

## **Prelim Bits 17-07-2018**

### **Vikas Engine**

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- Vikas is a family of liquid fuelled rocket engines that powers India's launch vehicles PSLV and GSLV.

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- It is aimed at improving the payload capability of PSLV, GSLV and GSLV Mk-III launch vehicles.

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- It is used in second stage of PSLV which consists of four stages in its operation (Solid-Liquid-Solid-Liquid).

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- It is used in second stage and four strap-on stages of GSLV.

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- GSLV is a three stage vehicle (Solid-Liquid-Cryogenic Engine) with four liquid strap-on boosters.

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- ISRO has recently improved the thrust of the Vikas engine which is expected to boost the rocket engine.

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- The main beneficiary of the high-thrust Vikas engine is GSLV-Mark III launcher, which is expected to lift 4,000-kg satellites to space.

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- GSLV-Mark III uses twin engine core liquid stage (L110).

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- GSLV - Mark III with upgraded Vikas engine would be the third Mk-III and the first working one to be designated MkIII Mission-1 or M1.

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### **Testing of Brahmos**

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- DRDO and the Indian Army have test fired a supersonic BrahMos cruise missile under "extreme weather conditions" from Integrated Test Range at Balasore, Odisha.

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- The test was under extreme weather conditions with sea state 7 (waves as high as 9 m).
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- Sea state is the degree of turbulence at sea, generally measured on a scale of 0 to 9 according to average wave height.
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- BrahMos is the supersonic cruise missile that can be launched from land, sea, sub-sea and air based platforms.
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- It is considered one of the world's fastest cruise missile currently in operational use.
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- The missile's range is estimated at around 300 to 400 kilometers with speeds of up to Mach 2.8 to 3.
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- The land-launched and sea-launched variants of the BrahMos are already in service with the Indian Army and Navy.
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- Recently, a new production line for BrahMos transport launch canisters in Vadodara in the western state of Gujarat,
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- DRDO is also working on an indigenous missile booster for the BrahMos.
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## **Wholesale Price Index (WPI)**

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- WPI represents the price of basket of goods at a wholesale stage i.e. goods that are sold in bulk and traded between organizations instead of consumers.
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- WPI is calculated by the Office of Economic Advisor, DIPP under Ministry of Commerce and Industry.
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- The base year for the index is 2011-12.
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- The components of WPI include Primary articles, Manufacturing items, fuel and power with different weightages assigned to them.
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- The weightages are Primary Articles (Weight 22.62%), Fuel & Power (Weight 13.15%), and Manufactured Products (Weight 64.23%).
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- It basically indicates the rise in profitability of industries.  
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- **Recent Concern** - WPI has risen to 5.77% in June, the highest since December 2013.  
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- It is driven in large part by rising fuel prices.  
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- The real upward push came from the crude petroleum and natural gas segment, which saw inflation surging to 48.7% in June from 26.9% in the previous month.  
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- Similarly, the fuel and power segment saw inflation quicken to 16.2% from 11.2% over the same period and inflation in manufacturing accelerated in June to 4.17% from 3.73% in May.  
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## **Child Care Institutions**

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- Central government has directed state government to ensure that all the child care institutions should be registered and linked to CARA.  
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- Central Adoption Resource Authority (CARA) is a statutory body of Ministry of Women & Child Development, Government of India.  
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- It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.  
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- It is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the Hague Convention on Inter-country Adoption, 1993, ratified by Government of India in 2003.  
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## **Bill against witch hunting**

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- President has recently given assent to the Assam government's bill against witch-hunting.  
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- Witch-hunting involves casting a spell on women victims to gain control over

them by magic.

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- The victim who is branded as a witch is subjected to numerous forms of torture, beatings, burns, paraded naked through the village, forced to eat human excrement and sometimes even raped.
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- In India, witch hunting dates back hundreds of years.
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- It emanated in the Morigaon district of Assam which is now infamously known as the 'Indian Capital of Black Magic'.
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- Assam Witch Hunting (Prohibition, Prevention and Protection) Bill, 2015 considers the act of witch hunting as cognizable, non-bailable and non-compoundable offense.
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- It prescribes a prison term of up to seven years and up to Rs. 5 lakh in fine for calling a person witch.
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- It also has provisions to come with Section 302 of the IPC (punishment for murder) if someone is killed after being branded a witch.

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**Source: The Hindu, PIB**

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