
REDUCCIÓN DE EMISIONES DE AMONIACO EN LA
AGRICULTURA MEDITERRÁNEA A TRAVÉS DE TÉCNICAS
INNOVADORAS DE FERTIRRIGACIÓN CON PURÍN

Proyecto LIFE ARIMEDA

Situazione e gestione degli effluenti di
allevamento in Lombardia (Italia)

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Dipartimento di Scienze Agrarie e Ambientali
Università degli Studi di Milano





Dipartimento di Scienze Agrarie e Ambientali

STAFF

80 ricercatori

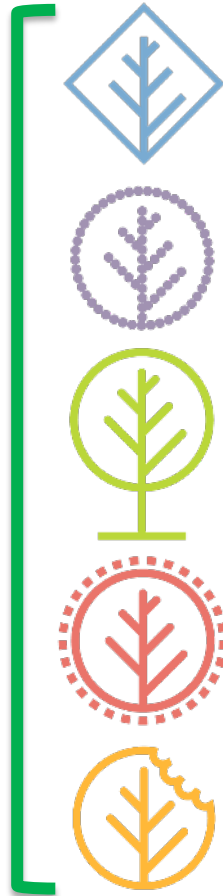
30 tecnici

10 amministrativi



60 PhD

60 post-Doc



Agricultural Engineering



Structures and Environment

Agricultural Genetics & Chemistry

Agronomy & Arboriculture

Bio-Defence

Animal Science





BIOATTIVATORI



BIOMASS-CURE



MBMT

Produzione

trattamento

stoccaggio

utilizzo



SEPARAZIONE



NERO



Solutions for Environmental And Economic Sustainability of PIG manure

FONDAZIONI IN RETE PER LA RICERCA AGROALIMENTARE

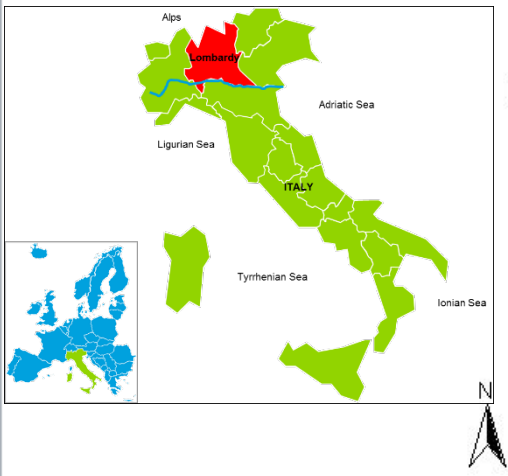
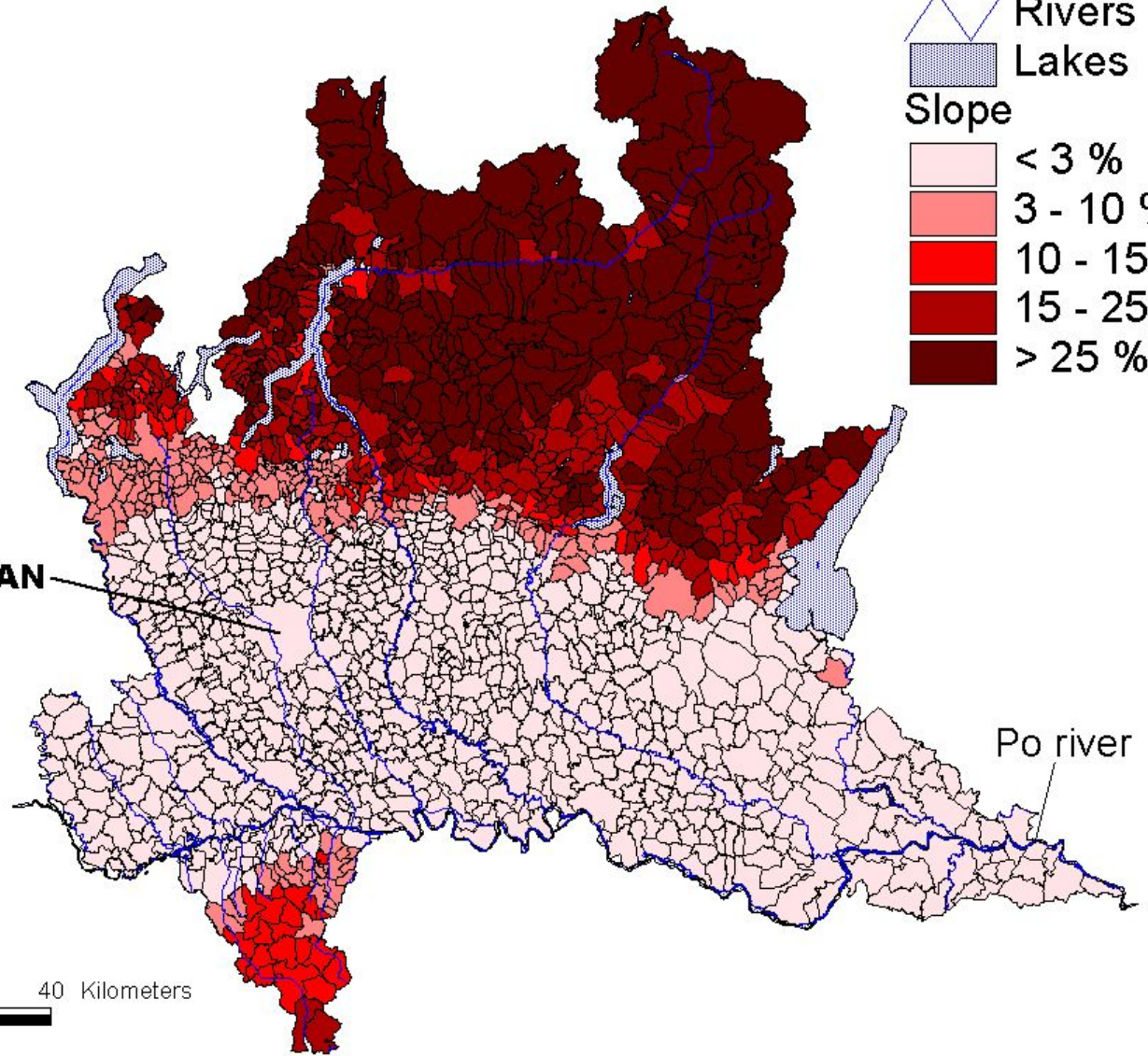
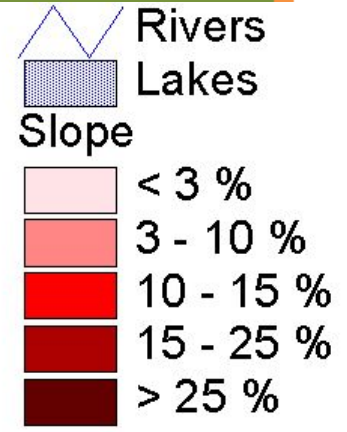
Scelta delle soluzioni ottimali

