GOBARdhan

Mains: *GS III – Infrastructure*

Why in News?

Recently, the Union Cabinet approved GOBARdhan – National Circular Bioenergy Scheme to boost domestic Compressed Bio Gas (CBG) and energy security.

What is GOBARdhan?

- **GOBARdhan – Galvanizing Organic Bio-Agro Resources Dhan**, was originally launched under the Swachh Bharat Mission (Grameen) in 2018.
- **Nodal Ministry –** Ministry of Petroleum and Natural Gas (MoPNG)
- **Implementation Period –** FY 2026-27 to FY 2035-36
- **Integral component of –** Solid and Liquid Waste Management (SWM), converting bio-waste - animal waste, kitchen leftovers, crop residue and market waste, into biogas and bio-slurry, thereby ensuring cleanliness in villages and improving rural lives.
- **Objectives**
  - To increase nearly ten-fold domestic CBG production.
  - Mobilize large-scale private investment.
  - Create a vibrant circular bioeconomy across the country.
- **Vision**
  - India's waste will fuel India's growth.
  - India's villages will become centres of clean energy production.

    - India's farmers will become partners in the nation's energy security.

What are the six growth engines under GOBARdhan?

- **Assured CBG Offtake –** It establishes a dedicated CBG Offtake Assurance framework to provide a reliable and predictable market for producers.
- Procurement by City Gas Distribution (CGD) entities will support achievement of the notified CBG Obligation trajectory:
    - 3% in FY 2026-27
    - 4% in FY 2027-28
    - 5% from FY 2028-29 onwards in CNG (Transport) and PNG (Domestic) segments
- This framework turns blending obligation into long-term demand signal, boosting bankability, utilization, and private investment.
- **Stable CBG Pricing Framework –** It introduces a government-backed administered price of Rs 2,110 per Metric Million British Thermal Unit (MMBTU).
- It is equivalent to ₹105 per kilogram of CBG, ensuring stable and remunerative pricing.
- Pricing framework ensures 10-year revenue certainty with government support and cost-sharing, balancing producer returns and consumer affordability.

- **Capital Assistance –** Eligible greenfield CBG projects will receive capital assistance of up to Rs. 2 crore per ton per day (TPD) of installed CBG capacity.

- Support covers value-chain assets and brownfield expansion, reducing capital burden and enabling wider private, MSME, cooperative, and rural participation.

- **Development of Pipeline Infrastructure –** It supports both cluster-based and standalone pipeline infrastructure connecting CBG plants with trunk pipelines and City Gas Distribution networks.

- Greater pipeline connectivity will reduce evacuation costs, improve reliability, expand market reach and enable higher utilization of domestically produced CBG.

- **Credit Guarantee Support –** Credit Guarantee Mechanism boosts lender confidence and expands MSME access to institutional finance for CBG projects.

- The mechanism will provide credit guarantee coverage of up to **85 %** on eligible loans for such projects.

- By sharing lending risk, the mechanism enables affordable finance, lowers collateral needs, speeds project development, and broadens MSME, women, and new-developer participation in a competitive CBG industry.

- **CBG Ecosystem Challenge Fund –** It establishes a dedicated CBG Ecosystem Challenge Fund to accelerate district-level implementation and strengthen local value chains across the CBG ecosystem.

- The Fund will support:

    - Feedstock resource assessment and mapping

    - Feedstock aggregation infrastructure

    - District-level CBG development planning

    - Technology adoption and process improvement

    - Value addition of organic manure

    - Capacity building and stakeholder awareness

GOBARdhan Unified Registration Portal: *Provides a single national platform for CBG/Bio-CNG plant operators and developers to obtain a registration number, which is mandatory to access MoPNG benefits and support.*

What are the expected outcomes of GOBARdhan?

- **Growth & Security –** Ten-fold surge in CBG output builds a clean gas pillar and enhances energy security by cutting fossil fuel imports.

- **Investment & Rural Empowerment –** Stable finance and project viability spur private investment while creating new income opportunities for farmers, cooperatives, and rural entrepreneurs.

- **Scientific Waste Utilization –** Productive use of agri-residue, dung, municipal waste, and biomass.

- **Emission Reduction –** Lower GHGs via fossil fuel replacement and organic waste use.

- **Organic Manure Economy –** Expansion through higher production, value addition, and FOM/LFOM use.

- **Streamlined Implementation –** Faster projects via one national framework, digital governance, and simplified institutions.

What are the benefits of GOBARdhan?

- **Production Growth –** Compressed biogas (CBG) output increased tenfold, which stimulated significant private sector investment.

- **Foreign Exchange Savings –** Over ₹40,000 crore saved as a result of reduced energy imports.

- **Fuel Substitution –** Clean gas replaced 10 million metric tonnes (MMT) of fossil fuels.

- **Economic Contribution –** The initiative contributed over ₹75,000 crore to the gross domestic product (GDP).

- **Employment –** More than 150,000 jobs were created throughout the value chain.

- **Climate Impact –** Waste diversion efforts prevented 40 million tonnes (MT) of carbon dioxide (CO_2) emissions.

- **Agricultural Support –** Production of 250 million metric tonnes (MMT) of organic fertilizer enhanced soil health.

What lies ahead?

- GOBARdhan will scale India's CBG journey from a strong base to a nationwide clean energy industry, reinforcing energy security, rural prosperity, waste-to-wealth, Atmanirbhar Bharat, and Viksit Bharat.

Reference

PIB | GOBARdhan