COMMON PROPERTY RESOURCES AND THEIR PRICING MECHANISM IN INDIA

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ABSTRACT

Mother Nature while creating the Planet Earth has provided ample quantity of resources needed to sustain a life system in the planet. Three-fourth of the globe is covered under water and different territories are bestowed with different sources of natural resources like land, water, air, minerals, flora and fauna, animal kingdom and mankind, all sustaining their livelihood on these resources. These resources, in a sense, become common property enjoyable by all irrespective of their form. Mankind by dint of their intelligence has carved out a niche for itself and appropriating a greater part of these resources for their own advantage and deriving utilities therefrom; and thus often it amounts to deprivation for others.

In this paper the authors make an analysis of the manner in which common property resources are priced for distribution to the different corporate entities in order to make value additions and derive utilities out of them. Very often conflict of interest arises out of state action in the process of distribution of such resources. The distortion in price caused by state intervention has been often put to judicial scrutiny and legal interpretation from time-to-time. This paper focuses on two common property resources beneath the surface, viz. crude oil and coal. It focuses on the best method of allocation of such resource and their pricing mechanism in a cogent manner.

Keywords: Auction, Captive Mining, Administered Pricing Mechanism, Import Parity, Subsidy.

INTRODUCTION

Common Property Resources (CPR) plays an important role in the life and economy of a nation. ‘Exclusive possession’ and ‘no possession’ are the two extremes in the continuum of property rights; in between lies CPR where the right to exploit the resources is held by an individual or a group of individuals, either in the form of having unlimited exploitation rights within a specified group, or having stipulated limits on exploitation for different user groups.

Common property resources are gifts endowed by Mother Nature to Planet Earth, owned and managed collectively by a community rather than by individuals. Such resources cannot be used for
deriving gain by any private individual but has to be appropriated to improve the quality of community life. It includes natural resources like land, air, water bodies, forest, flora and fauna, mines, minerals, energy, crude oil, waves, etc.

While few resources in this world are pure open access resources where the access is not controlled, the access to some resources are controlled to a certain extent. Various possible systems for controlling the use of such resources include traditional use, customs and government management. Since the CPR are scarce in supply, hence an effective control and management system is of prime importance. Lack of rules in the use of CPR may lead to their overuse and eventual depletion of the resource.

The parameters which may be considered for establishing the legitimate right over the use of common property are:

1. Use
2. Management
3. Scarcity
4. Distribution
5. Pricing
6. Protection
7. Record and account
8. Transferability

Literally, the term ‘common property resources’ implicate those properties owned and used by all. Thus, it includes:

1. **Public goods**: Public goods benefit the general public rather than selected individuals, and are essential for social well-being. They include goods and services such as roads, bridges, dams, parks, highways, public health facilities, national defence, world heritage sites, etc.

2. **Intellectual capital**: Intellectual capital like expertise, human skill, innovation, know-how, talent and knowledge is available for appropriation by humanities across the globe. It promotes improved living, provides pleasure, satisfaction, happiness, fulfillment and binds mankind together.

3. **Natural Resources**: These resources occur naturally within environments and is often characterized by amounts of bio-diversity and geo-diversity existent in various eco-systems. A natural resource may exist as a separate entity such as fresh water and air, as well as a living organism such as a fish, or it may exist in an alternate form which must be processed to obtain the resource such as metal ores, oil, and most forms of energy.

Having considered the aforesaid matters, we may now lay down the objectives of the present study.

**OBJECTIVES OF THE PRESENT STUDY**

For the purpose of the present study, we narrow down our discussion to two natural resources viz. coal and crude oil as CPR. Since price is the most effective economic instrument for energy conservation, the present work has been undertaken with the twin objective of examining the allocation of coal with a critical perspective and its pricing mechanism; and to highlight the current pricing mechanism of crude oil in India.
RESEARCH METHODOLOGY

The present research work is a descriptive study and is purely based on secondary information. In the present study, the reports of Coal India Limited (CIL), the Comptroller and Auditor General of India (CAG), the Ministry of Petroleum & Natural Gas (MPNG) and the International Energy Agency (IEA) for various years have been referred to.

In consonance with the stated objectives, the subject matter has been deliberated hereunder.

