

# When India grows, the world grows, says Modi

Addressing joint session of the U.S. Congress, PM stressed on shared value of democracy; he also touched on global concerns such as the war in Ukraine and the Indo-Pacific situation

**Sriram Lakshman**  
WASHINGTON DC

**P**rime Minister Narendra Modi addressed a joint session of the U.S. Congress on Thursday, where he, in agreement with U.S. President Joe Biden, called the India-U.S. relationship "a defining partnership" of the 21st century.

The Prime Minister also talked about the virtues of democracy, the ties that bind India and the United States, and India's economic and development trajectory. He also touched on issues of global concern, such as the war in Ukraine and the situation in the Indo-Pacific.

Mr. Modi's hour-long speech was heard by a packed chamber and he received several standing ovations, but over 70 members of Congress had raised concerns about democratic backsliding in India ahead of his address. A handful of them boycotted the event. "Democracy is one of our sacred and shared values," the Prime Minister said as he referred to India as the "mother of democracy".



While Modi addressed a packed chamber and received several standing ovations, a handful of lawmakers boycotted the event. ANI

"I am here to speak about our calling for this century," he said, characterising as an "exceptional privilege" the opportunity to address Congress twice (his first address was in June 2016).

He talked about the digitisation of the Indian economy and said that India would soon be the third-largest economy in the world. "When India grows, the world grows," Mr. Modi said.

He depicted India's development as being led by women and a blend of ancient values and modern capabilities, such as in technology.

"Be it creative reels on

Insta or real-time payments, coding or quantum computing... the youth of India are a great example of how a society can embrace latest technology," the Prime Minister said.

"We celebrated a remarkable journey of over 75 years of freedom, after a thousand years of foreign rule in one form or another," Mr. Modi said. (This is apparently a reference to both British rule and Mughal rule. The BJP has previously alluded to the Mughals as being essentially foreign).

He also spoke about India's environmental commitments, linking them to India's culture.

## GE deal to yield first engine in three years

NEW DELHI

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On the Russian invasion of Ukraine, Mr. Modi said the world order was based on respect for the United Nations Charter, sovereignty and territorial integrity and the peaceful resolution of disputes.

"War has returned to Europe. It is causing great pain in the region," he said, adding that the countries of the so-called Global South were particularly impacted.

"As I have said directly and publicly, this is not an era of war. But, it is one of dialogue and diplomacy," Mr. Modi said.

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# EVA STALIN IAS ACADEMY - BEST IAS COACHING IN CHENNAI

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## When India grows, the world grows, says Modi

"And, we all must do what we can to stop the bloodshed and human suffering," he added.

### Indo-Pacific issues

"Mister Speaker, the dark clouds of coercion and confrontation are casting their shadow in the Indo-Pacific," Mr. Modi said, in an apparent reference to Chinese assertiveness in the region.

He reiterated India's vision for a "free, open and inclusive Indo-Pacific" and he reaffirmed the importance of ASEAN countries in that vision. There were other veiled references – such as to China's debt traps and situations where geography is being used for strategic purposes – a likely reference to Pakistan.

Mr. Modi called the Quad (India, Australia, the U.S. and Japan) a "major force for good" in the Indo-Pacific.

## Warm welcome

The Modi visit further strengthened the ties between India and the U.S.

**R**olling out the red carpet for Prime Minister Narendra Modi during his state visit to Washington, U.S. President Joseph Biden underlined his belief that the India-U.S. partnership will be one of the "defining relationships of the 21st century", one that he has had a strong belief in as U.S. Vice-President in the Obama administration. The phrase mirrored the one used by U.S. President Barack Obama at the state banquet for former Prime Minister Manmohan Singh in 2009 – one of the "defining partnerships of the 21st century" – denoting the consistent strengthening of ties over the first two decades of the century. The visit by Mr. Modi, his first state visit to the U.S., has not disappointed votaries of the relationship. The two sides announced new deals involving high-end defence cooperation, semiconductor industry investments, and a partnership in quantum and advanced computing and AI. The deal for co-production of jet engines in India – White House called it "trailblazing" – will involve an unprecedented level of technology transfer. India's decision to join the 11-nation mineral security partnership for critical minerals, where China has a global monopoly, and cooperation on critical and emerging technologies, particularly in clean energy, will strengthen future cooperation here. Finally, India's move to sign on to the 27-nation Artemis Accords for cooperation in space exploration, and the NASA-ISRO partnerships for human spaceflight will also catapult India's ambitions in the sphere.

