GEO IAS
It's about quality

THE HINDU
INDIA'S NATIONAL NEWSPAPER SINCE 1878

Daily News Analysis

The Hindu Important News Articles & Editorial For UPSC CSE

Thursday, 12 Sep , 2024

Edition: International Table of Contents

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The National Commission for Protection of Child Rights (NCPCR) has criticised madrasas for inadequate education, citing curriculum issues, poor teacher quality, and lack of extracurricular activities.

- They argue that madrasas violate constitutional rights by teaching Islamic education to non-Muslims and call for comprehensive reforms and oversight.

Madrasas 'unfit' for proper education, NCPCR tells SC

Including a few NCERT books in the curriculum is a mere guise in the name of imparting education and does not ensure that children are receiving formal and quality education, it says

Krishnadas Rajagopal
NEW DELHI

The National Commission for Protection of Child Rights (NCPCR), the top child rights protection body in the country, has told the Supreme Court that madrasas are "unsuitable or unfit" places for children to receive "proper education".

The NCPCR, represented by senior advocate Swarupama Chaturvedi and advocate Abhaid Parikh, made the submission in response to petitions challenging an Allahabad High Court judgment which struck down the Uttar Pradesh Board of Madrasa Education Act, 2004.

The commission said the textbooks in madrasas "profess supremacy of Islam". "Merely teaching a few NCERT books in the curriculum is a mere guise in the name of imparting education and does not ensure that the children are receiving formal and quality education," it argued.

The NCPCR highlighted issues of curriculum, eligibility of teachers, opaque funding, violation of land laws, and failure to provide children a holistic environment as problems associated with madrasas.

"The teachers appointed in madrasas are largely dependent on the conventional methods used in learning Koran and other religious texts. The 'scanty and unregularised' working in madrasas creates a haywire system which just stands alone on the conventional ground of religion," it said.

The NCPCR highlighted issues of curriculum, eligibility of teachers, opaque funding, and others. SUSHIL KUMAR VERMA

"Majority of madrasas have no idea as to how to plan social events or extra-curricular activities, such as field trips, that could provide students with some level of experiential learning... Madrasa education is neither all-encompassing nor thorough. It is not helping children advance since it lacks so many crucial components of learning. Madrasas infringe on children's fundamental right to a good education by failing to provide these basic requirements. Children are denied not only a suitable education but also a healthy atmosphere and improved opportunities for growth," the commission said.

It said children from faiths other than Islam were also studying in madrasas in Bihar, Madhya Pradesh, West Bengal, Uttar Pradesh, and Uttarakhand. Providing Islamic religious education to non-Muslims was a violation of Article 28(3) of the Constitution, which upholds the right against forced participation in religious instruction or worship.

The High Court had ordered the transfer of madrasa students to regular schools. The top court stayed the implementation of the High Court decision in April. On Wednesday, a three-judge Bench headed by Chief Justice of India D.Y. Chandrachud said the petitions would be taken up for a detailed hearing soon.

Taking Uttar Pradesh's case, the NCPCR drew the court's attention to the Darul Uloom Deoband Madrasa founded in Deoband in Saharanpur district.

"According to the information available the Deoband Madrasa fanned out across South Asia and has also set up seminaries, or madrasas, teaching an austere version of Islam, particularly along the Pakistan-Afghanistan border... it has also been alleged by Taliban extremists groups to have been influenced by the religious and political ideologies of Darul Uloom Deoband Madrasa... the Deoband Madrasa issues fatwas online as well as offline and has a very strict and conservative interpretation of Sharia, as evidenced by its issuance of roughly 2,50,000 fatwas which restrict followers in terms of faith, life, and many other aspects," the NCPCR submitted.

"Though madrasas dot the country, only States such as Bihar, Chhattisgarh, Odisha, Uttar Pradesh, West Bengal, Madhya Pradesh, Rajasthan, Uttarakhand have Madrasa Boards. Large number of children attend madrasas that are either unrecognised or unmapped," the commission observed.

Concerns Raised by NCPCR:

- **Unsuitable Education Environment:** Madrasas are deemed "unsuitable" for providing proper education due to their focus on religious texts rather than a comprehensive curriculum.
- **Curriculum Issues:** Textbooks in madrasas are said to promote Islamic supremacy and offer limited exposure to broader educational content. The inclusion of a few NCERT books is criticised as insufficient.
- **Teacher Quality:** Teachers predominantly use traditional methods, resulting in irregular and unregulated educational practices.
- **Lack of Extracurricular Activities:** Madrasas reportedly fail to provide essential social and experiential learning opportunities like field trips and other extracurricular activities.
- **Violation of Constitutional Rights:** Teaching Islamic education to non-Muslims in madrasas is seen as a violation of Article 28(3) of the Constitution, which prohibits forced religious instruction.
- **Operational Concerns:** Issues include opaque funding, non-compliance with land laws, and lack of a holistic environment conducive to growth and learning.

Way Forward:

- **Curriculum Reform:** Revise madrasa curricula to include a balanced and comprehensive educational content that integrates national standards.
- **Teacher Training:** Improve teacher training and ensure regularisation of teaching practices.
- **Extracurricular Integration:** Implement structured extracurricular and social activities to enhance overall student development.
- **Regulatory Oversight:** Establish clearer guidelines for madrasa operations, funding transparency, and adherence to land laws.
- **Constitutional Compliance:** Ensure that madrasa education complies with constitutional rights, particularly regarding non-Muslim students.
- **Monitoring and Evaluation:** Regularly monitor and evaluate madrasa performance to ensure adherence to educational standards and rights.

