

How to Reduce Flood Damage? Take a Look Back at the Recent Flood in Iran

Floods with 43% of occurrences are the most common natural hazard worldwide.^[1] Unfortunately, Iran has also not been escape from this disaster. From mid-March to April 2019, Golestan, Fars, Khuzestan, Lorestan, and some other provinces of Iran have been affected by widespread flash flooding. Totally, in 13 provinces of Iran, 70 people died due to floods and related events.^[2] Undoubtedly, the recent flood occurred very unpredictably and challenged the country disaster relief system once again, perhaps because the happening of such a widespread flood was really far from anticipation. Natural disasters such as floods have significant social and psychological impacts that not only relate to their characteristics, such as their volume and severity but also the social and economic scarcity that preceded it, causing severe fatalities and losses.^[3] In general, five key disaster management phases have been accepted, including, prediction; warning; emergency relief; rehabilitation; and reconstruction.^[4] Prediction phase comprises mitigation and preparedness activities to limit the unfavorable impact of natural disasters. The warning phase refers to timely and effective information that allows those exposed to a hazard to take action to avoid or reduce their risk and perform an effective response. Emergency relief phase includes a set of actions that are immediately followed by disaster to meet the basic needs and preserve life. Rehabilitation includes measures that are taken after the disaster to reduce the risk and improve the living conditions of the disaster suffers. Finally, reconstruction refers to the rebuilding of damaged living conditions of the suffering population. Similarly, in Iran, article 2 of the Crisis Management Law emphasizes the four essential steps to prevent and reduce the level of damage caused by natural disasters, including (1) prevention, (2) preparedness, (3) confronting, and (4) reconstruction and rehabilitation. Regarding the damages that have been occurred, it seems that the three initial phases of disaster management were neglected, and flood areas are passing through the crisis and entering a reconstructed phase.^[5]

It seems a series of causes increase the likelihood of recent flood damages, including inappropriate policies, construction in the riverside and river beds, human intervention, and manipulations in the nature and nonscientific management of this natural disaster.

Investing in training of governors before assigning responsibility to them to improve the resilience in the face of accidents has an important role to reduce damage. In addition, learning from missteps also can be of great help in minimizing the disastrous consequences. In this regard, the order of the establishment

of a National Flood Investigation Committee, independent of executive and administrative organizations under the responsibility of one of the major universities by the president Hassan Rouhani can be an effective step for analyzing the event and preventing similar incidents in future.^[6]

Mohammad Reza Fazel, Mehrdad Mahdian

Trauma Research Center, Kashan University of Medical Sciences, Kashan, Iran

Address for correspondence: Dr. Mehrdad Mahdian, Trauma Research Center, Kashan University of Medical Sciences, Kashan, Iran. E-mail: mmahdian78@gmail.com

ORCID:

Mohammad Reza Fazel: <https://orcid.org/0000-0001-5944-9230>

Mehrdad Mahdian: <https://orcid.org/0000-0002-9168-6372>

REFERENCES

- Serra-Llobet A. Resilience in Flood Risk Management; 2018. Available from: http://www.oecd.org/naec/Resilience_in_flood_risk_management_compressed.pdf. [Last accessed on 2019 Sep 16].
- Shojaee A. The Number of Recent Flood Victims Reached 70; 2019. Available from: <https://www.yjc.ir/fa/news/6887879/>. [Last accessed on 2019 Sep 16].
- Srivastava K. Disaster: Challenges and perspectives. *Ind Psychiatry J* 2010;19:1-4.
- Siang KM, Yazdanifard R. The Review of Crisis Management Facing Natural Disaster; 2011.
- How could we Stop the Recent Flood Damage; 2019. Available from: <https://www.tabnak.ir/fa/news/891665/>. [Last accessed on 2019 Sep 16].
- Order of the Establishment of National Flood Investigation Committee; 2019. Available from: <http://www.farsnews.com/lorestan/news/13980122000741>. [Last accessed on 2019 Sep 16].

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