



# Analysis of Gender Sensitivity of Turkey's Disaster Legislation to Create a Disaster-Resilient Society

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Disasters frequently occur in Turkey. Although there is comprehensive disaster legislation in Turkey, it has not been well studied in terms of gender sensitivity. This study aimed to evaluate the disaster legislation of Turkey in the context of gender equality. We investigated 17 non-technical disaster legislations to determine in what context and to what level disaster management is gender-sensitive in Turkey. We also carried out a workshop with experts from governmental bodies and nongovernmental organizations (NGOs), and academics to discuss the gender sensitivity of the legislations. We found that only two of the 17 legislations included a gender perspective. One legislation addressed gender equality and equity very well, while one was partially gender-sensitive and the others 5 were gender blind. The workshop was conducted in collaboration with the Disaster and Emergency Management Presidency (AFAD) and 33 participants from 19 organizations. The participants agreed that the disaster legislation did not include a gender perspective and acknowledged the importance of integrating a gender perspective into the disaster policies of Turkey. They recommended that the AFAD and emergency response units should have at least one female president or vice president, gender equality training should be provided to officers and managers of government and non-governmental disaster institutions, and a working group should be established to develop strategies that integrate gender perspectives into disaster and emergency policies. The disaster legislation of Turkey is not gender sensitive. It is important to incorporate language terminologies, understanding, and approaches that are sensitive to gender into disaster-related legislation and regulations.

**Keywords:** disaster; gender; legislation; Turkey

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## Introduction

In the twenty-first century, disasters have continued to deeply influence societies. However, the situation of humans in the face of disasters has changed from helplessness to being equipped with strategies for coping with disasters in modern times. Recently, with the advances in the understanding of societies, new strategies to cope with disasters and to be resilient to those events have been developed to respond to these realities. One of the fundamental progress in understanding societies in the face of disasters involves the gender perspective.

Communities and society are heterogeneous structures

that fundamentally consist of men and women. Therefore, every stage of disaster management should include women and men together to create disaster-resilient societies. Gender mainstreaming is a strategy that brings a gender perspective into disaster legislation, which is the backbone of disaster management, and it will also enable women to be empowered. In the Sendai Framework for Disaster Risk Reduction (2015-2030), adopted in March 2015, it is stated that empowering women is to include women in all stages of a disaster, such as response, recovery, rehabilitation, and reconstruction. It is also stated that the gender perspective should be integrated into all policies and practices, and it is essential to encourage women's leadership (UN 2015).

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Gender inequality is an unfinished agenda for women's movements and international bodies, which is still widespread worldwide. Gender policies that are rooted and reproduce the gender inequalities within the country also influence disaster legislation, which is an important part of disaster management. The Committee on the Elimination of Discrimination against Women (CEDAW) declared in its General Recommendation No. 37 that state parties should ensure that all policies and legislation related to disaster risk reduction and climate change, are gender-responsive and grounded human rights (CEDAW/C/GC/37, 2018).

The term resilience is a concept that has been used since the late 1970s in the field of disaster and gained visibility owing to its place in the Hyogo Framework for Action (HFA) 2005-2015 (Matyas and Pelling 2012). The development and strengthening of institutions, mechanisms, and capacities to build resilience to hazards are the three main strategic goals of the HFA (UNISDR 2005). According to Lindell and Prater, the extent of problems caused by disasters is the result of a community's resilience to disasters (Lindell and Prater 2003). Resilience refers to the strengths of society or the abilities to improve the capacities to tackle disasters (OECD 2013), which makes the system anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner. Resilience also involves ensuring the preservation, restoration, or improvement of the essential structures and functions of the system (IPCC 2012).

Designing legislation for disaster risk reduction is fundamental to the enhancement of security in society and the first step in mainstreaming disaster risk reduction. The legislation provides a framework around which strategies for risk reduction and reconstruction activities can be prepared. The law can be used to provide penalties and incentives by enforcing standards in construction, land use, tenants' rights, and by defining people's rights during relief and reconstruction (Pelling and Holloway 2006). Legislation can also empower agencies with new responsibilities for the disaster risk reduction (DRR) or establish new bodies to advise or undertake DRR work. Budgets, as well as policy remits, can be set by legislative acts. The legislative process should be a constructive period for generating informed support for DRR among the policymakers and implementers (Pelling and Holloway 2006).

