

Wayanad death toll crosses 200

INTERNATIONAL RELATIONS



The death toll in the landslides that devastated the Chooralmala and Mundakkai areas near Meppadi in Wayanad district of Kerala crossed 200 as the search and rescue operations gained momentum on Wednesday. Personnel of the Army, Defence Security Corps, National Disaster Response Force, Forest Department and

Fire and Rescue Service picked through the debris strewn across the affected areas with the help of volunteers and rescue equipment, including earthmovers.

A total of 174 bodies and 61 body parts were retrieved by Wednesday evening; 191 persons were missing. A total of 1,592 persons were rescued from the ravaged sites in two days, with 99 persons undergoing treatment at various hospitals and rest shifted to relief camps.

The heavy layer of slush and the slippery terrain adversely affected the progress of the search on Wednesday. A makeshift bridge, constructed by soldiers, to cross the river for rescue operations was submerged in rainwater by evening. Meanwhile, the Army started building a 190-metre Bailey bridge across the Punna river, a tributary of the Chaliyar river, to connect the affected areas. The district administration is considering the feasibility of modern techniques such as ground mapping and use of the Ground Penetrating Radar (GPR) to retrieve the bodies buried deep in the debris.

Ismail Haniyeh of Hamas killed in Iran

INTERNATIONAL RELATIONS



Hamas leader Ismail Haniyeh was killed in a predawn air strike in the Iranian capital, Tehran. Iran and the militant group Hamas blamed Israel for assassination that risks escalating the conflict even as the U.S. and other nations were scrambling to prevent an all-out regional war.

The strike came just after Haniyeh had attended the inauguration of Iran's new President in Tehran.

Haniyeh's killing could also prompt Hamas to pull out of ceasefire negotiations and hostage release deal in the war in Gaza. On Tuesday, Israel carried out a rare strike in the Lebanese capital killing a top Hezbollah commander Fouad Shukur allegedly behind the rocket strike. Hezbollah denied any role in the Golan strike. The double strikes in Beirut and Tehran have "almost killed" hopes for a Gaza ceasefire and could push West Asia into a "devastating regional war".

India, China hold 30th round of border talks

INTERNATIONAL RELATIONS

India and China held an "in-depth, constructive and forward-looking" discussion at the 30th meeting of the Working Mechanism for Consultation and Coordination on India-China Border Affairs (WMCC) in New Delhi. The 29th WMCC meeting was held on March 24 in Beijing. The talks come amid indications that the two countries are making efforts to resolve the stand-off along the Line of Actual Control (LAC) in eastern Ladakh. Earlier, Foreign Ministers in their recent meetings at Astana in Kazakhstan and Vientiane in Laos reviewed the current situation along the LAC with a view to finding an early resolution of the outstanding issues.

Economic restrictions

India and China agreed on the need to jointly uphold peace and tranquillity on the ground in the border areas in accordance with bilateral agreements and protocols reached between the two governments. This also comes amid speculation that the government is considering relaxing some of its economic restrictions on Chinese companies following the recommendations of the latest Economic Survey, which called for more Foreign Direct Investment (FDI) from China.

Small Modular Reactors (SMRs)

SCIENCE AND TECHNOLOGY

The Centre is planning to team up with the private sector to study and test Small Modular Reactors (SMRs). SMRs, of 10 MWe-300 MWe each, smaller versions of their conventional counterparts aspire to be safer without compromising commercial feasibility by leveraging the higher energy content of nuclear fuel, a modular design, a smaller operational surface area, and lower capital costs.

The privatisation of nuclear power generation will also increase the demand for regulatory safeguards against radioactive material being diverted for military use. The first-generation SMRs are expected to use low-enriched uranium in facilities assembled on-site with factory-made parts to produce power that can be sold at economical rates. But the reactor will need frequent refuelling and will yield a consequential amount of plutonium; both outcomes will stress proliferation resistance. The IAEA has touted the use of 'safeguardable' reactor designs but such solutions will increase capital costs.

Subsequent SMR generations may also require more enriched uranium, especially if their feasibility is pegged on longer periods of continuous generation, or more sophisticated systems to increase fuel-use efficiency, which would increase the operational surface area and the generation cost. In fact, nuclear reactors have a fixed baseline cost and safety expectations that do not change with energy output, which means SMR-based tariffs need not automatically be lower. The Department of Atomic Energy increased its reactors' capacity from 220 MW to 700 MW. SMRs' ability to bolster the prospects of nuclear power in India will thus depend on their commercial viability — and in turn on the availability of less uncertain market conditions, stable grids, and opportunities to mass-produce parts — and the price of proliferation resistance.

