

Bhamy Shenoy

# The Mother of all Corruption

**How energy sector subsidies undermine good governance and energy security**

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## About the Author

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From 1997 until 2003, he was involved in efforts toward energy sector reform in former countries of the Soviet Union, including Kazakhstan, Uzbekistan, Turkmenistan and Georgia and was a board member of the National Oil Company in Georgia. He has been instrumental in fostering reforms addressing oil sector corruption in Georgia.

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# 1. Introduction

Many developing countries are confronted with a crippling multi-dimensional energy crisis, not the least with respect to the sustainable supply of oil. Those countries without their own oil resources are subject to the vagaries of an increasingly volatile global oil market and recurrently find themselves in need of adapting their economies to vast price swings and occasional supply cut-offs. Even exporters among the developing countries such as Nigeria, Kazakhstan or Iran, at times, suffer from a lack of refined oil products despite having adequate refining capacity. What is more, producers in developing countries are confronted with a wide range of other economic and political challenges that are rooted in the political economy of their oil and gas sectors. This lack of energy security is one of the major factors stifling economic growth in developing nations, frequently igniting political crisis and civil unrest.

As one of the major emerging energy consumers in the developing world, India is no exception to this sorry state of affairs. On the one hand, there has been quite some good news for India on the energy front. While the country is one of the fastest growing economies in the world, its energy consumption has not outstripped economic growth. While China's oil consumption has gone up by 64 percent between 2000 and 2007, India's has gone up by only 21 percent. China's energy intensity (measured in terms of total primary energy supplies per GDP in purchasing power parity dollars) is 72 percent more than that of India.<sup>1</sup> This is the result of two factors: First, much of India's growth in the past decades has been spurred by the knowledge-based IT sector and service-driven industries (in contrast to China which has emerged as the manufacturing house for the world). In addition, India has thus far failed to provide access to energy to its poor population. Thus, significant portions of the Indian population continue to depend on non-commercial energy sources such as firewood and agricultural waste while the middle and upper classes are increasingly getting "addicted" to hydrocarbon-based energy sources.

However, India – like many other developing countries – faces a different challenge that does not just threaten to undermine its energy security, but also has significant ramifications for the integrity of the country's political system. The problems of oil-rich exporting nations in capitalizing on the potential riches – popularly known as the "resource curse" – of their natural resources are well-documented. Most major producers in the developing world are plagued by systemic corruption and other ills related to their resource-based development model. In more recent years, the issue of resource governance has attracted widespread international attention and has sparked international programs such as the Extractive Industries Transparency Initiative (EITI).

Yet, these are not just challenges for major energy producers in the developing world. Resource-poor developing countries such as India do not only have to allocate a significant percentage of their export earnings to import energy, but they also suffer from what may be called the "curse of energy subsidies". To this day, many developing nations feature extensive domestic oil and gas sector subsidy systems that were originally designed

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<sup>1</sup> Shigeru Suehiro (2007), Energy intensity of GDP as an Index of Energy Conservation (Tokyo: IEEJ), August, accessible at: <http://encken.ieej.or.jp/en/data/pdf/400.pdf> (accessed 9 June 2009).

to protect the poor against higher energy prices and strong price fluctuations on international oil and gas markets. The impact of these domestic subsidy schemes, both on promoting energy security for the poor as well as on the political fabric - through rampant corruption at all levels of society, such as in India - has thus far not been comprehensively addressed.

Building on the specific case of India, this paper analyzes the political-economic effects of domestic oil sector subsidies on developing economies. At least for the Indian case, the results are very clear. The domestic subsidy system does not accomplish its stated objectives. The poor in India do not profit from the scheme. Instead, the existence of the subsidy systems has provided ample opportunity for rampant corruption that has the potential to undermine the social and political fabric in India. The paper closes with a number of concrete policy recommendations on how to address this problem, both at the national as well as at the international level.

