

# Is the grass really green there

**O**F LATE, INDIAN companies are looking to West Asia for setting up gas based ammonia/urea joint venture projects. Reason: while domestic gas is unavailable for new projects, it is cheap and plenty in the Middle East.

For the Oman project with a per day capacity of 3500 tonnes ammonia and 4400 tonnes urea, in which RCF and Kribhco are equal partners with Oman Oil Company (OOC), gas will be available at \$0.77 per million Btu (\$0.50 as the basic price and \$0.27 as transport cost.)

In India, at the prevailing basic price of Rs 1,850, and after including royalty, CST and local tax, the plants located near the landfall point pay about Rs 2,200 per thousand cubic metre, while for those drawing from the HBJ pipeline it is Rs 3,100. Expressed in terms of dollar per million Btu, these are 1.7 for the former and 2.4 for the latter (1 million Btu = 28 M3 and \$1 = Rs 36).

Mega size plants being built the world over have comparable levels of operational efficiency. For, the technology for production of ammonia/urea is standardised and the engineering contractors/plant builders are common. So, the energy needed to produce one tonne urea for the Oman project will be more or less the same as for a new project in India — about 24 million Btu.

Thus the energy cost of the Oman project will be about \$22 per tonne lower than the gas based plant in India located near the landfall point (1.7 - .77 x 24) and about \$39 per tonne lower than a plant along the HBJ (2.4 - 0.77 x 24).

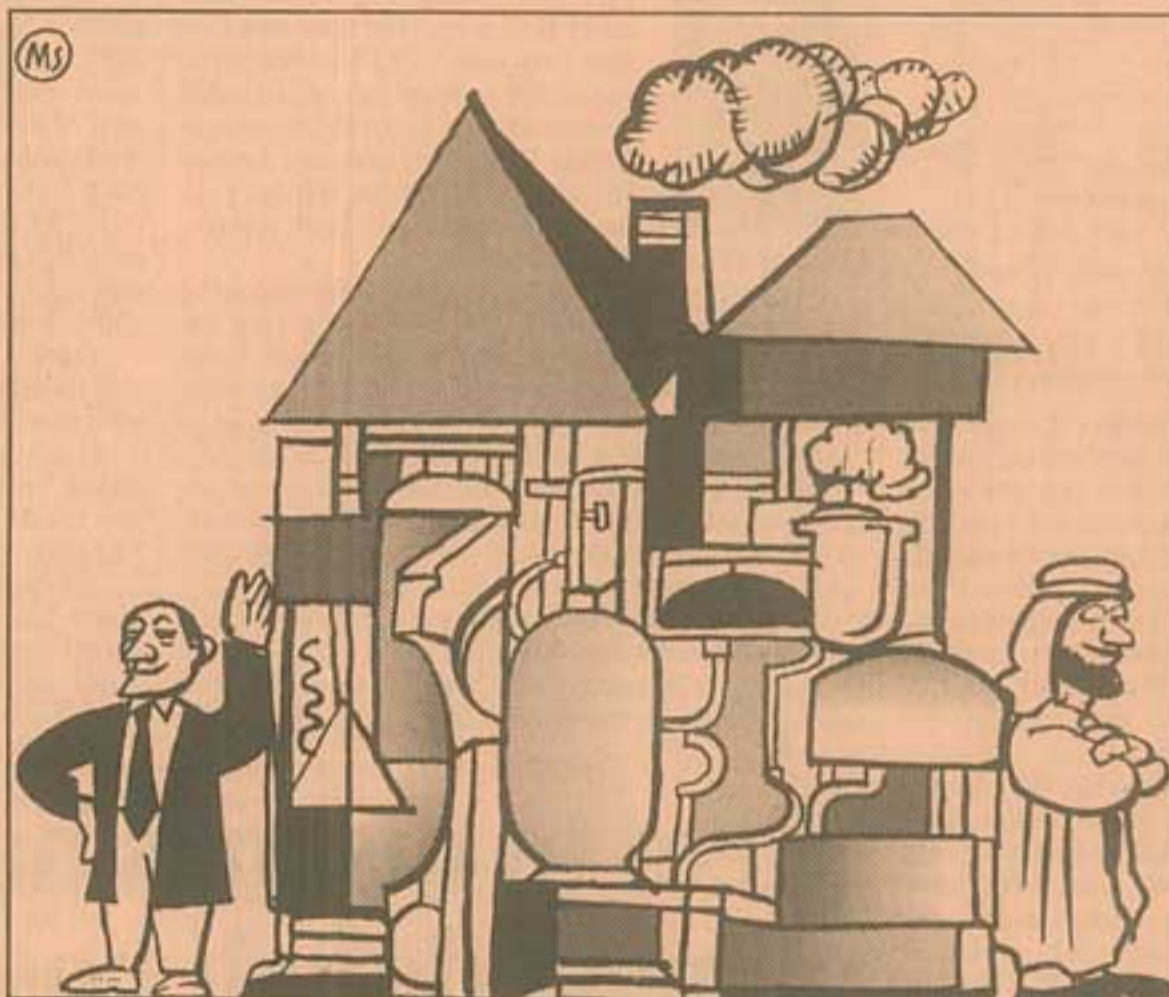
Reportedly, the investment cost for the Oman project is about \$1,150 million. The cost of a similar project in India of half the capacity (726 thousand tonnes per annum urea) will be about \$400-420 million. This is despite the higher taxes, duties and interest rates. After adjusting for the surplus ammonia capacity of the Oman project, the investment cost would be more or less at par.