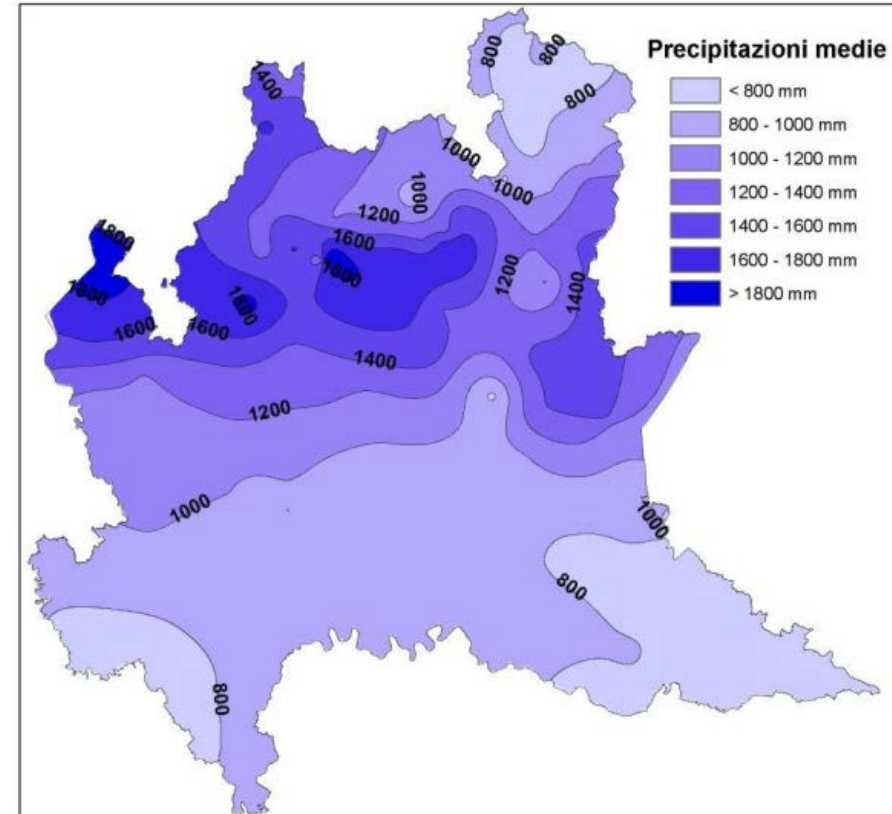


UNIVERSITÀ DEGLI STUDI DI MILANO

Lombardia

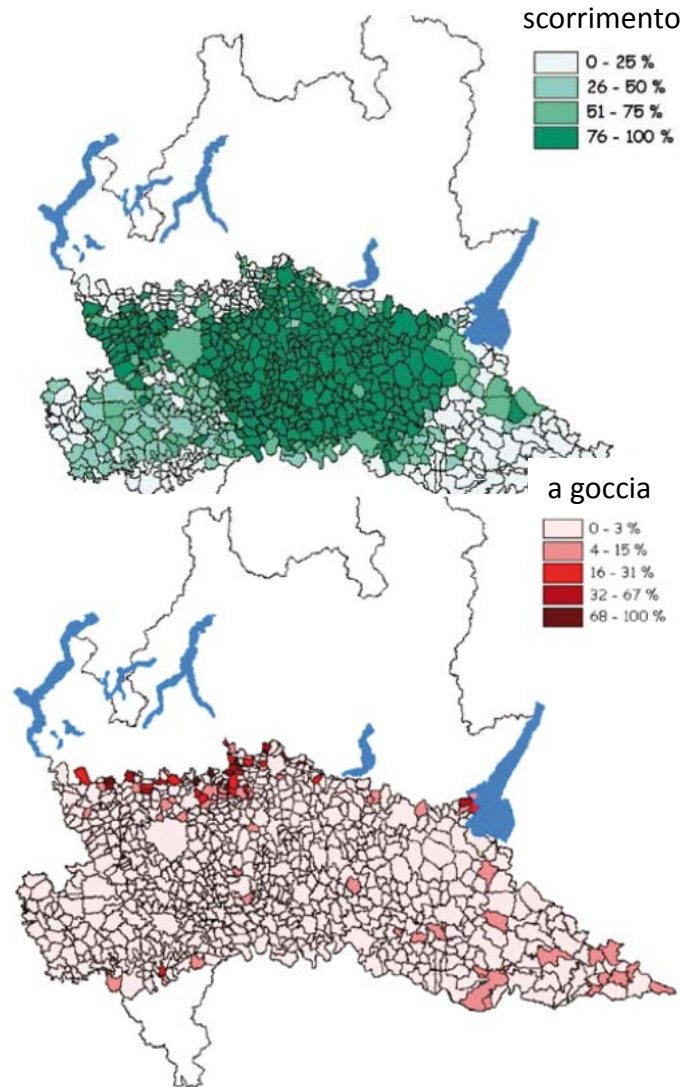
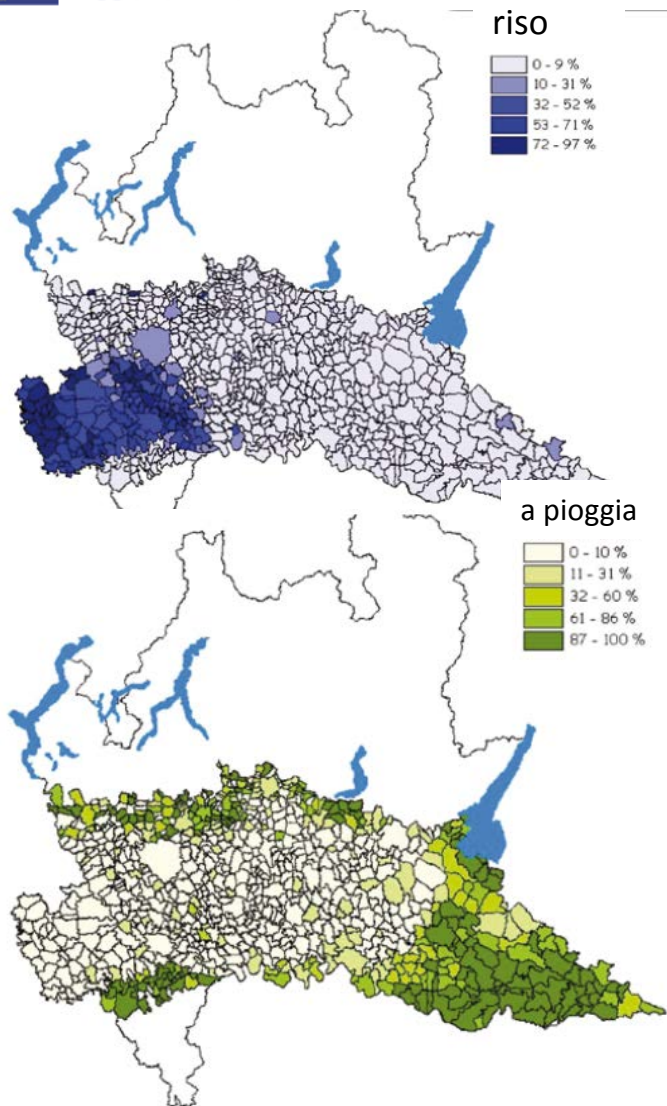
9 milioni di abitanti
 2.4 milioni di ha
 0.9 milioni di ha agricoli