## 2. India's energy system: Emerging energy needs and the domestic regulatory system

India's energy consumption has increased from 415 million tons of oil equivalent (mtoe) in 1998 to 565 mtoe in 2007 at the rate of 3.5 percent per year (see Figure 1 below). This is considerably less than India's GNP growth of 6.7 percent per year during the same period. This impressive energy and GNP relationship, however, does not reveal some more disturbing trends in India's energy sector. The poor in India (i.e. those who earn less than USD2 per day) account for more than 70 percent of the population and continue to depend mostly on non-commercial biomass and agricultural waste. While coal and oil meet 37 and 28 percent of India's energy needs respectively, the share of biomass in the energy equation is 23 percent. India's oil import dependency at present is about 75 percent and is forecasted to increase to 90 percent by 2030. Based on 2005 oil import statistics, India imported 67 percent of its requirements from the Middle East (Saudi Arabia, 25 percent; Kuwait, 12 percent; Iran, 10 percent; Iraq, 9 percent; Nigeria, 16 percent; and the rest of the world, 17 percent).

The Planning Commission of India, in its 2006 Integrated Energy Policy Report (IEPR), forecasted an increase in India's energy demand from 471 mtoe to between 1536 and 1887 mtoe by 2030 depending upon future GDP growth, success of energy conservation efforts, movement in oil prices, expansion of nuclear and renewable energy sources, implementation of energy policies by the government and other relevant factors.<sup>2</sup> The International Energy Agency's (IEA) World Energy Outlook 2008, on the other hand, forecasts India's consumption to be below 1279 mtoe in 2030 - considerably less than the consumption forecast by the Planning Commission.<sup>3</sup> According to the Planning Commission, India should aim to minimize energy consumption as much as possible while ensuring the availability of energy requirements to the poor.

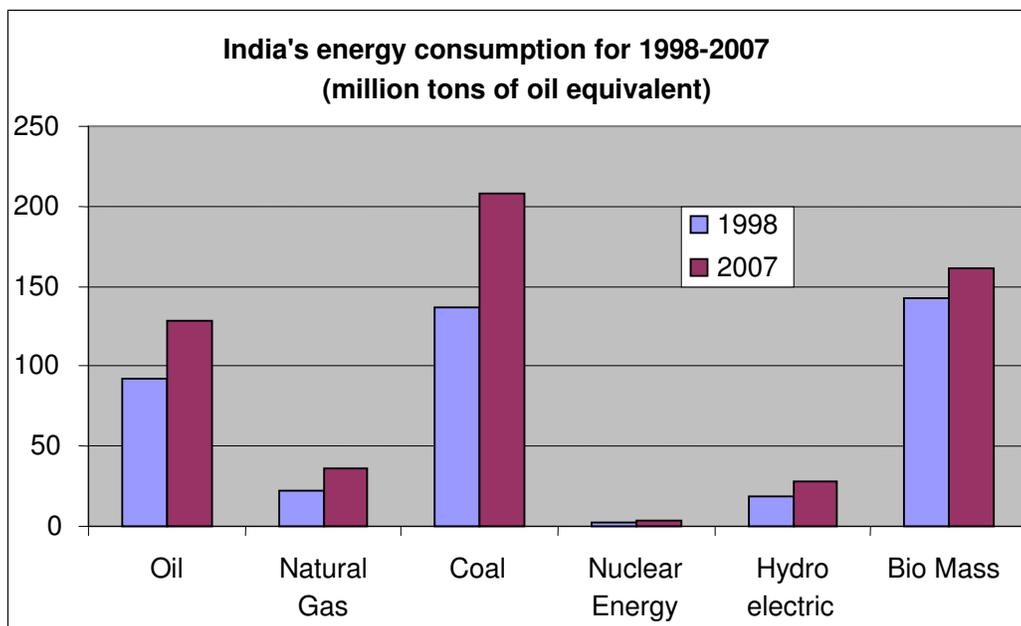
In the IEPR, the Planning Commission has made several recommendations to improve the productivity of different energy sectors like coal, oil, gas, nuclear and renewables. For the coal sector, the report recommends that private companies should be responsible for developing these reserves which today are dominated by the inefficient public sector companies. To encourage electricity production by private companies, the report has also suggested various reforms like open access to the distribution network, an efficient interstate and intra-state transmission system and ensuring gas availability to the power sector, among other recommendations. Most significantly, for the petroleum sector the Planning Commission recommends full competition and rationalization of pricing. It has made a strong recommendation for the creation of an enabling competitive environment where multiple players in each link of the energy value chain can compete on transparent and equal terms for realizing efficiency gains.

