

## **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

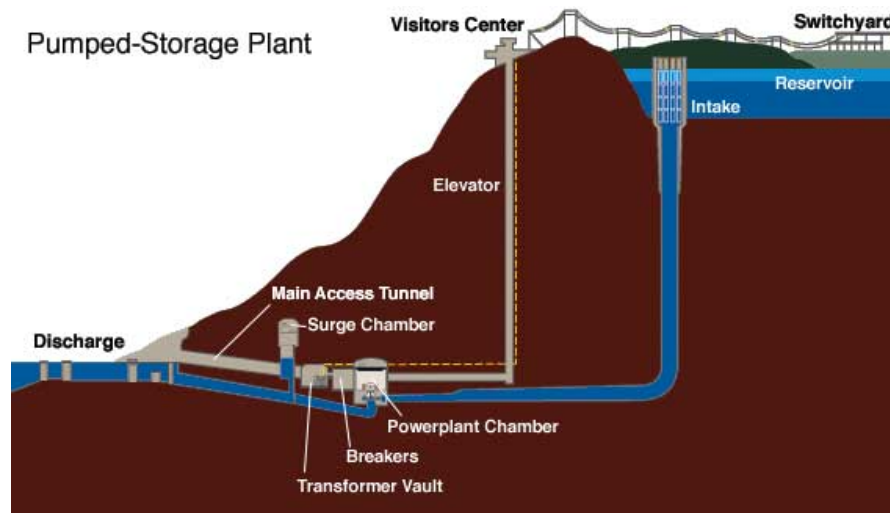
capacity of 2000 MW of electricity.

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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

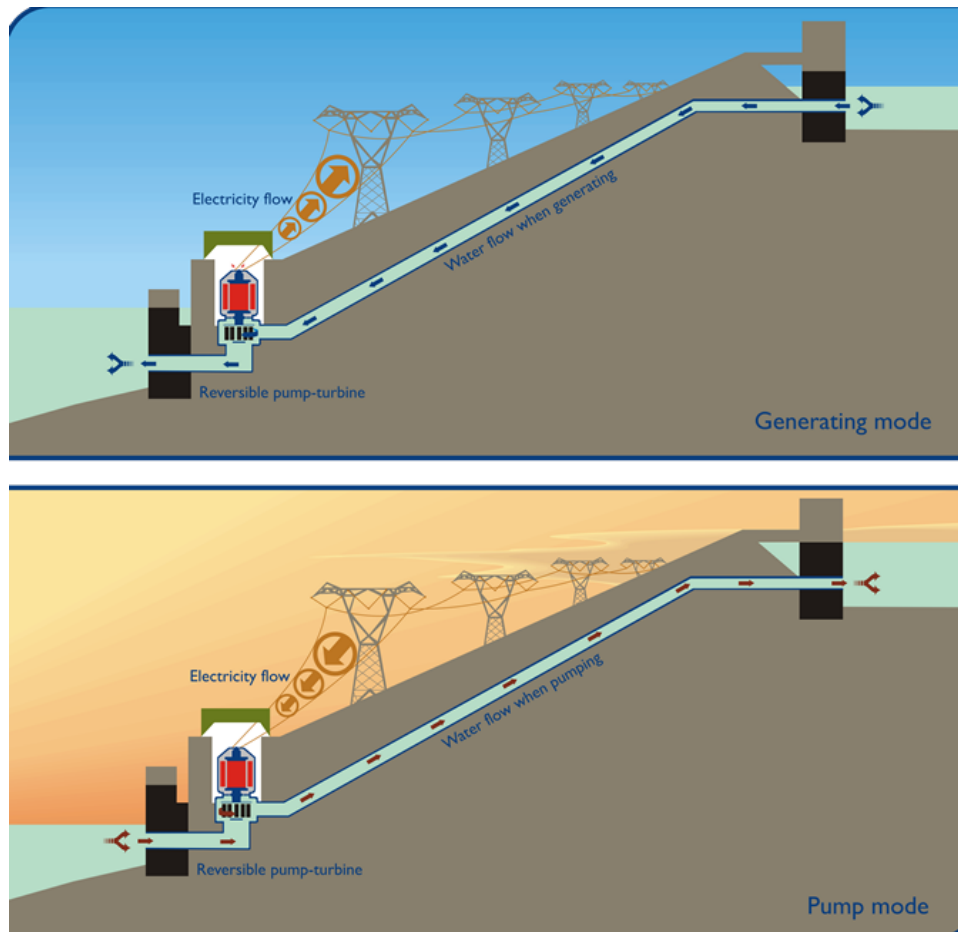
through turbines.

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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.
- Researchers pointed global warming as a reason for increasing frequency of cyclones.
- Normally, Arabian Sea sees one extremely severe cyclone in every 4 years.
- 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.
- First, Arabian Sea surface becomes warmer than the other ocean basins during this period.
- 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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