

Prelim Bits 14-03-2017

Bribery rate in Asia-Pacific

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- Recently, Transparency International has conducted a survey in 16 Asia-Pacific countries to rank them according to the bribery rate.
- India has the highest bribery rate of 69% when trying to access basic services like education or healthcare.
- China had 26% and Japan had the lowest with 0.2%.
- In ranking countries according to increase in corruption level over the past years, China topped followed by Indonesia and Malaysia.
- Police topped the list of public services most often demanding a bribe.
- In India, 73% of the poorest people paid a bribe for public services.
- Transparency International also publishes another index called "Corruption Perception Index", in which India ranks at 79^{th} position in 2017 among 176 countries.
- Belarus, Brazil, & China shared the same ranks as India and the list was topped by Denmark and New Zealand.

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India's largest floating Solar PV Plant

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• Recently, NTPC has installed India's largest floating solar photovoltaic (PV) plant at Rajiv Gandhi Combined Cycle Power Plant (RGCCPP) at Kayamkulam in Kerala.

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• Such floating solar panel system saves land usage and could be installed on saline water environment.

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• It has various benefits like conserving water through reduction of evaporation, increased power generation due to cooling effect on the panels, reduced installation time.

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CRISPR

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• CRISPR stands for Clustered Regularly Interspaced Short Palindromic Repeats.

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 CRISPR - Cas9 is a most prominent genome editing technique by targeting specific stretches of genetic code to edit DNA at precise locations.

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- The technique allows researchers to permanently modify genes in living cells and organisms and to correct mutations at precise locations in the human genome to treat genetic causes of disease.
- \bullet It can be used to target multiple genes simultaneously and can also activate gene expression instead of cutting the DNA. $\ensuremath{\backslash n}$
- Recently, a team in china has corrected genetic mutations in three normal human embryos using this technique and it is the first to describe the results of using CRISPR in viable human embryo.

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Car Nicobar-class patrol vessel

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• The Indian Navy has recently commissioned a new Car Nicobar-class highspeed offshore patrol vessel, **the INS Tillanchang.**

 \bullet The class and its vessels are named after an island in the Andaman. $\ensuremath{^{\backslash n}}$

- They are the **first water jet propelled vessels** of the Indian Navy.
- They can reach top speeds of over 35 knots (65 km/h).
- \bullet Production of the class was fast-tracked after the 2008 Mumbai attacks.
- The vessels are designed as a cost-effective platform for patrol, anti-piracy and rescue operations in India's Exclusive Economic Zone, Humanitarian Assistance and Disaster Relief.
- \bullet The vessels can also be used for the interception of fast moving surface craft, anti-smuggling and fisheries protection. $\$

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