

# **On Deregulation in the Petroleum Sector in India**

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## **1. Introduction**

The recent moves of the government to gradually deregulate the Petroleum, Oil and Lubricants (POL) sector in India as part of the agenda of 'neo-liberal reform' has generated discontent among the people. In the run-up to complete deregulation, there are instances of increase in the domestic price of POL products that are proportionately more than the rise in their international prices. In the most recent instance (of 13<sup>th</sup> September, 2012), the diesel price was raised by Rs.5 per litre at one go, even without any rise in international prices. These steps are being taken to eliminate the government subsidy on these products in a step-by-step manner. Deregulation of the POL sector is bound to eliminate the direct or indirect subsidies completely. And reduction in subsidy, according to the government, is the need of the hour in order to reduce the fiscal deficit as proportion to GDP. Deregulation is also necessitated in the current neo-liberal environment because if the government keeps subsidizing the public sector owned oil marketing companies (OMCs) like Indian Oil, Hindustan Petroleum and Bharat Petroleum, then the private companies like Reliance and others would not get a 'level playing field' and they would not be able to compete in price. In this way, the present subsidy regime indirectly restricts the private players from entering the oil marketing sector. Hence, if the priorities of the government in power are the reduction of subsidies and ensuring a 'level playing field' for private players rather than containing inflation and generating employment and growth, it would opt for a policy of deregulation. "A market-determined pricing system for petrol and diesel can be sustained in the long-run by providing level playing field and promoting competition among all players, public and private, in the oil and gas sector" (Kirit Parikh Committee Report, 2010). Before taking a position either in favour or against the price hike and subsidy reduction, which would eventually lead to the deregulation of the entire POL sector in India, it would be useful to examine some crucial facts about this sector with the help of statistics provided by various sources of the government.

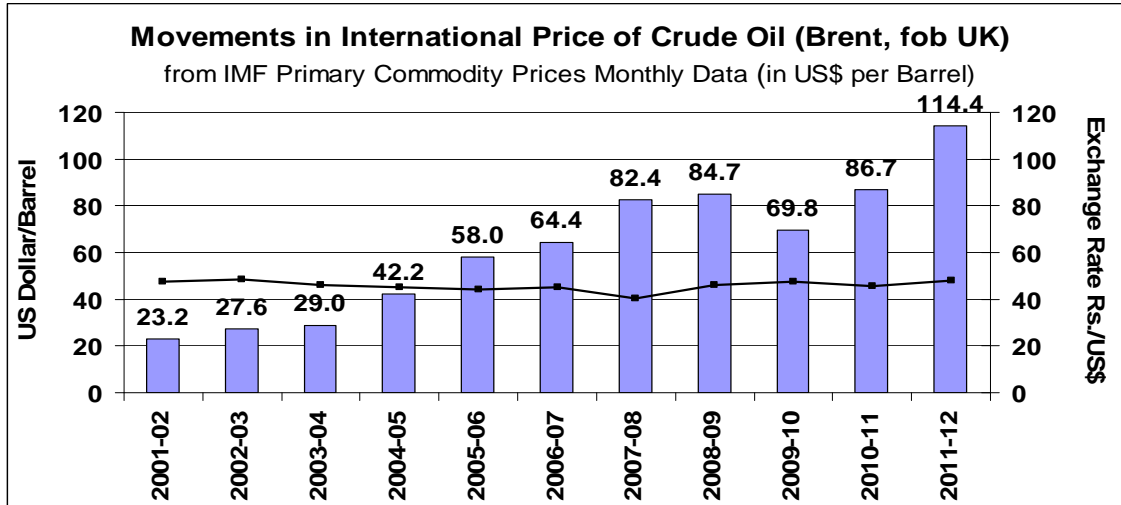
## **2. Background: Production, Consumption and Import/Export**

The total annual sales of all POL products by the industry in India has been estimated to be approximately 1480 lakh metric tonne during economic year 2011-12. Total crude oil processed by refineries owned by Indian Oil Corporation Limited (IOCL), Hindustan Petroleum Corporation Limited (HPCL), Bharat Petroleum Corporation Limited (BPCL), Chennai Petroleum Corporation Limited (CPCL), Oil and Natural Gas Corporation (ONGC), Reliance Industries Limited (RIL) and Essar Oil Limited (EOL) was 2037.5 lakh metric tonne during 2011-12. The total import of crude was 1717 lakh metric tonne and total imports including some

petro-product imports was 1867 lakh metric tonne. The export of petro-products was 608 lakh metric tonne, making net imports approximately 1260 lakh metric tonne during last financial year. Therefore, treating the annual industry sales of 1480 metric tonne to be a proxy for domestic absorption, it emerges that more than 85% of domestic consumption in India is met by net import of POL products and only 15% is produced domestically. In value (rupee) terms, on an average, POL imports constitute 17% of total import in India. India's import demand of crude constitutes almost 9% of World export/import of crude.

