Front loaded rate hikes

- The Reserve Bank of India will have to front-load its monetary policy to fight stubborn inflation and shield medium-term growth
- Inflation has remained above the RBI's tolerance level since January,
- "Front-loading of monetary policy actions can keep inflation expectations firmly anchored and reduce the medium-term growth sacrifice.
- There was, however, a resurgence of food price pressures, mainly from cereals, even as fuel and core components such as transport and manufacturing provided a modest measure of respite
- Aggregate demand was firm and poised to expand further as the festival season sets.
- policy responses are needed to tackle this because "given the limited policy space, frontloading of monetary policy actions can keep inflation expectations firmly anchored thus maintaining the credibility of the central bank, realign inflation with the target and reduce the medium-term growth sacrifice.

Flash flood

- Flash floods swept through several towns in hilly central Italy after hours of exceptionally heavy rain
- Flooding that begins within 6 hours, and often within 3 hours, of the heavy rainfall (or other cause).
- Flash Floods can be caused by a number of things, but is most often due to extremely heavy rainfall from thunderstorms. Flash Floods can occur due to Dam or Levee Breaks, and/or Mudslides (Debris Flow).
- The intensity of the rainfall, the location and distribution of the rainfall, the land use and topography, vegetation types and growth/density, soil type, and soil water-content all determine just how quickly the Flash Flooding may occur, and influence where it may occur.
- Urban Areas are also prone to flooding in short time-spans and, sometimes, rainfall (from the same storm) over an urban area will cause flooding faster and more-severe than in the suburbs or countryside.
- The impervious surfaces in the urban areas do not allow water to infiltrate the ground, and the water runs off to the low spots very quickly.
- If an area has had recent rainfall, the soil may be saturated to capacity and unable to absorb any more water.

- Flooding can also occur after a drought, when soil is too dry and hardened to absorb the precipitation.
- Flash floods are common in desert landscapes after heavy rainfalls and in areas with shallow soil depths above solid bedrock that limits the soil's ability to absorb rain.
- Since water runs downhill, rainfall will seek the lowest point in a potential pathway. In urban areas, that's often streets, parking lots and basements in low-lying zones.

Steps

- Engineers design storm water control systems to limit the damage that rainfall can do.
- Culverts transfer water and help control where it flows, often directing it underneath roads and railways so that people and goods can continue to move safely.
- Storm water containment ponds and detention basins hold water for release at a later time after flooding has ceased.
- Many cities also are using green infrastructure systems, such as rain gardens, green roofs and permeable pavement, to reduce flash flooding. Restoring wetlands along rivers and streams helps mitigate flooding as well.

 Often the design standards and rules that we use to engineer these features are based on historic rainfall data for the location where we're working.

THE HINDU

Eklavya School

- Eklavya Model Residential Schools (EMRS)
- EMRS started in the year 1997-98 to impart quality education to ST children in remote areas in order to enable them to avail of opportunities in high and professional educational courses and get employment in various sectors.
- The schools focus not only on academic education but on the allround development of the students.
 Each school has a capacity of 480 students, catering to students from Class VI to XII.
- Hitherto, grants were given for construction of schools and recurring expenses to the State Governments under Grants under Article 275 (1) of the Constitution.
- In order to give further impetus to EMRS, it has been decided that by the year 2022, every block with more than 50% ST population and at least 20,000 tribal persons, will have an EMRS.

- Eklavya schools will be on par with Navodaya Vidyalaya and will have special facilities for preserving local art and culture besides providing training in sports and skill development.
- Across the country, as per census 2011 figures, there are 564 such subdistricts out of which there is an EMRS in 102 sub-districts. Thus, 462 new schools have to be opened by the year 2022.

THE HINDU

Blended biodiesel

- As part of efforts to reduce its carbon footprint, the Indian Air Force (IAF) is looking to fly an AN-32 transport aircraft modified to operate on 10% blended biodiesel for 200 flight hours in the next six months.
- Biodiesel can be blended and used in many different concentrations. The most common are B5 (up to 5% biodiesel) and B20 (6% to 20% biodiesel).
- B100 (pure biodiesel) is typically used as a blend stock to produce lower blends and is rarely used as a transportation fuel.

B20

 B20 is a common blend because it represents a good balance of cost,

- emissions, cold-weather performance, materials compatibility, and ability to act as a solvent
- Engines operating on B20 have similar fuel consumption, horsepower, and torque to engines running on petroleum diesel.
- B20 with 20% biodiesel content will have 1% to 2% less energy per gallon than petroleum diesel, but many B20 users report no noticeable difference in performance or fuel economy. Biodiesel also has some emissions benefits,
- Biodiesel still offers greater greenhouse gas benefits than conventional diesel fuel

LB100 and High-Level Blends

- B100 and other high-level biodiesel blends are less commonly used directly as a transportation fuel than B20 and lower blends due to a lack of regulatory incentives and pricing. Biodiesel-compatible material for certain parts.
- B100 has a solvent effect; it can clean a vehicle's fuel system and release deposits accumulated from petroleum diesel use.
- The release of these deposits may initially clog filters and require frequent filter replacement in the first few tanks of high-level blends.

Indian PM in SCO

- Today's era is not of war and we have spoken to you many times on the phone that democracy, diplomacy and dialogue are such things that touch the world,"
- The Chabahar trade route to Central Asia
- "They stressed the need to make concerted efforts to diversify the trade basket and enter into longterm arrangements to promote trade and investment.
- Connectivity was considered key to unlock the potential in this regard, including greater usage of the Chabahar port and the International North-South Transport Corridor.

THE HINDU