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Future Research on the Resilience of Tehran's Urban Areas Against Pandemic Crises Horizon 2050

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Abstract : Resilience is an important goal for cities as urban areas face an increasing range of challenges in the 21st century; therefore, according to the characteristics of risks, adopting an approach that responds to sensitive conditions in the risk management process is the resilience of cities. In the meantime, most of the resilience assessments have dealt with natural hazards and less attention has been paid to pandemics.In the covid-19 pandemic, the country of Iran and especially the metropolis of Tehran, was not immune from the crisis caused by its effects and consequences and faced many challenges. One of the methods that can increase the resilience of Tehran's metropolis against possible crises in the future is future studies. This research is practical in terms of type. The general pattern of the research will be descriptive-analytical and from the point of view that it is trying to communicate between the components and provide urban resilience indicators with pandemic crises and explain the scenarios, its future studies method is exploratory. In order to extract and determine the key factors and driving forces effective on the resilience of Tehran's urban areas against pandemic crises (Covid-19), the method of structural analysis of mutual effects and Micmac software was used. Therefore, the primary factors and variables affecting the resilience of Tehran's urban areas were set in 5 main factors, including physical-infrastructural (transportation, spatial and physical organization, streets and roads, multi-purpose development) with 39 variables based on mutual effects analysis. Finally, key factors and variables in five main areas, including managerial-institutional with five variables; Technology (intelligence) with 3 variables; economic with 2 variables; socio-cultural with 3 variables; and physical infrastructure, were categorized with 7 variables. These factors and variables have been used as key factors and effective driving forces on the resilience of Tehran's urban areas against pandemic crises (Covid-19), in explaining and developing scenarios. In order to develop the scenarios for the resilience of Tehran's urban areas against pandemic crises (Covid-19), intuitive logic, scenario planning as one of the future research methods and the Global Business Network (GBN) model were used. Finally, four scenarios have been drawn and selected with a creative method using the metaphor of weather conditions, which is indicative of the general outline of the conditions of the metropolis of Tehran in that situation. Therefore, the scenarios of Tehran metropolis were obtained in the form of four scenarios: 1- solar scenario (optimal governance and management leading in smart technology) 2- cloud scenario (optimal governance and management following in intelligent technology) 3- dark scenario (optimal governance and management Unfavorable leader in intelligence technology) 4- Storm scenario (unfavorable governance and management of follower in intelligence technology). The solar scenario shows the best situation and the stormy scenario shows the worst situation for the Tehran metropolis. According to the findings obtained in this research, city managers can, in order to achieve a better tomorrow for the metropolis of Tehran, in all the factors and components of urban resilience against pandemic crises by using future research methods, a coherent picture with the long-term horizon of 2050, from the path Provide urban resilience movement and platforms for upgrading and increasing the capacity to deal with the crisis. To create the necessary platforms for the realization, development and evolution of the urban areas of Tehran in a way that guarantees long-term balance and stability in all dimensions and levels.

Keywords : future research, resilience, crisis, pandemic, covid-19, Tehran
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