COAL

Coal is the most important and abundant fossil fuel in India. It accounts for 55 percent of the country's energy needs. The country's industrial heritage was built upon indigenous coal. Coal mining was nationalized in 1973 but the state monopoly was found to be incapable of supplying enough coal, although India has one of the world’s largest reserves of coal, to meet the economy’s needs. Indian coal offers a unique eco-friendly fuel source to domestic energy market. Coal produced in India is primarily non-coking type and has high ash content in the range of 25-35%. The ash content in coal determines its suitability in various industries. Although there are total geological reserves in respect of 57 blocks at 12.1 billion tonnes, but not all of it can be extracted. The coal blocks that can be mined is called extractable reserves.

Potential capacity of coal blocks is estimated from the mining plans submitted by their owners. In case of blocks where mining plans are not available, the CAG uses commonly used benchmarks for estimation. The sources of Government revenue from coal include royalty on the mined coal and taxes on the profits generated from the use of coal. The present authors in this article examine the allocation of coal with a critical perspective and its pricing mechanism.

Allocation of Coal

Land is a state subject and the state enjoys the power to allocate land for public good, while the minerals lying beneath the land has been taken out of the purview of the state authority, and entrusted with the Centre against a specific legislation enacted by the Parliament. Hence, the state enjoys the right to recommend allocation of coal blocks to some select corporate entities. For instance, coal block may be allotted to an electric power generation company which will utilize coal as an input for deriving electric power. Similarly, some coal blocks are allotted to steel manufacturing companies which will use coal as an input for production of steel. The Centre and State intervention in the coal sector has been compounded by a corresponding obligation upon the company that power so generated out of the coal block shall be again made available for distribution in the State under the State protocol. Similarly, the steel companies manufacturing steel by utilizing this coal shall be under administrative mandate with regard to its distribution and sale. In fact, it becomes discretionary allotment of natural resources on a preferential basis. The access to domestic coal is subject to state’s discretionary allocation on two grounds: state monopoly in coal leading to shortages and repressed pricing at a discount to imported coal. This kind of duality does not allow free play of market forces in the process of distribution and allocation of a CPR.

While making allocation of coal blocks to corporate enterprises, the government has a practice of classifying them into three groups, viz. Open Cast, Under Ground and Mixed (combination of the first two). 90 percent of the coal mined in India is open-cast. The allocation mechanism has been further circumspect by the intervention of price of coal fixed by the government without going through open market operations. The price at which the coal belts are allocated is more or less a kind of administrative price or discretion price. When this administered pricing mechanism is put to judicial scrutiny, the CPR is often found to be under-priced and its allocation biased and not based on the concept of open bidding, open auction, free and fair competitive pricing.
arrangement. Further, when this matter was scrutinised by the highest auditing authority of the country, i.e., the Comptroller and Auditor General of India (CAG), it was observed that the presumptive price which the coal allocation could have fetched through open bidding would further enhance the public revenue. Thus, under-pricing of coal leads to lesser revenue generation for the state exchequer which was reported to be a presumptive loss in its audit report of 2011-12. The CAG alleged that the government’s move on free coal blocks allocation to corporate houses like the Tatas, Jindals, Essar and many other companies resulted in potential windfall gains to these companies which was estimated at Rs 1.86 lakh crores based on the price of the entire quantity of coal that can be mined from these blocks over their life-time. Here lies a matter of contest between the government and the constitutional audit authorities as the Government feels allocation of common property like coal blocks is a prerogative of the government as a policy of the governance of public resources; and the audit authorities cannot question the policy making matters of the legislative agencies. Again, the legislative bodies have criticized the manner in which the presumptive loss is calculated by the audit authorities because presumptive loss is not based on actual transactions that have taken place but is based on an alternative gain that has been lost by ignoring an opportunity.

The coal-gate controversy centres on the manner of allocating the right of extracting coal from captive mining to benefit one or two companies. The policy of allocating mining rights posits undue benefits to some companies, not huge loss to the exchequer. The Annual Report of Coal Ministry for the year 2010-11 mentioned: “A need was felt for evolving an objective and transparent system of allocation of coal blocks. Accordingly the Mines and Minerals (Development and Regulation) Act has been amended to provide for introduction of competitive bidding system for allocation of coal blocks for captive use”. In the earlier practice, coal blocks were nominated on a project specific basis keeping in mind fuel requirement and its location. Allocation of coal blocks was done to industries like steel and power which are eligible for captive mines. From April 2012 onwards the Coal Ministry has made a policy initiative to ensure transparency in allocation of coal blocks. The earlier practice as stated above has been discontinued and it is now replaced by allocating blocks on captive basis only through the auction route. Auction route enable an equitable price discovery from the participants in the auction; and it fetches free, fair, reasonable revenue for the Ministry of Coal. The auction mechanism is considered to be transparent because of inviting open bids among the willing parties.

