# MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT

### WATER DEVELOPMENT DEPARTMENT

## **ANNUAL REPORT 2006**

#### WATER DEVELOPMENT DEPARTMENT

#### 1. Introduction

The Water Development Department is responsible for implementing the water policy of the Ministry of Agriculture, Natural Resources and Environment. Main objective of this policy is the rational development and management of the water resources of Cyprus. In this context, the responsibilities of the department cover a wide and diverse spectrum, which includes: a) the collection, processing and classification of hydrological, hydrogeological, geotechnical and other data necessary for the study, maintenance and safety of the water development works, b) the study, design, construction, operation and maintenance of works, such as dams, ponds, irrigation, domestic water supply and sewerage schemes, water treatment works, sewage treatment and desalination plants, and c) the protection of the water resources from pollution.

#### 2. Structure and Activities

The Water Development Department consists of the following divisions: Water Resources, Hydrology, Planning, Design, Rural Projects - Tenders and Contracts, Sewage and Reuse, Construction, Management, Operation and Maintenance of Government Water Supply Systems, Operation and Maintenance of Irrigation Systems, Telemetry and the Mechanical-Electrical Services Division. The Department has also four Regional Offices, located in Nicosia, Limassol, Paphos and Famagusta-Larnaca.

#### 3. Activities

The basic water policy of the Government is the production of desalinised sea water, the use of non-conventional sources such as the use of recycled water for irrigation, recharge and amenity purposes, the desalting of brackish water, the efficient use of available water including the better use of pricing and water conservation measures, the harmonisation with the European acquis, the protection, preservation and improvement of the water quality, the introduction of new effective management procedures through the establishment of a Water Entity and the development of the remaining existing water resources with the construction of dams.

During 2006, every household in every part of free Cyprus had continuous supply of drinking water on a 24-hour basis. The new desalination plant near Larnaca Airport, the largest in Cyprus in this sector, coupled with the Dhekelia plant produce 33 million cubic metres of water a year. The production by the two desalination plants in 2006 was 26.2 million cubic metres. The decreased production is due to the fact that the Dhekelia Unit was shut down at the end of October for refurbishment and upgrading purposes. This quantity along with the quantity of water in the dams constitutes safe quantities for the completely lifting of restrictions.

Further to the above, the Ministry of Agriculture, Natural Resources and Environment implemented several other measures to increase the supply of water and to encourage water conservation.

During the year under review, the Water Development Department continued its usual work with the aim of achieving the above-mentioned goals and has continued or initiated the implementation of numerous projects and programmes vital to the further development of all sectors of the Cyprus economy.

The main construction works included the construction of Akaki-Malounda Dam and Dhiarizos Irrigation Area. The construction of Akaki-Malounda Dam has been completed and will shortly begin to impound water.

Furthermore, 5,15 Km of the central conveyor of Kannaviou Dam and 4,00 Km of the Anadiou Water Works Conveyor have also been installed.

Other activities also included the completion of the Environmental Impact Assessment Study for the Solea Valley Project. It is recalled that the "Water Protection and Management Law of 2004 " (N.13(I)/2004), transposing all the provisions of the Water Framework Directive, 2000/60/EC, was voted by the House of Representatives on 5 February 2004 and published in the Official Government Gazette on 20 February 2004.