582 000 ha irrigui (65% della superficie coltivata)





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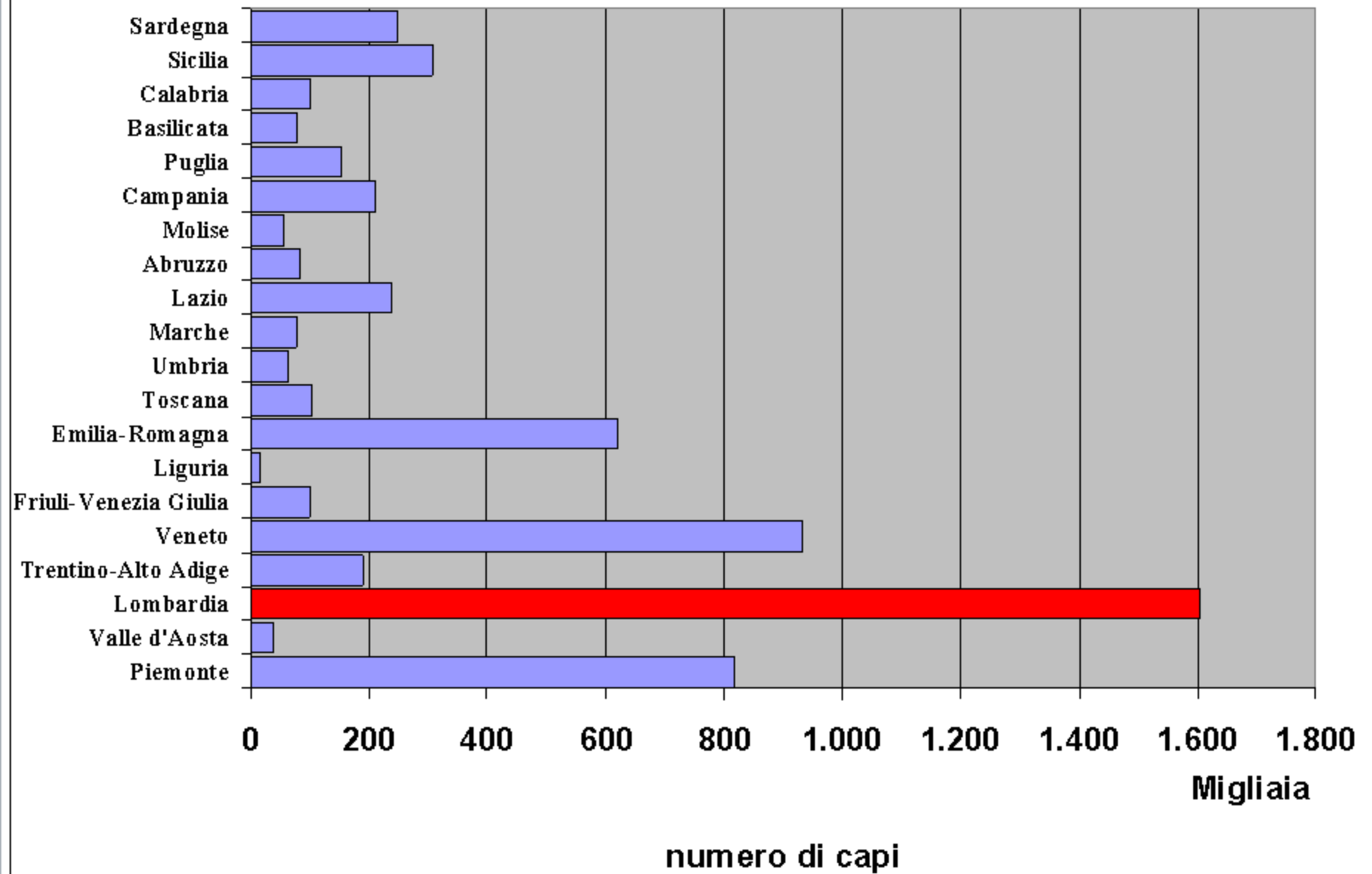
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bovini















