UnderStand UPSC
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CURRENTLY — 9&10 August 2026

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Podium finish

India's women boxers were the highlight of the Glasgow Commonwealth Games

In the truncated Commonwealth Games in Glasgow, India performed well, exceeding expectations and retaining fourth place behind developed nations such as Australia, England, and Canada, despite a sharp drop in medals from 61 to 39, including 13 gold, 17 silver, and nine bronze. The gold rush on the penultimate day, powered by the spectacular performance of the boxers who won seven gold and three silver medals, improved India's position. While some weight classes had weaker draws, several categories posed strong challenges. Propelled by determination and hard work, five women boxers – Sakshi Chaudhary, Preeti Pawar, Jaismine Lamboria, Priya Ghanghas, and Arundhati Choudhary – and two men, Sachin Siwach and Ankush Panghal, ensured India's best-ever showing of 10 medals, three more than that in the last edition. The women boxers' fearless approach established them as a force to reckon with. India won 16 medals in athletics and para-athletics, with notable contributions from para-athletes Dilip Gavit, Soman Rana, and Sharmila Dhankar. In world-class fields, the country's athletes won 10 medals compared to eight in Birmingham 2022. Neeraj Chopra recovered from injury to take a creditable silver and lead the country to twin-medal glory in javelin along with Yashvir Singh and underlined India's rising status as a javelin powerhouse. Other moments to cherish included triple jumpers Praveen Chithravel and Selva Prabhu's twin podium finishes, Gulveer Singh becoming the first Indian to medal in 5000m and 10000m, Murali Sreeshankar winning his second straight long jump silver, Tejaswin Shankar claiming the country's first-ever decathlon medal, and Sarvesh Kushare pocketing a high jump silver.

Asmita Dey and Harsh Singh sprang a surprise by winning the country's first gold medals in judo, while Mirabai Chanu lived up to her billing to clinch her third successive gold medal. She led Indian lifters to a significant haul of eight medals. The country's strong show, against an expectation of around 30 medals, helped the contingent leave Glasgow on a high as Ahmedabad prepares to host a bigger Games offering more medals in 2030. Indian athletes' praiseworthy performance in Glasgow has raised hopes for the Aichi-Nagoya Asian Games next month, where a bigger haul is expected from a wider range of disciplines. While India is capable of securing impressive medal collections at the Commonwealth and Asian Games, it needs to raise its level manifold to be counted among the best globally. Aspiring to host the 2036 Olympics, it must identify priority sports and invest in them to ensure a higher finish, even while waging a perennial war against doping.

Final medals table (top-5)

Country	G	S	B	Total
Australia	70	45	56	171
England	29	45	36	110
Canada	19	20	23	62
INDIA	**13**	**17**	**9**	**39**
Scotland	13	9	17	39

1. CONTEXT

- The 23rd Commonwealth Games, held in Glasgow from 23 July–2 August 2026, brought together athletes from 74 nations across 11 sports and 215 medal events.
- India finished 4th with 39 medals — 13 Gold, 17 Silver and 9 Bronze.
- More important than the tally was the quality of the performance: India showed growing depth in women's sport, boxing, judo, athletics and para-sport, suggesting a gradual diversification of its sporting base.

2. INDIA'S PERFORMANCE — THE BIGGER SIGNIFICANCE

- Record boxing campaign: India won 10 medals (7 Gold, 3 Silver)—its best-ever boxing performance at a Commonwealth Games and the highest boxing medal haul at Glasgow.
- Women's excellence: Preeti Pawar, Jaismine Lamboria, Sakshi Chaudhary, Priya Ghanghas and Arundhati Choudhary won Gold in women's boxing, demonstrating a significant rise in women's high-performance sport.
- Judo breakthrough: Asmita Dey (48 kg) and Harsh Singh (60 kg) won Gold, giving India its first Commonwealth Games judo Gold medals and marking a historic expansion beyond traditional medal disciplines.
- Athletics: Neeraj Chopra — Silver (Javelin); Murali Sreeshankar — Silver (Long Jump); Gulveer Singh — Silver (10,000m) + Bronze (5,000m) underline India's growing track-and-field capability.
- Para-sport: India secured 7 para-sport medals, including 3 Gold, demonstrating growing inclusivity and competitive depth.
- Broader message: The 39-medal haul therefore represents not merely quantity, but diversification + women's empowerment + para-sport inclusion + emergence of new medal disciplines.