International reports underline the consequences of inequalities between women and men and show how existing capacity is wasted and how the community's long-term prospects for development are hindered (World Economic Forum 2019; UNESCO 2020; EC 2020). The main internationally agreed strategy to end gender inequality is to support women's empowerment (UN 2015). Sendai Framework emphasized that "women and their participation are critical to effectively managing disaster risk and designing, resourcing and implementing gender-sensitive DRR policies, plans and programs; and adequate capacity building measures need to be taken to empower women for pre-

paredness as well as build their capacity for alternate livelihood means in post-disaster situations" (UN 2015). The Sendai Framework lists "strengthening disaster risk governance to manage disaster risk" as one of four priorities for action. The first step for promoting stronger governance for DRR is to improve relevant laws and regulations as well as strengthen their implementation (UN 2015).

In this paper, we aimed to present the results of the content analysis of Turkey's disaster legislation which we examined a perspective of gender sensitivity. Finally, we shared the results of the workshop conducted on how to ensure gender-sensitive disaster management in Turkey with stakeholders.

## Methods

This paper was a part of the big project called "Integration of Gender Perspective to Disaster Policies of Turkey", supported by the National Earthquake Research Program (UDAP) of Disaster and Emergency Management Authority (AFAD) in Turkey which was carried out in 2017-2020. This study consisted of two phases. In the first phase, we carried out a content analysis of Turkey's disaster legislation in the context of gender sensitivity. In the second phase of the study, we conducted a workshop with stakeholders to develop recommendations to support the efforts to improve gender-sensitive disaster management.

### *Content analyses of disasters legislations*

First, we searched 87 legislations related to disasters on the website of AFAD. Of them, 64 legislations were excluded from the scope of study because of completely included technical issues. Finally, we investigated 17 non-technical legislations related to disasters with a perspective of gender sensitivity. We prepared a control checklist by international guidelines to evaluate the legislation in terms of gender perspective. The control checklist consisted of (1) technical features of the law such as date, aim, and audience; and (2) a comprehensive list of terms such as "man/men", "woman/women", "girl/s", "boy/s", "gender", "right/s", "equality", "equity", "married", "widow", "single", "retired", orphan, etc. (3) We also reviewed the status of the legislation to have a security and social perspective or not; and (4) the status of the legislation to have a gender perspective and gender terminology or not. After a comprehensive review of the legislation, the gender sensitivity of the legislation was evaluated as "Gender-Blind", "Gender Neutral" and "Gender-Sensitive" proposed by Pincha (2008). The gender sensitivity of the law was determined by the joint decision of three researchers.

### *Workshop with stakeholders*

After investigating the legislation, a workshop that aimed to bring together the experts involved in all aspects of disaster management was held on May 14, 2018 in Ankara as a starting point for gender-sensitive disaster management. The workshop was conducted in collabora-

tion with the AFAD. The main goal of the workshop was to clarify whether Turkey’s disaster policies were gender sensitive. Representatives of various governmental bodies, non-governmental organizations (NGOs) and academics attended this activity (19 organizations and 33 participants). The workshop was conducted in two phases. In the first phase, the requirements and importance of integrating a gender perspective into Turkey’s disaster policies were discussed. The agenda was to determine how gender-sensitive legislation can be implemented, the implications of the laws for both genders, how gender-focused activities can be added to legislative acts, and what gender-sensitive indicators can be used to monitor the implementation of said legislation. Several international guidelines were used as references such as “Making Disaster Risk Reduction Gender-Sensitive: Policy and Practical Guidelines” (UNISDR et al. 2009), “Making Laws Work for Women and Men: A Practical Guide to Gender-Sensitive Legislation” (OSCE/ODIHR 2017), “Gender Handbook for Humanitarian Action” (IASC 2017), and “Gender Sensitive Disaster Management: A Toolkit for Practitioners” (Pincha 2008).

In the second phase of the workshop, the participants were divided into five groups to analyze the relevant legislation and determine the context and level of integration of the gender perspectives. The groups consisted of lawyers, public office holders, NGO representatives, and disaster service providers; they evaluated two or three legislations that were appropriate for their expertise. They noted their comments on gender issues in the legislation in the table given to them.