Page 06 : Prelims Fact

The Union Cabinet, led by Prime Minister Narendra Modi, approved extending Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) coverage to all senior citizens aged 70 and above, providing ₹5 lakh health insurance, enhancing benefits for elderly citizens.

Analysis of the news:

- The Union Cabinet approved extending Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) health coverage to all senior citizens aged 70 and above, regardless of income.
- The scheme will cover approximately 6 crore senior citizens across 4.5 crore families with ₹5 lakh free health insurance per family.
- Eligible seniors will receive a new distinct card under the scheme.
- Those already covered under AB PM-JAY will get an additional ₹5 lakh annual top-up for themselves.
- Seniors with other public health schemes like Central Government Health Scheme (CGHS) or Ex-Servicemen Contributory Health Scheme (ECHS) can choose between their existing scheme and AB PM-JAY.
- Private health insurance holders will also be eligible for AB PM-JAY benefits.

Cabinet approves health cover for all aged 70 and above

Bindu Shajan Perappadan
NEW DELHI


Eligible senior citizens will get a new distinct card under Ayushman Bharat scheme.

The Union Cabinet, chaired by Prime Minister Narendra Modi, on Wednesday approved health coverage to all senior citizens aged 70 and above irrespective of income under the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY).

This will benefit nearly 4.5 crore families with six crore senior citizens by providing ₹5 lakh free health insurance cover on a family basis.

New card

This scheme was one of the promises made in the BJP manifesto.

With this approval, persons aged 70 and above, irrespective of their socio-economic status, will be eligible to get the benefits under the AB PM-JAY.

The eligible senior citizens will be issued a new distinct card under the scheme.

Senior citizens belonging to families already covered under the AB PM-JAY will get an additional top-up cover up to ₹5 lakh per year for themselves (which they do not have to share with other members of the family who are below the age of 70).

All other senior citizens aged 70 and above will get a cover up to ₹5 lakh per year on a family basis. Senior citizens who are already getting benefits of other public health insurance schemes such as the Central Government Health Scheme (CGHS), Ex-Servicemen Contributory Health Scheme (ECHS), and Ayushman Central Armed Police Force (CAPF) may either choose their existing scheme or opt for AB PM-JAY.

It has been clarified that senior citizens aged 70 and above who are under private health insurance policies or Employees' State Insurance scheme will be eligible to get benefits under the AB PM-JAY.

"The AB PM-JAY is the world's largest publicly funded health assurance scheme, which provides health cover of ₹5 lakh per family per year for secondary and tertiary care hospitalisation to 55 crore individuals corresponding to 12.34 crore families," the Union government said in a release.

The expansion of cover to persons aged 70 and above was announced by Mr. Modi in April.

Page 07 : GS 3 : Science and Technology

The Government of India introduced the 'BioE3' policy to advance biotechnology, emphasising precision therapeutics and biologics.

Organ-on-chip tech could boost BioE3 objective to personalise medicine

Researchers currently take a decade and $2.3 billion on average to bring a drug from lab to the market. One big roadblock is that drugs that clear animal-testing in a clinical trial's early stages often fail when tested with humans. Organ-on-chip technology offers a solution to this problem

Manjeera Gowravaram
Viraj Mehta

On August 24, the Government of India announced the 'BioE3' policy to drive innovation in the biotechnology sector by establishing biomanufacturing facilities, bio-AI hubs, and bio-foundries. ('AI' stands for artificial intelligence.) A key focus area of the policy is precision therapeutics, which involve developing and administering drugs according to the needs of individual patients. The policy also aims to boost the development of biologics such as gene therapy and cell therapy.

Recent advancements in human-relevant 3D culture models, also known as 'new approach methods' (NAMs), have shown promising results in the field of precision therapeutics. These models include 3D spheroids, organoids, bioprinting, and organ-on-chips.

The global organ-on-chip market is expected to be worth around $1.4 billion by 2032. This expansion is the result of increasing investments in R&D within the field of NAMs, particularly in organ-on-a-chip technology. Since its invention, this technology has acquired significant momentum and stands poised to revolutionise the healthcare sector by integrating cells derived from a human body with a well-defined *in vitro* biological environment (i.e., in the lab) that mimics the body's conditions.

A major driving factor in the organ-on-chip market is the increasing demand to replace the use of animals to test drugs.

In April, an English company named CN Bio raised $21 million from venture capitalists to expand its R&D in organ-on-chip technology. In the U.S., Vivodyne raised $38 million in seed funding to integrate large-scale automation and AI with organ-on-chips. These are just two recent examples to illustrate the growing interest in this technology and its commercial value.

Drug testing and development

In the current and traditional drug development process, researchers take almost a decade and an average cost of $2.3 billion to bring a new drug from the lab to the market. However, many drug candidates also fail in the final stages of clinical trials. One major reason is that in the early stages of trials, these drugs are tested on animal models – animals genetically engineered to respond to a drug the way a human organ (or organs) might. Drugs that succeed on these animals often fail in humans, however.