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<sup>2</sup> Government of India Planning Commission (2005), Draft Report of the Expert Committee on International Energy Policy, (New Delhi: Planning Commission), accessible at: <http://planningcommission.nic.in/reports/genrep/intengpol.pdf> (accessed 11 June 2009).

<sup>3</sup> IEA (2008), World Energy Outlook 2008 (Paris: IEA), chapter 2.

Figure 1: India's energy consumption for 1998 – 2007 (mtoe)<sup>4</sup>



During the past decades, India's approach to oil and gas market regulation has changed considerably. Before the mid-1970s, the oil price was based on import parity. Thus, while the oil price in the country did not reflect the true forces of demand and supply in the market, the government did not play a significant role in manipulating or even fixing the price. All of this changed with the introduction of an elaborate system to control petroleum product prices with the establishment of the so-called Oil Pricing Committee in 1976 by the central government as well as the introduction of the Administrative Pricing Mechanism (APM). The Oil Pricing Committee collected information from public sector oil companies concerning their refinery operations, types of crude oil refined, cost of operations and investment and determined the prices they can sell products in the market and thus ensuring some minimum rate of return on their investment. Since crude oil was allowed to be imported only by one public sector company, the Indian Oil Corporation, there was not much variation in the product prices. Prices were more or less uniform all over the country irrespective of the cost involved in transporting it from refinery gate to consuming points. In this respect, oil companies were ensured a minimum rate of return on their investment. As a result, there was no incentive for them to either maximize the productivity at their refineries or reduce the cost of operation.

The APM was formally dropped beginning in 2002 and oil companies were then allowed to fix the prices in a relatively competitive environment. However, this interregnum did not last long. As explained below, when international crude oil prices started to increase after 2004 and exceeded USD50 per barrel, the "long hand" of the government again started to control prices in an ad hoc manner. Unlike in the past, the cost of refinery production was not considered while fixing the prices. Only the politics of vote banks became the deciding factor. Even when higher prices were needed to keep the oil market-

<sup>4</sup> BP World Energy Report 2008 (biomass data is an estimate based on IEA World Energy Outlook 2008).

ing companies viable and to keep them from losing money, in order to please the voters the government did not pass on the higher costs. Since public sector oil companies control more than 90 percent of the oil market, this was relatively easy to accomplish.

So far the recommendations of India's Planning Commission to solve India's energy crisis and to improve energy security have remained only on paper. Instead, many of the key players in the energy game are directing their attention to a different ballgame – rent-seeking. Rather than promoting energy security they are working hard to protect the current subsidy system that has failed to broaden energy access for the poor. This subsidy system offers manifold opportunities for rent-seeking and corruption with disastrous economic and political consequences.

### **3. Oil sector subsidies: the mother of all corruption**

Energy price regulation has a long tradition in India. Before 1939, there were no price controls in India, but during the war, informal price control was managed by the oil companies themselves based on import parity of finished products. This was regularized after 1948 with fixed dealer and refinery margins. Despite having such a close monitoring of petroleum product prices, kerosene, on the other hand, was treated differently as it was the fuel which was used widely by the poor for cooking and lighting.

Since the Second World War, kerosene distribution has always been under government control. During the war, the need for control was driven by widespread shortages, resulting in rationing. Later, in order to help the residential sector, which consisted of mostly the poor, secure subsidized kerosene, its distribution was closely controlled by the government while allowing a free market for the use of kerosene for industrial and commercial sectors.

Similarly, the market for LPG was also tightly regulated. To popularize the use of Liquefied Petroleum Gas (LPG) in the late 1960s, the oil marketing companies were encouraged to offer subsidies even when all the users were among the rich and the middle class.<sup>5</sup> Once such a system was introduced, it became difficult for the government to eliminate it. Later when commercial and automotive sectors started to use LPG, the government allowed the oil companies to sell LPG at market driven prices. Thus a system of multiple pricing for the same commodity developed - a system which offers plenty of opportunities for black marketing.<sup>6</sup>

With increasing demand for LPG, a slight reduction in kerosene demand and higher oil prices, the subsidy cost to the government has become a big burden. More than the cost of the subsidy, the government is also losing tax revenues because of diversion of these subsidized products. Since no current government reports give total financial conditions of the energy sector, it is not easy to assess the real cost of these subsidies. The following section describes one possible approach to obtain such financial information and also why the government has been interested in dismantling the Administrative Pricing Mechanism.

