

THE DESCRIPTION OF THE ITALIAN TARGET AREA  
**THE INTERREGIONAL PO RIVER BASIN**  
**(PROVINCES OF FERRARA AND ROVIGO)**

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**EU.WATER**  
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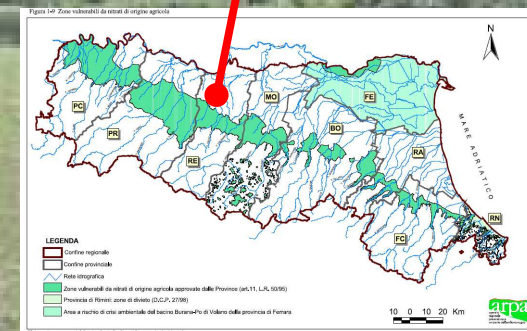


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## PROVINCE OF FERRARA (Emilia Romagna Region)

- INSERIRE INFO PROVINCIA DI FERRARA





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## PROVINCE OF ROVIGO (Veneto Region)

- The Province of Rovigo developed in **armony and in balance with Environment and Nature**
- The provincial territory has **alluvial origin**. It was originated by the **Po Delta**, that is still developing, so for 40% it is even or below sea level.
- The area has an extent of 178.000 HA and is **located between the two longest italian rivers (Po and Adige):**
  - - 110.000 HA are exploited to fit for **sowing** (annual herbaceous cultivations);
  - - 3.500 HA of **wooden cultivations** for long-term cycles (poplar plantations, orchards and woods);
  - - 300 HA of fields under grass and permanent pastures;
  - - 30.000 HA of humid area with valley for fishing and internal lagoon.
- **1.500 farmings** work in this contest and they produce **zoothechnical effluents** in part subject of this project.



# Target area

INSERIRE IMMAGINE DEL BACINO INTERREGIONALE (SE  
ESISTENTE ) E ALCUNE INFO SUL perché ABBIAMO SCELTO DI  
LAVORARE ASSIEME NELL'AREA INTERREGIONALE





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# Province of Ferrara

## Agronomic information

	YES	NO
<b>Does a GIS soil map of your target area exist?</b>		

**If not, please specify:**

- the extension of total cultivated area
- the percentage of dominant types of soil texture

*See example below*

Target area	The Province of Ferrara
<b>total cultivated area</b>	180,000 ha
<b>Extension (%) of the main soils</b>	42% clay-sandy
	26% clayey
	23% peaty
	9% sandy



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# Province of Ferrara

## Agronomic information

What the GIS data ( <i>if available</i> ) says about...	
Type of soil	
Precipitation data	
The quality of groundwater, in relation to concentrations of:	
Ammonium ( $\text{NH}_4^+$ )	
Nitrite ( $\text{NO}_2^-$ )	
Nitrate ( $\text{NO}_3^-$ )	
Organic carbon	
The quality of superficial water, in relation to concentrations of:	
Ammonium ( $\text{NH}_4^+$ )	
Nitrate ( $\text{NO}_3^-$ )	

Please indicate the total amount of enterprises (in %) in the target area, which receive EU grants for agricultural production (i.e. CMO, CAP, Rural Development Program)



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# Province of Ferrara

## Agronomic information

Describe the open field cultivation (grass, trees and vegetables) which area goes over 2.5% of total cultivated area and indicate the agronomic data for each crop in 2008 or previous years.

*See example below*

Target area							
Crop	Area (in ha)	Area (in %)	Main nitrogen fertilizer	Units of nitrogen (kg/ha)	Period	Depth of plowing	Other
wheat	58.000	35	urea	160-190	Pre-sowing 30% Sprouting 50% etc.	30 cm	-



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# Province of Rovigo

## Agronomic information

	YES	NO
Does a GIS soil map of your target area exist?	X	

<b>Target area</b>	The Province of Rovigo
<b>total cultivated area</b>	115.464 ha
<b>Extension (%) of the main soils</b>	76,1% alluvial slimy-clay
	12,7% shoreline-marine sandy
	7,6 % alluvial sandy
	2,7 % melted material of recent warehouse
	1,0 % peaty

# Province of Rovigo

## Agronomic information

What the GIS data <i>(if available)</i> says about...	
<b>Type of soil</b>	Loamy clayey-slimy sediments or clayey-slimy sediments mainly. In the Po Delta there are peaty areas.
<b>Precipitation data</b>	Data availability per survey control unit and control units geographical coordinates.
The quality of groundwater, in relation to concentrations of:	
Ammonium (NH <sub>4</sub> <sup>+</sup> )	2000-2006 mean concentration: <b>0,5mg/l-5mg/l</b> for 70% of control units
Nitrite (NO <sub>2</sub> <sup>-</sup> )	not available at present
Nitrate (NO <sub>3</sub> <sup>-</sup> )	2000-2006 mean concentration: <b>&lt;=10mg/l</b> for 70% of control units
Organic carbon	not available at present
The quality of superficial water, in relation to concentrations of:	
Ammonium (NH <sub>4</sub> <sup>+</sup> )	not available at present
Nitrate (NO <sub>3</sub> <sup>-</sup> )	2006 concentration: <b>6,6mg/l-16mg/l</b>

At present only data related to amounts of European grants awarded are available, for each destination category.



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# Province of Rovigo

## Agronomic information

### Main Crops 2008: ISTAT and Veneto Agricoltura Data

Target area							
Crop	Area (in ha)	Area (in %)	Main nitrogen fertilizer	Units of nitrogen (kg/ha)	Period	Depth of plowing	Other
Maize	40.900	30,3	urea	250	May-June (covering and post-emergency)	35 cm	-
Wheat	35.500	26,3	urea	150	February-April (rising heading)	25 cm	-
Soya	13.900	10,3	-	-	-	25 cm	-
Ceroso Maize	5.000	3,7	urea	300	May-June (post-sprouting)	35 cm	-
Alfalfa	4.500	3,3	-	-	-	30 cm	-

# Target area Problems

## General introduction

- With reference to geomorphological context it is necessary for the PROVINCE OF ROVIGO to pay **particular attention to the use and effects that nitrates could have on this type of land.**



# Partner's expectations

Inserire intro generale

The Province of Ferrara.....

The Province of Rovigo intends to develop methods and technologies to **improve the agronomic use of zootecnical effluents** and at the same time to **develop technologies for water reutilization**, necessary for cultivations in progress.