#### ΚΥΒΕΡΝΗΤΙΚΑ ΥΔΑΤΙΚΑ ΕΡΓΑ ΠΙΝΑΚΑΣ 9

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ΥΔΑΤΙΚΑ ΕΡΓΑ		Χωρητικότητα Αποθέματα Εισροή			Χρήση Νερού 2006				
		MCM	1/1/2006	1/1/-31/12/06	Υδρευση	Αρδευση	Εμπλουτ	Αποθ.Αχνα	Ολικό
1	Χρυσοχού								
1.1									
1.1	Φράγματα	24.000	10.450	1 010		2 247			2 247
	(ι) Ευρέτου	24,000	10,459	1,213		3,317			3,317
	(ιι)Πωμός	0,860	0,069	0,617		0,804			0,804
	(ιιι) Αγία Μαρίνα	0,298	0,073	0,082		0,182			0,182
	(ιν) Αργάκα	0,990	0,168	0,741		0,747			0,747
4.0	Ολικό	26,148	10,769	2,653		5,050			5,050
1.2	Γεωτρήσεις					0,181			0,181
	Ολικό Χρυσοχούς	1				5,231			5,231
2.1	Πάφος								
	Φράγματα								
	(ι) Ασπρόκρεμμος	52,375	30,085	3,232	5,600	8,200	0,800		14,600
	(ιι) Μαυροκόλυμπος	2,180	0,455	0,543		1,100			1,100
	Ολικό	54,555	30,540	3,775	5,600	9,300	0,800		15,700
2.2	Γεωτρήσεις&Εκτροπές				3,700	3,300	1,500		8,500
	Ιννια ,Δρούσια,Βρέτσια ,Αναδιού				0,500	0,200			0,700
	Ολικό Πάφου				9,800	12,800	2,300		24,900
	Νότιος Αγωγός								
_	Βασιλικός - Πεντάσχοινος								
3	Γερμασόγεια - Πολεμίδια								
3.1	Φράγματα	445.000	FF 0 10	0.000	00.00=	47.00-	F 00-	0.400	45.000
	(ι) Κούρης	115,000	55,349	8,686	23,035	17,367	5,295	0,133	45,830
	(ιι) Καλαβασός	17,100	7,775	0,402	0,590	3,460			4,050
	(ιιι) Λεύκαρα	13,850	5,971	0,179		0,370			0,370
	(ιν) Διπόταμος	15,500	9,057	0,167	5,800	0,630			6,430
	(ν) Γερμασόγεια	13,500	2,837	1,719		0,650	2,700		3,350
	(νί) Πολεμίδια	3,400	1,629	0,458		0,450			0,450
	(νιι) Κίτι								0,000
	(νιιι) Άχνα	6,800	1,446						0,000
	Ολικό	185,150	84,064	11,611	29,425	22,927	7,995	0,133	60,480
3.2	Γεωτρήσεις Λάρνακας-Λευ/σιας	lambda			0,550				0,550
3.3	Γεωτρήσεις Λεμεσού/Γαρύλλη	Y			6,851	2,200			9,051
3.4	Αφαλάτωση				26,200				26,200
0.5	Ανακυκλ. Νερό Δυτικά					4.000			4.000
3.5	καί Ανατολικά τής Λεμεσού					4,000			4,000
3.6	Ανακυκλ. Νερό Λάρνακας					0,000			0,000
	Ολικό Ν.Α./ Β.Π /Γ.Π				63,026	29,127	7,995	0,133	100,281
4	Εργα Επ. Λευκωσίας								
4.1	Φράγματα								
	Ξυλιάτος	1,430	0,302	0,960		0,500			0,500
	Βυζακιά	1,690	0,280	0,363		0,350			0,350
	Καλοπαναγιώτης	0,363	0,335	0,412		0,230			0,230
	Λύμπια	0,220		0,150		0,055			0,055
	ολικό	3,703	0,917	1,885	0,000	1,135	0,000		1,135
	Ανακυκλ.Νερό Βαθειάς Γωνιάς					0,150			0,150
	Γεωτρήσεις					.,			.,
	Ολικό Επ. Λευκωσίας								
_		4 000	4.051	7.50.4			4.070		4.070
5	Αρμίνου	4,300	1,954	7,584		0.000	4,372		4,372
6	Αυδήμου-Παραμάλι					0,269			0,269
	Ολα τά εργα	-							
	<u>Φράγματα</u>				35,025	38,412	13,167		86,604
	<u>Γεωτρήσεις</u>				11,601	5,950	1,500		19,051
	<u>Αφαλάτωση</u>				26,200				26,200
	Ανακυκλωμένο Νερό					4,150			4,150
	Ολικό	273,856	128,244	27,508	72,826	48,512	14,667	0,133	136,005
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					Εμπλουτισμός Γεωτρ.Υδρευσης -8,860 <b>127,1</b>				
	Συνολική Κατανάλωση						Q 0 <i>6</i> 0		127,145

ΣΗΜ: Ολική ποσότητα Ανακυκλωμένου νερού στο υδατικό ισοζύγιο 6,5 εκ.κυβ.μ. ( 4 εκ.κυβ.μ.στην Λεμεσό+2,5 εκ.κ.μ. της Πάφου που συμπεριλαμβάνεται στις γεωτρήσεις)