3. PERSISTING CHALLENGES

- Concentrated success: A few disciplines still carry a disproportionate share of India's medal burden.
- Grassroots-to-elite gap: Talent identification and sustained coaching remain uneven across regions and socio-economic groups.
- Sports-science deficit: Nutrition, psychology, biomechanics, rehabilitation and performance analytics need wider reach.
- Infrastructure & funding: Long-term, predictable investment and quality facilities remain essential for building depth.
- Governance & athlete welfare: Professional federation management, transparent selection, career support and anti-doping systems need continuous strengthening.

4. WAY FORWARD

- Create a seamless talent pipeline: Connect Khelo India → schools → universities → academies → high-performance centres.
- Invest in the complete athlete: Integrate sports science, nutrition, psychology, physiotherapy and data analytics into everyday training.
- Build sporting depth: Provide multi-year, outcome-linked support to emerging Olympic, Paralympic and non-traditional disciplines.
- Make sport inclusive: Strengthen dedicated pathways for women, para-athletes and under-represented regions.
- Use Ahmedabad 2030 strategically: Treat the 2030 Commonwealth Games as a catalyst for lasting infrastructure, domestic competition and institutional capacity—not merely a one-time event.

DAMASCUS

Syria reaches understanding with Moscow on future of Russian bases

REUTERS

Syria and Russia have reached a memorandum of understanding on the fate of Russian bases at Tartous and Hmeimim after 18 months of talks. Syria's Foreign Ministry said on Sunday Damascus would take over management of civilian facilities, including Hmeimim airport and the commercial berth at Tartous port. REUTERS


TURKEY
Hmeimim
Tartus
SYRIA
Mediterranean Sea
LEBANON
DAMASCUS
IRAQ
ISRAEL
JORDAN
middleeasteye.net

1. Context [GS-II – International Relations | West Asia | India–Russia Relations]

Syria and Russia have reached an MoU after 18 months of negotiations to reorganise Russia's military presence at Tartus and Hmeimim, marking a shift in the long-standing Russia–Syria security relationship.

2. The Two Russian Facilities

- Tartus Naval Facility: Russia's key Mediterranean naval/logistics foothold; the facility dates back to the Soviet era and was expanded under a 2017 agreement, giving Russia long-term access.
- Hmeimim Air Base: Located near Latakia, it became the principal base for Russian air operations after Moscow intervened in the Syrian civil war in 2015 to support Bashar al-Assad. Russia formalised its long-term presence through a 49-year arrangement in 2017.

3. Why These Bases Matter to Russia

- Mediterranean access: Tartus provides Russia with a strategic naval foothold beyond the Black Sea.
- Power projection: Hmeimim enabled Russian air operations and strengthened Moscow's influence across West Asia and the Eastern Mediterranean.
- Africa & wider reach: Together, the facilities have served as important logistical nodes for Russia's regional military presence.

4. Current Development

- Syria will take over civilian facilities, including Hmeimim Airport and the commercial fourth berth at Tartus.
- The military facilities will be reconfigured as joint Russian-Syrian training and qualification centres, rather than continuing in their previous form as Russian military bases.

A common blueprint for India's industrial heat electrification

India's next phase of energy transition must focus on electrifying industrial heat; a coordinated approach involving innovative financing, skilled workers, demonstration projects and cluster-level planning can help scale the transition and strengthen manufacturing competitiveness

Vrinda Gupta
Srinivas Ethiraj

India's energy transition is already mainstreaming renewable-powered electrification across major demand centres. Electric mobility is replacing internal combustion engines, agriculture is increasingly powered by solar irrigation, and buildings are adopting smarter appliances. The next phase lies in electrifying industrial heat, particularly across India's MSMEs, to strengthen manufacturing competitiveness, energy security and decarbonisation.

India's solar photovoltaic revolution reduced solar tariffs by more than 85% over the past decade through a coordinated ecosystem of supportive policies both at the national and state level, innovative financing, competitive vendors and markets, institutional mandates, and sustained private sector investment. Now, scaling industrial heat electrification will require a similar approach. The focus has shifted to how India plans and scales this transition.