SMALL MODULAR REACTORS

Small modular reactors (SMRs) are one of the latest nuclear energy technology innovations. SMRs — about one-third the size of a typical nuclear power plant — feature simplified, compact designs that are anticipated to be cost-effective and incredibly safe.

The Energy Information Administration projects that by the year 2040 electricity demand in the U.S. will increase by 20 percent. SMRs can help meet the nation's growing energy demands while providing reliable, affordable low-carbon power.

As clean energy demand continues to grow, the Energy Department is committed to providing licensing and technical support for the deployment of SMR designs within the next 10-15 years as well as R&D efforts for advanced SMR technologies.

THE DESIGN FACTOR

- Major components (aka "modules") are assembled in a factory and shipped by train or truck to the point of use, where they are installed and loaded with fuel.
- The reactors can be installed underground — providing more safety and security.
- Additional SMRs can be installed onsite as energy demand increases.

HOW DO SMRS WORK?

- Nuclear power plants generate heat through nuclear fission. The process begins in the reactor core. Atoms are split apart — releasing energy and producing heat as they separate into smaller atoms. The process repeats again and again through a fully controlled chain reaction.
- Control rods made of neutron-absorbing material are inserted into the core to regulate the amount of heat generated by the chain reaction.
- Reactor coolant water picks up heat from the reactor core. Reactor coolant pumps circulate the hot water through a steam generator, which converts water in a secondary loop into steam.
- The steam is used to drive a turbine, which generates electricity.
- Throughout the process, the pressurizer heats the reactor coolant water under high pressure to prevent it from boiling.

WHY SMRS MATTER

- LESS PREP**: SMRs require limited safety preparation — which could significantly reduce upfront capital costs and construction time compared to large reactors.
- MORE OPTIONS**: SMRs could increase nuclear technology options — allowing smaller size units that cannot support large reactors.
- FLEXIBILITY**: As energy demand increases, additional SMRs can be added to provide more power as a site.
- NEW BUSINESS**: SMRs could strengthen U.S. leadership in nuclear energy worldwide — opening new domestic jobs and business and global export opportunities.

SC to decide if States can take retrospective taxes on mines

POLITY AND GOVERNANCE

A nine-judge Bench of the Supreme Court reserved orders for a query raised by the Centre on whether its July 25 judgment upholding the power of State legislatures to tax mines and mineral rights would be applied retrospectively. On July 25, the Constitution Bench in a majority judgment of 8:1 upheld the power of State legislatures, not be limited by Parliament to tax mineral-bearing lands and quarries. The judgment freed States from the restrictions of the Centre and is in tune with the federalist principles of governance.

The mines were leased out in public auctions based on the terms of the amendments made to the Mines and Minerals (Development and Regulations) Act of 1957 in 2015. The bids were formulated according to the then-existing rates. Retrospective evaluation of tax would lead to a heavy load, which could crush these sectors. Solicitor-General Tushar Mehta cautioned of the “cascading effects” and ultimate impact upon the common man for allowing States to demand retrospective taxes on mines and mineral rights. Lawyers appearing for mining companies submitted that past levy demands may be more than the net worth of many companies ran the risk of bankrupting these companies.



“Any dilution in the taxing powers of the State legislatures will necessarily impact their ability to raise revenues, which in turn will impede their ability to deliver welfare schemes and services to the people. The ability of the State governments to invest in physical infrastructure, health, education, human capacity, and research and development is directly correlated to the raising of government revenues... Fiscal federalism entails that the power of the States to levy taxes within the legislative domain carved out to them and subject to the limitations laid down by the Constitution must be secured from unconstitutional interference by Parliament”

D Y Chandrachud
Chief Justice of India

IAF to host its largest multilateral exercise

INTERNAL SECURITY



The Indian Air Force (IAF) is all set to host its largest multilateral exercise, Tarang Shakti, totalling 150 aircraft, both foreign and IAF in two phases in August and September to foster interoperability and share best practices and also to showcase indigenous defence industry.

