

RECENZII

Reviews

VICTOR SOROCOVSCHI (2016), **NATURAL RISKS**. Theoretical and applicative aspects, Editura Casa Cărții de Știință, Cluj – Napoca, 175 p., 6 cap., 36 fig., 39 tab., 171 bibliographical references, summary in English.

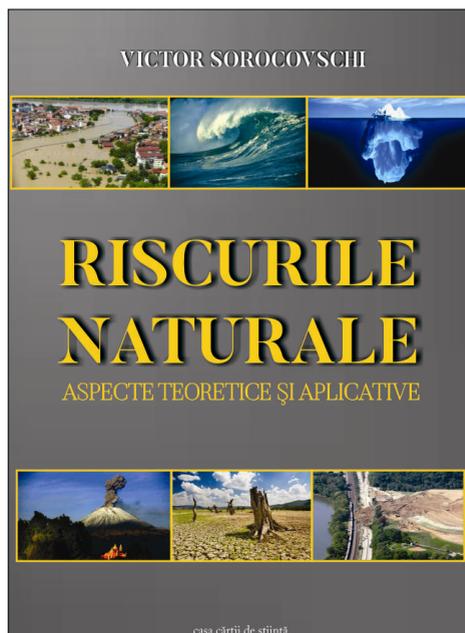
It has been around 2.5 decades since in Romania, natural risk phenomena have become a major concern in geographic research.

From the first article appeared under the signature of Acad. D. Bălțeanu in 1992, entitled *Natural hazards in Romania*, published in *Revue Roumaine de Géologie - Géophysique - Géographie*, **XXXVII** so far, the interdisciplinary literature on this topic has been enriched, thanks to these sustained concerns, which demonstrates its undoubted theoretical and practical importance.

Although such extreme natural phenomena existed forever in the history of human society that were the subject of *Applied Geography*, their frequency, mode of expression, intensity and induced risks rarely reached the maximum they reached in the contemporary age, mostly due to the great natural hazard that is global warming.

WMO (2006) estimated that about 65% of the damages and about 90% of the deaths caused by the natural disasters are due to extreme climatic and hydrological phenomena, drought causing alone the death of about 280 000 people/year, most of them in developing countries.

To reduce these irreparable losses, international research programs such as IDNDR (1992) for Natural Disaster Reduction and ISDR (2000) have been launched to mitigate the consequences of natural disasters that have focused the academic society's efforts to study them and increase the quality of life.



On this line are also the sustained concerns of Prof. Univ. Dr. Sorocovschi, who managed to coagulate around this topic numerous specialists from Romania and abroad, whose contributions he published in the journal *Riscuri și Catastrofe*, as editor, from whose first appearance in 2002 until present (2017), over 15 years of scientific research have seen print in 20 volumes.

In this way, His Excellency managed to develop at the University of Cluj-Napoca a real school for studying natural and anthropogenic risk phenomena becoming thus becoming more and more known both in the country and abroad.

It is also worthwhile his personal contributions to hydrology and beyond, which have found place in each of these volumes, and we now find them synthesized and integrated into an original, self-contained volume (which formatted and titled, tends to be confused with the magazine itself) entitled *Natural Risks. Theoretical and Applied Aspects*.

The volume brings forward new concepts, well-founded theories and methodologies, by studying the extreme natural phenomena, by new, very complex guidelines, in defining the notions of **risk** and **hazard** as a risk-associated phenomenon, the **vulnerability** considered as the relative measure of risk as well as other notions such as **disaster**, **catastrophe**, **sinister**, **cataclysm**, **accident** and **record**, notions reflecting, on the one hand, the consequence of the risk induced by these extreme phenomena and, on the other hand, the unpredictable reaction of the population to these consequences.

The paper is well documented and structured.

In it intertwines the author's own ideas with those of the literature, especially foreign, presented in an original manner.