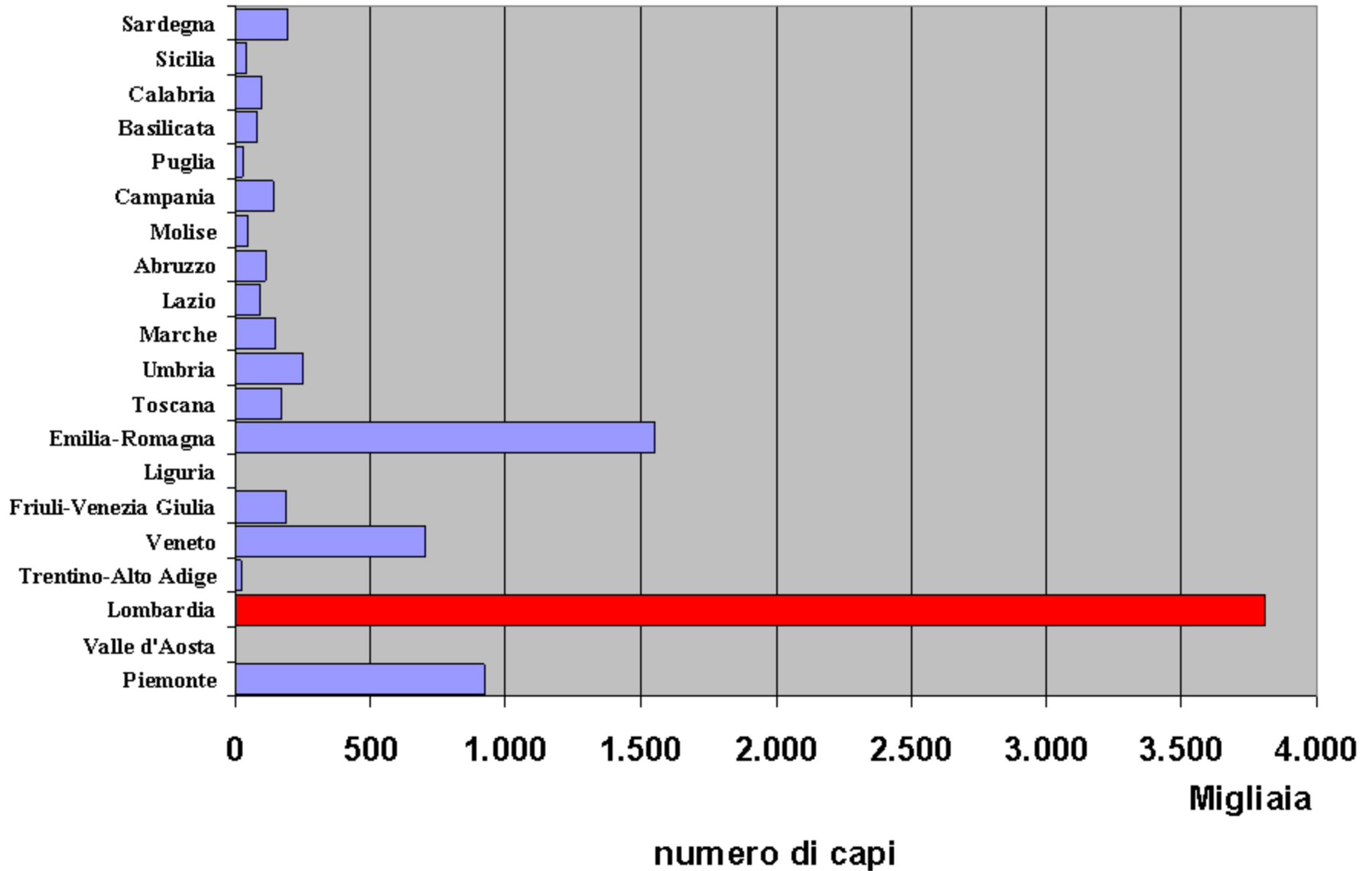








suini





















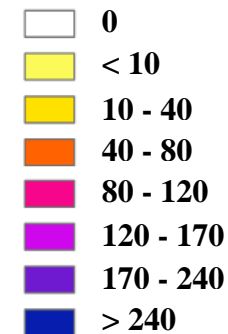






TOTAL MINERAL AND MANURE NITROGEN

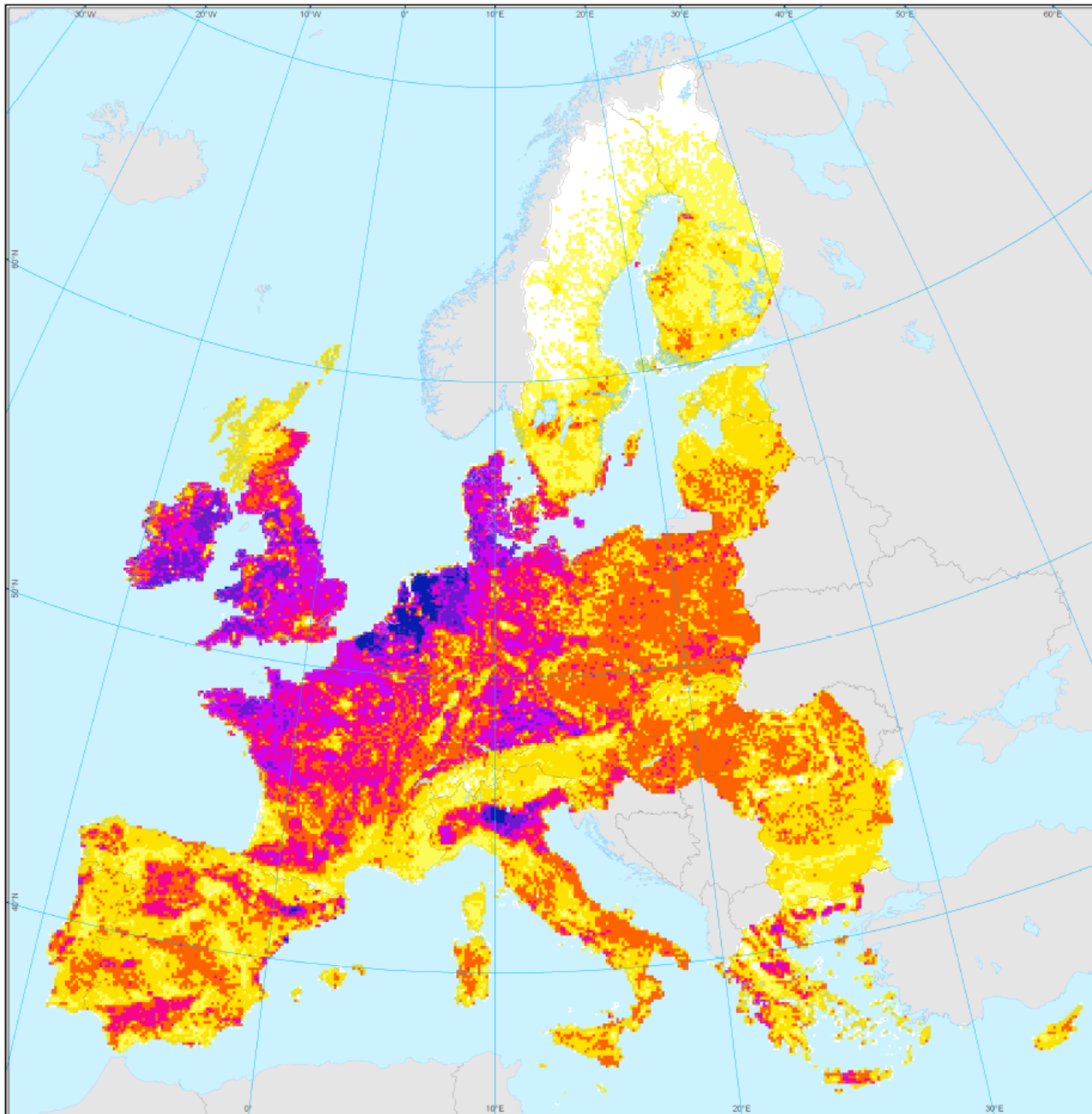
Anno di
riferimento: 2000
Azoto minerale e
zootecnico
(kg.ha⁻¹)



0 100 200 300 400 500 km

Total Mineral N fertilizer and manure application calculated for 10 km x 10 km grid using FATE land use data and fertilizer/manure data.
For the 10 new member states:
fertiliser data derived from CAPRI - Common Agricultural Policy Regional Impact, University of Bonn

Sources : JRC (Mulligan et al., 2006. An Atlas of Pan-European Data for Investigating the Fate of Agrochemicals in Terrestrial Ecosystems, EUR 22334 EN, 52 pp.)
Coordinate Reference System: ETRS89 Lambert Azimutal Equal Area
Cartography : JRC, 11/2008
© EuroGeographics for the administrative boundaries
© 2008 Copyright, JRC, European Commission
Extracted from ELISA (European Land Information System for Agriculture and Environment)



