Prelim Bits 02-12-2017

Coastal Shipping Agreement

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- Member Countries of BIMSTEC recently discussed the draft text of Coastal Shipping Agreement drafted by the Ministry of Shipping, Government of India.
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- It would apply to coastal shipping (i.e) shipping within 20 nautical miles of the coastline.
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- The objective is to facilitate coastal shipping by promoting lot of cargo movement between the member countries through the cost effective, environment friendly and faster coastal shipping routing.
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- It is expected to give a boost to trade between the member countries.
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- Coastal ship movements require smaller vessels and lesser draft, and therefore, involve lower costs.
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- BIMSTEC grouping - Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand
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Sharavathi Project

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- Sharavathi Project is a pumped storage scheme planned by Karnataka Power Corporation.
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- It involves constructing an upstream reservoir across one of the tributary of Sharavathi River.
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- There will be one underground power station which will utilise the water from the upstream and downstream reservoir for power generation with a

capacity of 2000 MW of electricity.
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- The underground pipeline connects two reservoirs such as Talakalale and Gerusoppa reservoir. And a power plant is situated underneath a reserve forest.
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- The forest comes between the sharavathi wildlife sanctuary near Jog forest reserve and Aghanashini Lion Tailed Macaque conservation reserve.
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- It got pre-construction clearance from the Ministry of Environment and Forests.
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Pumped Storage Scheme

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- Pumped storage hydro plants store and generate energy by moving water between two reservoirs at different elevations.
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- During times of low electricity demand, such as at night or on weekends, excess energy is used to pump water to an upper reservoir.
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- The turbine acts as a pump, moving water back uphill.
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- During periods of high electricity demand, the stored water is released through turbines.
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- A pumped-storage plant works much like a conventional hydroelectric station, except the same water can be used over and over again.
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Floating Solar Power Plant

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- India’s largest floating solar power plant project at the Banasura Sagar Dam in Wayanad district is completed and going to be commissioned soon.
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- It has the generating capacity of 500 Kilo watt and it will be fed to the Kerala State Electricity Board grid using underground cables.
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- It can be more efficient than their ground-mount counterparts due to the water body’s cooling effect on the modules.
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- They collect less dust which cuts down on maintenance and they also preserve water levels through shading.
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- Earlier in the year NETRA (NTPC Energy Technology Research Alliance), installed a 100kW floating solar plant at Kayamkulam, which is also in Kerala.
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Frequent cyclones in Arabian Sea

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- A recent study by researchers has found that extremely severe cyclones are becoming more frequent in the Arabian Sea.
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- Researchers pointed global warming as a reason for increasing frequency of cyclones.
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- Normally, Arabian Sea sees one extremely severe cyclone in every 4 years.
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- Cyclones in Arabian Sea –
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1. 1998 – 2013 - Only 5 extremely severe cyclones
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2. 2014 - Cyclone Nilofar hitting Gujarat.
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3. 2015 – Two cyclones Chapala and Megh hitting the Yemeni island of Socotra.
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4. 2017 – Cyclone Ockhi.
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- There are two factors contributed to the increased severity of Arabian Sea cyclones, particularly post-monsoon.
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- First, Arabian Sea surface becomes warmer than the other ocean basins during this period.
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- Second, due to the interplay of global warming, climate variability and weather changes, winter monsoon circulation has been weakening over the years.
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Source: The Hindu, PIB, BusinessLine

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