Leasing out the mines for specific periods with well defined targets would help add value to the domestic industry and also pass the benefits to the tax payers, stopping the pilferage from CIL mines and railways wagons. A policy of providing coal linkage on a case-to-case basis may eclipse the problems arising from allocation of coal. Coal being a natural resource should, however, be allocated on competitive bidding as it brings in more transparency and objectivity in the system. In fact, the Supreme Court held that the State is deemed to have a proprietary interest in natural resources and must act as a guardian and trustee in relation to the same. They can augment their resources but the object should be to serve the public course and to do public good by resorting to fair and reasonable methods.

Pricing of Coal

The pricing of coal was controlled by the Central Government since 1945 u/s 4 of the Colliery Control Order of 1945 and this practice continued till the end of 1999. The nationalisation of coal mines was undertaken in two phases. In the first phase, coking coal mines were nationalized in the year 1972. In the second phase, non-coking coal mines were nationalized in 1973. Coal mines that could not be nationalized were allowed to be worked by private lease holders. However, the Coal Mines (Nationalisation) Amendment Act, 1976 terminated all the mining leases with the private lease holders, except those of iron and steel producers. Again, the Coal Mines (Nationalisation) Amendment Act, 1993 allowed Indian companies engaged in generation of power, in addition to the
iron and steel producers, to carry out coal mining for their captive use. Following the recommendations of Bureau of Industrial Costs and Prices (BICP), now christened the Tariff Commission, a decision was taken by the government to deregulate the prices of all grades of coking coal and A, B and C grades of non-coking coal with effect from March, 1996. Subsequently in consideration of a recommendation of the Committee on Integrated Coal Policy, the Government decided to de-regulate the prices of soft coke, hard coke and D grade of non-coking coal and this decision was implemented with effect from March, 1997. The Government also decided to allow CIL and SCCL to fix prices of E, F and G grades of non-coking coal once in every six months by updating the cost indices as per the escalation formula contained in the 1987 Report of the BICP. The pricing of coal was fully deregulated after the Colliery Control Order, 2000 was notified with effect from 1st January 2000 in suppression of the Colliery Control Order, 1945. Under the Colliery Control Order, 2000 the Central Government has no power to fix the prices of coal; coal pricing was completely deregulated giving full autonomy to the CIL to decide its price.

The pricing of coal was done on Useful Heat Value Basis till December, 2011 and from January, 2012 the pricing mechanism was changed to Gross Calorific Value. At present, coal prices are fixed by the Coal Ministry in consultation with the CIL and Singareni Collieries Company Ltd. (SCCL) on the basis of cost incurred in coal production from different mines. Besides, the Tariff Commission is involved in pricing of coal for the power sector and suggests modalities for pricing of coal for other sectors.

The price of coal depends on the input cost, mining cost, inflation and other factors. Under the Coal Supply Agreement between the purchaser and the seller/CIL, the ‘As Delivered Price of Coal’ for coal supplies is the sum of Base Price, Other Charges and Statutory Charges as applicable at the time of delivery of coal. The Base Price in relation to coal is notified by the seller/CIL from time-to-time. Other Charges include transportation charges, sizing/crushing charges, rapid loading charge and washing charges. When coal is transported by the seller beyond the distance of 3 kms, from pithead to the delivery point, the purchaser shall pay transportation charges as notified by CIL/seller from time-to-time. The purchaser shall also pay sizing/crushing charges as applicable and notified by CIL/seller where coal is crushed by mechanical means for limiting the top size to 250 mm or any other lower size. In addition, the purchaser shall pay rapid loading charges where coal is loaded through rapid loading system. Washing charges shall include charges for sizing, removal of rock originating from mining roof, removal of ash and sulphur minerals and blending of different coals to achieve desired physical and chemical properties. Any other charges as notified by CIL/seller from time-to-time including additional charges and service charges arising out of supply of imported coal shall be applicable. The statutory charges shall comprise royalties, cesses, duties, taxes, levies, etc. if any, payable under the relevant statute but not included in the base price. Freight charges, under any mode of transportation of the coal supplied shall be borne by the purchaser.

The monopoly situation in the coal market, in the absence of a regulatory mechanism, leads to arbitrary increase in price levels adversely affecting the cost of generation and thereby electricity tariff which has direct impact on the national economy. In view of this, the Coal Regulatory Bill was passed on November, 2013, wherein the regulator's role will be to set frameworks for pricing (raw and washed coal), attract investment in mining, help resolve disputes and advise on policy issues. CIL would, however, retain its price-fixing authority even after a regulator is appointed.

