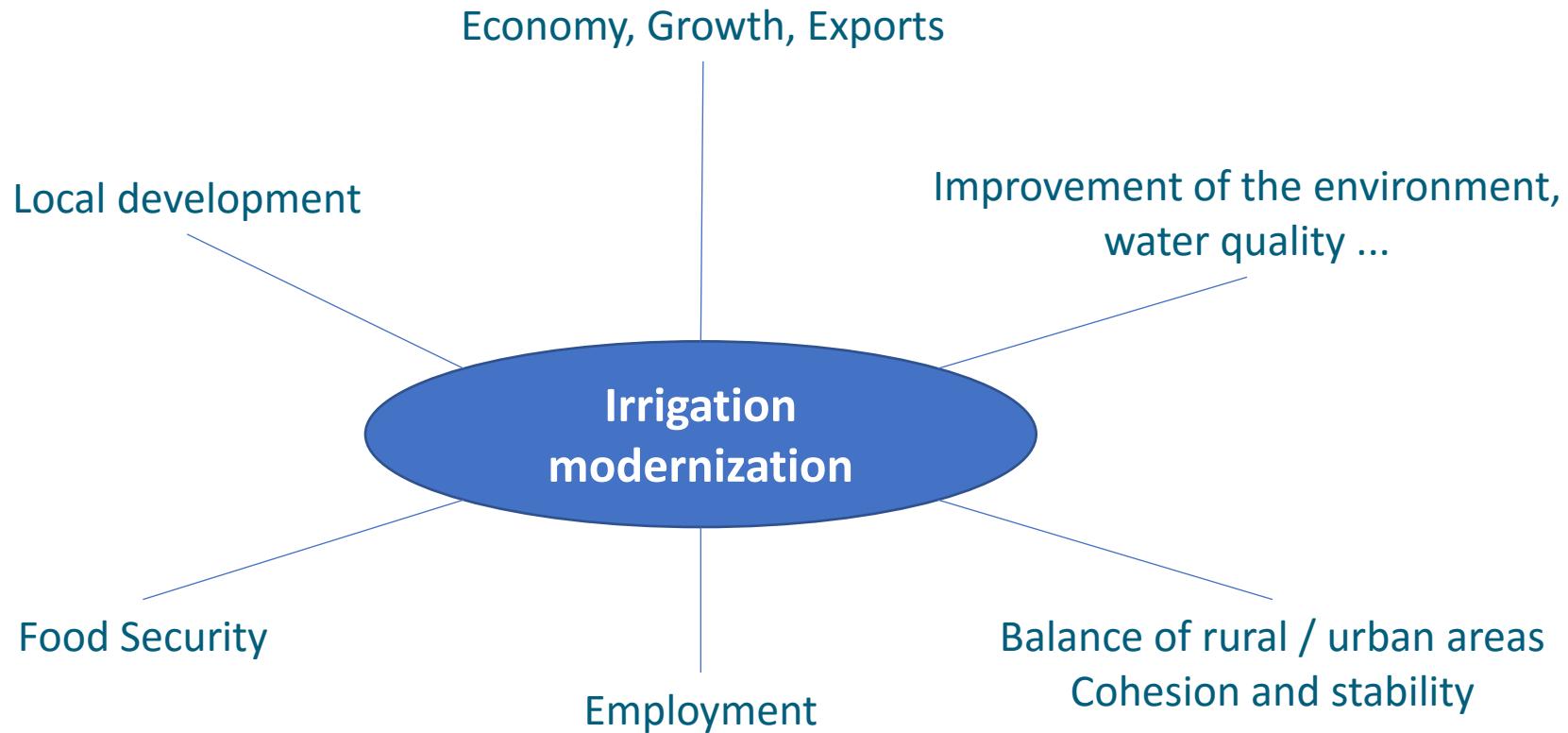
Country	Total Irrigation surface (Mha)	Sprinkling (Mha)	Dripping (Mha)	Irrig modernized (Sprinkling and dripping) (Mha)	% Presurized irrigation / Total Irrigation
Egypt	3.420	450	104	554	16,20%
France	2.900	1.380	103	1.483	51,14%
Germany	540	525	5	530	98,15%
Italy	2.420	959	423	1.381	57,07%
Morocco	1.650	190	8	198	12,00%
Portugal	630	40	25	65	10,32%
Spain	3.640	885	1.793	2.678	73,57%
Turkey	5.730	680	340	1.020	17,80%
<b>TOTAL</b>	<b>20.930</b>	<b>5.108</b>	<b>2.801</b>	<b>7.909</b>	<b>37,79%</b>

Source: ICID (The International Commission on Irrigation and Drainage)