It is significant that areas of discord, such as the differences in policies towards Russia's war in Ukraine, and confrontation with China, where New Delhi has been more diffident, were sidestepped. Perhaps more difficult to sidestep were increasingly loud questions over the state of democracy and human rights in India, which 75 U.S. members of the Congress raised in a letter to Mr. Biden. While some uber-liberal Democrat lawmakers took the extreme step of boycotting Mr. Modi's address to the joint session of Congress, it would be harder to ignore the pointed words from Mr. Obama in an interview the same day, on India's minority rights. Eventually, Mr. Modi's response, in a rare press availability with Mr. Biden, dismissed some misgivings over his administration – he denied alleged discrimination against minorities and a crackdown on dissent. Rights issues are not a bilateral concern, and with his warm welcome, Mr. Biden made it clear he did not share the concern. If Mr. Modi wishes to address public concerns, however, he may find it more effective to make the case in a press conference on his return, emphasising his belief that "if there are no human values and there is no humanity, there are no human rights, then it cannot be called a democracy".

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# AI-based CCTV network installed across the city

Integrated Command and Control Centre inaugurated under the Chennai Safe City Project; Commissioner says feature-rich system offers video analytics

**R. Sivaraman**  
CHENNAI

**T**he Greater Chennai Police Commissioner Shankar Jwal on Friday inaugurated an integrated command and control centre (ICCC) under the Chennai Safe City Project (CSCP) on the premises of the his office in Vepery.

Under the project, 5,250 CCTV cameras are being installed at 1,750 key locations across Greater Chennai Police (GCP) limits and the live feeds from all such cameras will be monitored at this centre.

Accordingly, the feed from 4,008 CCTV cameras installed at 1,336 locations will be viewed at the ICCC in the first phase. Further, the CCTV camera feeds can be viewed at the Commissioner's office in Vepery round the clock. This will be monitored by personnel at ICCC.

The Commissioner said state-of-the-art technology and artificial intelligence-based software system had been deployed in the net-



**Live feed:** Greater Chennai Police Commissioner Shankar Jwal at the integrated command and control centre on Friday. S.R. RAGHUNATHAN

work with numerous analytics features coupled with alerts to facilitate immediate action on a crime. Video analytics on crimes such as chain/hand bag / mobile snatching, harassment of women, women surrounded by men/violence, abduction, vandalism, vehicle theft and others are made available in this system.

The AI-based software will help in ensuring the safety of women as the camera feeds will analyse the situation by

AI software and the same will alert the ICCC for taking appropriate action even in case of SOS gestures made on the camera, said the Commissioner.

The video feeds will be stored in data centre and replicated it in the data recovery centre. The live footages will be monitored at the ICCC and will also be made available to the offices of six Joint Commissioners of Police and 12 Deputy Commissioners of Police.

## WRD plans to take up study to link Kosasthalaiyar and Araniar rivers

The idea is to transfer floodwater across the basin to manage extreme weather events. Sources say flooding in Chennai cannot be tackled in isolation and river basins in neighbouring districts will need to be connected for better conservation

**K. Lakshmi**  
CHENNAI

**T**he Water Resources Department (WRD) is planning to take up a study on the possibility of linking Araniar and Kosasthalaiyar rivers to mitigate urban flooding.

The idea is to transfer floodwaters across the basin to manage extreme weather events. Sources said a technical feasibility study is being considered to provide a link between the rivers. Flooding in Chennai cannot be tackled in isolation. River basins in the neighbouring districts of Tiruvallur and Chengalpattu will have to be connected for better conservation of floodwater.



A study carried out with numerical groundwater flow modelling predicted that linking the rivers will help decrease the extent of seawater incursion by about one km by 2030. B. JOTHI RAMALINGAM

A link channel is being provided in the middle reach of the waterways near Vadamadurai, Tamaraipakkam check dam or near Karanodal Road to drain the surplus water whenever either of the riv-

ers swell and the other has deficit flow. This will sustain flow in the rivers and help arrest seawater intrusion, the officials said.

The proposal was discussed at a recent stakeholders' meeting with the Eu-

ropean Union (EU) delegation to India and India-EU Urban Partnership on urban sustainability and smart city.

A study authored by L. Elango, visiting professor, Department of Civil Engineering, IIT-Madras, along with S.P. Rajaveni and Indu S. Nair, had assessed the feasibility and impact of linking these rivers to reduce seawater incursion in coastal aquifers north of Chennai.