No blanket solution

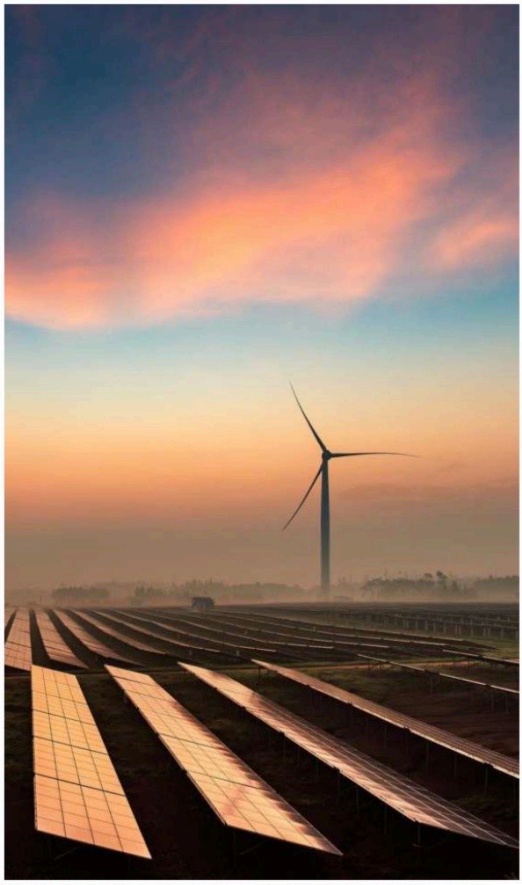
First, facility-level engineering assessments should become the foundation of industrial heat electrification. Most industries have limited visibility of their thermal systems beyond fuel consumption. Steam flow is rarely metered, process temperatures are often unmonitored, and waste heat streams remain unquantified. Without robust engineering assessments, industries risk investing in technologies unsuited to their process requirements. So, engineering assessments should evaluate legacy boiler performance and operating costs, optimise steam systems, identify recoverable waste heat, and where feasible, replace steam with more efficient direct heating before electrification.

Electricity can be used only where it delivers the greatest value. So, process integration tools such as pinch analysis should identify internal heat recovery opportunities before electrification.

Representative facilities can be used to develop standardised process profiles that estimate hourly thermal demand, identify electrifiable heat loads, and inform future electricity demand for utilities and grid operators. Aggregated across industrial clusters, these assessments can support district-level industrial decarbonisation plans tailored to local industrial profiles, renewable resources, and infrastructure readiness. Localised planning recognises that there is no one-size-fits-all solution.

Second, India should adopt a technology-inclusive approach. Industrial processes vary widely in temperature, production schedules, and thermal demand. So a single technology solution is impractical.

Heat pumps are well suited for low- and medium-temperature applications, particularly where waste heat can be recovered. Electric boilers currently offer a practical pathway for steam generation above 200° C. Mechanical vapour recompression systems can recover and reuse process vapour in evaporation-intensive processes. Thermal energy storage solutions can act as thermal buffers by storing surplus heat generated when renewable electricity is abundant or recovered from industrial waste heat, and releasing it when process heat is required, improving operational flexibility and reducing peak electricity demand.



Powering up: A successful electrification programme hinges on affordable and reliable renewable electricity supply. GETTY IMAGES

Access to capital

Third, a successful electrification programme hinges on affordable and reliable renewable electricity supply. While renewable generation costs have fallen dramatically over the past decade, the delivered cost of renewable electricity for industries remains influenced by network charges, open-access provisions, and other transaction costs.

As India's commercial and industrial renewable energy market matures, reforms should focus on reducing these costs by streamlining open-access procedures, rationalising banking provisions, reducing transactional complexity, and strengthening grid infrastructure, particularly for electrification projects that replace fossil fuel-based heating. Renewable electricity planning should be integrated with industrial electrification, enabling industries to align thermal demand with periods of renewable generation.

Fourth, financing models must evolve alongside technologies. The principal challenge in scaling industrial heat electrification extends beyond technology to reducing engineering and investment risks, particularly for MSMEs with limited access to capital and technical expertise.