#### **3.1 Assessment of energy sector financial health using value chain analysis**

In the annual financial budgeting process of any country, the energy sector has a dominating role because of several taxes imposed on energy products, income taxes to be collected from the energy sector companies, subsidies doled out to various sectors such as agriculture, fertilizer manufacturers, people living below the poverty line and revenues collected from the government share of oil and gas production. It is not possible to find any country where the government attempts to prepare an overall report which looks at

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<sup>5</sup> Center for Energy Economics, University of Austin (2006), LPG Subsidies in India (Austin: CEE), accessible at: [http://www.beg.utexas.edu/energyecon/new-era/case\\_studies/LPG\\_Subsidies\\_in\\_India.pdf](http://www.beg.utexas.edu/energyecon/new-era/case_studies/LPG_Subsidies_in_India.pdf) (accessed 11 June 2009).

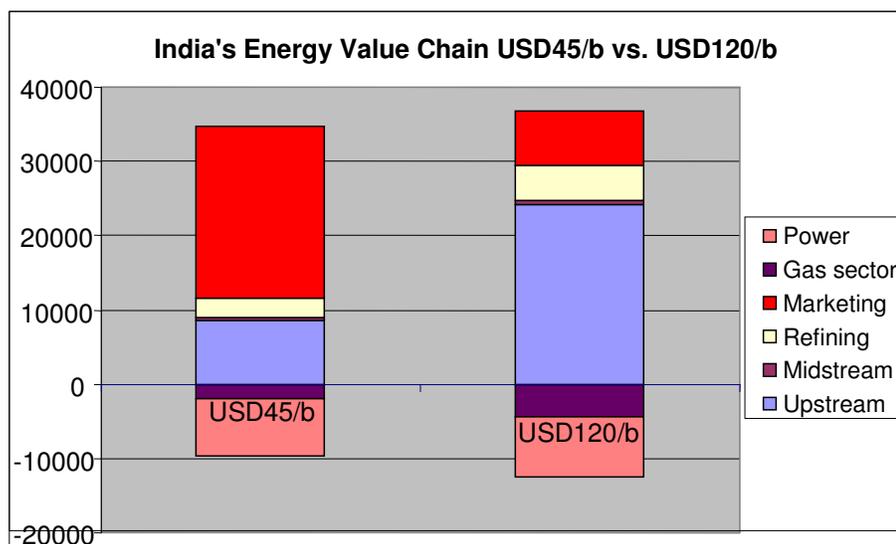
<sup>6</sup> Subsidized LPG and the Black Market in India, accessible at: <http://www.poten.com/Opinion.aspx?id=4218> (accessed 11 June 2009).

the total revenues collected from different energy value chain links and thus analyze the tax collection efficiency and study the impact of various energy policies. In the case of industrialized countries, though such a report is useful, it may not be essential to study the leakages and interactions between different value chain links because the system operates with high degree of integrity due, for example, to better governance. However, this is not true in many developing countries. Frequently, official data relating to energy imports, exports and consumption of petroleum products may not be accurate because of smuggling or illegal operations of blending of products.<sup>7</sup>

One way to provide an indication of the financial health and integrity of the energy industry is to find out how value is added along the various links of the energy chain from exploration to production, to pipeline, to refining, to marketing and to power generation.<sup>8</sup>

A table using an oil value chain model developed for India is provided in Appendix I. When the model was simulated for market conditions prevailing during USD120 per barrel and the current market of USD45 per barrel the financial results were stunning. The government revenues during these vastly different scenarios were more or less the same, however, an analysis of the revenues generated by different sectors show the wealth distribution game played by the government. Under the USD120 per barrel scenario, upstream generated massive revenues of USD24.2 billion while marketing had only USD7.2 billion (see Figure 2). As explained below, by forcing public sector oil companies to sell gasoline, diesel, kerosene and LPG below their production cost, the government subsidized the well-off sector of the economy. As crude prices started to come down, upstream revenues declined and downstream showed improvement.