The study, covering an area of 554 sq. km., had suggested forming a channel to link the rivers near Karanodal-Puduvoyal Road or near Vengal, Panchetti to moderate floods in the basin. This would improve groundwater ta-

ble and also recover aquifer where the water had turned saline.

Prof. Elango said seawater had intruded nearly 15 km inland till Panchetti where wells had been sunk to provide drinking water supply to the city. The groundwater table in Minjur is over-stressed and saline. The study carried out with numerical groundwater flow modelling had predicted that linking the rivers would help decrease the extent of seawater incursion by about one km by 2030.

Check dams could also be built in the confluence points of the rivers with the link channel to sustain flow in the channel and recharge groundwater.

## Bridging the gap

Efforts to reduce gender disparities must continue in earnest

India has climbed eight places from last year in the annual Gender Gap Report, 2023, and is now ranked 127 out of 146 countries in terms of gender parity. But this improved statistic, closing 64.3% of the overall gender gap, is hardly a cause for cheer. On the four key markers of the index – economic participation and opportunity; educational attainment; health and survival; political empowerment – India has a window of opportunity to improve in each so that one half of the most populous country in the world may contribute to the economy, growth and overall well-being of society. India has fared well in education, and in political empowerment, with representation of women of over 40% in local governance, thanks to efforts on the ground after the 73rd and 74th Amendments. But, as the report points out, women represent only 15.1% of parliamentarians, “the highest for India since the inaugural 2006 edition”. This should spur Parliament to take it to the next level by acting on the long-pending Women’s Reservation Bill, which proposes to reserve 33% of seats in the Lok Sabha and State Assemblies for women, and introduced in 1996. To understand where things stand on women’s participation in politics, consider this: Nagaland, which became a State in 1963, elected its first two women MLAs only in 2023.

On providing even access for men and women on economic participation and opportunity, India ranks near the bottom, with less than 40% parity. On the one hand, there are upticks in parity in wages and income, but then shares of women in senior positions and technical roles have dropped. Another concern is India’s performance in health and survival, though an improvement in sex ratio at birth has driven up parity after more than a decade of slow progress. It is imperative that girls get access to education through school and college; and they also need paid work. Women end up doing so much unpaid work at home that many do not have the time or the energy to opt for paid work. Providing girls with a job-assured education will automatically improve all development indices including nutrition, and break the vicious cycle of early marriage leading to poor maternal and child health. If the pandemic revealed the fragility of life, it was harder on women, with their labour participation rates dropping, thus reducing household incomes. Often, even if they get a job, women are impeded by patriarchal and cultural norms; besides, they often have to worry about their safety. The pandemic may have stalled progress to achieve gender equality by 2030, but work towards bridging the gap must go on in earnest.

## Tiruvallur district administration aims for zero waste in some pockets

**The Hindu Bureau**  
CHENNAI

In its efforts to achieve zero waste and better solid waste management, the Tiruvallur district administration is implementing various projects, including recycling of plastic waste in some pockets, on a pilot basis.

District Collector Alby John Varghese recently signed a memorandum of understanding (MoU) with the Indian Institute of Technology - Madras and Bharat Petroleum Corporation Ltd. to establish a zero emission plastic pyrolysis plant at Vallur panchayat, Minjur.

Officials said the ₹3.5-crore plant would be set up in the densely populated area and industrial belt. With a capacity to process 1,000 kg a day, it would use a technique where thermal degradation at high temperatures would treat non-recyclable plastic waste and yield fuel. Its output efficiency is estimated to be 50%.

The plant, which is under construction, will be ready in six months. Fuel produced by it will be sold to industries in Minjur belt, the officials said.

The Tiruvallur Collecto-

rate plans to set up biogas plants and use the trommel system to divert waste that otherwise reaches landfills.

It would be used to segregate and shred plastic waste obtained from areas like Minjur and Ponneri.

The district administration has been operating a biogas plant to convert waste into electricity and manure in Varadharajapuram, Poonamallee. Electricity generated from the plant is used to illuminate 146 streetlights in the panchayat.

### Plastic for roads

There are plans to construct roads by adding shredded plastic waste along with bitumen as part of the ₹120-crore project.

“We have 10 plastic shredding units across the district. The material obtained from these units will be used to enhance the strength of the roads,” said an official.

At Ayapakkam, colour-coded bins have been provided to encourage source segregation.