# Climate change and water regulation in Med countries



# Impacts of irrigation modernization

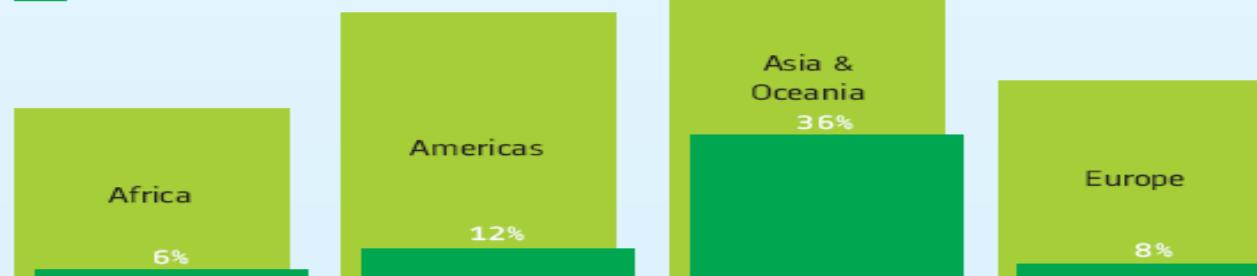


# World irrigated area and Percentage of arable land.

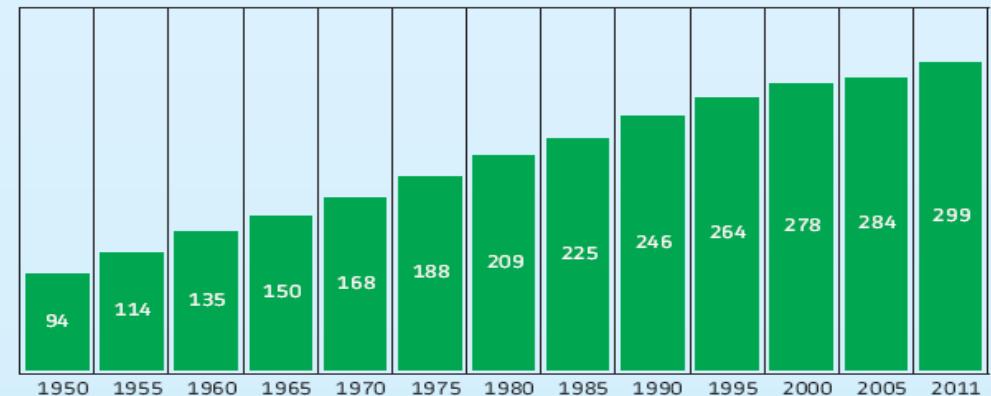


Irrigated Area as Percentage of Arable Land

Arable Land  
Irrigated Land



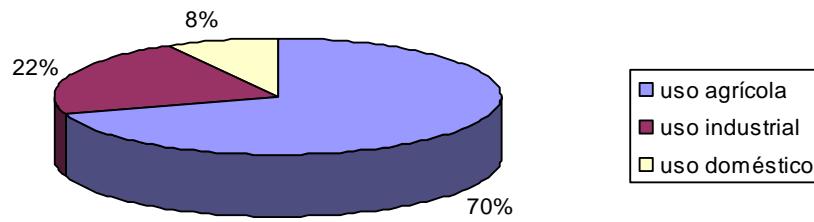
World Irrigated Area (million ha)



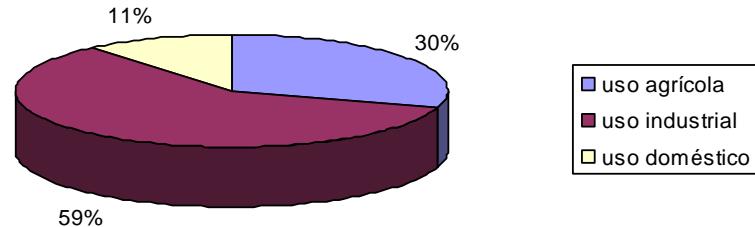
Source: ICID (The International Commission on Irrigation and Drainage)

# Uses of Water in the world

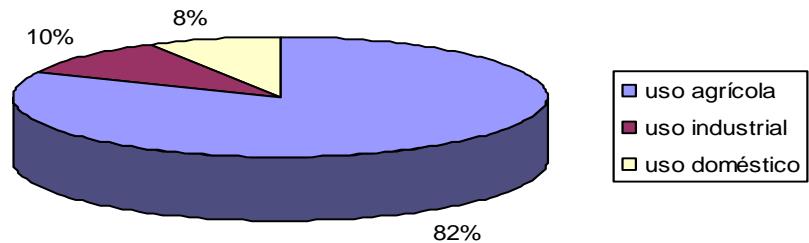
Usos Alternativos del Agua (Mundo)



