

# TURKEY

## Current Risks in Cultural and Natural Heritage Protection

In Turkey's 2011–2013 report for *Heritage at Risk* (p. 150), the impacts of dam constructions (i.e. Yortanlı Dam and Ilisu Dam) on the Roman bath complex of Allianoi and on the archaeological sites and historic cultural traces of Hasankeyf, were noted. In the last years, development pressures have continued to affect the heritage values of the country. Housing and commercial development, transportation and water infrastructure development have been significant concerns for several World Heritage properties since 2016, as mentioned in several decisions of the World Heritage Committee and in State of Conservation (SoC) reports prepared by Turkey (WHC 2016, 2018, 2019) (see Table 1). Sadly, threats to Diyarbakır Fortress and Hevsel Gardens Cultural Landscape, a World Heritage Site in southeastern Turkey, in connection with civil unrest were also stated in the UNESCO World Heritage Committee meetings, and the related SoC reports since 2016 (WHC 2019). The State of Emergency in the area has ended.

Management and institutional factors (e.g. incomplete management plans, insufficient legislative protection, and need to improve the monitoring system) have been other concerns for several World Heritage Sites, including Historic Areas of İstanbul (WHC 2018); Pergamon and its Multi-Layered Cultural Landscape (WHC 2016); Archaeological Site of Ani (WHC 2018); and Ephesus (WHC 2019). It was noted in the World Heritage Committee decisions that Turkey has made efforts to address the main concerns of the Committee for each property and has made progress with regard to the management and institutional factors affecting those properties. However, the country needs to continue with the completion and implementation of management plans, and with the improvement of the legislative protection and the monitoring system. We should note that World Heritage properties are generally better protected than other heritage properties because there are buffer zones and other management mechanisms. Several places of cultural importance have been exposed to other human-caused risks, such as illegal construction, inappropriate use, neglect, lack of use and maintenance, treasure hunting, and vandalism (TAY 2019).

Primary factors	Secondary Factors	World Heritage Sites and the Years of SoC reporting
Management and institutional factors	Management System/management plan	Historic Areas of İstanbul (2017, 2018); Pergamon and its Multi-Layered Cultural Landscape (2016); Archaeological Site of Ani (2018); Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (2019); Ephesus (2017, 2019)
	Legal Framework	Ephesus (2017, 2019)
	Management activities	Historic Areas of İstanbul (2017, 2018)
Buildings and Development	Housing	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (2019); Historic Areas of İstanbul (2017)
	Commercial Development	Historic Areas of İstanbul (2018)
Transportation Infrastructure	Ground Transport Infrastructure	Diyarbakır (2019); Ephesus (2017, 2019); Historic Areas of İstanbul (2017, 2018)
	Effects arising from use of transportation infrastructure	Pergamon and its Multi-Layered Cultural Landscape (2016)
	Underground transport infrastructure	Historic Areas of İstanbul (2017, 2018)
Utilities or Service Infrastructure	Water Infrastructure	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (2019)
Social/cultural uses of heritage	Impacts of tourism/visitor/recreation	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (2019)
Other human activities	Civil unrest	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (2016,2017,2018)
Sudden ecological or geological	Earthquake	Archaeological Site of Ani (2018)

Table 1: Primary and secondary factors affecting the World Heritage properties in Turkey. Source: Prepared by the authors based on the World Heritage Committee decisions.



Fig. 1: Rainfall-induced landslide affecting rural settlements in Arhavi, Artvin, November 2016 (photo: AFAD)

Cultural assets in Turkey are not only threatened by various human-induced factors but also by catastrophic natural events. The prevalence and impact of natural disasters across Turkey are a severe issue. According to the report of the INFORM Global Risk Index (INFORM 2018), which measures the risk of humanitarian crises and disasters in 191 countries, Turkey is in the group of countries with high levels of risk; it also has one of the highest values in the hazard and exposure dimension. The hazard and exposure dimension of INFORM measures hazardous events that could occur and the people or assets potentially affected by them. The three-year trend (2016–2018) of the INFORM Global Risk Index shows that the level of risk in Turkey has increased.

Concerning natural disasters, the highest risk component is an earthquake followed by a tsunami and flood (ibid). In 1999, we experienced İzmit earthquake which occurred on 17 August in the northwestern province of Kocaeli, killing 18,373 people and injuring more than 500 (AFAD 2018a). The 2011 Van-Erciş and Van-Erdemit earthquakes also caused devastating damage, killing 644 people and injuring 1,966 (AFAD 2011; 2019a). We have not seen a major earthquake (magnitude 6 or higher) since the 2011 Van earthquakes (AFAD 2011). Experts have often warned that İstanbul is at risk of a big earthquake ever since the 1999 İzmit earthquake occurred. An earthquake measuring 5.8 magnitude shook İstanbul on 26 September 2019 (BU 2019), slightly injuring eight people and causing some damage to buildings. This earthquake triggered fears of an impending one and raised concern that the next great earthquake striking İstanbul would have a devastating effect on the city which over the decades has developed with uncontrolled urbanisation and population growth. Hence, we have to be prepared for a major earthquake, which may strike İstanbul or another earthquake-prone city in Turkey and may lead to severe casualties and a loss of significant heritage values. Numerous cultural assets, historic settlements, including such World Heritage sites as Historic Areas of İstanbul, Bursa and Cumalıkızık, the city of Safranbolu, Xanthos-Letoon, Hierapolis-Pamukkale, Pergamon and its Multi-Layered Cultural Landscape, the Archaeological Site of Troy and their surroundings are located in earthquake zones.