**CRUDE OIL**

Energy is required for almost all economic activities and crude oil is one of the key sources of energy in the world. However, it is a scarce resource largely concentrated in the Middle East and West Asia. This imbalance in distribution has serious implications on the countries that are not self-sufficient in terms of indigenous production of petroleum and are largely dependent on imports from
the aforesaid regions to fuel their economies. The oil crisis of 1973-74 bears ample testimony to the severity of the problem of imbalance in supply of oil.

India is a globally significant oil consumer and is one of the top ten oil-consuming countries in the world with oil and gas representing over 40 per cent of the total energy consumption in India. Although the petroleum industry of the country is one of the oldest, India is one of the least-explored countries in the world. With inadequate crude production, the country is heavily dependent on imports to meet the lion’s share of its requirement with crude being the single largest item on India’s import list. The import dependence for crude and the consequent vulnerability of the country to oil price shocks has aggravated over the recent past owing to rapid growth of the Indian economy post-1991. The imported crude oil is transported to refineries in India. Crude oil is then separated into various products like petrol, diesel, coal tar, etc in distillation towers of these refineries. Given the paramount importance of petroleum for the Indian economy and its increasing import dependence on this front, domestic pricing of crude oil and petroleum products assumes enormous significance for the country. There are many factors that influence the global crude oil prices including technology to increase production, storage of crude oil by richer nations, changes in tax policy, political issues, etc. The pricing of crude and petroleum products in India has been influenced by a multiplicity of politico-economic factors and interests of various interest groups involved in the matrix, such as the consumers, producers, refiners, marketing companies and the government.

The pricing of crude oil not only influences the cost of energy for the economy as a whole but also has significant implications on economic growth and welfare. A close look at the pricing regime in the petroleum sector in India reveals that for nearly two and half decades (from 1975 to 1997) the petroleum sector in the country was operating in a state of complete protection under Administered Pricing Mechanism (APM). In 1998, the sector embarked on a gradual transition to a regime of deregulation and open competition. The present study examines the current pricing mechanism of crude oil in India.

Pricing

Up to 1939, there were no controls whatsoever on the pricing of petroleum products. Between 1939 and 1948, the oil companies themselves used to pool accounts for major products without any intervention by the government. However, since independence, the pricing of petroleum products in India has persistently witnessed several structural changes in policies. In 1948, an attempt was made to regulate prices through Valued Stock Account procedure. This was basically a cost plus formula based on import parity to which were added all elements of cost such as ocean freight up to Indian ports, insurance, ocean loss, remuneration, import duty and other levies and charges. The realization of oil companies under this procedure was restricted to the import parity price of finished goods plus excise duties/local taxes/ dealer margins and agreed marketing margins of each of the refineries. Any realization in excess of the normal was surrendered to the Government.

After the 1973 oil crisis the government constituted the oil price committee (OPC) under the chairmanship of S. Krishnaswamy in March 1974. The OPC recommended the discontinuation of the import parity principle and instead suggested the Administered Pricing Mechanism (APM) for pricing of petroleum products. APM is the process of fixation of prices of finished products by the government coupled with the retention mechanism for refiners, marketing and distribution companies which came into existence in December 16, 1977, implemented under the aegis of the Ministry of Petroleum & Natural Gas (MPNG) through its executive wing “Oil Co-ordination Committee” (OCC) with its secretariat at New Delhi.

One of the reasons why APM was introduced was because under the import parity pricing the indigenous cost of production was totally overlooked while determining producer prices. This issue under the new mechanism was addressed through ‘retention pricing’, by which refiners were allowed to retain out of the sale proceeds, cost of crude, refining cost and a reasonable return on investment.
The same mechanism of retention pricing was also extended to marketing and distribution companies. It involved pricing of crude oil at a uniform free on board (FOB) cost to all the refineries based on the pooled FOB price of indigenous and imported crude oil. Refining costs and return were also decided on retention basis. Every three years, the Government used to determine the standard refining cost and return on capital employed for each refinery.

The entire APM was operated through an oil pool account (OPA) maintained by Oil Coordination committee (OCC), wherein inflows and outflows of the pool account were to be kept in balance to provide uniform and stable prices throughout the country. Inflows to the oil pool account were from collection of surcharges on sale of petroleum products, while outflows were aimed at meeting shortfalls in various elements of standard cost of production.