At the end of the evaluation, they also answered three questions:

1. What are the group’s views on the legislation in terms of gender perspectives in general?
2. Are there any issues in terms of gender inequality in the legislation?
3. What are your proposals for legislation development to ensure gender equality?

### Results

We found that out of 17 legislations, 15 legislations (88.2%) were gender-blind, one legislation (5.9%) was gender-neutral (National Earthquake Strategy and Action Plan-2023, UDSEP-2023), and one legislation (5.9%) was partially sensitive to gender (Directive on Establishment, Management and Operation of Temporary Accommodation Centers) (Table 1). Only two pieces of legislation included a gender perspective, of which one legislation addressed gender equality and equity. In the National Earthquake Strategy and Action Plan 2023 (UDSEP-2023), women were categorized as risk groups. They were evaluated together with children and people with disabilities as a risk group.

The frequency of the concepts determined in the laws is given in Fig. 1. While the concept of “shelter” (258) was used the most, the concept of “woman” was used ten times and the concept of “gender” is used once (Fig. 1).

In the workshop, the working groups prepared reports and presented their findings at the end of the meeting. They assessed the current state of legislation and identified the areas for improvement and progress. Several suggestions and assessments were made by the groups. The most important assessment was that there was a lack of gender sensitivity in the legislation and a lack of regulation to support women in the various stages of a disaster. The key suggestions based on the findings of the workshop are as follows:

At least one vice president of the AFAD, municipal authority and emergency response units should be a woman. The board of the Turkey Disaster Risk Reduction

Table 1. Distribution of legislations in terms of a gender perspective.

Type of legislations	n	%
Gender-blind	15	88.2
Gender-neutral	1	5.9
Partially sensitive to gender	1	5.9

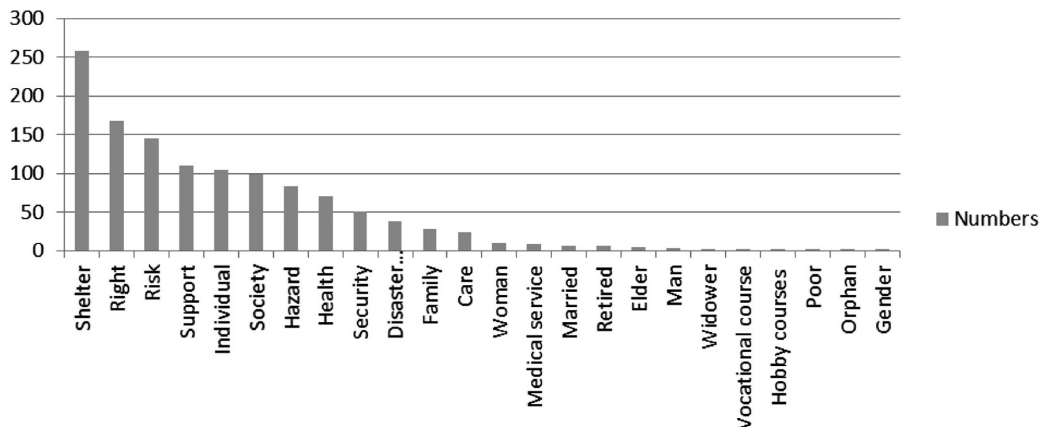


Fig. 1. The frequency of concepts found through a systematic search in 17 legislations.

Platform should keep gender equality in mind.

Gender equality training should be provided periodically to officers and managers of the AFAD, NGOs, and volunteers.

Gender balance should be considered in civil defense training. The contents of the training should also be gender sensitive.

A working group should be established to develop strategies to integrate a gender perspective into disaster and emergency policies.

Losses must be assessed according to sex and age (women, men, girls, and boys), and reports should be gender sensitive.

Arrangements should be made, including measures such as social assistance and loans, for positive discrimination of women, especially after a disaster.

Various programs and facilities for the inclusion of women in working life and empowerment of women through economic freedom should be organized.

Ownership rights should be determined in terms of gender, which should take into account whether the women and their spouse/s live together or whether they are separated.