Figure 2: India's energy value chain: USD45 per barrel vs. USD120 per barrel<sup>9</sup>



<sup>7</sup> Bacon, Robert and Masami Kojima (2006), Phasing out Subsidies (Washington, DC: World Bank), accessible at: [http://rru.worldbank.org/documents/publicpolicyjournal/310Bacon\\_Kojima.pdf](http://rru.worldbank.org/documents/publicpolicyjournal/310Bacon_Kojima.pdf) (accessed 11 June 2009).

<sup>8</sup> The author developed such a value chain model for Georgia in 2003. It exposed huge revenue leakages in oil and gas sector. This resulted in the government having to take measures to stop such leakages. See report at <http://georgia.usaid.gov/pdf/18.pdf> (accessed 5 June 2009).

<sup>9</sup> Based on India's value chain model developed by the author.

Like in the case of petroleum products where kerosene and LPG are subsidized, India also subsidizes some consumers like farmers and people below the poverty line in the power sector. However, unlike the petroleum sector where the government-owned companies were in reasonable financial health until the recent increase in oil prices, state owned electricity companies were losing money. This was mostly because of the political interference in the management of these power sector companies.

In most Indian states, autonomous electricity regulatory commissions have been established to improve the financial conditions of the power sector. As per law, they are all expected to fix prices based on actual costs without cross subsidy, but this is never practiced. For example, the government is continuing to provide farmers with free electricity in many states.<sup>10</sup> The poor are supplied with either free electricity or with electricity at highly subsidized prices.<sup>11</sup> In addition (and as a consequence of political interference) electricity theft is often ignored by state-owned companies.<sup>12</sup> Transmission and distribution losses are usually more than 30 to 35 percent and in some states it is even more than 50 percent.<sup>13</sup> Thus all of the government owned state electricity companies are running financial deficits. As a consequence, private companies have little or no incentive to enter the liberalized generation sector since they are not confident of being paid either on time or in full.

The competition among different political parties to offer subsidies to farmers and the poor also has some unintended consequences. India is a leader in biogas power generation technology from cow dung, agricultural waste and biodegradable matter, but the amount of power generated using such technology has been less than 10 percent of the potential.<sup>14</sup> In the case of cow dung, only about 4 million biogas plants have been constructed, whereas the potential is for 12 million tons. When the government promises to sell free or highly subsidized power, one will not have any incentive to invest in such renewable energy sources. The same is true for solar, wind and other renewables. Cumulatively, India has invested in 4 million family type bio-gas plants, 110 MW of solar photovoltaic, 0.6 million solar cookers and grid interactive renewable power of 11300 MW (wind power of 7800 MW, small hydro of 2040 MW).<sup>15</sup> India is one of the few countries which have a separate ministry for promoting renewable energy sources.

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<sup>10</sup> Indo Asian News Service (2009), Chhattisgarh offers free power to farmers, accessible at: <http://india-forums.com/news/article.asp?id=177925> (accessed 11 June 2009).

<sup>11</sup> Practical Action (2006), Electricity Reforms in India - Past and Present (Columbo: Practical Action), accessible at: [http://www.janathakshan.org/gats\\_reforms/c/eleindia.html](http://www.janathakshan.org/gats_reforms/c/eleindia.html) (accessed 11 June 2009).

<sup>12</sup> Godbole. Madhav (na), Power Sector Reforms: If Wishes were Horses, accessible at: <http://www.geocities.com/bororissa/pow.html> (accessed 11 June 2009).

<sup>13</sup> Prayas (2002), India Power Sector Reforms Update (Pune: Prayas), accessible at: <http://www.psir.org/india/IRU3-0502.pdf> (accessed 11 June 2009).

<sup>14</sup> Chanakya, H. N., P. Rajabapaiah and J. M. Modak (2004), Evolving biomass-based biogas plants: The ASTRA experience (Bangalore: IISC), accessible at: <http://www.ias.ac.in/curresci/oct102004/917.pdf> (accessed 11 June 2009).