### **3. Price of POL products – Petrol, Diesel, PDS Kerosene and LPG Cylinders**

Heavily oil importing countries like India would naturally be vulnerable to movements in the international price of crude oil (see the graph below). The average international price of the basket of crudes imported by India increased steeply from US\$26.65/bbl in 2002-03 to US\$83.57/bbl by 2008-09. It softened a bit to US\$69.76/bbl in 2009-10 but went up again to US\$85/bbl in 2010-11 and to a high of US\$112/bbl during 2011-12 (annual average). This poses a serious challenge to macroeconomic stability. The exchange rate has also depreciated since 2007-08 to an average of Rs.48/US\$ on an average during 2011-12. Traditionally, a substantial portion of any international oil price shock was absorbed by the government and not passed on to the consumers because of its inflationary consequences as well as detrimental effects on growth. As the Chaturvedi committee (2012) noted, in terms of US\$, the international price of the Indian basket of POL imports went up by 3.5 times between December 2003 and June 2008; whereas, the domestic prices of motor spirit and high speed diesel (HSD) in India went up by only 1.5 times during this period. The government decides the market price and compensates the oil marketing companies for the shortfall from the import parity price i.e. the difference between the government administered selling price and the international price paid if the finished POL products had been imported directly. Although, the import parity price could be higher than the price warranted by the increased costs of imported crude and is therefore a 'notional' proxy, if the government does not compensate them on this basis, the oil marketing companies would prefer exporting their POL products rather than selling them in the domestic market at much lower prices. This gap between the domestic price and the import parity price (or export or trade parity price) of POL products multiplied by the units sold in the domestic market constitutes the total 'under recovery'. Part of the under recoveries are absorbed by the public sector (upstream and downstream) companies and the rest is financed by the government through government-guaranteed oil-bonds and direct oil subsidies. However, the Central government imposes excise and custom duties on oil and the state governments impose sales tax on petro-products, which are reflected in the final price of these products and contribute substantially (roughly 20% of Centre's and 10% of States' total revenue) into the government exchequer.



It is interesting and important to know how the prices of petrol, diesel, kerosene and LPG build-up step-by-step in India. For example, let us consider Delhi rates for petrol as was effective on 1<sup>st</sup> September, 2012. The cost and Freight (C&F) price was US\$126/bbl and the exchange rate was Rs.55.6/US\$ - that makes the refinery transfer price (RTP) on landed cost basis i.e. the price paid by the oil marketing companies (OMCs) to refineries in terms of Indian currency Rs.45.27/Litre. But, price (excluding excise duty and Value Added Tax (VAT)) charged to the dealers was Rs.41.24/Litre and the difference was under recovery. Adding Rs.14.78/Litre specific excise duty with 3% education cess, dealers' commission of Rs.1.50/Litre and Rs.10.94/Litre VAT (@20%) the retail selling price in Delhi comes to be Rs.68.47/Litre. It is interesting to note here that 37.5% of the retail price of petrol is attributable to excise duty and VAT. Similarly, for diesel in Delhi, C&F price was US\$136.5/bbl or Rs.47.13/Litre. The trade parity price makes RTP Rs.48.35/Litre. Adding marketing cost and premium and delivery charges of OMCs, the desired price without excise duty, VAT and dealer's margin amounts to Rs.50.56/Litre. After considering under recovery of Rs.17.05, the price charged to dealers was Rs.33.51 and adding excise duty of Rs.2.06, VAT of Rs.4.84 and dealers' commission of Rs.0.90, the final retail price works out to Rs.41.32/Litre for diesel. For Kerosene, C&F price was Rs.42.72, total desired price was Rs.46.50, final retail selling price in Delhi was Rs.14.83, the price charged to the dealers excluding excise duty and VAT was Rs.12.99 and the under recovery of OMCs amounted to Rs.32.70 per litre. And RTP per cylinder of LPG was Rs.646.71, desired price was Rs.742.78, after central government subsidy of Rs.22.58 and under recovery of Rs.346.79 per cylinder, the distributor price becomes Rs.373.41 and finally after adding distributor's profit, the final price was Rs.399 (as excise duty and VAT on LPG cylinders are zero in Delhi) on 1<sup>st</sup> September, 2012. The effective customs duty, excise duty and sales tax/VAT rates on diesel and kerosene are 20% and 5% respectively in Delhi. We summarise these below.