Organ-on-chip technology offers a potential solution to this problem by providing a more accurate and efficient platform for testing drugs without involving animals or humans in preclinical testing. An organ-on-chip is a small device designed to recreate the dynamic functions of some human organ in a controlled microenvironment. They are expected to be better than the cell cultures and animal models researchers currently use for testing the effects of a drug. The results from the use of these devices would in turn provide a better understanding of the drug-candidate's efficacy and toxicity, reduce the use of animals, and pave the way for personalised treatment.

Organ-on-chip technology offers a platform for testing drugs without involving animals or humans in the preclinical stages. JANET STEPHENS

bringing drugs to the market faster and potentially at lower prices.

Investments in technology

Researchers first reported the usefulness of an organ-on-chip model in a 2010 study. Two years later, the U.S. National Institutes of Health allocated $100 million in funding for scientists to develop specific organs-on-chip devices, including for the kidneys, intestines, and the heart, as well as body-on-chip devices that could simulate the effects of a drug on multiple organs at once.

The technology's potential for drug development was quickly clear, and as a result, there are several organ-on-chip companies around the world today focussing on developing microphysiological systems for various organs. In addition to those above, chips exist today to mimic the liver and the lungs.

The U.S. government further boosted this field by passing the FDA Modernisation Act 2.0 in September 2022. The Act allows researchers to develop, use, and qualify organs-on-chips as a suitable alternative wherever applicable, including to test drugs at the preclinical stages of drug development. A year earlier, the members of the European Union had resolved to phase out the testing of cosmetics on animals. The bloc is currently working towards a regulatory framework for the use of NAMs, including organ-on-chips.

Many international pharmaceutical companies are also testing the waters. For instance, Bayer is collaborating with TissUse for a liver and multi-organ-on-a-chip model. Roche is using chips developed by Mimetas to study the effects of inflammatory bowel disease and hepatitis B virus infections.

> Organ-on-chips are devices designed to recreate the functions of human organs. They are expected to be better than the cell cultures and animal models researchers currently use for testing the effects of a drug

for their biological research. According to one recent estimate, at least 30 pharmaceutical companies worldwide are evaluating organ-on-chip models in a bid to move away from animal testing.

Challenges for India

India also took a step in this direction by amending the New Drugs and Clinical Trials Rules 2019 to permit the use of human organs-on-chips and other NAMs prior to and in conjunction with animal testing when evaluating new drugs. In July this year, the CSIR-Centre for Cellular and Molecular Biology, Hyderabad, and the Central Drugs Standard Control Organisation hosted a workshop on the latest scientific and regulatory developments in the field of NAMs.

Developing an organ-on-chip technology requires experts from diverse fields – such as bioengineering, pharmacology, biotechnology, computer science, and clinical medicine – to work together. Currently, more than 80 laboratories are working on NAMs, including developing 3D culture models for various applications. To fully harness the technology's potential, India needs to establish dedicated centres that facilitate such collaboration.

Second, the presence of such centres will help to converse between industry genetic differences between Indian populations for which a NAM is being tailored and the populations on which a given drug or therapy has already been tested.

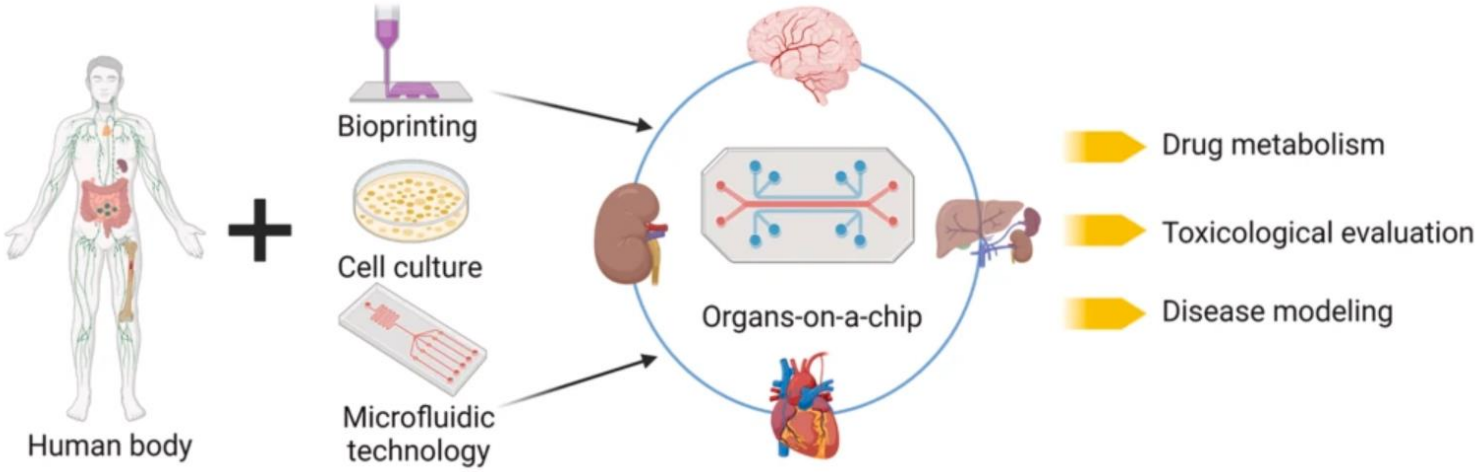
Third, researchers will have to contend with regulatory bodies and their requirements and navigate regulatory frameworks pertaining to the development, standardisation, and qualification of organ-on-chip devices. The centres could streamline this process and ensure chips make it from the lab bench to the factory floor without a glitch.