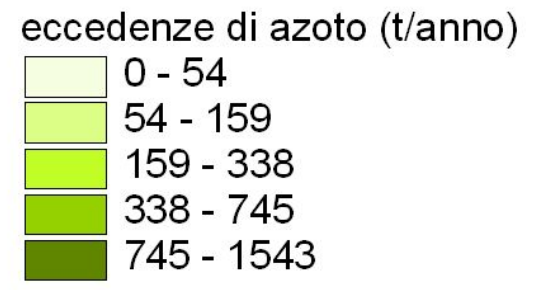
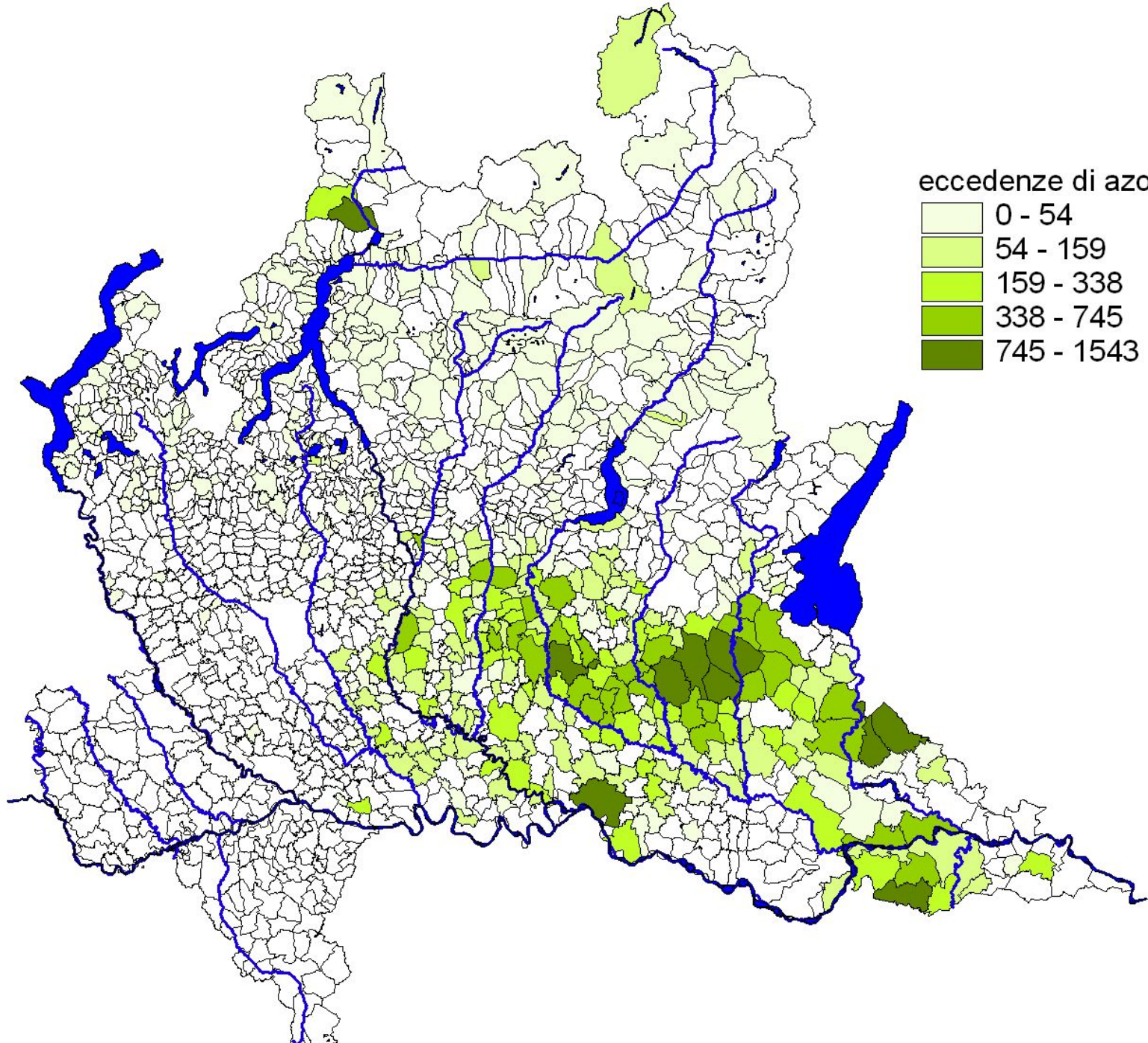