<sup>15</sup> Accessible at: [http://mnes.nic.in/annualreport/2007\\_2008\\_English/Chapter1/chapter1\\_1.htm](http://mnes.nic.in/annualreport/2007_2008_English/Chapter1/chapter1_1.htm) (accessed 11 June 2009).

### **3.2 Effects of energy sector subsidies during the 2008 oil price hike**

India must be one of the only large countries which actually reduced domestic prices for petroleum products during the relentless crude oil price increase between 2003 and 2008. It was only in 2008, when crude prices shot above USD120 per barrel, that the government with great reluctance increased the prices. However, this was only a marginal increase in order to compensate the marketing oil companies for assumed crude price of about USD60 per barrel.<sup>16</sup> This forced private companies like Reliance and others to shut down their service stations. Reliance had developed a world class network of service stations with ultramodern IT facilities to monitor the operations of the service stations from their headquarters, which would have given tough competition to the poorly managed government-owned service stations often selling adulterated products.

The public sector marketing oil companies were losing money by the millions every day. In a totally non-transparent and ad hoc manner, the government forced the government-owned upstream companies ONGC and Oil India to transfer some funds to public sector oil marketing companies. In addition, the government also subsidized this through a totally irrational system of buying oil bonds from the oil companies, a system of indirect subsidy never adapted anywhere else in the world. Instead of oil bonds, the government could have given direct subsidies to the government-owned oil companies, but such a transparent system needs budget approval.

While the government was trying to manage with high oil prices, oil traders who were the owners of service stations, distributing or selling LPG or agents distributing kerosene through public distribution system (PDS) were practically minting money. They diverted low priced PDS kerosene to adulterate high-priced gasoline and diesel.<sup>17</sup> Poor consumers had to wait for hours to secure their meager ration of kerosene supplies or buy it on the black market and thus pay three times the price. Since residential LPG is priced low, dealers diverted highly subsidized residential LPG to commercial and automotive sectors where the prices are two to three times the residential LPG prices as described below.<sup>18</sup>

Figure 3 shows the huge subsidies doled out by the government to the users of various petroleum products. It also shows the amount of black money generated by diverting subsidized products to more lucrative sectors, as explained above, when the world oil price was USD120 per barrel. Currently, with crude oil prices around USD45 per barrel, there are no subsidies on gasoline and diesel.

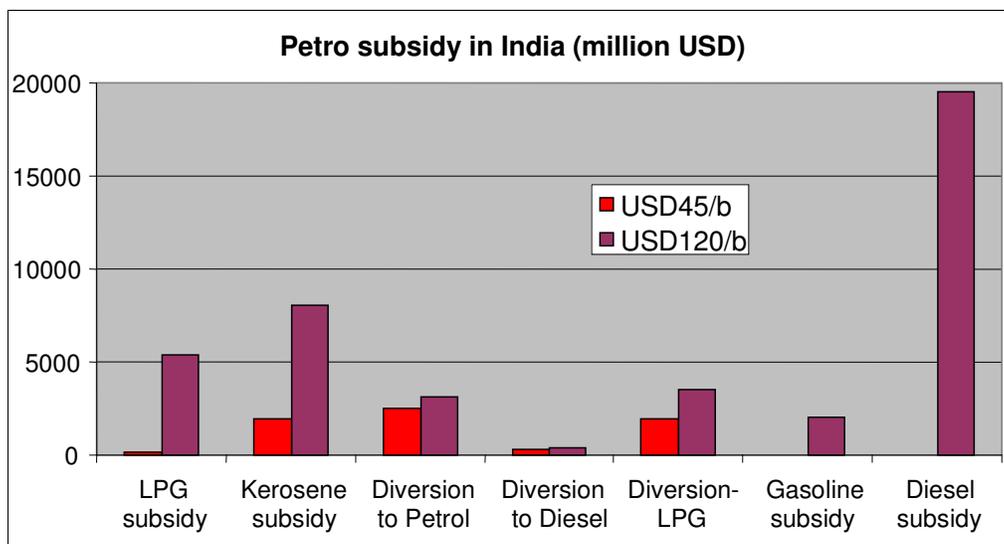
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<sup>16</sup> Verma, Nidhi, India Essar to reopen fuel pumps, Reliance cautious, in Reuters online, accessible at: <http://www.reuters.com/article/rbssOilGasExplorationProduction/idUSBOM13392920081017> (accessed 11 June 2009).