## Delhi Rates for Petrol, Diesel, Kerosene & LPG on 1<sup>st</sup> September, 2012

Category	Petrol	Diesel	Kerosene	LPG
RTP Price	Rs.45.27 per litre	Rs.48.35 per litre	Rs.45.02 per litre	Rs.646.71 per cylinder
Desired Price	Rs.45.27 per litre	Rs.50.56 per litre	Rs.46.50 per litre	Rs.742.78 per cylinder
<b>Less Under Recovery + Subsidy</b>	<b>Rs.4.03 per litre</b>	<b>Rs.17.05 per litre</b>	<b>Rs.33.52 per litre</b>	<b>Rs.369.37 per cylinder</b>
Dealers' Price	Rs.41.24 per litre	Rs.33.51 per litre	Rs.12.99 per litre	Rs.373.41 per cylinder
<b>Taxes</b>	<b>Rs.25.72 per litre</b>	<b>Rs.8.13 per litre</b>	<b>Rs.0.71 per litre</b>	<b>NIL</b>
<b>Tax as % of Final Price</b>	<b>37.5%</b>	<b>20%</b>	<b>5%</b>	<b>0%</b>
Dealers' Commission	Rs.1.50 per litre	Rs.0.90 per litre	Rs.1.13 per litre	Rs.25.59 per cylinder
<b>Final Price</b>	<b>Rs.68.47 per litre</b>	<b>Rs.41.32 per litre</b>	<b>Rs.14.83 per litre</b>	<b>Rs.399.00 per cylinder</b>

**Source:** Petroleum Planning and Analysis Cell, Ministry of Petroleum and Natural Gas, GoI.

### 4. Taxes, Subsidies and Under Recoveries

The government earns huge revenue from the POL sector, which is way above its total expenditure on direct subsidies provided to this sector. The maximum revenues come from the excise and customs duty, which accrue to the exchequer of the Central government and the second largest component of revenue comes from sales taxes, which accrue to the State exchequers. A third major component of revenue from this sector is the royalty and oil development cess (ODC) and the fourth is dividends paid to the government by the public sector units (PSU) from their profit. It is interesting to note here that the PSU net profits (after tax) have always been larger than the direct subsidy. In 2010-11, the subsidy amount was exactly equal to the net profit of the PSUs. Therefore, if the government does not pay any subsidy, then just the profit of its own units would evaporate, even if the prices of petro-products remain unchanged. Hence, it is absolutely not necessary to provide direct subsidies to the OMCs when keeping the prices unchanged at the administered levels. So, there is no major cause of concern when administered prices are left unchanged. Moreover, the direct subsidy was minuscule when measured as a percentage of total revenue earnings from this sector at least upto 2008-09 (Table 1).