Technology leasing, heat-as-a-service, energy service company models, and blended finance can lower the upfront investment and technology risks. Equally important is demand aggregation. Facility-level assessments should feed into cluster-level investment pipelines, allowing industries with similar thermal profiles to aggregate demand, reduce procurement costs, and improve access to low-cost finance.

The right fit

The following criteria can help identify brownfield units best suited for early deployment of low- and medium-temperature electrification technologies:

Screening criterion	Indicative threshold
Steam generation cost	> ₹2.8 per kg of steam
Steam-to-fuel ratio	< 3 kg steam per kg fuel
Recoverable waste heat	Temperature ≥ 50° C; flow rate ≥ 60 cubic metres per hour
Delivered cost of renewable electricity	< ₹6 per kWh
Boiler service life	> 18 years

Demonstration projects

Fifth, India needs skilled workers and implementation capacity tailored to cluster needs. Many industries, particularly MSMEs, face capability and skill gaps that slow technology adoption, reduce efficiency, and limit innovation. Most of the vocational and industry training programmes often focus on routine operations and maintenance. Industrial heat electrification will require an engineering transition at the shop floors rather than a simple equipment replacement exercise. Scaling it requires a workforce of engineers, technicians, and operators with capabilities in process integration, system design, installation, commissioning, operation, and maintenance, and digital automation and control systems.

Sixth, India needs demonstration projects before it needs large-scale mandates. India needs first-of-a-kind demonstration projects across representative sectors, process temperatures, and industrial clusters. This will generate engineering evidence, validate business models, and reduce investment uncertainty. The priority should be to identify the most suitable first-mover facilities.

Based on our analysis in brownfield settings, units that meet these screening criteria are the best candidates for early deployment of low- and medium-temperature (up to 250 °C) electrification technologies **(Table 1).**

Common blueprint

Finally, industrial heat electrification needs a coordinated national framework supported by place-based implementation. It should establish engineering standards, designate institutional responsibility, facilitate demand aggregation, mobilise finance, and support early demonstration projects. Its implementation should be driven through district and cluster-level industrial energy transition plans, allowing each industrial cluster to transition according to its unique thermal profile, local context, electricity market, and renewable energy potential.

India now needs a common blueprint to transform industrial heat electrification into a scalable industrial strategy. Industrial heat offers an opportunity to decarbonise manufacturing, reduce greenhouse gas emissions, and build a more resilient and future-ready industrial economy.

(Vrinda Gupta is associate director, Energy Transition, Vasudha Foundation. Srinivas Ethiraj is assistant manager, Energy Transition, Vasudha Foundation)

1. Context [GS-III – Energy | Environment | Industrialisation | Climate Change]

India's next energy-transition challenge is industrial heat electrification—shifting suitable industrial heat processes from fossil fuels to clean electricity to achieve decarbonisation, energy security and competitive manufacturing.

2. Why Industrial Heat Electrification?

I. Decarbonisation

- Low- and medium-temperature industrial heat offers significant scope for electrification; globally, such applications account for about 70% of industrial energy consumption.

II. Renewable-energy opportunity

- India's expanding renewable-electricity base creates scope to shift industrial heat towards clean electricity.

III. Competitiveness

- Reduces fossil-fuel dependence and exposure to fuel-price volatility, while supporting low-carbon manufacturing.

3. Common Blueprint

I. Right Technology, Right Temperature

- Conduct facility-level assessment of temperature, heat demand and waste-heat recovery.
- Heat pumps are particularly suited to low/medium-temperature processes.

II. Affordable Finance

- High upfront costs, especially for MSMEs, require Heat-as-a-Service, technology leasing and blended finance.

III. Demonstration + Skills

- Pilot projects across industrial clusters → validate technology and reduce investment risk.
- Build skills in installation, commissioning, maintenance and digital controls.

4. Policy Link + Way Forward

- Perform, Achieve and Trade (PAT) Scheme: In 2025, covered 1,333 energy-intensive industrial units, representing 55% of industrial energy consumption, with reported energy savings of 25.78 million tonnes of oil equivalent (Mtoe).
- Next step: Complement PAT's energy-efficiency focus with industrial heat electrification.
- Create cluster-level plans to aggregate demand and reduce procurement/finance costs.
- Combine renewable electricity + storage + waste-heat recovery where technically viable.
- Prioritise MSMEs and low/medium-temperature processes, where electrification has stronger near-term potential.