<sup>17</sup> Comprehensive Study to Assess the Demand and Requirement of SKO”, NCAER, October 2005.

<sup>18</sup> India Ministry of Petroleum and Natural Gas (2006), Report of the Committee on Pricing and Taxation of Petroleum Products (New Delhi: Ministry of Petroleum and Natural Gas), accessible at: <http://petroleum.nic.in/Report1.pdf> (accessed 11 June 2009).

Figure 3: Petro subsidy in India<sup>19</sup>



Even the subsidy on residential LPG has fallen with the lower oil price. When the oil price was around USD120 per barrel, the total annual subsidy the government was handing out amounted to USD35 billion and, in addition, through diversion of subsidized products there was another implicit loss of USD7 billion. Currently, these losses have decreased to USD2 billion and USD5 billion per year respectively, but even at this lower level, they are significant and black money generated through this system can be considered as the mother of all corruption in India. Of course, when the oil prices were high, oil traders and their political supporters were earning huge profits, though illegally, when the country was losing valuable foreign exchange in order to import crude oil.

In 2008, there were about 34,194 gasoline stations, 6,624 kerosene dealers and 9,365 LPG dealers in India as per the report prepared by Petroleum Ministry.<sup>20</sup> Those who are beneficiaries of these dealerships have, more often than not, direct or indirect connections with the political establishments.<sup>21</sup>

While international crude oil prices have increased from about USD25 per barrel in 2003 to a high of USD147 per barrel in 2008, the Indian government forced the public sector oil companies to sell kerosene through the public distribution system at USD34 per barrel. During this time, gasoline and diesel prices were increased to some extent, but not enough to compensate the marketing companies for the huge increase in crude prices. As shown in Figure 4, comparable prices for gasoline and diesel were USD208 per barrel and USD140 per barrel and the market price of kerosene was USD151 per barrel. Oil companies were forced to subsidize kerosene to the extent of about USD117 per barrel. Owners of stations who were also PDS kerosene distributors blended kerosene with gas-

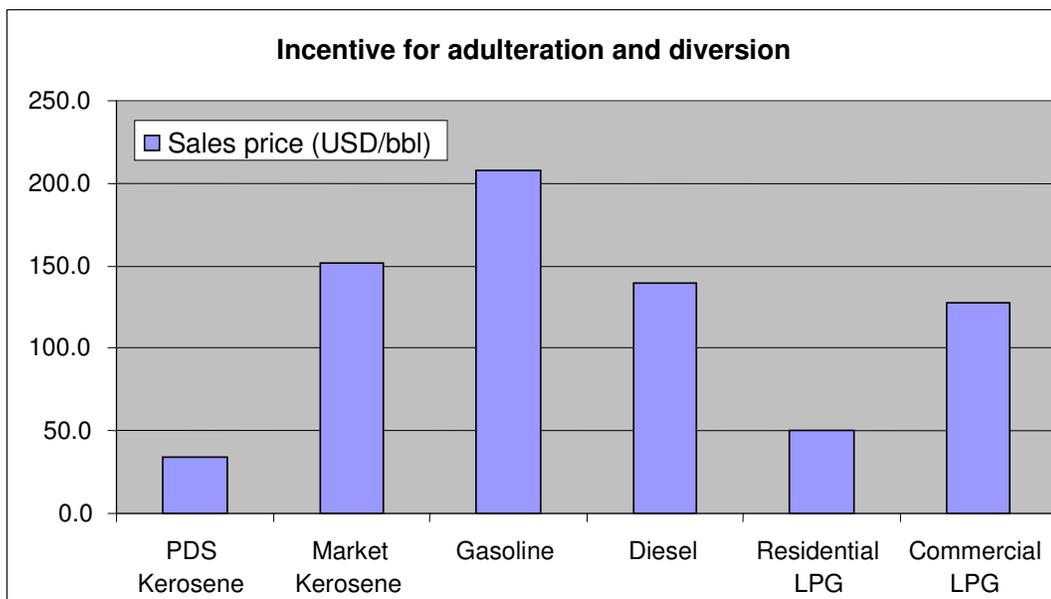
<sup>19</sup> Graph is based on the models developed by the author.