**Table 1: Combined Government Revenue & Expenditure and PSU Profit from POL Sector**  
(In Rs. Crore)

	2003-4	2004-5	2005-6	2006-7	2007-8	2008-9	2009-10	2010-11
Total Contribution to the Exchequer	10437 5	12094 6	13908 3	15721 9	17173 1	16179 8	18386 0	22549 4
Excise & Customs	50733	56395	63143	71893	78373	70557	71766	10261 7
Royalty & ODC	9171	10637	11127	14109	15187	15665	15051	19962
Dividends	6310	9436	9545	11527	9474	9861	8066	9807
Sales Tax	32849	39000	45934	53086	59890	62962	63949	78689
Central Govt.	69195	77692	87478	97264	10828 6	93512	11177 9	13649 7
State Govt.	35180	43254	51605	59955	63445	68285	72081	88997
Total Petroleum Subsidy	6351	2956	2683	2724	2820	2852	14951	38386
Total PSU Profit After Tax	24235	26398	26572	34197	35053	26730	39408	38395
Petroleum Bonds	-	9349	26611	50734	57938	13388 7	14418 6	14418 6
Under Recoveries Of OMC: Kerosene	3751	9480	14384	17883	19102	28225	17364	19484
Under Recoveries Of OMC: LPG	5523	8362	10246	10701	15523	17600	14257	21772
Subsidy + UR on LPG & Kerosene	15566	20772	27292	31108	37266	48513	34391	44161
Under Recoveries Of OMC: Diesel	-	2154	12647	18776	35166	52286	NA	34706
Total Under Recovery	9274	20146	40000	49387	77123	10329 2	46051	78190
Govt Issue of Oil Bonds/Cash Asst	-	-	11500	24121	35290	71292	26000	41000
Discount given by Upstream Companies	3123	5947	14000	20507	25708	32000	14430	30297
Borne by OMCs	6151	14199	14500	4759	16125	0	5621	6893

**Source:** Compiled from Indian Petroleum & Natural Gas Statistics, Basic Statistics on Indian Petroleum & Natural Gas 2010-11 and 9<sup>th</sup> Standing Committee Report, Ministry of Petroleum & Natural Gas, Govt. of India.

However, a genuine cause of concern is the indirect subsidies provided by the government through oil-bonds. This was an 'innovation', which was made to finance the under recovery of this sector by borrowing from the domestic capital market. Government-backed special oil bonds were floated to bypass this expenditure when computing the fiscal deficit, especially after the enactment of FRBM legislation. Instead of floating oil-bonds, the government could have directly subsidised this sector when faced with rising international oil prices and financed the expenditure by borrowing from the same domestic capital market against the government's own bonds. That would have been much more transparent. But then, the fiscal deficit to GDP ratio would have been higher. Following the very steep increase in the international price of oil in 2008-09, the total amount of these oil-bonds issued went up to Rs.134 thousand crore. However, this was the total stock of bonds accumulated over the years; the annual change in that stock, which is a flow, is what matters for the public finances. This figure too was very high in 2008-09, with the change in stock of oil bonds amounting to Rs.75 thousand crore. After that the government decided not to float anymore new government-guaranteed oil bonds over and above the existing stock and also to incorporate all 'off-budget items' including oil bonds into the budget in order to get a sense of the total effective fiscal deficit. As a result, the direct subsidy component to finance under recovery began to rise and the increase in oil-bonds was arrested. But, even then the direct subsidy does not exceed 20% of the combined revenue receipts of the Centre and States from this sector in the recent past.

It is important to note here that while the calculation of under recovery is based on notional import parity prices, part of the under recovery is also absorbed by the upstream and downstream companies and does not get reflected in either the subsidy bills of the government or in an increase in the stock of oil-bonds. It is true that the oil subsidy is given solely by the central government. However, 60% of the total revenues receipt from this sector also comes to central exchequer and the states get less than 40%. The total subsidy does not cross 35% of revenue receipts of the central government from POL. But, whether any extra subsidy would give rise to an increase in fiscal deficit or not would depend on whether the rise in expenditure is larger than the increase in revenue or not. In 2009-10 and 2010-11, the increases in subsidies have been much lower than the contemporaneous increases in the contribution of the POL sector to both the combined exchequer as well as the central exchequer. If we look at the financing of the total under recovery, we see that the discounts given by the upstream companies covered 30-40% of total under recovery. Earlier, the burden of the rest of the under recovery used to be borne by the OMCs, but that contribution has been gradually brought down to a mere 10%.

However, if the after tax profits of the public sector-OMCs increase, a substantial part would come back to the government as dividends and revenues from taxes on dividends. But, that would not be true in the case of private companies like Reliance or Essar or if the government decides to sell the shares of PSU-OMCs to private investors. The fresh issue of oil bonds by the

government covered more than 50% of total under recovery in recent past, which is, for all practical purposes, equivalent to the fiscal deficit financed by borrowing. This process of financing of under recoveries of OMCs has resulted in the accumulation of a stock of oil bonds valued at Rs.144 thousand crore in 2010-11. The policy makers are worried about this ever increasing stock of 'off budget liabilities' of government and based on a partial analysis of this sector alone recommended the 'pass-through' of the increase in international prices on to the domestic consumers. But the story is a little more complex than it appears to be. POL products are universal intermediates and their prices affect the rates of inflation and growth, and the levels of employment and the real wage in the economy almost immediately. If we look at the total subsidies on and under recoveries from LPG and Kerosene in 2010-11, prices of which directly affect real incomes, they amount to less than 20% of the total revenue receipts of government from POL sector. So the POL sector should not be seen in isolation, and the government's policy stance with respect to the sector must be based on a holistic analysis, given the impact that policy would have on the other sectors of the economy through various macroeconomic channels.