Since these centres will host a dedicated and qualified team of researchers, they could also build a new skill base for the next generation of scientists and engineers and help ensure a steady flow of talent to drive the development of organ-on-chip technology forward. The centres could even create opportunities for an industry-linked doctoral programme to help graduate and postgraduate students to move seamlessly between academia, research, and industry after completing their education.

As medical research advances rapidly, it is important for the Indian government, the business and investment communities, and policymakers and regulators to facilitate the establishment of organ-on-chip centres that improve the healthcare system whilst boosting the economy. By supporting these technologies and centres, India could also increase its self-sufficiency in a domain of developmental and strategic importance.

(Manjeera Gowravaram has a PhD in RNA biochemistry and is a freelance science writer. Viraj Mehta has a PhD in biomedical engineering and supports pharmaceutical companies and CROs in establishing NAMs or microphysiological systems based assays for drug discovery and development.

- Recent innovations in organ-on-chip technology offer accurate drug testing and disease modelling, potentially reducing costs and animal use, with significant global interest and investment.

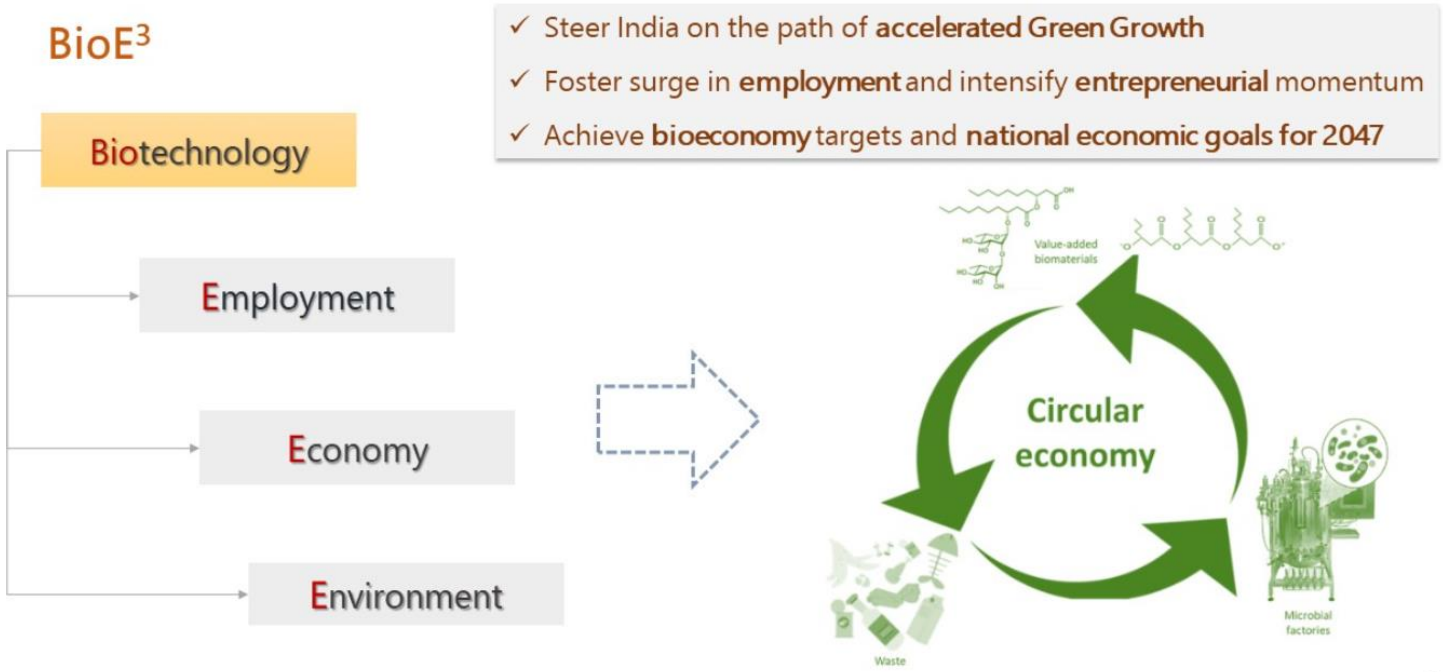


Organ-on-Chip Technology:

- **Complete Details About**
  - **Definition:** Organ-on-chip technology involves microfluidic devices that replicate the physiological functions of human organs on a miniature scale.
  - **Components:** Combines living cells, tissues, and engineered microenvironments to mimic the complex interactions within human organs.
  - **Purpose:** Provides a more accurate and controlled in vitro platform for studying organ-specific responses and disease mechanisms.

'BioE3' Policy:

What do we aim to achieve?



- The BioE3 Policy focuses on enhancing high-performance bio-manufacturing in India.
- It supports innovation and entrepreneurship in biotechnology through the establishment of Biomanufacturing & Bio-AI hubs and Biofoundries.
- The policy emphasises the development of regenerative bioeconomy models, promoting green growth and circular bioeconomy practices.
- Strategic sectors include high-value bio-based chemicals, biopolymers, smart proteins, functional foods, precision biotherapeutics, climate-resilient agriculture, carbon capture and utilisation, and marine and space research.
- It aims to advance sustainable and circular practices to address critical societal issues such as climate change, food security, and human health.
- The policy will enhance the skilled workforce and boost job creation, aligning with the government's initiatives like Net Zero carbon economy and Lifestyle for Environment.
- It envisions a resilient biomanufacturing ecosystem to drive cutting-edge innovations and biobased product development.
- **Advantages:**
  - **Enhanced Accuracy:** Offers more precise simulations of human organ functions compared to animal models, improving the relevance of experimental results.

