

The Importance of the Innovations to Pass Natural Hazards in Romania as Economic and Energetic Method

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ABSTRACT

In my opinion, the importance of innovations to pass natural hazards in Romania consists for example in innovations to pass earthquakes situations, fire situations and floods situations. In the first situation is about magnetic levitation platforms that can make seismic waves absorption for Japanese buildings situation (see Okinawa Institute of Science and Technology studies and practice [1]. In the second situation is about how is efficient the aircraft dust for forests and agriculture lands in fire, And the third situation how is efficient the water computerized parapets on floods situation (see Holland situations after 70 s.) In this respect, we can consider the climate change books at Romanian Academy Publishing House as scientific source and for energetical transition can be as innovation for Romania blackout the Varzob invention the radioisotopic battery with electricity provisions for 50 years. For climate changing after 90s we have a series of International Environment Protocols start with Rio de Janeiro in 1992 until Glasgow Environment Protocol nowadays [2,3]. Also is very important in my opinion the correlation between economic growth and innovations process (See Philip Aghion academic work} [4].

My objective on this article is to proof the importance of the innovations to pass natural hazards in Romania as economic and energetic efficiency method.

As method I use Tsukamoto Fuzzy Logic System with input and output variables as volatility indicators [5].

And finally, as result is the efficacy of innovations for natural hazards situations in Romania.

My originality point of view is estimation of Tsukamoto Fuzzy Logic System with input and output variables for innovations in 3 types of natural hazards like earthquakes situation, fire situation, floods situation.

Keywords: Innovations, Natural Hazards, Fuzzy Logic System

1989, Environmental Protocols after 1989, energetical transition in Romania etc.

Introduction

In the economic literature there are some authors that connect the economic growth with innovations process (for example See Philip Aghion The connection between economic growth and innovations process in his academic work on the google academic) and also by authors like Nicolae Anastasiu and Doru Catalin Moraru with their book The climate change and energetical transition by Romanian Academy Publishing House 2021 with the following issues climate changing problems after

In the earthquakes issue over degrees Richter in Romania after 1989 until now we can use the magnetic levitation platforms that can make the seismic waves absorption.

In this matter of energetical transition in Romania we can have innovations that can stop the energetical crisis like Euroinvent inventor Vladimir Varzob with his radioisotopic battery to pass energetical crisis for Romania for over 5 decades.

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For fire problems we can have the utility planes that can stop with anti-fire dust the fire issues.

For floods problems we can have the computerized parapets like in Holland floods technology.

Methodology

In this subject I can start with Tzukumoto Fuzzy Logic estimation method where volatility input variables are natural hazards like earthquakes over 5 degrees Richter after 1989 in Romania until nowadays, floods variables after 1989 in Romania and fires variables after 1989 and the last phenomenon but not the least the blackout phenomenon after 1989 until nowadays and for blackout phenomenon after 1989 in Romania until nowadays.

As output variables we can have innovations for each issue mentioned above as method of economic efficiency and energetic efficiency.

As final result Tzukumoto Fuzzy Logic estimation method can help us to measure the volatility for each natural hazard phenomenon econometrical tested by E-views program started with the least squared method.

If I consider my aggregate polynomial function of 6 degrees for each input variables and output variables, we can obtain a matrix with 6 columns for each natural hazard event and innovations process after 1989 to nowadays in Romania. For example my aggregate polynomial function can be $ax^6+bx^5+cx^4+dx^3+ex^2+fx+g$

Where a, b,c, d, e, f, g are input and output variables for each natural hazard event and innovation process after 1989 until now in Romania.

Conclusion

As I said in my abstract the conclusion can be that innovations process can help us to pass each issue of natural hazard phenomenon in Romania.

References

1. Okinawa Institute of Science and Technology studies and practice on diamagnetic materials for seismic waves absorption on www.oist.jp
2. Nicolae Anastasiu, Doru Catalin Moraru, Schimbările climatice și tranziția energetică – Spre un viitor verde al Terrei, Editura Academiei 2021.
3. Euroinvent Vladimir Varzob radioisotopic battery on google academic site.
4. Philip Aghion The correlation between economic growth and innovations process on Philip Aghion academic work on the google academic site.
5. Tzukumoto fuzzy logic estimation method on the google academic site.