Catastrophic losses of life and physical destruction are not only caused by earthquakes but also by floods, landslides, avalanches and mudflows, with disasters constantly occurring across the regions, while their frequencies and impacts change from one region to another (AFAD 2018b) (see Fig. 1). For instance, in 2019, severe threats to lives, livelihoods and cultural and natural assets



Fig. 2: Huge forest fire affecting more than 5,000 hectares of land in İzmir, August 2019 (photo: İzmir Metropolitan Municipality)

were caused by forest fires in the Aegean region (IBB 2019) and by flooding in the Black Sea region (TOB 2019; AFAD 2019b) (see Fig. 2). We remain grateful that the impact on life has been much less than that from previous disasters, while the economic impacts of these events, particularly in rural areas, have been sorely felt. The lack of information on the extent of loss of significant cultural and natural heritage values as a result of natural events is a significant issue. National statistics on cultural heritage sites destroyed or severely damaged by earthquakes or other natural disasters do not exist.

### Protection and management

A significant achievement occurred by the release of Turkey's first National Earthquake Strategy and Action Plan 2012–2023 on 18 August 2011 in the Official Gazette after its approval by the High Council of Disaster and Emergency in 2010 (AFAD 2010). The plan sets out national strategies and objectives, one of which is to safeguard cultural heritage from earthquakes, and the actions to achieve that goal:

- completing inventories of historic buildings,
- identifying the safety of their structural systems,
- seismic retrofitting of structures that are not structurally sound,
- developing and providing guidelines regarding methods, design and manufacturing of structural interventions, and
- developing methods for reducing vulnerabilities of museum collections.

The leading public institution responsible for realising these actions is the Ministry of Culture and Tourism, and the related institutions include the Grand National Assembly of Turkey, Disaster and Emergency Management Presidency, the Pious Foundation, the Union of Municipalities of Turkey, universities and professional associations (ibid). National-level emergency preparedness and response planning are carried out by the Disaster and Emergency Management Presidency. Turkey's Disaster Response Plan released by the Disaster and Emergency Management Presidency in 2013 identifies roles and responsibilities of service groups and coordination units that will work during responses to disasters and emergencies; it also sets underlying principles (AFAD 2013), such as ensuring safety and protection of cultural assets and transport of movable components.

The management of disaster risks for safeguarding cultural heritage is explicitly mentioned in the 10th and 11th Development Plans of Turkey (MoD 2014, PSB 2019). Following the goals, objectives and policies of the 10th Development Plan (2014–2018), the Ministry of Culture and Tourism (MoCT), the principal public organisation that has the authority and responsibility of conservation and management of cultural properties in Turkey (Act no.2863 1983), developed its Strategic Plan (MoCT 2015). The Strategic Plan sets out the Turkish Government's strategic vision, objectives and priorities and the actions it would take to support and promote Turkey's remarkable natural and cultural heritage. While in some cases there has been an improvement in the state of conservation of cultural assets in Turkey through the activities of the MoCT, key threatening factors remain. Many have been identified above, and those listed below remain, as additional issues, identified in the Strategic Plan 2015–2019:

- incomplete inventories;
- impacts from illicit excavations of archaeological sites and trafficking incidents;
- inadequate or lack of involvement with local communities;

- inadequate legal frameworks and difficulties in making essential legal changes within reasonable time;
- insufficiency of financial resources; and
- lack of adequate information and information systems management.

These managerial and institutional factors increase the vulnerability of cultural assets to both natural and human-induced hazards. Decreasing vulnerabilities and increasing the resilience of historic environments through preparedness to cope with natural disasters have to be prioritised. While Turkey has a national earthquake strategy and a national disaster response plan, they are still at the policy level. Comprehensive risk management plans and strategies for all heritage components are yet to be developed at local and property scales in collaboration with related public institutions, local administrations, non-governmental organisations, local communities, and various other stakeholders. Cultural heritage preservation laws and regulations need to be strengthened for effectively managing disaster risks to cultural heritage. Briefly, capacity development, collaboration with related stakeholders, preparation and implementation of disaster risk management plans are essential topics to be considered.

Sibel Yıldırım Esen and A. Güliz Bilgin Altınöz  
Middle East Technical University

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