## **5. Macroeconomic Impact of Rise in International Price of Oil**

There are three major channels through which the international price of oil affects the economy of major oil importing countries like India *viz.* import channel, price channel and fiscal channel. If there is a rise in international oil prices, given import demand, the current account balance deteriorates, which in turn affects the growth rate adversely and causes, *ceteris paribus*, a depreciation of the exchange rate (i.e. increase in Rs./US\$). Since, import depends positively on the level of activity and net import depends negatively on exchange rate depreciation, the initial negative impact of oil price rise on the current account balance would somewhat get mitigated by a reduction in overall net import including that of POL products. As for the price channel, the weight of mineral oil sector in our WPI basket is 10%. The direct effect this implies would be compounded by the fact that if the domestic price of oil rises, prices of almost all other things would be affected. If the government decides to pass the international price rise through to domestic consumers, then it would affect the price level for sure. In a demand constrained situation, this imported inflation would significantly affect the growth rate, which eventually may lead to a stagflationary situation of high inflation combined with low growth. If the government wants to administer the domestic price of oil in the face of rising international prices, then the under recovery of oil marketing companies and/or the oil subsidy bill of the government would go up. However, the tax revenue of the government also goes up because of relatively lower inflation and higher growth. On the contrary, if the government decides to deregulate the POL sector completely, the inflation rate and the growth rate would be at the mercy of international movements of price of oil. But, in such a scenario, the subsidy bill and under recovery would be zero and the state governments would earn some extra sales tax (which is an ad valorem tax that is levied on the total value i.e. price multiplied by quantity and not a specific duty that is levied only on quantities and not on prices) collection from POL sector. But,

excise and customs revenues might come down because of a relatively lower quantity import of oil because of higher prices (although, POL products are largely price inelastic) and a lower overall growth rate. The ultimate effect of all these for different degrees of pass-through on the revenue, expenditure, fiscal deficit and the fiscal deficit to GDP ratio is not unambiguous.

A recent (technical) study based on the NIPFP policy simulation model (Bhanumurthy, Das & Bose, 2012) has tried to explore this complex dynamics through multiple iterations of a simultaneous equation system using real data on the Indian economy. Some of the interesting findings of the empirical exercise are as follows. Following the international oil price shock, even if the government absorbs the entire shock, i.e. assuming zero pass-through, the growth rate comes down slightly because of a worsening of the current account balance. The combined effect of an increase in expenditure due to the rise in oil subsidy and increase in revenue via growth results in a slight increase in the fiscal deficit as a proportion to GDP. The final increase in the fiscal deficit to GDP ratio is low relative to the initial increase in the subsidy bill because of the relatively higher growth achieved under zero pass-through and the relatively higher revenue receipts. On the other hand, under the full pass-through scenario, the inflation rate increases substantially and growth reduces significantly. The fiscal deficit to GDP ratio eventually comes down slightly because of a relatively lower increase in revenue and aggregate level of activity and no increase in expenditure due to increase in the oil subsidy bill. Thus, the trade-off is between a slight reduction in the fiscal deficit to GDP ratio, on the one hand, and high inflation and deceleration in growth of output and employment, on the other. The study (NIPFP working paper 99, 2012), therefore, concludes that in the face of substantially high and persisting inflation and the recent deceleration of growth in India, the policy of price deregulation of petroleum products must be carefully assessed.

On the balance of payment (BoP) front, the current account deficit as proportion to GDP increases with rise in international price of oil. However, given inelastic demand for oil, the quantity demanded does not come down significantly with rise in domestic prices or increase in degree of pass-through. However, if the growth rate comes down due to the increase in domestic oil prices, the aggregate import comes down and the current account balance improves marginally. Further, given net capital flows and flows of remittances, if the exchange rate adjusts because of the increase in the trade deficit, then the rise in current account deficit would be relatively smaller because export increases and import reduces with rupee depreciation. If the international price of oil keeps rising, it may pose serious challenges for the BoP in the long-run and may make India more dependent on the net inflows of international finance capital. Under a regime of deregulated oil prices, in case of full pass-through, any exogenous rise in the international price of oil would give rise to an equivalent increase in domestic prices and as a result of that, costs of production would inevitably increase. In turn, this would make India's exportable products less competitive in the world market, which may reduce aggregate exports, widen the trade deficit, reduce the growth and aggravate the BoP crisis in future.



