

ITALIAN AGRICULTURE AND CLIMATIC RISK

L'AGRICOLTURA ITALIANA E IL RISCHIO CLIMATICO

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Abstract

General characters of climatic risk for Italian agriculture are presented and some ideas about the evolution of this risk are given, in the light of the variability of climate in the Euro-Mediterranean area. In particular it is presented a summary description of the elements of risk for the main crops in the principal agroclimatic zones; in this context, the effect on climatic risk of the climate change of '80 years of twentieth century is discussed and some adaptive answers of the agricultural system are listed; these answers seems rational but also tardy, as a result of significant economic losses.

The distortion in the perception of climate variability is also described as the result of the low attention of public opinion and farmers to quantitative aspects of weather phenomena; the responsibility of some subjects (media, professional organizations, etc.) on this effect is also discussed.

On the base of these facts, a new and more rational approach to climatic variability founded on the fast activation of research organisms on the base of data coming from services that analyze data from meteo stations and atmospheric circulation is proposed; in this context the possible role of Ucea in order to provide early warnings for agriculture and to define mitigation tactics and strategies is also discussed.

Riassunto

Il lavoro rappresenta il tentativo di fornire una descrizione sommaria dei caratteri del rischio climatico per l'agricoltura italiana e di sviluppare alcune idee in merito all'evoluzione di tale rischio alla luce della variabilità del clima in area euro-mediterranea. In particolare viene presentata una sommaria descrizione degli elementi di rischio per le principali colture agrarie italiane in funzione di macroaree agroclimaticamente omogenee. In tale contesto viene collocato il cambiamento climatico del 1989 e la risposta adattativa del sistema agricolo a tale cambiamento viene descritta con alcuni esempi; emerge una risposta razionale ma tardiva e frutto di rilevanti perdite economiche.

L'effetto di distorsione sulla percezione della variabilità climatica è altresì descritto, come risultato dello scarso livello di attenzione dell'opinione pubblica e degli stessi agricoltori agli aspetti quantitativi dei fenomeni; su tale aspetto viene messa in luce l'influenza avuta dai media e da alcune organizzazioni professionali agricole.

In base a tali fatti si giunge a prospettare un nuovo e più razionale approccio alla variabilità climatica fondato sulla rapida attivazione degli enti di ricerca sulla base di dati provenienti da stazioni meteorologiche e strutture circolatorie atmosferiche, in modo tale da fornire allerta precoci all'agricoltura con indicazioni accurate circa strategie e tattiche di mitigazione. Viene infine discusso il possibile ruolo dell'Ucea in tale futuribile contesto.

Introduction

In Italian language the term “rischio” means “probability of a potentially dangerous event that can be quantified by means of suitable statistical methods.” This concept is similar to the English term “hazard”, whereas the term “risk” has a more economic meaning, because it is referred to the dimension of the injury to persons or things that follows a hazardous event. This premise is important because show the economic implications of climatic risk and show a possible mismatch between Italian and English speakers, with consequences sometimes important because English is, at present, the most important global language.

All natural events, disasters included, are characterized by a risk that, as a rule, can be quantified. This quantitative evaluation is in many cases laborious because it needs technical and statistical analyses sometimes very

complex but it must be sustained by the trust that almost nothing is completely unforeseeable in terms of risk (Rosini, 1988).

Farmers and climatic risk live together from about 10,5 thousand years, in other words from the Neolithic revolution; the main consequence of this fact is that a deterministic approach to the relation between mankind and climatic risk is quite reductive. More specifically Leroy Ladurie (2004) said that the history of climate can be seen in the context of the conquests of mankind, and the human progress can be considered as an attempt to freedom the mankind from the “dictatorship of the climate”. An example given by the same Leroy Ladurie is represented by the terrible winter 1739-1740, particularly ruinous due to the period of occurrence. In fact this very cold winter followed about fifty years of mild oceanic