It is very important to emphasize the explanations made in the study of all the aspects developed in the work that make light in their diversity, complexity and interdisciplinarity, so necessary in the study of risk management, which can be expressed through a wide range of terms (pp. 34-35) and definitions (pp. 40-42). We consider it necessary for any specialist who has to study the risks of a certain territory, in order to establish its management in order to reduce the effects of possible disasters, to know this Romanian mini-risk treaty, whose theoretical and especially practical importance, is undeniable.

Until now, the definitions that circulated in the literature seemed relatively simple and reflected only certain aspects of the notions of **risk**, **hazard** and **vulnerability**, in the present paper, Prof. Univ. Dr. Sorocovschi makes light from this point of view. It is not by accident that he emphasizes the **risk** (and not the hazard), namely the **vulnerability** or susceptibility of some **inhabited territory** to bearing significant losses caused by an extreme natural phenomenon that can reach different magnitudes expressed by what is called **disaster** or **catastrophe** for which the population (by its degree of civilization) must be prepared to liquidate their consequences from a material and moral (psychic) point of view.

In other words, from a philosophical point of view, the author points out that "***the risk has two connotations: the first refers to the concept of chance or opportunity*** (ie. the cause that causes the risk, n.n.) ***and the second to the potential losses ...***" (Chapter 3.1). Hence the conclusion that **risk hatches the hazard**.

This is even more apparent from the Chapter 3.2. ***The components of the risk concept*** in which the author states (p. 43): "***The concept of risk includes three terms: hazard*** (danger, respectively hazard, p.44), ***vulnerability and exposure*** (ie. the element exposed to risk).

So, the most important issue is to dimension the value of the risk, the circumstances in which it occurs, its complexity, etc. in order to establish its management. This does not mean that the hazard that produces it is not relevant to the study of "chances", the possible causes of extreme natural phenomena that need to be studied and measures that need to be taken to mitigate the damage.

Exceptional documentation and contributions, in the context of national and world literature, give undeniable value to this work.

By debating all the aspects that are required to be known in such a study, the author succeeds in demonstrating how complex their research is, such as the very notions it calls into question, and the need to apply an appropriate study methodology, territorially differentiated, in relation to the degree of representativeness, the local and regional specificity of each phenomenon.

The presentation of numerous subtleties that do not appear at first glance, but which reflect the complexity of these extreme phenomena, give not only the aspect of the work to be treated, but also give the author the opportunity to bring to light his philosophical side.

Particularly interesting are the notions of ***disaster, catastrophe, sinister, cataclysm, accident, record***, which reflect the gravity and the magnitude of the risk produced as perceived by the members of society (p. 153)

According to the dictionaries used, the author points out that the ***disaster*** is synonymous with the catastrophe Béthemont, J. (1991), in his work ***Sur la nature des événements extrêmes catastrophe et cataclysm, Géogr., Lyon. 66, 3-4, pp. 139-142***, also gives a philosophical explanation to the notion of ***catastrophe*** (which also associates with cataclysm), stating that it expresses man's impotence before nature, a sudden change in the order of things, which happens with violence, ***disaster, misfortune, bad luck, waste, something random and irrational, framing it between extreme natural phenomena***. It specifies that the two concepts reflect two aspects: physical, ***objective***, palpable, quantifiable by the consequences produced by the disaster itself and the ***subjective*** one, reflecting the degree of perception, knowledge, civilization of society who supports him, which he defined as cataclysm. According to the author, the two catastrophic concepts express two connotations of the same unit (face/reverse), one natural, objective and another immaterial, subjective, which remains within the probability domain, for if the first catastrophe (eg a flood of proportions) ***could be partially predicted to its relatively***

real dimensions, cataclysm (ie, population reaction, panic produced) could not be predicted.

In our opinion, the notion of cataclysm is similar to that of sinister. It is very difficult to define these notions, because each one includes the other.

Concluding, we appreciate that the present paper is a tremendously valuable mini-treaty for the study of extreme natural phenomena which presents a set of aspects related to these (many of which are valid for the anthropic ones), the first of its kind in the Romanian literature, of some scientific value and practice, which will ensure a wide circulation among the specialists, as well as all those interested in the sheltering of material goods and the salvation of human lives. It will certainly become a landmark for literature.

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