Toilets, breastfeeding rooms, and other needs of women in the shelter areas should be provided.

### Discussion

The problems related to gender equality and equity are critical issues in Turkey and are not restricted to the field of disaster management. According to the 2020 Global Gender Gap Report of the World Economic Forum, Turkey ranked 130th out of 153 countries and was the lowest-ranked country in the European region in terms of the gender gap. The report stated that Turkey experienced a widening of the gender gap in political empowerment, healthcare, and survival since 2013 (World Economic Forum 2019).

The problems on gender equality and equity in Turkey have reflections in the field of disaster management. Turkey officially reported that 32,962 people died in the Erzincan Earthquake in 1939; 18,373 people died in the Marmara earthquake in 1999; 644 people died in the Van earthquake in 2011; and 117 people died and several people were injured in the İzmir Province earthquake in 2020 (TMMOB 2017; Ozmen 2000; AFAD 2014, 2020b). However, there is no information about how many women/girls and men/boys had died or had been injured in these disasters. The fact that Turkey does not highlight the sex distribution in its casualty tolls reflects the lack of gender sensitivity. The report of the “Parliamentary Research Commission”, which aimed to determine the measures to be taken in earthquake management and was published on December 1, 2010, drew attention to the very limited number of women working in disaster-related institutions as service providers during a disaster (TBMM 2010). Moreover, a very small number of women contributed

(23.4%) to the “National Earthquake Strategy and Action Plan committee (2012-2023)” (AFAD 2011), and female representation in the AFAD is quite low (10%) (AFAD 2018). The AFAD was organized as a national agency under the Ministry of Interior in 2009 by Law No. 5902 to single-handedly coordinate and exercise legal authority in cases of disasters and emergencies. Furthermore, the AFAD works to prevent disasters and minimize disaster-related damages, plan and coordinate the post-disaster response, and promote cooperation among various government agencies. It currently has 81 provincial directorates across Turkey, in addition to 11 search and rescue units (AFAD 2020a).

The Marmara Earthquake which caused the greatest destruction in the recent history of the country occurred at 03:02 AM on August 17, 1999, and many women could not go out to save themselves because of being in night suits and no head covers. After the Van-Erciş Earthquake occurred on Sunday, October 23, 2011, the women were mostly at home with their children, while a significant proportion of the men were outside even though it was a holiday (Inal and Erbaydar 2016). The surveys carried out after the earthquakes in Turkey indicated that post-traumatic stress disorder, depression, and suicide ideation levels were higher among women than among men (Basoglu et al. 2002, 2004; Aksaray et al. 2006; Vehid et al. 2006). After the Van-Erciş earthquake, a community work program was carried out. The program included 5,427 men and 514 women; only 9% of the participants were women (AFAD 2014). It was also reported that most of the women left the earthquake region due to the lack of job opportunities (UNICEF 2015).

In the study on 87 legislations, 17 non-technical legislations were investigated and 15 legislations were found as gender blind. This level is quite high and the need for improvement and intervention in this regard is obvious. The adoption and implementation of gender-sensitive approaches in a society can be ensured by the guarantee of laws. In the light of these facts, it would be beneficial to carry out a gender analysis of disaster policies to develop an integrated disaster management process that is sensitive to gender, to identify goals appropriately, to deliver existing resources to the groups most in need, to deliver appropriate services, to meet real and current needs, to reduce the vulnerability to potential disasters in the future, and to prevent secondary problems in disasters.

In conclusion, our legislation review and workshop results show that Turkey’s disaster legislation was “almost completely gender insensitive.” Only the national action plan for earthquakes refers to gender issues. However, in this plan, women were often placed in “vulnerable/vulnerable groups” and “groups with special needs”. Moreover, women were assessed along with children, older people, and people with disabilities in the legislation. The workshop allowed discussions with experts on how best to proceed in this area. Experts also agree that the legislation was

not gender-sensitive, and they made some suggestions for making disaster legislation gender-sensitive. It is necessary to increase training and awareness efforts to integrate a gender perspective into disaster-related legislation in Turkey.

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### Conflict of Interest

The authors declare no conflict of interest.

