





ELEMENTS OF CORSICA REPORT



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Meeting in Germany . B. KHOUMERI (Université de Corse) avec la collaboration de F. Moracchini (ODARC) et A.Honorez (OEHC) Schrobenhausen 2013





POPULATION (source insee) :

- **316 578** inhabitants (2012). Since 1999 the population is increasing due to emigration.
- Population older than the national average.
- Today Corsica is more urban than rural, even if rural areas represent 80 % of the territory.
- Total **active population** : 103 700 (2010).
- Unemployment rate : 9,6 % (2011)
- **Unequal repartition** of the population : concentration on coastal regions and around major roads. On the contrary, the villages of the interior are abandoned.
- Average **density** : 35,5 inh/km² the weakest of France.

Unequal repartition of the population Municipalitie population (1999)53,000 5.000 — National roads 1.000 100

Touristic population very important mainly in summer : **3 millions** in summer 2009. Approximatively 10 tourists per inhabitant.









Water ressources

Total theoritical storage	106 thousands of m3
Total Mean yearly precipitation 2009-2010	9.536 thousands of m3
Yearly average rainfall	900 mm < 700 mm in plain, > 1000 mm in mountain
Highest interseasonal Capacity of Storage	< 2 %

Unequal repartition in space and in time

Main interseasonal storage water structures

	Conces- sionnary	Structures (dams and	Storage Capacity			
		water	(thousands			
		detention)	of m3)		Uses	
Department					Drinking	
				Irrigation	supply	Electricity
Sud Corsica	EDF	TOLLA	32	Х	Х	Х
North Corsica	EDF	CALACUCCIA	25	х		Х
Sud Corsica	EDF	SAMPOLO	1.6	Х		Х
Sud Corsica	EDF	RIZZANESE	1.3	Х		Х
North Corsica	OEHC	ALESANI	10.6	х		х
North Corsica	OEHC	ALZITONE	5.6	Х		
North Corsica		TEPPE-ROSSE	4.4			
	OEHC			Х		
North Corsica	OEHC	PERI	3.0	x		
North Corsica		BACCIANA	2.4			
	OEHC			Х		
North Corsica		GUAZZA	0.3			
	OEHC			Х		
North Corsica	OEHC	CODOLE	6.6	Х	Х	
North Corsica	OEHC	PADULA	1.9	Х		
Sud Corsica	OEHC	FIGARI	5.6	Х	Х	
Sud Corsica	OEHC	OSPEDALE	3.3	Х	Х	
Sud Corsica	OEHC	ORTOLO	2.9	Х		X

Source : EDF, OEHC

Dams and Reservoirs

The artificial water reserves can have 3 kinds of uses:

- Production of hydroelecticity (E)
- Irrigation (I)
- Drinking water supply (AEP)

EDF Dams



Dams and reserves of OEHC (Corsican Hydraulic Equipment Agency)

Mobilization of the resource:

•65 millions of m³ of water stored

- 6 dams
- •6 « collinaire » reserves

20 points of draw-off in rivers

Distribution:

- •53 stations of pumping
- 200 Km of drain
- 30 stations of treatment







Total Water abstraction

	Water abstraction per uses (2009)					Total	
Resources Thousands of m ³	Agriculture	Domestic uses	Industry	Energy production	Corsica	France	
Surface water	54 205	22 560	148	303	77 216	27 421 113	
Groundwater	0	21 761	750	0	22 511	6 022 188	
« Non	0	0	0	0	0	-	
conventional« water							
Total	54 205	44 321	898	303	99 727	33 443 301	

Source : MEDDE, Agence de l'Eau RM&C







Agricultural water uses

Consumptions of natural water recorded on the OEHC 's network

Natural water Thousands of m ³	2007	2008	2009	2010	2011
Natural irrigation water	22 131	18 030	19 619	16 101	20 104
Natural water not used for irrigation	8 054	6 628	7 665	7 228	7 806
Total	30 185	24 658	27 284	23 329	27 910

Source : ODARC, OEHC

Price of agricultural water (without subscription) in 2012 €/m ³				
volume < 1 000 m ³	0,024 €/m³			
volume > 1 000 m ³	0,036 €/m³			

Irrigation practises



- Total SAU : 155 659 Ha
- Irrigated Cultures : 12 419 Ha

8% of total SAU

- Irrigables Cultures : 17 169 Ha

11% of total SAU





Drinking water supply and waste water treatment

	Drinking water supply		Waste water treatment		
	Population	Communes	Population	Communes	
	%	%	%	%	
Direct Management	23	81	24	77	
Intermediary Management Kyrnolia (41%) OEHC (22%)	77	19	76	21	
No collective waste water treatment	-	-	0	3	







Quality drinking water supply

Boreholes and water spring catchments for drinking water supply

Water spring catchments with Declaration of Public Utility (DUP)	53
Population who accesses to improved water	88 %

•In RMC basin : 45 % of Delegated Management

•Price of water depends on way of management

- Average price in Corsica in 2007 : 3.34 €/m³ (2.89 € for the RMC Basin) The price was $1.72 \in$ in 1992









Waste water treatment

Number of waste water plants	239	360 communes
Conformity in equipment and functioning (%)	50	Minimum values because the
Conformity in equipment only (%)	23	conformity is unknown for 22 plants

Source : MEDDE (2010), ODARC



Source : ODARC









Quality according to the WFD

87% of streams and rivers of Corsica basin are in good or very good ecological status.

However efforts remain to be done : SAGE and « river contracts » have to be implemented.

Climate change

Increase of the global water deficit



AS (Année Sèche) : Dry years

Source : A.Honorez (OEHC)





Hydrology of streams and rivers

Influence of climate warming on streams hydrology











To conclude...

Corsica is an island, it has to supply water needs of the population without exterior help

Even precipitations are significant in Corsica , they are unequally distributed :

- Micro-régiions that are the lesast watered as Balagne
- Are often the most touristic

Consumptions are important and increase specially on the short summer period











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(http://www.offrench.net/photos/gallery-4.php