## 6. Concluding Remarks

The cost of a slight reduction in the fiscal deficit as proportion to GDP achieved by deregulating the POL sector seems to be too high in terms of substantially higher inflation and lower growth. In fact, to boost growth today, the government is desperate enough to allow FDI even in multi-brand retail, which is likely to worsen the employment scenario in the country. Many people have argued in favour of 'tax rationalisation' on sensitive POL products. However, from the point of view of the fiscal deficit, the effect of a tax reduction without increasing the subsidy and the effect of increasing the subsidy without touching the tax rates would be the same for any given administered price of these products. Moreover, arguments for reducing the petro-subsidy bill incurred by the Central government or reducing the sales tax rate on petro-products means simply shifting of fiscal deficit from the centre to the state exchequers. I would like to argue that even if the fiscal deficit as a proportion to GDP increases slightly in order to maintain domestic price stability of POL products, we should allow that increase in order to minimize losses. The fiscal deficit does not necessarily cause inflation or 'crowding out' of private investment by raising the interest rates, anyway. But, the policy of oil price deregulation in the face of rising international price of oil, would surely have direct detrimental effects on growth, inflation and 'macroeconomic stability'. As far as the question of financing the extra deficit is concerned, the RBI (Reserve Bank of India) can purchase new oil bonds and repurchase some of the old oil bonds in the secondary market and indirectly monetise it. The macroeconomic impact of monetisation would be exactly the same as a reduction in the Cash Reserve Ratio (CRR), which is being lowered under the current monetary policy regime. If monetisation is as argued (by monetarists) inflationary, then that is true also for the increase in foreign exchange reserves due to inflow of foreign capital. For a growing economy, higher growth rate ensures higher tax revenue as well as creates larger fiscal space for more subsidies as a proportion to GDP, making it sustainable.

The Prime Minister has recently argued, in the context of diesel price deregulation, that "much of diesel is used by big cars and sports utility vehicles (SUVs) owned by the rich and by factories and businesses. Should the government run large fiscal deficits to subsidise them?" he asked (The Hindu, September 22, 2012). The Kirit Parikh Committee report tells us that the composition of consumption of diesel by different users in 2008-09 was: 37% consumed by trucks, 12% by buses, 15% by passenger cars, 6% by the railways, 12% by agriculture for irrigation purposes, 10% by the industry and 8% by the power generators. The Prime Minister has rightly pointed out that we do not want luxury cars and SUVs to consume the subsidized diesel but, what about the other uses? Moreover, it is not practically feasible to have differential prices for diesel, which would encourage black-marketeering. Instead, we can tax the diesel-run luxury cars and SUVs heavily, if we do not want to subsidize them, by levying much higher life-time registration fees on these cars. However, if the main reason is to provide the private players

like Reliance or Essar a 'level playing field' as part of the 'reform' agenda, then the question is more political rather than being just a matter of economic debate.

**References:**

Bhanumurthy, N.R., Surajit Das & Sukanya Bose, (2012) "Oil Price Shock, Pass-through Policy and its Impact on India" NIPFP working paper No. 2012-99, March.

Chaturvedi Committee Report, (2008) "Report of the High-Powered Committee on Financial Position of the Oil Companies", Govt. of India.

Economic Division, Ministry of Petroleum & Natural Gas (2012), "Basic Statistics on Indian Petroleum & Natural Gas 2010-11"

Economic Division, Ministry of Petroleum & Natural Gas (2012), "Indian petroleum and natural gas statistics 2010-11", Govt. of India, March.

Parikh Committee Report, (2010) "Report of the Expert Group on A Viable and Sustainable System of Pricing of Petroleum Products", Govt. of India.

Standing Committee of Petroleum and Natural Gas (2011) "Challenges of under-recoveries of petroleum products", 9<sup>th</sup> Report, Ministry of Petroleum and Natural Gas, Govt. of India, 21 December.