### References

- AFAD (T.C. Basbakanlık Afet ve Acil Durum Yonetimi Baskanlığı) (2011) Ulusal Deprem Stratejisi ve Eylem Planı-2023 (UDSEP-2023). Date: 9/8/2011. Decision No: 2011/1. <http://www.resmigazete.gov.tr/eskiler/2011/08/20110818-13.htm>. [Accessed: April 5, 2021] (in Turkish).
- AFAD (T.C. Basbakanlık Afet ve Acil Durum Yonetimi Baskanlığı) (2014) Mudahale, iyilestirme ve sosyoekonomik acidan 2011 Van depremi. Ankara. [https://www.afad.gov.tr/upload/Node/17944/xfiles/mudahale\\_iyilestirme-ve-sosyoekonomik-acidan-2011-van-depremi-raporu2.pdf](https://www.afad.gov.tr/upload/Node/17944/xfiles/mudahale_iyilestirme-ve-sosyoekonomik-acidan-2011-van-depremi-raporu2.pdf) [Accessed: August 10, 2020] (in Turkish).
- AFAD (T.C. Basbakanlık Afet ve Acil Durum Yonetimi Baskanlığı) (2018) Teskilat Semasi. <https://www.afad.gov.tr/tr/2218/Teskilat-Semasi> [Accessed: August 15, 2018] (in Turkish).
- AFAD (T.C. Basbakanlık Afet ve Acil Durum Yonetimi Baskanlığı) (2020a) About Us. <https://en.afad.gov.tr/about-us> [Accessed: August 26, 2020] (in Turkish).
- AFAD (T.C. Basbakanlık Afet ve Acil Durum Yonetimi Baskanlığı) (2020b) İzmir Seferihisar Depremi-Duyuru 81 (26.11.2020 - 21.00). <https://www.afad.gov.tr/izmir-seferihisar-depremi-duyuru-81-26112020---2100> [Accessed: April 12, 2021] (in Turkish).
- Aksaray, G., Kortan, G., Erkaya, H., Yenilmez, C. & Kaptanoğlu, C. (2006) Gender differences in psychological effect of the August 1999 earthquake in Turkey. *Nord. J. Psychiatry*, **60**, 387-391.
- Basoglu, M., Salcioglu, E. & Livanou, M. (2002) Traumatic stress responses in earthquake survivors in Turkey. *J. Trauma Stress*, **15**, 269-276.
- Basoglu, M., Kilic M., Salcioglu, E. & Livanou, M. (2004) Prevalence of posttraumatic stress disorder and comorbid depression in earthquake survivors in Turkey: An epidemiological study. *J. Trauma. Stress*, **17**, 133-141.
- CEDAW/C/GC/37 (Committee on the Elimination of Discrimination against Women General Recommendation No. 37) (2018) The gender-related dimensions of disaster risk reduction in the context of climate change. [https://tbinternet.ohchr.org/\\_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW/C/GC/37&Lang=en](https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW/C/GC/37&Lang=en) [Accessed: April 5, 2021].
- EC (European Commission) (2020) Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. Brussels. Com (2020) 152 Final.
- IASC (Inter-Agency Standing Committee) (2017) The Gender handbook for humanitarian action. [https://reliefweb.int/sites/reliefweb.int/files/resources/iasc\\_gender\\_handbook\\_2017.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/iasc_gender_handbook_2017.pdf) [Accessed: July 25, 2018].
- Inal, E. & Erbaydar, N.P. (2016) 2012-2023 Ulusal Deprem Stratejisi ve Eylem Planı'nın toplumsal cinsiyet bakış açısı ile incelenmesi. *Fe Dergi*, **8**, 33-49.
- IPCC (2012) Glossary of terms. In: *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation* edited by Field, C.B., Barros, V., Stocker, T.F., Qin, D., Dokken, D.J., Ebi, K.L., Mastrandrea, M.D., Mach, K.J., Plattner, G.-K., Allen, S.K., Tignor, M. & Midgley, P.M. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC), Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 555-564.
- Lindell, M.K. & Prater S.C. (2003) Assessing community impacts of natural disasters. *Natural Hazards Review*, **4**, 176-185, TDV/DR 010-53, 2000.
- Matyas, D. & Pelling, M. (2012) *Disaster Vulnerability and Resilience: Theory, Modelling and Prospective*, Foresight, London, UK, 159-178.
- OECD (2013) What Does "Resilience" Mean for Donors? An OECD Factsheet. OECD. <http://www.oecd.org/dac/May%2010%202013%20FINAL%20resilience%20PDF.pdf> [Accessed: April 5, 2021].
- OSCE/ODIHR (The OSCE Office for Democratic Institutions and Human Rights) (2017) Making Laws Work for Women and Men: A Practical Guide to Gender-Sensitive Legislation, Organization for Security and Co-operation in Europe, Warsaw.
- Ozmen, B. (2000) 17 Agustos 1999 İzmit Korfezi Depreminin Hasar Durumu (Rakamsal Verilerle), TDV/DR010-53, Türkiye Deprem Vakfı, Ankara, 132s, (in Turkish).
- Pelling, M. & Holloway, A.J. (2006) Legislation for mainstreaming disaster risk reduction. Tearfund. [https://www.preventionweb.net/files/1198\\_DRRlegislation1.pdf](https://www.preventionweb.net/files/1198_DRRlegislation1.pdf) [Accessed: April 5, 2021].
- Pincha, C. (2008) *Gender Sensitive Disaster Management: A Toolkit for Practitioners*, Oxfam International, UK.
- TBMM (Türkiye Büyük Millet Meclisi) (2010) Deprem riskinin araştırılarak deprem yönetiminde alınması gereken önlemlerin belirlenmesi amacıyla kurulan meclis araştırması komisyonu raporu Sayısı: 549. <https://acikerisim.tbmm.gov.tr/xmlui/bitstream/handle/11543/132/ss549.pdf?sequence=1&isAllowed=y> [Accessed: April 5, 2021] (in Turkish).
- TMMOB İstanbul II Koordinasyon Kurulu (2017) İstanbul deprem raporu. [http://evreninsirlari.net/dosyalar/146\\_s09\\_04.pdf](http://evreninsirlari.net/dosyalar/146_s09_04.pdf) [Accessed: April 5, 2021] (in Turkish).
- UN (United Nations) (2015) Sendai Framework for Disaster Risk Reduction 2015-2030. [https://www.preventionweb.net/files/43291\\_sendaiframeworkfordren.pdf](https://www.preventionweb.net/files/43291_sendaiframeworkfordren.pdf) [Accessed: April 5, 2021].
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2020) UNESCO and the promise of gender equality: key actions of 2018-2019. <https://unesdoc.unesco.org/ark:/48223/pf0000372716> [Accessed: April 5, 2021].
- UNICEF (T.C Aile ve Sosyal Politikalar Bakanlığı) (2015) Van -

