

Experts Workshop Madrid, 3 – 4 July 2007



#### Feasibility Study on the Mediterranean Water Observation Mechanism

# **Agriculture Indicators**

#### **Presented by: Louis M. Loizou**



ISO 9001 ISO 14001 OHSAS 18001

© LML CBA (Conquest Business Advisors) Ltd.

#### Contents

Indicators for Agriculture

 Treated waste water reused,
 Area equipped for irrigation,
 Agriculture water requirements

Comments on Indicators
Difficulties Faced



ISO 9001 ISO 14001 OHSAS 18001

#### **Treated Waste Water Reused**

Total treated waste water reused (10^6 m3/year)						
Year 1990 to 2007	Source 1	Source 2	Source 3	Other sources		
1990 - 1997	No Data Available					
1998		1.3				
1999		1.1				
2000		1.3				
2001		3.2				
2002		5.1				
2003		4.3				
2004		5.5				
2005		5.3				
2006		4.0				
2007						

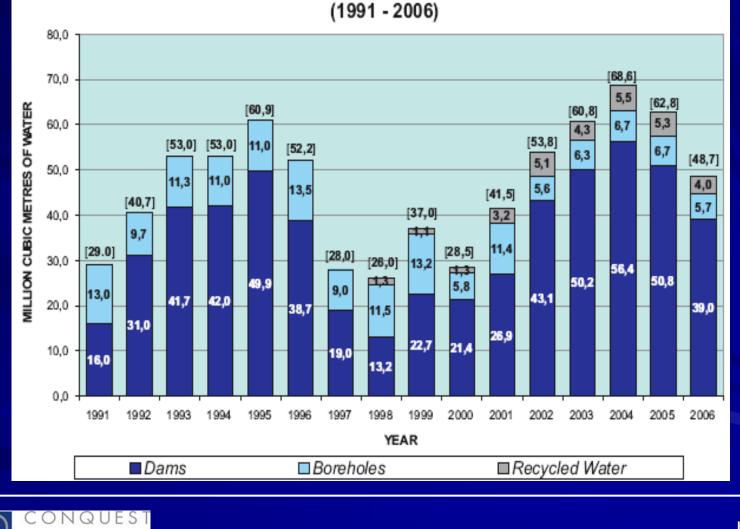
Source: Water Development Department



**Certified Integrated Management System** 

ISO 9001 ISO 14001 OHSAS 18001

#### Treated waste water reused GOVERNMENT WATER WORKS - IRRIGATION SUPPLY SOURCES





© LML CBA (Conquest Business Advisors) Ltd.

USI

NE

B

#### Area equipped for irrigation - 2004

Source	Irrigation system (1000Ha)					
	Surface	Sprinkler	Localized			
Underwater	-		-			
Surface	-	154	50			
Other sources	-	-	-			



ISO 9001 ISO 14001 OHSAS 18001

© LML CBA (Conquest Business Advisors) Ltd.

# Agriculture water requirements

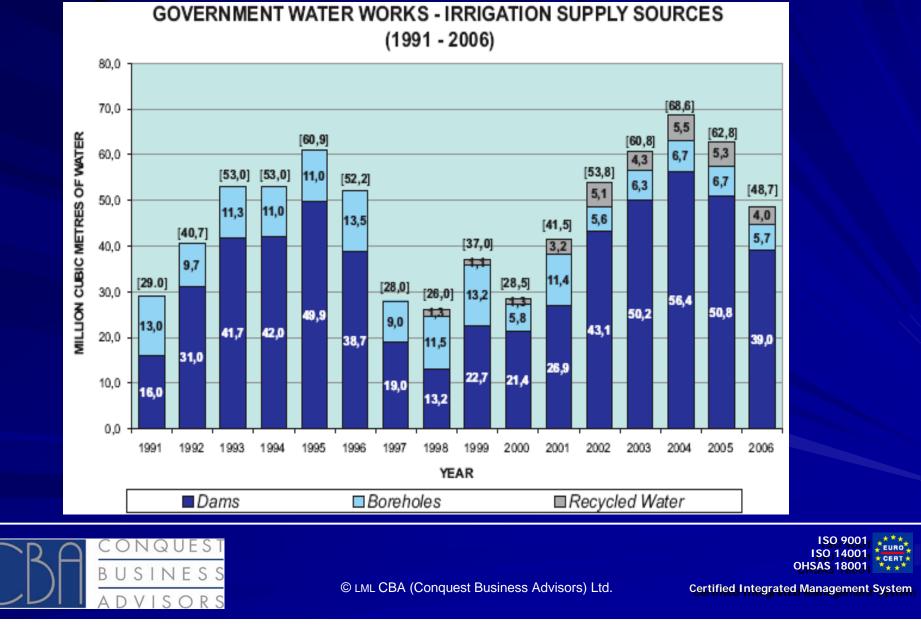
Agriculture water requirement (10^6 m3/year)							
Year 1990 to 2007	Source 1	Source 2	Source 3	Other sources			
1990							
1991		28.13					
1992		39.47					
1993		51.41					
1994		51.41					
1995		59.07					
1996		50.44					
1997		27.16					
1998		25.22					
1999		35.89					
2000		27.16					
2001		40.25					
2002		51.41					
2003		59.07					
2004		65.96					
2005		60.91					
2006		47.23					
2007							

CONQUEST BUSINESS ADVISORS

**Certified Integrated Management System** 

ISO 9001 ISO 14001 OHSAS 18001

### Agriculture water requirements



#### **Comments on Indicators**

Indicators are produced and maintained by the Water Development Department Main indicators are readily available and up to date Main indicators are publicly available Treated wastewater used is less than produced due to skepticism of the consumers





ISO 9001 ISO 14001 OHSAS 18001

# **Difficulties Faced**

- Data was missing
- Data was not readily available
- Indicator is not used or maintained in the required detail
- Confusion as to responsible department that produces the required data

#### All of the above concern the Area Equipped for Irrigation





ISO 14001