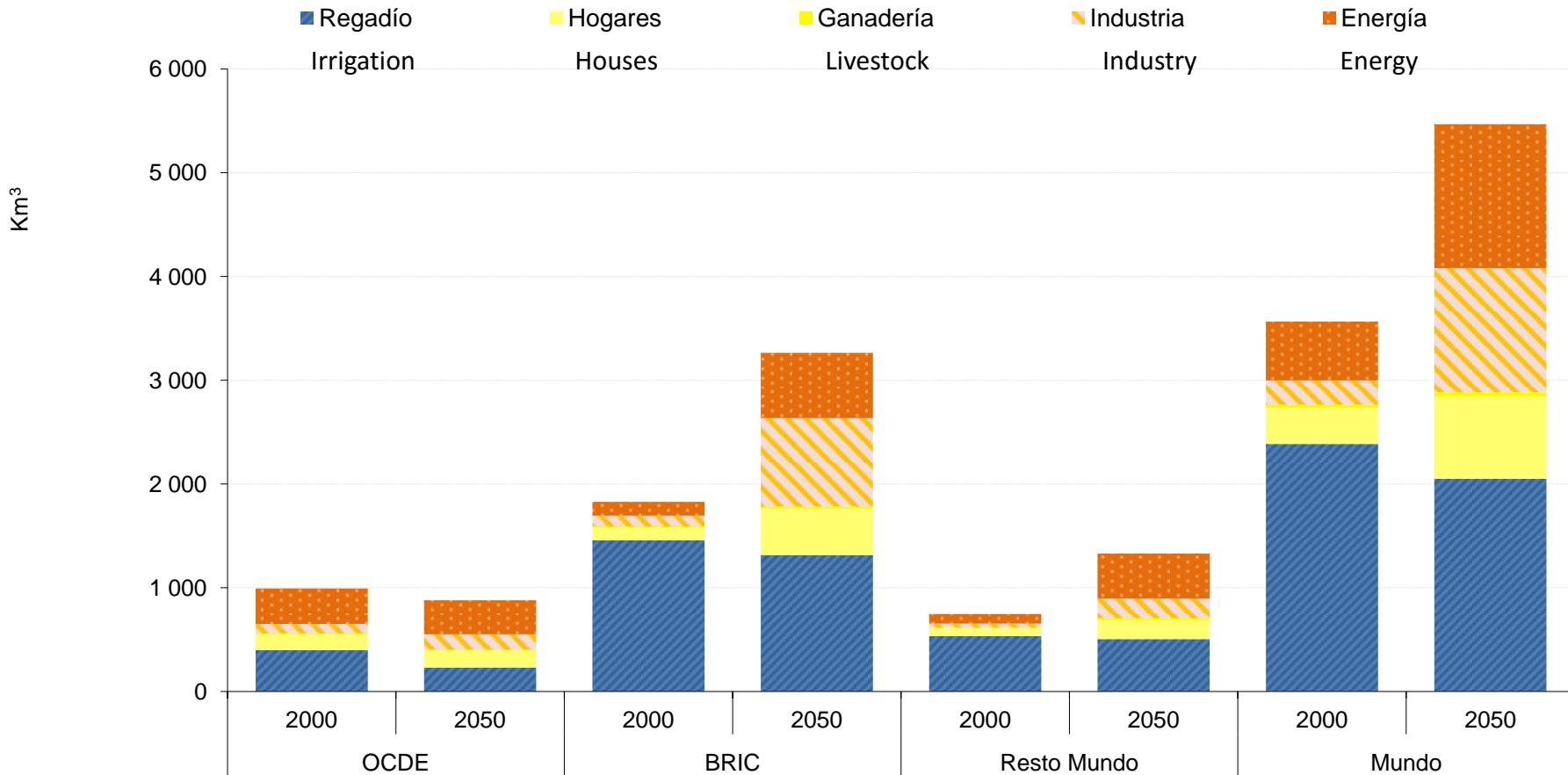
Usos Alternativos del Agua (Países de Ingresos Elevados)



Usos Alternativos del Agua (Países de ingresos medios y bajos)