Eighteen countries, 10 of them with air assets, will join the exercise to be held in two

phases at Sullur and Jodhpur. Besides the observer countries, Germany, France, Spain, and the U.K. are scheduled to take part in Phase-1 to be held from August 6-14 at Sullur in Tamil Nadu, and see participation of 32 foreign aircraft. The Indian Navy will participate in Phase-1 with its MiG-29K carrier borne fighters.

Phase-2, to be held from September 1-14 at Jodhpur, will see participation will see participation of Australia, Bangladesh, Greece, Singapore, the United Arab Emirates and the U.S. with 27 fighters, two refuelling aircraft, two airborne early warning aircraft, and four C-130 Special Forces aircraft from foreign countries.

Railways forms panel to decide on working hours of loco pilots

POLITY AND GOVERNANCE



The Railway Board constituted a High-Level Committee (HLC), comprising the Principal Executive Director (Traffic), Additional Member (Staff) and Additional Member (Traction) to examine the implementation and compliance of accepted recommendations of High-Power Committee (HPC) with special focus on outstation rest, headquarters rest,

periodical rest, working hours and compliance of Hours of Employment Rules (HOER) of Loco Pilots and Assistant Loco Pilots. The move comes against the backdrop of a series of train accidents resulting in the deaths of several passengers and railway employees across the country. Besides, the Railway Board also instructed senior officers across its network to inspect locomotives and rest houses of loco running staff to check availability of basic amenities.

RBI proposes safer digital payment regulations

ECONOMICS AND DEVELOPMENT

The Reserve Bank of India (RBI) issued a draft circular proposing an Alternative Factor Authentication for all transactions to boost digital-payment security. As per the draft, an additional dynamically created factor of authentication determined by a host of parameters, including a risk profile of the customer and transaction value, among others was mandatory. The RBI has also mandated compulsory customer consent before a new factor of authentication in addition to choose to withdraw consent and de-register.

Contactless cards with a value lower than ₹ 5,000 per transaction, insurance premium, credit card payments above ₹ 1 lakh and other categories up to ₹15,000 are exempted.

The RBI also released another draft circular proposing due diligence to be undertaken by banks to verify Aadhar-enabled Payment System (AePS) touchpoint operators. The notification is as per RBI's Know Your Customer Master Direction 2016. The RBI proposed KYC updation be carried out for operators who had not undertaken any financial transaction for six months straight, before further enabling the operator. Also, the operators must be monitored on an ongoing basis by banks that acquired them and all agents must adhere to the National Payments Corporation of India (NPCI) regulations.



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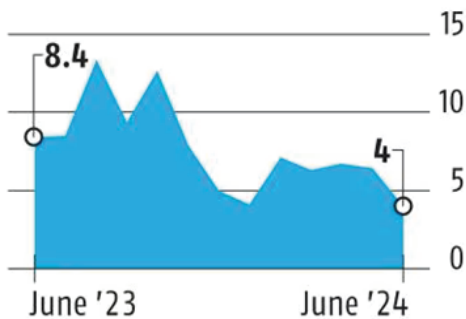
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Core sector growth slows

ECONOMICS AND DEVELOPMENT

IN SLOW LANE

Core sector growth rate
(Y-o-Y change in %)



Source: DPIIT

SECTORWISE BREAK-UP FOR JUNE

Sector	(Y-o-Y growth in %)
Coal	14.8
Crude oil	-2.6
Natural gas	3.3
Refinery products	-1.5
Fertiliser	2.4
Steel	2.7
Cement	1.9
Electricity	7.7

Growth in India's eight core sectors slipped to a 20-month low of 4 % in June from an upgraded 6.4% rise in May, with most sectors barring coal recording a sharp slide in output growth, steel production at a 7-month low, and refinery products slipping into contraction for first time in five months.

'IIP may decelerate'

The Index of Core Industries, which constitutes a little more than 40 % of the Index of Industrial Production (IIP), was 3.2 % below May's level. Industrial output had grown at a seven-month high pace of 5.9 % in May but is expected to decelerate in June. With the dip in the core sector growth, we expect the IIP to post a rise of 3.5 % to 5 % in June.

Lower public capex

The decline in core sectors' growth during June could possibly be attributed to lower spending on Government capex before the General Elections and the slowdown in construction activity which has led to a temporary slack in demand for steel and cement.



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