Erciş Depremleri Sonrası Yürütülen Psikososyal Destek Programlarının Genel değerlendirilmesi. Değerlendirme raporu.

<https://www.unicef.org/turkey/media/5471/file/VAN%20ERC%C4%B0%C5%9E%20Depremleri%20Sonras%C4%B1%20Y%C3%BCr%C3%BCt%C3%BClen%20Psikososyal%20Destek%20Programlar%C4%B1n%C4%B1n%20De%C4%9Ferlendirilmesi%202015.pdf>

[Accessed: April 5, 2021] (in Turkish).

UNISDR (currently known UNDRR) (2005) Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. World Conference on Disaster Reduction, Kobe, Hyogo, Japan.

<https://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-action-english.pdf>

[Accessed: April 5, 2021].

UNISDR (United Nations International Strategy for Disaster Risk Reduction); UNDP (The United Nations Development Programme); IUCN (The International Union for Conservation of Nature) (2009) *Making disaster risk reduction gender-sensitive: Policy and practical guidelines*. UN, Geneva, 52-54.

Vehid, H.E., Alyanak, B. & Eksi, A. (2006) Suicide ideation after the 1999 earthquake in Marmara, Turkey. *Tohoku J. Exp. Med.*, **208**, 19-24.

World Economic Forum (2019) Global Gender Gap Report 2020. Insight Report. ISBN-13: 978-2-940631-03-2.

[http://www3.weforum.org/docs/WEF\\_GGGR\\_2020.pdf](http://www3.weforum.org/docs/WEF_GGGR_2020.pdf)

[Accessed: April 5, 2021].