Traditional diets shape unique gut microbes of Indian tribes

Research on Indian tribal populations shows that traditional diets foster unique gut bacteria; the findings show an urgent need for biobanking to preserve microbial diversity and develop region-specific probiotic therapies as required

Rohini Karandikar

The gut microbiomes of eight tribal populations across India have a unique diversity shaped by their traditional diets and are distinct from those observed in industrialised settings, researchers have reported in *Gut Microbes*.

The effects of probiotics depend on a population's diet and gut composition, and the study offers a baseline for India's tribal communities. It also points to the research still needed before such interventions can be tailored effectively.

The study's authors have also stressed a need to preserve these microbiomes in biobanks before the diversity disappears.

India has a large indigenous population that follows diverse diets based on location and culture. However, they are also underrepresented in global human microbiome studies, making up less than 1% of the human microbiome samples.

"The Indian microbiome is very different compared to the Western population, with an enormous diversity within India," said Dhiraj Dhotre, a scientist at the National Centre for Cell Science (NCCS), Pune, and the study's co-corresponding author. "Secondly, the entire microbiome is shaped by our long-term dietary habits."

The study was led by researchers from NCCS in collaboration with scientists from other institutions in India, Finland, and the U.S.

In the study, the team investigated the effects of dietary variation across eight tribal cultures on their gut microbiomes. These communities were from four regions: Warli from the western coast, Madia and Gond from the northeastern Deccan plateau, Kabui from northeast India, and Brokpa, Purigpa, Balti, and Boto from the trans-Himalayas. Of these, 76 healthy adults contributed dietary data and faecal samples for study.

The team's analysis revealed that the diet of the trans-Himalayan communities mainly included a variety of grains and dairy while those of the other four tribes significantly differed, as they included home-brewed alcoholic beverages, fish, fruits, and/or greens and stems.

The gut microbiota of the trans-Himalayan population was also more diverse and included a distinct strain of the bacterium *Bifidobacterium adolescentis*. The researchers associated this pattern with high dairy consumption.

"The dairy component in the diet has [exerted] an evolutionary selection pressure, due to which specific microbes have been established," Abhijit Kulkarni, lead co-author of the study and former PhD student at NCCS, said.

Bifidobacterium bacteria are known to improve gut health and are a major component of commercial probiotics. However, Dr. Dhotre cautioned against considering it to be a universal marker of a healthy microbiome.

"It is not that only healthy individuals have *Bifidobacterium* and others do not. Those consuming diets other than dairy and grains may harbour different organisms that can provide similar health benefits," he said.

Among other species, *Bifidobacterium* bacteria convert dietary carbohydrates into short-chain fatty acids. In infants, the enzyme lactase converts lactose in milk to glucose and galactose. However, in adults, bacteria like *Bifidobacterium* take over and help ferment lactose. The trans-Himalayan population's microbiome showed enriched pathways of lactose and galactose metabolism and plant-degrading carbohydrate-active enzymes. The researchers also compared the microbial diversity from tribal communities with that from previously described samples from California, an industrialised setting, and found that the tribal gut microbiome was distinct.

"It becomes interesting to see how your human biological evolution, microbial presence, and cultural trait of having dairy or milk in your diet all go hand in hand to create not only human diversity but also affect the microbial diversity," Dr. Shantanu Ozarkar, a co-author and a biological anthropologist from Savitribai Phule Pune University, said.

Researchers did note that the study's sample size was small – yet they were able to identify 14 putatively novel bacterial taxa from 76 participants. The work in this study led to the conceptualisation of the Indian Human Microbiome Initiative, which concluded recently with the goal of "sampling more than 3,400 individuals across [India] from 10 endogamous and 7 tribal communities."

"The data is very robust because [the study] employs better and novel analytical, statistical, and bioinformatic tools," Mojibur Khan, of the Institute of Advanced Studies in Science and Technology, Guwahati, and an independent expert, said.

Researchers also stressed the importance of preserving these microbial communities in biobanks.

