

03 Oct 2020: PIB Summary & Analysis

TABLE OF CONTENTS

- 1. Atal Tunnel
- 2. <u>RAISE 2020</u>
- 3. BreathPrint

1. Atal Tunnel

Context:

Prime Minister dedicates to the nation the Atal Tunnel.

About the Atal Tunnel:

- The Atal Tunnel at Rohtang is at an altitude of above 3,000 metres in Himachal Pradesh.
- The 9.02 km-long-tunnel, built by the Border Roads Organisation (BRO), is the world's longest highway tunnel and connects Manali to Lahaul-Spiti valley.
- It provides all-weather connectivity to the landlocked valley of Lahaul-Spiti, which remains cut-off for nearly six months in a year as the Rohtang Pass is usually snow-bound between November and April.
- Before the tunnel construction, the Lahaul Valley used to remain closed for vehicular movement due to bad weather conditions.
- But now, the people of the Valley will have all-year-round connectivity.
- The tunnel reduces the distance by 46 km between Manali and Leh and the travel time by about 4 to 5 hours.
- It is expected to boost tourism and winter sports in the region.
- The tunnel, also significant from the military logistics viewpoint, will provide better connectivity to the armed forces in reaching Ladakh.
- In 2019, the Union Cabinet decided to name the tunnel as 'Atal Tunnel' to honour former Prime Minister Atal Bihari Vajpayee for his contributions. The foundation stone for the tunnel had been laid by Vajpayee in 2002.



2. RAISE 2020

Context:

The Ministry of Electronics and Information technology (MEITY) unveiled RAISE 2020 – a global virtual summit on <u>Artificial Intelligence (AI)</u>.

Know more about RAISE 2020 in PIB dated Sep 24, 2020.

3. BreathPrint

Context:

Scientists at S. N. Bose National Centre for Basic Sciences find new "BreathPrint" for detecting ulcercausing gastric pathogen.

Details:

- Scientists have found a method for early diagnosis of bacteria that causes peptic ulcer, with the help of a biomarker called 'BreathPrint' found in the breath.
- The team spotted a new biomarker for the diagnosis of *Helicobacter pylori* in semi-heavy water (HDO) in human exhaled breath.
 - Helicobacter pylori, a common infection which may turn serious if it is not treated early, is usually diagnosed by the traditional and invasive painful endoscopy and biopsy tests which are not suitable for early diagnosis and follow up.
- The team has used 'study of different water molecular species in human breath, also called 'Breathomics' method to explore different water isotopes in human exhaled breath.
- The team has already developed a patented 'Pyro-Breath' device for diagnosis of various gastric disorders and H. pylori infection, which are under the process of technology transfer.