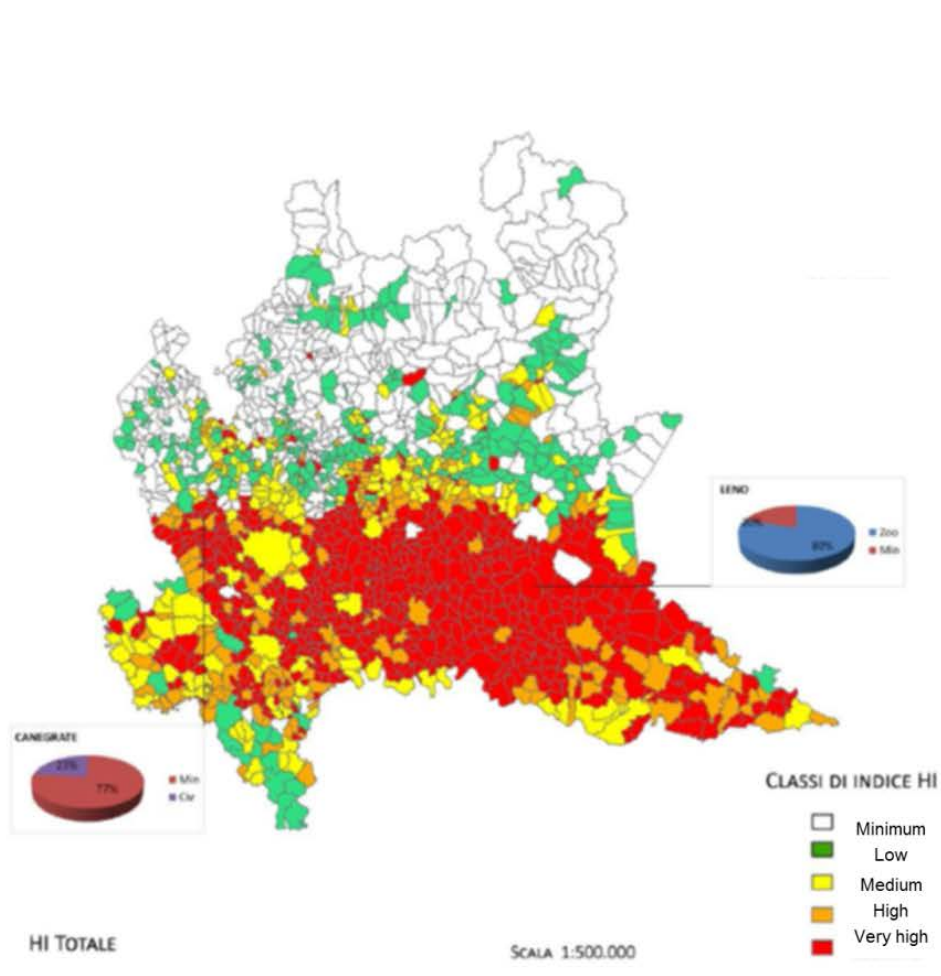
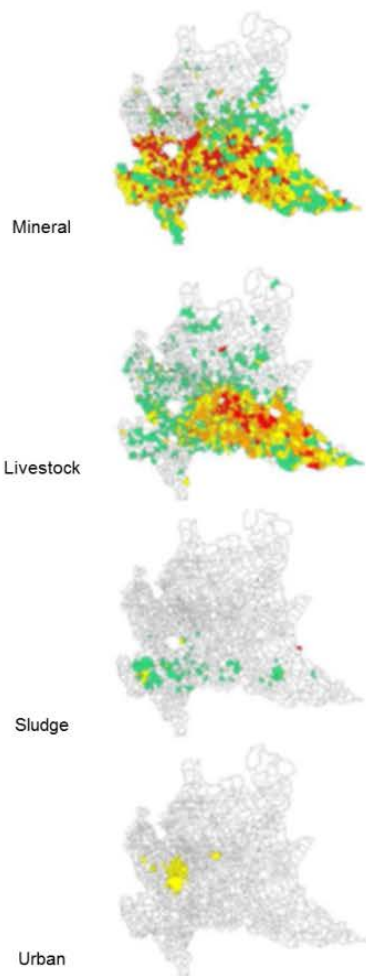


FOTO: ANICHILERA D'AMORE

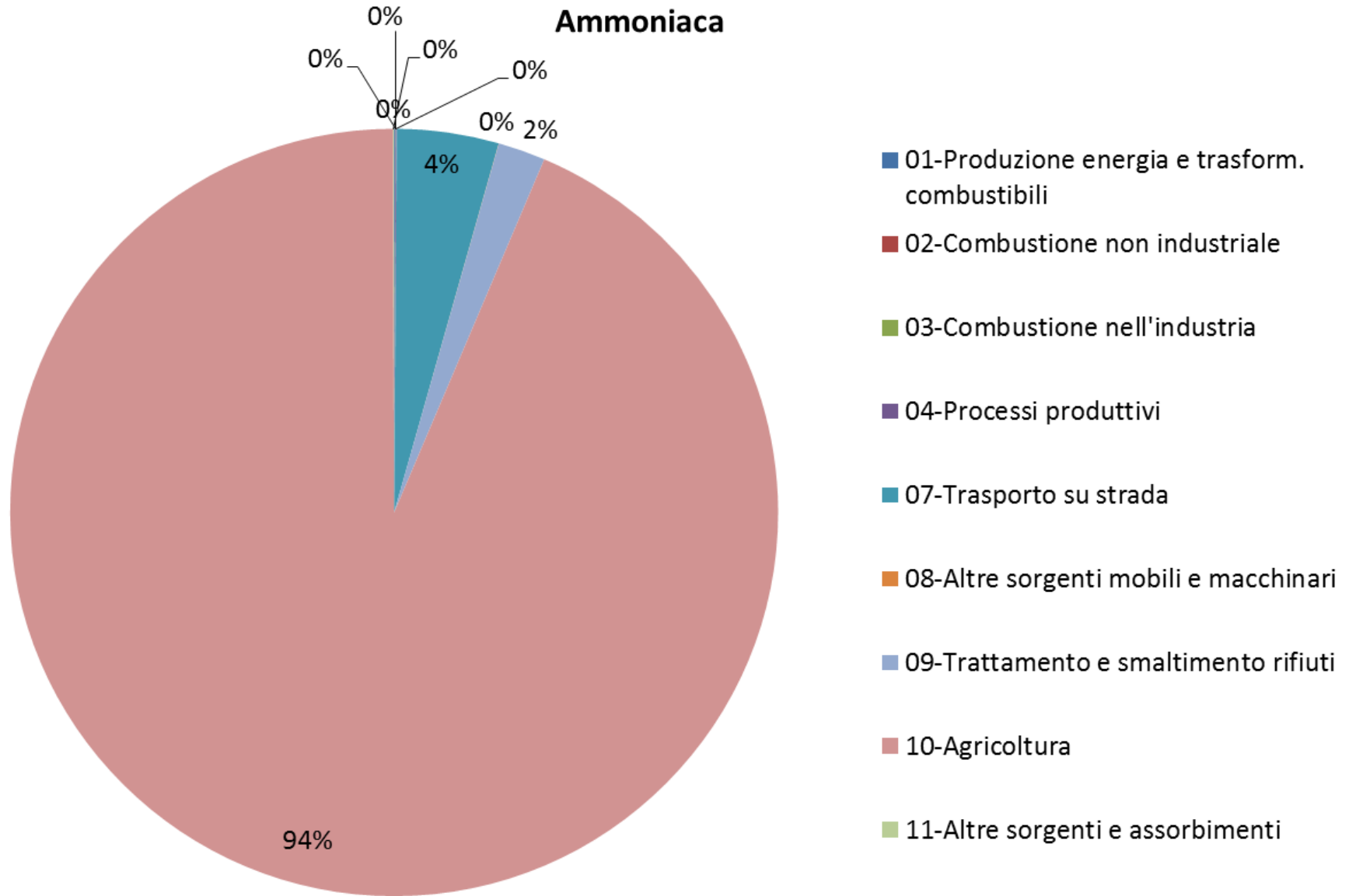
Fioritura algale sulla costa dell'Adriatico (Ferrari, 2013)