Despite comparable investment cost, the incidence of interest on the Oman project is less because of lower interest rate. However, this would be more or less offset by lower conversion cost (including depreciation) in India. On a net basis, the incidence of fixed cost including capital servicing in India will not be more than in Oman.

The Oman project thus has an edge only in energy cost. Under the buyback agreement, the entire urea produce has to be brought back to India. So the energy cost advantage is offset by ocean freight, handling charges, and inland transportation costs.

The deal in Oman on the gas price is exceptionally good. We may not get similar price elsewhere. For the proposed JV between the Quesham Free Area Authority (QFAA)/Iran, and Kribhco/IFFCO, the Iranians have reportedly asked \$3 per million Btu. The Syrians too seem to be demanding about the same price for a possible JV with NFL. So what is true for Oman cannot hold for all projects in the Middle East.

*Setting up fertiliser ventures in West Asia is not a desirable trend. It may rather clog the ports for no gains, says Uttam Gupta*



Some quarters argue that gas in India is underpriced. This is not true. From January 1, 1992 the basic price of gas to the consumer was Rs 1,550 per thousand cubic metre (Rs 1,500 being realisation to the producer, ONGC/ OIL, and Rs 50 towards Gas Pool Account — GPA.) In August 1992, the JPC concluded that the price was artificially high and recommended a 35 per cent reduction and removal of royalty i.e. 10 per cent.

About the transport charge, based on the evidence by the ministry of petroleum and natural gas (MPNG), the JPC concluded that the charge for an average distance of 1060 km along HBJ should be about Rs 466 per thousand cubic metre against Rs 850 being charged.

Far from implementing these recommendations, the basic price per thousand cubic metre was raised to Rs 1,650 from January 1, 1993, to Rs 1,750 from January 1994 and Rs 1,850 from January 1995. All these hikes however went towards the GPA and the producers' realisation remained at Rs 1,500.

And, now reportedly based on the Shankar committee report, the government is thinking of raising the price from January 1997. It is also considering a 35 per cent hike in the transport charge to Rs 1,150, from Rs 850 now.

Eventually, the government proposes to link the price of gas to liquid hydrocarbons

i.e. naphtha. This is illogical as naphtha is an inferior feedstock with lower conversion efficiency. The energy consumption per tonne of urea for a plant based on naphtha is about 20-25 per cent higher than a gas based unit. Besides, the investment cost is also higher.

That is why, following discovery of gas in Bombay High and South Bassein region, almost all the plants set up in India during the 80s and early 90s were based on gas as the feedstock. Even the world over, gas is the predominant feedstock and, in major exporting regions such as Middle East, this account for almost 100 per cent of the ammonia capacity.

Pricing of gas has to be on its own i.e. based on the reasonable cost of production and distribution. In arriving at the cost various distortions identified in the JPC report need to be removed: (i) price allowed to producers should take into account the weighted average of the cost of gas from all sources instead of using South Bassein field as the basis; (ii) transport charge along HBJ should be on a reasonable and realistic basis; for this depreciation be raised to 25 years instead of 10 years now; and (iii) royalty on gas should be removed.

If the JPC package is followed — a 35 per cent reduction over the base price of Rs 1,550 per thousand cubic metre prevailing then (1992), and no royalty — the gas price

to a plant near the landfall point will be about Rs 1,100 per thousand cubic metre, the price to a plant on HBJ will be about Rs 1,600. In terms of dollars per million Btu these will be 0.86 and 1.24, respectively. At these levels, a project in India will have a decisive advantage over its counterparts in the Middle East.

The problem of gas supply has also to be tackled. Diversion of supplies to low priority uses such as power and sponge iron units are a major reason for the short supply. Gas, apart from heat value, has chemical value which is best used in fertiliser production. In power, it is wasted.

Recognising these basics, high power committees — Lovraj Kumar committee (1976) and Satish Chandran committee (1979) — had recommended use of gas in fertiliser manufacture as first priority. The gas allocation policy in the 80s was designed on this basis.

Power can be produced from coal for which technology is matured and advanced. In fertilisers, technically, it is extremely difficult to use coal, apart from being very expensive. Ramagundam and Talcher units of FCI, both based on coal, could not stabilise even 16 years after commissioning.

Power availability can also be increased by improving the PLF of existing power stations, reducing T&D losses and speedy completion of ongoing new thermal projects. All this will get neglected if we give an easy option to the power sector by supplying gas on priority.

If at all we need to import something, why not import raw materials like fuel oil and even good quality coal and use these in power generation (for which they are best suited) and give domestic gas to the fertiliser units.

Also, fertiliser is a value added item and its imports should be restricted to the bare minimum. At prevailing C&F, landed cost of imported urea will be \$195 per tonne (contains about six million Kcal.) So importing 10 million Kcal will cost about \$325. This much energy can be imported through one tonne fuel oil, valued at just \$115 per tonne.

In recent years, the facilities for handling at ports and inland transportation have come under severe strain, leading to delays in berthing and handling of ships and movement of the material to consumption points. Even as the demand continues to grow, if the required capacity is not created at home, dependence on imports will increase, which may not be available in time for use due to infrastructural constraints. From this angle also, it is better to set up plants in India and limit imports.

There is an urgent need for rationalising the use of domestic gas to maximise national economic benefit. Fertilisers should be restored its top priority status as in the 70s and 80s. Equally important is the need to price it on a reasonable basis.

This will help in producing fertilisers at least cost, with a favourable spinoff effect on subsidy payments and food security.