A comparative study of climate change and security challenges of water crisis in cities of Urmia lake and central Iran basins

Afzali, R\textsuperscript{a}. Zaki, Y\textsuperscript{b}. Kaviani Rad, M\textsuperscript{c}. Mohammadkhani, E\textsuperscript{d,1}

\textsuperscript{a} Associate Professor, Department of Political Geography, University of Tehran, Tehran, Iran.
\textsuperscript{b} Assistant Professor, Department of Political Geography, University of Tehran, Tehran, Iran.
\textsuperscript{c} Associate Professor, Department of Political Geography, University of Kharazmi, Tehran, Iran.
\textsuperscript{d} PhD student of Kish International Campus of Tehran University, Tehran, Iran.

Extended Abstract

Objective: The impacts of climatic change on the water crisis and the other challenges it has to deal with, requires careful scrutiny because it affects different levels of society and encompasses many cities. Damage can be avoided if the various dimensions and how they occur are identified. Climate change and the problem of drying up of Urmia Lake and the lack of water in the Central Iran Basin have harmful consequences on the political, cultural, social, economic, environmental and security aspects of the citizen. National security, and the country's territorial integrity, both at home and abroad are at risk, if these important water resources are not prevented. The hypotheses of this study are 1. Climate impacts on the water crisis in the cities of Urmia Lake and Central Iran Basins have capacity to made security crisis like chaos and political rebellion. 2. There are differences and similarities in terms of the geographical scale of events, the nature and origins and causes of climate change on water crisis. This study tries to discover these hypotheses by a comparative study of these two basins.

Methodology: This research is considered as applied category from purpose point of view and is classifying as a development type. In terms of nature and method, is a descriptive-analytical and survey type researcher-made questionnaire was used for data collection. The questionnaire consists of two parts: general information and items. According to research hypotheses, available resources and expert opinion, Likert scale, used to design the items of the questionnaire and single sample t-test and Leven's test were used to evaluate the result. The questionnaire was designed out of 31 items related to aims and hypotheses of the research. The number of items in the geographical scale, nature of challenges and roots and causes sections were 11, 8 and 12 items, respectively.

Results: Research findings from residents of the Urmia Lake and Central Iran basins shows that climate impacts on water crisis challenges cause conflicts between the people of these cities, people and law enforcement force, causing problems for law enforcement and enforcement agencies in these cities deeper. And to make the political factions more transparent, increasing political divisions and ethnic clashes, negating citizens' view of the country's political bureaucracy, heightening political protests to resolve the
water crisis, diminishing public participation in elections, social divisions, distrust of government officials and there is the potential for security crises in the cities in the face of chaos and political unrest. Results of T-test shows that the geographical scale of events is local and the mean of these events for Urmia Lake and Central Iran basins are 31.47 and 29.08, respectively. Citizens believe that the geographic scale of the challenges, tensions and security problems of the climate impacts of the water crisis in the cities of the catchments at the local level, but also affect the scale of the national crisis. Regarding the nature of the challenges, the mean obtained for the Urmia Lake and Central Iran basins are 23.49 and 22.64, respectively. Citizens view the nature of the security challenges of the effects of climate on the water crisis in the cities of these two watersheds in terms of managerial, social, environmental and political nature, respectively. Regarding the origins and causes of climate change challenges, the average water crisis obtained for the Urmia Lake and Central Iran basins are 44.33 and 40.68, respectively. Citizens of the Urmia Lake catchment have taken human-management and natural factors into account, such as inadequate environmental management and rapid population growth, respectively. Citizens of the central catchment, while natural, have prioritized natural factors over human factors and see the roots of climate impacts on the water crisis in frequent droughts, reduced rainfall, severe heat, and evaporation.

**Conclusion:** Climate change and the formation of the water crisis have affected different aspects of the lives of the residents of Urmia Lake and Central Iran basins. Crisis Capacity The security implications of climate crises, due to their impact on economic, social and political spheres, are not necessarily restricted to the boundaries of the cities of the Urmia Lake and Central Iran basins. But beyond their geographical boundaries and on a larger scale can affect the security of these cities. The social, political and economic consequences of the water crisis and water scarcity have a wide range that can lead to migration, displacement, unemployment, poverty spreading and marginalization in cities. The continuation of the water crisis can cause citizens to lose faith in the political legitimacy and efficiency of the central government and thus reduce public confidence in the political system.

**Keywords:** Water Crisis, Climate Change, Central Iran Basin, Urmia Lake, Drought.

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