The APM played a significant role in insulating oil producers, refiners and marketing companies from global oil price fluctuations and fulfilled the socioeconomic objectives of the government considerably. However, the APM could not be continued for long due to its inherent limitations. The APM which involved artificial price fixing by the government from time to time and hike or reduction in the prices become a political decision, rather than being a rational economic decision. The APM regime could not generate adequate financial resources for investment in the upstream and downstream sectors. Subsidies and cross-subsidies led to large distortion in consumer prices and encouraged adulteration and diversion. With the entry of private players in the market it became increasingly onerous to administer the APM and ensure a level playing field to public players as extensive monitoring system was required to examine whether the private refiners had been deriving undue benefits out of the cost-plus mechanism. The APM also provided little incentive for cost minimization, technological upgradation and improved productivity. With the ushering of liberalization and economic reforms in 1991, it became imperative to dismantle the APM and move towards a Market Determined Price Mechanism (MDPM) through price deregulation which would allow the refineries to stipulate refinery gate price of petroleum products that would compete with prices of imported products.

The government finally announced the complete dismantling of the APM on 21st November 1997 which was to be carried out in a phased manner over the period 1998-2001, beginning 1st April 1998. The decision to dismantle the APM was aimed at gradually shifting from artificial pricing of petroleum products towards a situation where the price is determined by the market forces of demand and supply. In the post-APM period, effective from 1 April 2002, the prices of indigenous crude oil were determined on the basis of the Crude Oil Sales Agreement (COSA) between the producers and the refineries by benchmarking various indigenous crude oils to equivalent international crude oils. Although the process of deregulation of the petroleum product prices began in 1998, five sensitive products namely petrol, diesel, domestic liquefied petroleum gas (LPG), PDS-kerosene and aviation turbine fuel (ATF) continued as controlled commodities. In the post-APM era beginning from 1.4.2002, oil marketing companies were allowed to sell their products at market-determined prices based on the notion of import parity from April 2002 to May 2006 and from June 5, 2006 onwards on the basis of trade parity for petrol and diesel except PDS kerosene and domestic LPG which continued to be subsidized.

The year 2004-05 witnessed unprecedented high oil prices in the international market. In 2005-06, the financial position of the public sector oil refinery and marketing companies deteriorated and reported their financial distress in terms of “under recoveries”. In view of the rapidly deteriorating financial position of the oil companies and with the objective of conserving petroleum products and establishing a transparent mechanism for autonomous adjustment of prices by the oil companies, the Government on 26th October, 2005 set up a committee under the chairmanship of C. Rangarajan to examine various aspects of pricing and taxation of petroleum products with a view to stabilizing or rationalizing their prices.
Accordingly, the concept of *trade parity*, which was of an innovative nature to oil pricing in the Indian context, was accepted by the government with effect from June 16, 2006 in principle for refinery gate as well as retail pricing. It was proposed to review and update the trade parity price every year depending on the relative weight of exports and imports. The government also accepted in principle the need to restrict kerosene subsidy to below poverty line (BPL) families. The change that took place in the basis of calculation from June 2006 onwards is that the price determination formula has been changed from import parity to trade parity for petrol and diesel in line with the recommendations of the Rangarajan Committee. In such a deregulated environment, market prices are driven by competition. The oil companies in the present context would have to play their role in moderating the price fluctuations by contracting/expanding their marketing margins. Under the APM, they enjoyed guaranteed returns but now the consumer is the king.

The price variation in crude oil impacts the sentiments and hence the volatility in stock markets all over the world. Fluctuation in the crude oil prices has both direct and indirect impact on the global economy. Indian policymakers should view the current global economic downturn and the lower energy prices as an opportunity to proceed with important energy policy reforms.

**CONCLUSION**

While using CPR, the marginal and poor people should have equitable rights and access to natural resources. The global scope of many CPR, including the atmosphere and oceans, raises issues regarding proper management of the global commons. New and reformed institutions are needed to manage CPR at the global level. The difficulty often has been to establish effective international authority to regulate activities that threatens global eco-systems. With a view to maintain and sustain CPR, the government should work out policies to reduce their unrestrained exploitation. The diversification of the energy basket will help to promote sustainable economic growth and development.

Coal and crude oil are CPR and should be within the framework of government and regulatory purview. The economic exploitation of these resources should therefore lead to win-win solution for both the investor as well as the people of India. Price rise of these CPR virtually impacts industries, which can cause a rippling effect on all businesses dependent on energy. The subsidy burden of allocation of natural resources has been a bone of contention in appropriation of common national property. Subsidisation of the products like kerosene and LPG should only be targeted to the people living below the poverty line by devising a suitable mechanism. Remaining subsidies must be withdrawn by adhering to a prescribed timeline.

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