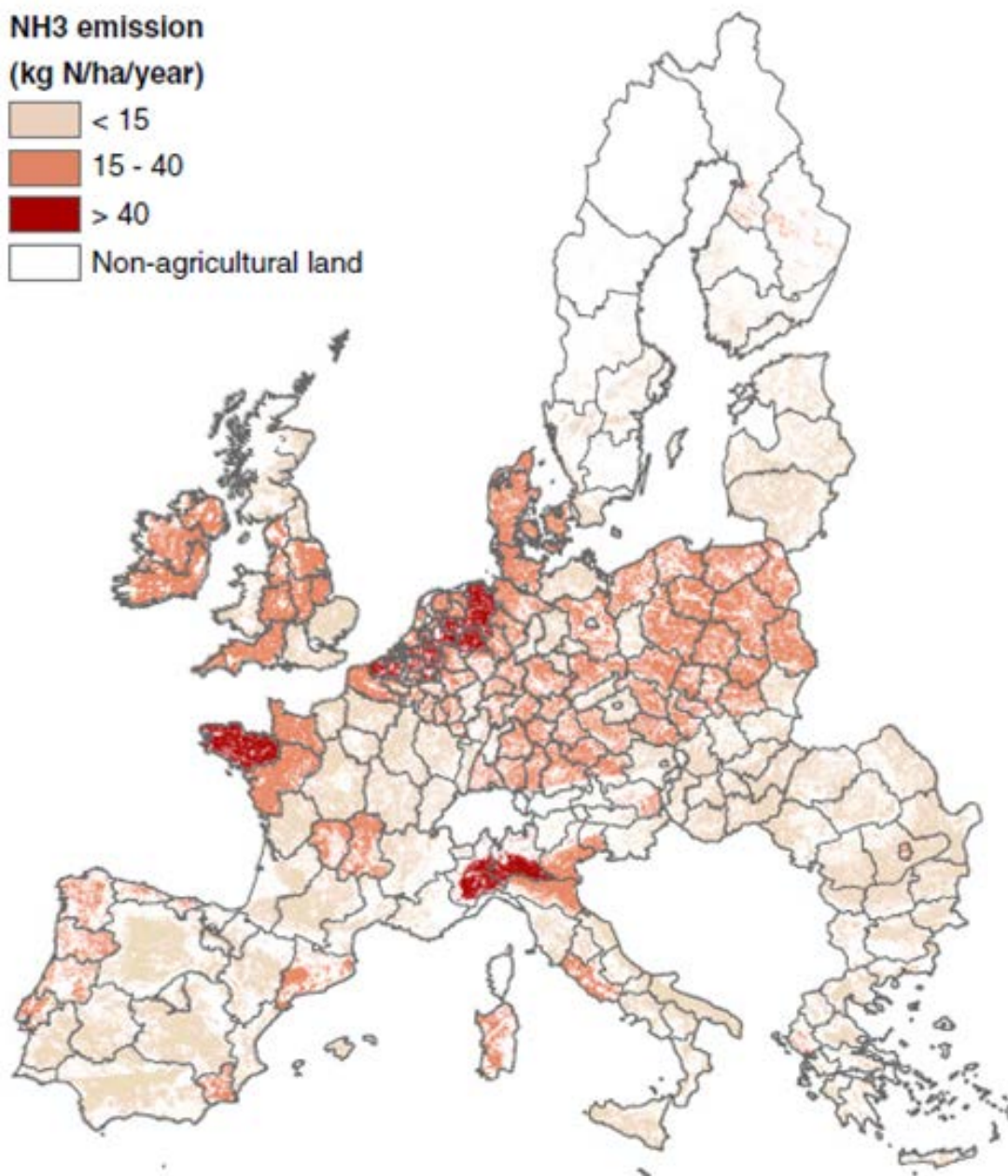
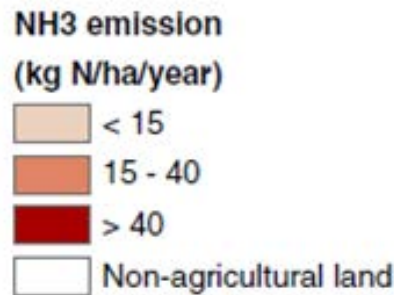


Contributo dei diversi settori ai rilasci di azoto



Ammoniaca





Source: (Velthof, et al., 2014)
 NH₃ emissions from agriculture in the EU-27 in 2008 (kg N per ha of agricultural land per year)

400 impianti di biogas in Lombardia









E' necessario individuare soluzioni sostenibili per la utilizzazione agronomica degli effluenti di allevamento che consentano di migliorare l'efficienza dell'azoto e riducano le emissioni in aria e verso le acque.



Grazie per l'attenzione!