- **Cost-Efficiency:** Reduces the time and financial investment needed for drug development by providing quicker and more reliable testing platforms.
- **Ethical Benefits:** Minimises or eliminates the need for animal testing, addressing ethical concerns related to animal welfare.

Applications:

- **Drug Development:** Used to test drug efficacy and safety, reducing the likelihood of failures in later clinical trials.
- **Disease Research:** Helps model diseases and study their progression, enabling the development of targeted therapies.
- **Personalised Medicine:** Facilitates the creation of personalised treatments by integrating individual genetic information into drug testing and development processes..

Page 12 : Prelims Fact

The Union Cabinet approved the PM Electric Drive Revolution (PM E-Drive) scheme with an allocation of ₹10,900 crore to boost electric vehicle adoption and infrastructure.

- The scheme includes funding for e-buses, charging stations, and subsidies for various electric vehicles.

Cabinet approves ₹10,900 cr. scheme for e-mobility push

PM E-Drive scheme aims to enable procurement of e-buses, setting up 72,000 charging stations; plan offers subsidies or demand incentives worth ₹3,679 crore, says Ministry of Heavy Industries

The Hindu Bureau
NEW DELHI

The Union Cabinet on Wednesday approved a scheme with an outlay of ₹10,900 crore to provide for procurement of e-buses as well as for setting up more than 72,000 charging stations for EV batteries in cities and on highways to address 'range anxiety' among buyers.

The scheme, named PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-Drive), will be valid for two years.

Charge booster

PM E-Drive scheme, approved by the Union Cabinet, aims to address range anxiety among EV buyers

- Scheme, valid for two years, will support 24.79 lakh e-2Ws, 3.16 lakh e-3Ws, 14,028 e-buses
- ₹4,391 cr. for procurement of 14,028 e-buses by State transport undertakings of 9 cities
- ₹2,000 cr. to set up charging stations in cities with high EV penetration and on some select highways

According to a press statement from the Ministry of Heavy Industries, the scheme also offers subsidies or demand incentives worth ₹3,679 crore for e-two wheelers (e-2Ws), e-three wheelers (e-3Ws), e-ambulances, and e-trucks to buyers. The scheme will support 24.79 lakh e-2Ws, 3.16 lakh e-3Ws, and 14,028 e-buses, the Ministry added. A total of ₹4,391 crore will be set aside under the scheme for procurement of 14,028 e-buses by state transport undertakings for 9 cities with a population of more than 40 lakh, namely Delhi, Mumbai, Kolkata, Chennai, Ahmedabad, Surat, Bangalore, Pune and Hyderabad.

The scheme also provides for ₹2,000 crore to set up charging stations in select cities with high EV penetration and on some specified highways.

Analysis of the news:

- The Union Cabinet approved the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-Drive) scheme with an outlay of ₹10,900 crore.
- The scheme will last for two years and aims to address range anxiety among electric vehicle (EV) buyers.
- It includes subsidies or demand incentives worth ₹3,679 crore for electric two-wheelers (e-2Ws), three-wheelers (e-3Ws), ambulances, and trucks.

- ₹4,391 crore will be allocated for procuring e-buses by state transport undertakings in 9 major cities with populations over 40 lakh.
- ₹2,000 crore will be set aside for establishing over 72,000 charging stations in high EV penetration cities and specified highways.
- The scheme aims to boost EV adoption and infrastructure development across India.

On Wednesday, Afghanistan announced the commencement of work on the $10-billion TAPI pipeline, which will transport natural gas from Turkmenistan through Afghanistan, Pakistan, and India.

Afghanistan set to begin work on TAPI pipeline

The $10-billion natural gas pipeline traversing Turkmenistan, Afghanistan, Pakistan, and India is the most significant development project for Taliban authorities since they seized power in 2021

Agence France-Presse
ISLIM CHESHMA

Afghanistan said on Wednesday that work would begin on a $10-billion gas pipeline traversing South Asia as officials joined dignitaries in neighbouring Turkmenistan to celebrate its completion on that side of the border.

Progress on the TAPI pipeline – running through Turkmenistan, Afghanistan, Pakistan, and India – has been repeatedly delayed because of security issues in conflict-ravaged Afghanistan.

"From today the operations will start on Afghanistan's soil," Taliban government spokesperson Zabihullah Mujahid said in comments broadcast by Afghan state television.

At the border ceremony in Islim Cheshma in Turkmenistan, officials on both sides, including Afghan Prime Minister Hassan Akhund, hailed the project.

"This project will benefit not only the economies of the countries participating but also the countries of the whole region," the President of Turkmenistan Serdar Berdimuhamedow said in a video broadcast live at the ceremony.

However, experts warned that the project – which is still not fully funded – is unlikely to be operational for another decade.

In the Afghan border province of Herat, a public holiday was declared to mark the occasion, with posters celebrating the project plastered around the capital of the same name.