# Global water demand: Baseline scenario, 2000 and 2050



Source: The Environmental Outlook Baseline. OCDE

# Food demand

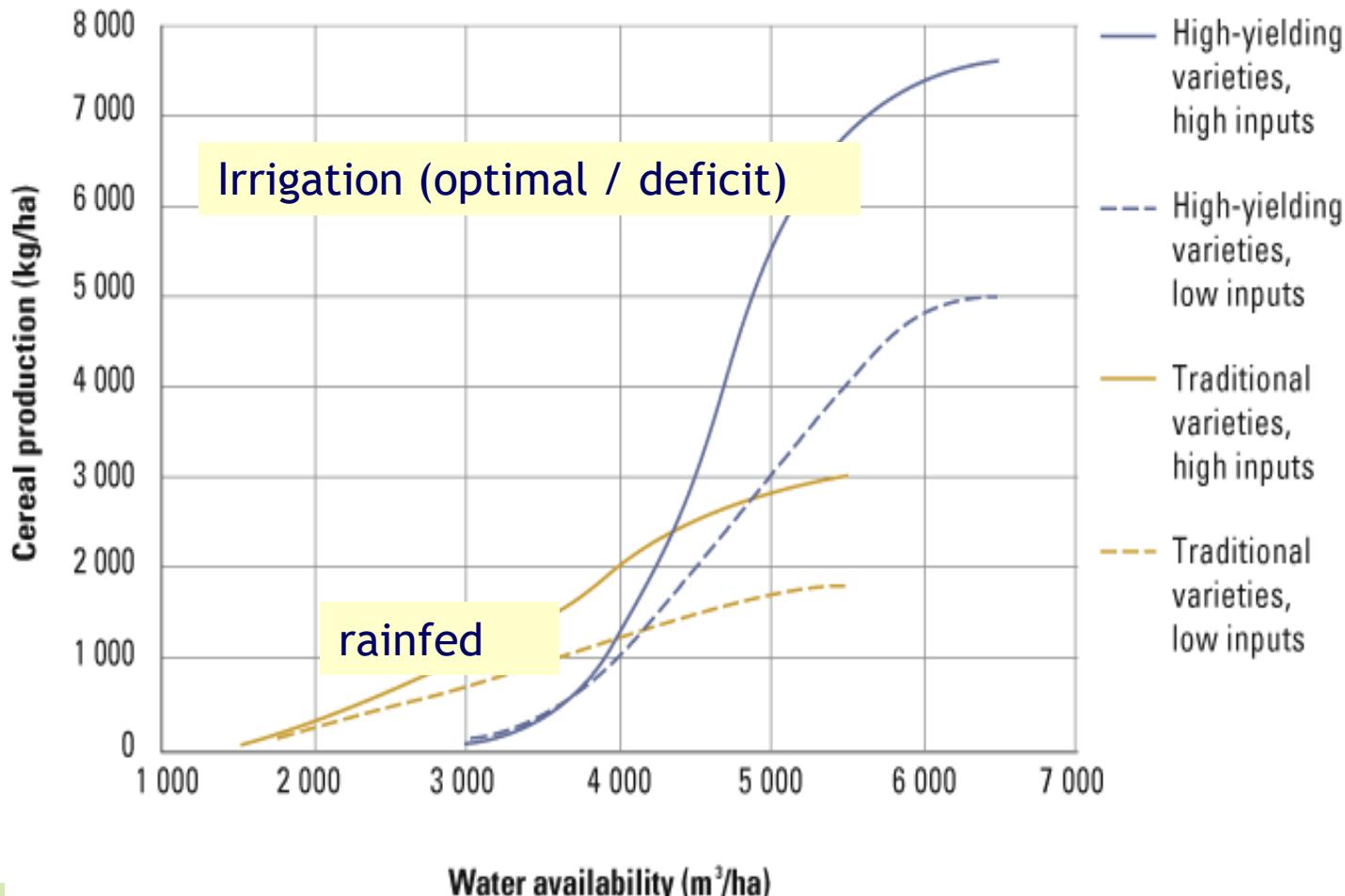


Increases in food demand can be satisfied in three ways:

- Raising agricultural productivity.
- Increasing arable land.
- Increasing crop intensity (number of crops per year).

# Irrigation contribution to food security

Crop varieties, fertilizer and water availability, NRLW, FAO 2008



# Irrigation contribution to food security



**Effect of drought in rainfed crops**



**Control of soil moisture on well-irrigated land**

# Conclusions



1. Irrigation and biotechnology will be the solution to overcome the challenges of the food demand in a growing world population. Reducing waste food in some countries and promoting a better distribution in others will also contribute.
2. In order to mitigate the negative effects of Climate Change, Mediterranean irrigation systems need technology and have water guaranteed through the necessary regulatory infrastructures (reservoirs and / or transfers).
3. In countries around the Mediterranean, the greater regulation of a river basin, the less negative impact of Climate Change will be, as the damage from floods and droughts decreases.
4. Efficiency in water use and energy consumption, through the use of geometric grades in irrigation, are vital for its environmental and economic sustainability.



THANK YOU FOR YOUR ATTENTION  
GRACIAS POR SU ATENCIÓN  
MERCI POUR VOTRE ATTENTION

Euro-Mediterranean Irrigators Community  
Comunidad Euro-Mediterránea de Regantes  
Communauté Euro-Méditerranéenne des Irrigants

*Paseo de la Habana 26, 2º Oficina 2, 28036, Madrid, España*

+34 91 563 63 18 • [eic@e-mic.org](mailto:eic@e-mic.org)

[www.e-mic.org](http://www.e-mic.org)