Moreover, the e-carts have been fitted with GPS and tracked from a control room to ensure that the vehicles covered all households, the officials added.

# Jet engine deal ensures 80% technology transfer to HAL; first engine in three years

Except for a small component, the F414-INS6 will be entirely manufactured in India; the 2012 deal had only 58% technology transfer, says an official, adding that current agreement reflects the level of trust India evokes in the U.S. and the strategic priorities that the countries share

**Dinakar Peri**  
**Suhasini Haldar**  
NEW DELHI

The jet engine deal with the U.S. is an "almost done" deal and will see 80% technology transfer by General Electric (GE) to Hindustan Aeronautics Limited (HAL). This will include critical technologies. The first engine will roll out three years after the contract is ready, said a Defence Ministry official.

A previous 'Engine Development Agreement' in 2012 between GE and HAL for the F414 engine had 58% technology transfer, the official stated.

A factsheet issued by the White House on the bilateral meetings, described the GE proposal to jointly produce the F414 jet engine in India as "groundbreaking", adding that a manufacturing licence agreement has been submitted for Congressional notification.

"It will take three years for the first engine to roll out once the contract is

signed. The 80% technology transfer to HAL is of critical importance. Such a transfer has not happened before and shows the level of trust India evokes in the U.S.," a senior defence source said on the Memorandum of Understanding (MoU) between GE and HAL to manufacture F414 engines for the Light Combat Aircraft (LCA)-MK2 in India. "Except for a small component, the F414-INS6 engine will entirely be manufactured in India."

"This trailblazing initiative to manufacture F414 engines in India will enable greater transfer of U.S. jet engine technology than ever before," the joint statement issued after talks between Prime Minister Narendra Modi and President Joe Biden said.

#### Critical technologies

Some of the key technologies that would be transferred to India include special coatings for corrosion; casting, machining and coating for Single Crystal for turbine blades; casting, machining and coating of



A White House factsheet described the GE proposal to produce the F414 jet engine in India as groundbreaking. SPECIAL ARRANGEMENT

nozzle guide vanes and other hot parts; blisk machining; forging/power metallurgy discs for turbine; machining of thin walled titanium casing; friction inertia welding for fan and after burner; Polymer Matrix Composites (PMC) for bypass polymer duct; Ceramic Matrix Composites (CMC) for LPNGV, flaps; laser drilling technology for combustor; bottle boring of shafts.

On the timeline, Foreign Secretary Vinay Kwatra said that the U.S. Congress would have to approve the

deal which involves two separate legislations: Export Administration Regulations (EAR) and International Traffic in Arms Regulations (ITAR), and that some of the spade-work had been completed during the Strategic Trade Dialogue he participated in earlier this month in Washington.

"Given that it is crucial to address the regulatory ecosystem, which intersects with technology cooperation, India and the U.S. recently held the first meeting of the strategic

trade dialogue. The whole idea behind the strategic trade dialogue is that we look at regulatory issues more in terms of finding ways to enable our technology cooperation." Mr. Kwatra said that the Jet engine tech transfer deal was one of the "strong, strategic and shared priorities" for both Mr. Modi and Mr. Biden.

While the final cost is yet to be worked out, the official said the costing is indexed to the 2012 agreement based on which the current cost for 99 engines should be under \$1bn.

The F414 will significantly enhance the capability of the LCA-MK2 and engines for prototype and testing are already available. As reported by *The Hindu* earlier, the LCA-Mk2 will be 1350mm longer featuring canards and a payload of 6,500 kgs compared with 3,500 kgs for the Mk1 and Mk1A.

Around 120-130 LCA-MK2 jets are likely to be produced. A final decision has to be taken by the Defence Acquisition Council

headed by Defence Minister Rajnath Singh, who has been pushing the project towards faster execution, officials said. The official noted that they are still in talks for co-development of a HOKN engine to power the Advanced Medium Combat Aircraft (AMCA)-MK2. This F414 deal makes GE the frontrunner for the deal, though a final decision is yet to be taken.

#### Approval process

The defence official said that in addition to the U.S. Congressional approval, there are some commercial terms that are yet to be finalised.

The deal also shows that the U.S. trusts our Intellectual Property Rights (IPR) regime and that the technology would remain secure. The U.S. has showed confidence in our military systems also, the official added.

The Cabinet Committee on Security (CCS) has already approved the development of the LCA-Mk2 at a total development cost of ₹9,000 crore.