Slow progress: Work on the pipeline has been delayed by security issues in Afghanistan. FILE PHOTO

The pipeline will see around 33 billion cubic metres of natural gas each year extracted from the Galkynysh gas field in the south-east of Turkmenistan.

It will be pumped through a 1,800-kilometre pipeline traversing Afghanistan, including Herat and Kandahar in the south, before crossing into restive Balochistan province in Pakistan and ending in Fazilka in Punjab of India.

Pakistan and India will each purchase 42% of the gas deliveries, and Afghanistan 16%, while Kabul will also benefit from lucrative transit fees of around $500 million per year, according to Afghan media.

Work on the Turkmen side began in 2015 and was initially scheduled to start in Afghanistan in 2018, but has been repeatedly delayed.

Stumbling blocks

India's commitment to the pipeline has also previously been questioned over its relationship with Pakistan and easy access to liquified natural gas markets, which are seen as potential stumbling blocks.

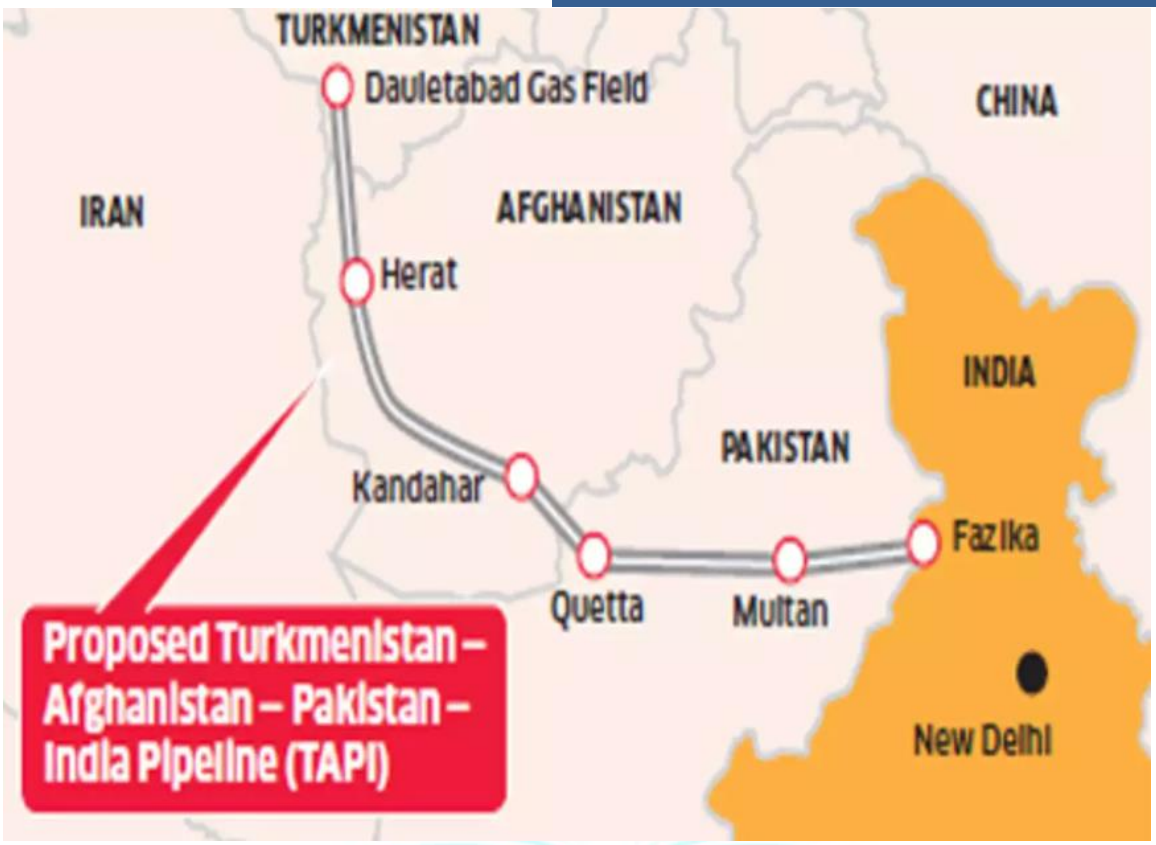
It is the most significant development project for Taliban authorities since they seized power in 2021, ending their two decade-long insurgency against the foreign-backed government.

The pipeline gives the government, which is not officially recognised by any nation, a strategic role in regional cooperation between Central Asia and South Asia, which is facing huge energy deficits.

Afghanistan, although still under economic and financial sanctions from the West, is currently trying to relaunch ambitious projects, particularly in energy, mines and infrastructure.

At the end of July, Afghanistan and China officially relaunched a major copper-extraction project in the world's second-largest known deposit, near Kabul, which had been bogged down since 2008.

- The project aims to address regional energy deficits and enhance economic cooperation, despite past delays and ongoing security challenges in Afghanistan.



TAPI Pipeline:

- The TAPI (Turkmenistan-Afghanistan-Pakistan-India) pipeline is a 1,814-kilometre project designed to transport 33 billion cubic metres of natural gas annually.
- Known as the 'Peace Pipeline', it begins at the Galkynysh gas field in Turkmenistan, passes through Afghanistan and Pakistan, and reaches Fazilka in India.
- At full capacity, the pipeline will allocate gas to Afghanistan (5%), Pakistan (47.5%), and India (47.5%) over a 30-year period.
- The project encompasses procurement, installation, and operation of the pipeline and associated facilities in Afghanistan and Pakistan.
- Conceived in the 1990s, an inter-governmental agreement was signed in 2010, with subsequent agreements in 2013 and a groundbreaking ceremony in Herat in 2018.
- Financed by the Asian Development Bank and Turkmenistan's $700 million loan from the Islamic Development Bank, with an initial $300 million investment from the three other countries.