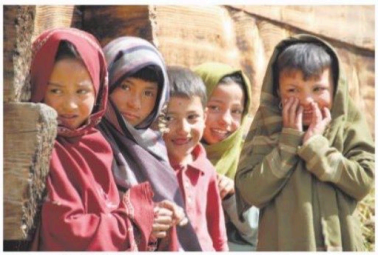
"After a few decades, when we need them for corrective measures or for clinical applications, we will not have any representations left of these ancient microbes. This microbial biodiversity must hence be preserved."

(Rohini Karandikar works with the TNQ Foundation, and is a science communicator and educator)

Microbial riches

New research offers a baseline to understand the effects of probiotics in India's tribal communities

- A study of eight Indian tribal populations reveals unique microbial diversity shaped by their traditional dietary habits
- Indian populations remain underrepresented in microbiome research, making up less than 1% of samples in international studies



A group of Balti children in 2008. MARIA LY (CC BY)

- High dairy consumption in trans-Himalayan tribes is linked to unique bacterial strains that improve gut health
- Tribal microbiomes differ from industrialised datasets, although globalisation is beginning to influence some specific microbial profiles
- Scientists emphasise the importance of using biobanks to preserve indigenous microbiomes before urbanisation destroys them
- The study also highlights the need for regional studies to develop diet-specific probiotic interventions for India

Consider the following statements in respect of probiotics :

1. Probiotics are made of both bacteria and yeast.

2. The organisms in probiotics are found in foods we ingest but they do not naturally occur in our gut.

3. Probiotics help in the digestion of milk sugars.

Which of the statements given above is/are correct ?

(a) 1 only

(b) 2 only

(c) 1 and 3

(d) 2 and 3

1. Context [GS-III – Science & Technology | Biotechnology | Health & Nutrition]

A study of eight Indian tribal populations shows that traditional, region-specific diets shape distinct gut-microbial communities, highlighting the need to preserve indigenous microbiomes and develop region-specific probiotic interventions.

2. Probiotics

- **Probiotics**: Live microorganisms that provide a health benefit when consumed in adequate amounts.
- They mainly include beneficial bacteria and certain yeasts and may be obtained through fermented foods or probiotic products.
- **Bifidobacterium** is an important group of beneficial gut bacteria involved in digestion and production of beneficial metabolites.
- Some probiotics can help in the digestion of lactose and other dietary carbohydrates.

3. Key Findings

- **Distinct tribal microbiomes**: Study of 76 healthy adults from eight tribal communities across four regions revealed distinctive microbial profiles.
- **Diet–microbiome link**: Traditional diets containing grains, dairy, fish, fruits, greens and locally available foods influence gut-microbial diversity.
- **Trans-Himalayan uniqueness**: High dairy consumption was associated with distinctive strains including Bifidobacterium adolescentis.
- **Research gap**: Indian populations constitute less than 1% of samples in global microbiome studies, despite India's enormous population and dietary diversity.

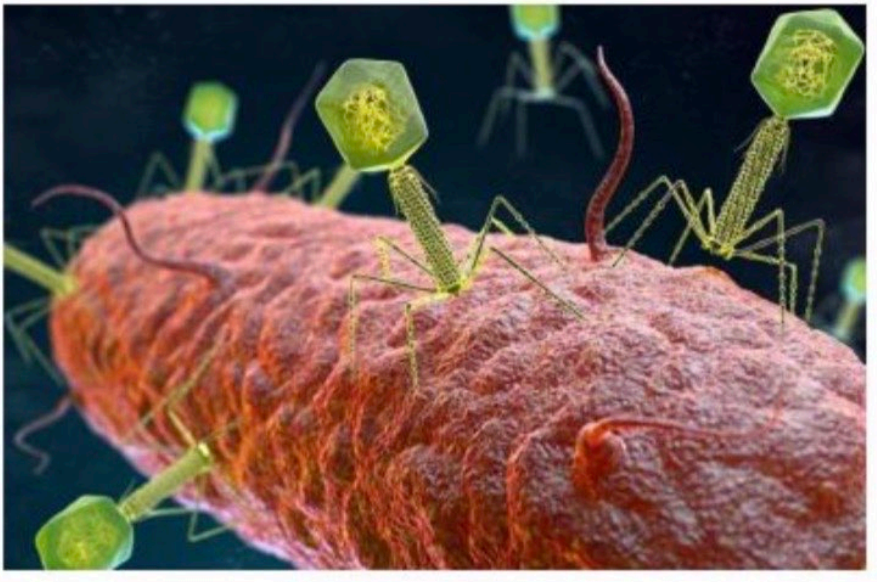
4. Significance

- **Health & nutrition**: Gut microbes influence digestion, metabolism and immune functions.
- **Personalised interventions**: Probiotic therapies should consider regional diet and microbiome composition, rather than assuming a universal formulation.
- **Biological heritage**: Indigenous microbiomes represent a form of biological diversity that could be lost with dietary and lifestyle changes.

