



Gateway of Hell: Turkmenistan

Why in News

Recently, Turkmenistan has decided to find a way to extinguish a fire in a huge [natural gas](#) (Mixture of methane, carbon dioxide, nitrogen, hydrogen sulphide and helium) the **Darvaza gas crater** also known as the '**Gateway to Hell**'.

- Turkmenistan has been at the **centre of methane leakages**. Out of the 50 most severe methane gas leakages onshore oil and gas operations in 2019, 31 were in Turkmenistan.
- In addition to this, **one of these leakages, “had a climate impact roughly equivalent to the annual emissions of all the cars in Arizona”**.

Severity of Methane Leaks

- Methane is the primary contributor to the **formation of ground-level ozone, a hazardous air pollutant and greenhouse gas**, exposure to which causes 1 million premature deaths every year.
- Methane is also a powerful greenhouse gas. **Over a 20-year period, it is 80 times more potent at warming** than carbon dioxide.

Key Points

- About: [//](#)



- Located in the Karakum desert, 260 kilometres away from Turkmenistan’s capital, Ashgabat, the **crater has been burning for the last 50 years**.
- The crater has become **a significant tourist attraction in the country**. In 2018, the country’s president officially renamed it as the **“Shining of Karakum”**.

▪ Origin of Crater:

- The details of the origin are not actually known but it has been said that the crater **was created in 1971 during a Soviet drilling operation.**
 - Soviet geologists were drilling for oil in the Karakum desert when **they hit a pocket of natural gas by mistake, which caused the earth to collapse** and ended up forming three huge sinkholes.
 - A **sinkhole** is a depression in the ground that has no natural external surface drainage. These are regions formed **when underlying limestone bedrock is dissolved** by groundwater.
- Locals have also said that the crater was formed in the 1960s but wasn't lit on fire until the 1980s.
- It has also been said that since oil and gas were very expensive commodities during Soviet rule, **the formation of the crater has remained a confidential piece of information.**

▪ Reason for Closing:

- It **negatively affects both the environment and the health** of the people living nearby.
- **Loss of valuable natural resources** for which they can get significant profits and use them for improving the wellbeing of people.
- Hinders the **accelerated industrial development of the subsoil riches** of central Karakum.

[Source: IE](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/gateway-of-hell-turkmenistan>