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Page : 08 Editorial Analysis

Perils of decentralisation with Chinese characteristics

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In his Independence day speech this year, the Prime Minister urged States to compete with each other to attract investors. In sharp contrast, extreme subnational economic competition seems to have run its course in China. Here is why decentralisation, once celebrated as a reason for China's economic miracle, has turned counter-productive.

Unlike India, where city-level governments account for less than 3% of total government spending, a staggering 51% of government spending in China happens at sub-provincial levels. Local governments also have a much broader qualitative mandate. They are almost exclusively responsible for unemployment insurance and pensions, subjects Indians generally associate with the national government.

Yet, China's extreme decentralisation does not make it a federal country. A key feature of a federal system is that higher-level governments cannot extinguish the powers given to lower-level governments, as the Constitution protects them. No such provision exists in China's Party-state system. After Deng Xiaoping's Southern Tour caused local governments to go on a spending spree, the central government severely and immediately restricted their ability to raise money through the Tax-Sharing Reform of 1994.

Overcapacity is structural

Local governments had to find a way out. Since economic growth was an important determinant of local leaders' political prospects, they started prioritising industrial construction over the provision of public services. They offered industrial land at deep discounts compared to residential land in the hope that industrial outputs would increase regional economic growth and also become a source for future local tax revenues. Local governments attracted investors with attractive land rights. Firms accepted the offer, churned out goods at low rates because of cost advantages, and exported to the world.

This investment-led model is structurally prone to overcapacity. This model of competitive sub-national growth is akin to a car having two accelerators and no brakes. The arrangement worked well till the Hu Jintao period. The central leadership set broad priorities and targets while local governments experimented and competed. The process of crossing the river while feeling the stones created tremendous wealth, while also generating structural overcapacity, wasteful investment, and loss-making entities.

> India must note that decentralisation, once celebrated as a reason for China's economic miracle, has turned counter-productive

The overall trend remained net positive for two reasons. First, the directives were broad enough for local governments to try different ways to achieve growth or reform goals. For instance, Guangdong interpreted the central goal of economic opening by experimenting with special economic zones. Other regions were free to follow alternate models. Likewise, the central leadership permitted local innovations in the housing sector, rather than imposing a particular solution. This policy innovation process was locally determined and not micromanaged by the centre.

Second, a salubrious geopolitical climate was crucial. Foreign markets were willing and able to absorb China's ever-increasing capacity. China's steel sector's expansion is a case in point. Starting from the turn of the millennium, within six years, China went from being a net steel importer to the largest steel manufacturer and a net exporter. By the beginning of the 2010s, tackling overcapacity in the steel sector had become a prominent policy objective. While many Chinese companies failed along the way, several rode this wave, generating tremendous value for employees and the government.

The car encounters a slope

However, this model began to reach a tipping point around the time Xi Jinping came to power. Researchers at the National Development and Reform Commission (NDRC) in 2014 estimated that half of all investment between 2009 and 2013 was "ineffective", amounting to a waste of nearly $6.9 trillion. Mr. Xi's solution to this predicament was to strengthen central control and establish traffic lights to direct state and private capital in desirable domains.

Since then, central directives have become narrower. The desire for self-sufficiency has further resulted in them focusing on specific product lines. For example, the drive to localise the entire supply chain for semiconductors is divorced from market-based demand and the comparative advantages of the Chinese industry. The "Big Fund" began in 2014 intending to build a self-sufficient semiconductor industry. Drawing on this, many local governments indiscriminately poured money into chip-making firms. Ten years later, China has not mastered the production of advanced chips. Nevertheless, many firms continue to milk local governments for funding. The Economist reports that 30% of all industrial firms were making losses at the end of June 2024, beating the previous worst performance during the Asian financial crisis in the late 1990s.

Another reason is that other governments now see China's overcapacity as a national security threat. This is evident in the geopolitical wrangling underway over tech-enabled Chinese products such as electric vehicles and telecom equipment. Moreover, China's bad international conduct has exacerbated the negative perceptions of Chinese products and investments.

Shortcomings in the BRI approach

Mr. Xi planned to substitute western markets with increasing domestic demand and find new international markets through the Belt and Road Initiative (BRI). Increasing domestic demand has not worked out because this is unfamiliar territory for a structure obsessed with supply-side stimuli. The BRI approach has not worked because the participating countries are not economically strong enough to generate huge demand.

In short, overcapacity and export orientation are baked into Chinese-style decentralisation. This model has now reached its limits due to China's arrogant approach to international relations and its drive towards self-reliance. Though we might see a jump in exports for some sectors, China faces an economic decline if it does not transform its political and economic relations with the world's major countries.

GS Paper 02 : Indian Polity

PYQ: (UPSC CSE (M) GS-2 2018): Assess the importance of the Panchayat system in India as a part of local government. Apart from government grants, what sources the Panchayats can look out for financing developmental projects? (250 w /15 m)

UPSC Mains Practice Question Discuss the challenges associated with decentralisation in China. What lessons can India learn to improve its own decentralisation efforts? (250 w /15 m)

Context :

- China's extreme decentralisation has led to overcapacity and inefficient investments, as local governments prioritise industrial growth over public services.
- This model, once key to China's economic rise, is now facing challenges due to geopolitical tensions and shrinking international demand, highlighting the need for policy reforms.