5. Policy & Way Forward

- **Biobanking**: Preserve indigenous microbial strains before they disappear.
- **Human Microbiome Research**: Expand geographically diverse Indian datasets; the Indian Human Microbiome Initiative envisages sampling 3,400+ individuals from 10 indigenous and 7 tribal communities.
- **Region-specific probiotics**: Develop interventions suited to local diets and microbial profiles.

SNAPSHOTS



Scientists use AI to design viruses to kill hardy bacteria

Scientists have used AI to design entire genomes for bacteriophages, viruses that infect and kill bacteria. Using 'genome language models', they generated thousands of new DNA sequences, then used them with a well-studied virus called X174 as a template to yield 16 functional viruses. These phages were different from any found in nature, and could together successfully kill bacteria known to resist natural viruses. The work offers a path to create treatments to fight drug-resistant bacteria.

Consider the following statements :

I. No virus can survive in ocean waters.

II. No virus can infect bacteria.

III. No virus can change the cellular transcriptional activity in host cells.

1. Context [GS-III – Science & Technology | Biotechnology | Health]

Scientists have used Artificial Intelligence (AI) to design bacteriophages capable of killing bacteria that resist naturally occurring phages, opening a potential new approach against antimicrobial-resistant (AMR) infections.

2. Bacteriophage — Basics

- Bacteriophages (phages) are viruses that specifically infect bacteria and use bacterial cells to replicate.
- They are generally host-specific—a phage that infects one bacterial species/strain may not infect another.
- After infecting a susceptible bacterium, a lytic phage can multiply inside it and ultimately lyse (destroy) the bacterial cell.
- They can be found widely in nature, including soil, freshwater and oceans.

3. What is New?

- **AI-designed genomes**: Genome language models generated thousands of candidate DNA sequences for new bacteriophages.
- **X174 template**: Researchers used the well-studied bacteriophage X174 as a template and obtained 16 functional viruses.
- **Novel phages**: The engineered phages differed from naturally occurring viruses and collectively killed bacteria resistant to natural phages.
- **Potential application**: Could contribute to phage therapy against difficult-to-treat drug-resistant bacterial infections.

4. Why It Matters

- **Antimicrobial Resistance**: Provides a potential alternative/complement to conventional antibiotics.
- **Precision therapy**: Phages can be highly specific to their bacterial hosts, potentially reducing disruption of beneficial microbiota.
- **AI + biotechnology**: Demonstrates how AI can accelerate the design–test–optimise cycle in synthetic biology.

300 GW:

A New Milestone in India's Clean Energy Journey

300 GW+
Non-Fossil Fuel-based installed power capacity

400%
surge in Renewable Energy Capacity over the last **12 years**

54.18%
of India's total installed power capacity now comes from Non-Fossil Fuel sources

3rd
globally in Renewable Energy and Solar Power Capacity

4th
globally in Wind Power Capacity

India Achieves Landmark 300 GW Non-Fossil Fuel Power Capacity

Posted On: 09 AUG 2026 2:31PM by PIB Delhi

In a major milestone for the nation's clean energy transition and climate action targets, **India has crossed 300 GW of non-fossil fuel-based installed electricity generation capacity as on 31st July, 2026;** over 60% of the 500 GW capacity targeted to be achieved by 2030.

Breakdown of Non-Fossil Fuel Capacity (as on 31.07.2026):

- **Solar Power: 164.59 GW**
- **Wind Power: 58.14 GW**
- **Hydro Power (Large & Small): 57.24 GW**
- **Bio-power: 11.75 GW**
- **Nuclear Power: 8.78 GW**
- **Total Non-Fossil Capacity: 300.50 GW**

The share of non-fossil fuel electricity capacity in the country's total electricity generation capacity (which is around 552 GW at present), has reached over 54%.