Analysis of City Gas Distribution project

Why in news?

The Prime Minister has laid the foundation for the ninth bidding for city gas distribution (CGD) projects recently.

What are city gas distribution networks?

- India’s natural gas consumption presently stands at 6.2% of its primary energy consumption and it has been targeted as 15% by 2020.
- Natural gas in India is either produced domestically or imported as LNG.
- It is produced in Assam, Bombay High, Krishna Godavari basin and the Cauvery basin.
- Government of India has put thrust to promote the usage of natural gas as a fuel/feedstock across the country to move towards a gas based economy.
- Accordingly, development of CGD networks has been focused to increase the availability of cleaner cooking fuel (i.e. PNG) and transportation fuel (i.e. CNG) to the citizens of the country.
- The expansion of CGD network will also benefit industrial and commercial units by ensuring the uninterrupted supply of natural gas.
- Under the gas allocation policy, city gas enjoys the first priority in the allocation of cheap domestic gas to consumers, while the gas from fertiliser sector enjoys the second priority.

What are the advantages?
With the expansion of city gas distribution (CGD) projects, it is expected that 200 lakh households will have piped gas connectivity very soon.

Natural gas, predominantly methane, is a cheap and environment-friendly fuel with a very low emission of particulate matter.

Natural Gas (as CNG) is cheaper by 60% as compared with petrol and 45% with respect to diesel.

Providing gas linkage to domestic households, the automobile sector, and small and major industries will play a major role in elevating the social status of the people.

The additional savings from fuel bills can be invested into productive areas such as education of children, which will pave way for a faster socio-economic development.

What are the concerns with CGD networks?

• **Price control** - The CGD business model is currently based on the supply of cheap domestic gas which is both inherently flawed and unsustainable.

• The price of gas produced domestically is controlled through an administered pricing mechanism (APM) by the government and is about 65-70% lower than the imported LNG price.

• This establishes a huge spread between input prices (controlled by government) and output prices (market price), thereby enabling CGD entities to make large profits in a non-transparent manner.

• **Opportunity costs** - Natural gas enjoys the opportunity cost of alternative fuels like petrol and diesel.

• Opportunity cost is the "cost" incurred by not enjoying the benefit associated with the alternative choice.

• Thus, CGD entities by bidding on natural gas gets a better return than investing on other fuels, thus affording a hefty profit margin for them.
• **Bidding** - The availability of cheap gas has also led to irresponsible bidding, with bidders bidding zero or nominal tariffs in earlier rounds.

• This was done with the expectation that all costs will be recovered through huge profits that they will get as a result of low input and high output prices.

• However, as cheap domestic gas sources dry up, bidders will be faced with serious problems of cost recovery, thereby affecting viability and sustainability of the CGD system.

• This will pave the way for legal disputes, contract re-negotiations, higher non-performing assets and supply disruptions.

• These issues can be taken care of if the business model is based on sourcing natural gas at market prices by removing APM mechanism.

• This will provide a more solid foundation for the expansion of the CGD network in the country.

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**What should be done?**

• Energy consumption in India is growing at 4.2% per annum, which is the fastest among major economies of the world.

• However, India’s domestic production of natural gas is low and its import dependency stands at 45.6%.

• Thus, increasing production, developing the delivery infrastructure like terminals, stations and pipelines, along with giving priority for CGD allocation is necessary to ensure availability.

• India will also have to embark on a balanced approach to develop indigenous gas resources through deeper drilling techniques and large scale import tie-ups.

• A shift to a gas-based economy should ensure both availability and affordability and India has still a long way to go for transforming the economy to a gas-based one.