Comparing India and China's economic decentralisation

- **City level data:** Unlike India, where city-level governments account for less than 3% of total government spending, a staggering 51% of government spending in China happens at sub-provincial levels.
- **Qualitative mandate for local government:** They are almost exclusively responsible for unemployment insurance and pensions, subjects Indians generally associate with the national government.
- **Non-federal and centralising tendencies of China**: China's extreme decentralisation does not make it a federal country.
  - A key feature of a federal system is that higher-level governments cannot extinguish the powers
  - No such provision exists in China's Party-state system.
  - After Deng Xiaoping's Southern Tour caused local governments to go on a spending spree, the central government severely and immediately restricted their ability to raise money through the Tax-Sharing Reform of 1994.

Overcapacity is structural

- **Industrial prioritisation:** Since economic growth was an important determinant of local leaders' political prospects, they started prioritising industrial construction over the provision of public services.

- They offered industrial land at deep discounts compared to residential land in the hope that industrial outputs would increase regional economic growth and also become a source for future local tax revenues.
- Local governments attracted investors with attractive land rights.
- Firms accepted the offer, churned out goods at low rates because of cost advantages, and exported to the world.

- **Over-capacitated investment-led model:** The arrangement worked well till the Hu Jintao period.
  - The central leadership set broad priorities and targets while local governments experimented and competed.
  - The process of crossing the river while feeling the stones created tremendous wealth, while also generating structural overcapacity, wasteful investment, and loss-making entities.

Positive Trends in China's Economic Policies

The overall trend remained net positive for two reasons:

- **The directives and local innovations**: were broad enough for local governments to try different ways to achieve growth or reform goals.
  - For instance, Guangdong interpreted the central goal of economic opening by experimenting with special economic zones. Other regions were free to follow alternate models.
  - Likewise, the central leadership permitted local innovations in the housing sector, rather than imposing a particular solution.
  - This policy innovation process was locally determined and not micromanaged by the centre.
- **A salubrious geopolitical climate:** Foreign markets were willing and able to absorb China's ever-increasing capacity.
  - China's steel sector's expansion is a case in point.
  - Starting from the turn of the millennium, within six years, China went from being a net steel importer to the largest steel manufacturer and a net exporter.
  - By the beginning of the 2010s, tackling overcapacity in the steel sector had become a prominent policy objective.
  - While many Chinese companies failed along the way, several rode this wave, generating tremendous value for employees and the government.

Tipping points and need for policy changes

- However, this model began to reach a tipping point around the time Xi Jinping came to power.
- Ineffective investments: Researchers at the National Development and Reform Commission (NDRC) in 2014 estimated that half of all investment between 2009 and 2013 was "ineffective", amounting to a waste of nearly $6.9 trillion.
  - Mr. Xi's solution to this predicament was to strengthen central control and establish traffic lights to direct state and private capital in desirable domains.

- **Narrowness of the central directives:** The desire for self-sufficiency has further resulted in them focusing on specific product lines.
  - For example, the drive to localise the entire supply chain for semiconductors is divorced from market-based demand and the comparative advantages of the Chinese industry.
  - The "Big Fund" began in 2014 intending to build a self-sufficient semiconductor industry. Drawing on this, many local governments indiscriminately poured money into chip-making firms.
  - Ten years later, China has not mastered the production of advanced chips. Nevertheless, many firms continue to milk local governments for funding.
  - The Economist reports that 30% of all industrial firms were making losses at the end of June 2024, beating the previous worst performance during the Asian financial crisis in the late 1990s.
- **China's overcapacity as a national security threat**: This is evident in the geopolitical wrangling underway over tech-enabled Chinese products such as electric vehicles and telecom equipment.
- **China's bad international conduct:** Has exacerbated the negative perceptions of Chinese products and investments.

Way forward

Overcoming the shortcomings in the BRI approach

- Mr. Xi planned to substitute western markets with increasing domestic demand and find new international markets through the Belt and Road Initiative (BRI).
- Increasing domestic demand has not worked out because this is unfamiliar territory for a structure obsessed with supply-side stimuli. The BRI approach has not worked because the participating countries are not economically strong enough to generate huge demand.
- China should shift from relying on domestic demand and the Belt and Road Initiative (BRI) to fostering innovation and building partnerships with stronger global markets. This shift can improve efficiency and competitiveness.

Learnings for India

- **Balanced Decentralisation:** India can focus on a balanced decentralisation model, ensuring local governments have sufficient autonomy without undermining central oversight.
- **Fiscal Reforms:** Strengthening local fiscal capacity through transparent revenue-sharing mechanisms can empower local bodies and reduce over-dependence on state and central grants.
- **Avoid Overcapacity:** India should avoid overemphasis on industrial growth at the expense of public services, ensuring that local development is sustainable and balanced.
- **Policy Flexibility:** Allowing regional experimentation with policy solutions, while setting broad central guidelines, can promote innovation without leading to inefficiencies.
- **Focus on Services:** India should ensure that local governments prioritise essential public services alongside industrial development to ensure inclusive growth.