<sup>20</sup> India Ministry of Petroleum and Natural Gas (na), title unknown (New Delhi: Ministry of Petroleum and Natural Gas), accessible at: <http://petroleum.nic.in/petstat.pdf> (accessed 11 June 2009).

<sup>21</sup> Viswanathan, S. and Shobha Mathur, Highway Robbery, *Industrial Economist*, 15-29 May 2005.

oline and could earn as much as USD174 per barrel.<sup>22</sup> They also blended it with diesel, though the profit margin was less at USD106 per barrel.

Figure 4: Incentive for adulteration and diversion<sup>23</sup>



It was not very different with the subsidized sale of LPG in the residential sector. Unlike PDS kerosene, there was marginal increase of about 40 percent in the price of residential LPG. But this was not enough to compensate the oil companies for their increased cost of buying LPG. When residential LPG was sold at USD50 per barrel, commercial LPG commanded a market driven price of USD128 per barrel. Such a huge difference gave every incentive to the LPG distributors to divert residential LPG quota to the commercial sector, earning a profit margin of USD78 per barrel.

### 3.3 Failed attempt to liberalize oil market

With great fanfare, the government dismantled the APM in April 2002, but the euphoria of dismantling lasted only for a short period. Oil companies were given some freedom to determine the prices based on the international petroleum market. However, when crude oil prices started to increase in 2004 and oil companies wanted to pass on the increases to customers, the government started to again interfere with the pricing decisions.

When crude oil price was USD120 per barrel, the prices for gasoline, diesel and PDS kerosene were USD1.30, USD0.90 and USD0.21 per liter and the oil marketing companies were losing USD0.16, USD0.37 and USD0.72 per liter respectively. In the case of residential LPG, the loss was about USD460 per ton. Many studies have showed that more than 40 percent of PDS kerosene does not reach the intended beneficiaries and is systematically diverted either to blend with gasoline and naphtha or sold on the black mar-

<sup>22</sup> Sethuraman, Dinakar and Archana Chaudhary (2008), Drivers, using Kerosene Mixed Oil, accessible at: <http://staging.livemint.com/articles/2008/05/08222537/Drivers-using-kerosenemixed.html> (accessed 11 June 2009).

<sup>23</sup> Indian Oil Company website, accessible at: <http://www.iocl.com/> (accessed 11 June 2009).

ket at a higher price.<sup>24</sup> There are some honest officials and oil company managers who quote an even a higher percentage of PDS kerosene diversion to the extent of 60 percent in some states.

Licenses to own and operate gasoline service stations are a largesse doled out to politically connected people, though there are well spelled out criteria giving preference to unemployed engineers, retired army people or people with disabilities. A few years ago, the Supreme Court had to cancel the licenses of more than 2000 owners of service stations when it was discovered that the award of these licenses was due to collecting bribes. One of the most celebrated cases involved the award of such a license to the daughter of one of the former Prime Ministers of India. Furthermore, many of these service station owners also happen to be dealers of PDS kerosene due to easy access to subsidized kerosene. This is not a chance coincidence.

In the case of LPG, the government also has the noble motive of helping the “poor” and “middle class” and has forced the oil companies to sell LPG at highly subsidized prices. Only recently, with the drop in oil price, has the LPG subsidy come down. Again the studies have found that more than 30 percent of LPG connections in residential sector are bogus and LPG is regularly diverted to commercial and automotive sectors earning huge margins by avoiding taxes.<sup>25</sup> There is a long list of millions of customers waiting to get LPG connections and, additionally, not many poor can afford to have these connections. In rural areas, the poor depend mostly on kerosene or firewood for cooking. Still, the political class is not prepared to liberalize the LPG market and allow the free market to decide the price.

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<sup>24</sup> India Standing Committee on Petroleum and Natural Gas (2006), Marketing, Supply, Distribution, Dealerships and Pricing of Kerosene and other Petroleum Products (New Delhi: Lok Sabha Secretariat), accessible at: <http://www.indiaenvironmentportal.org.in/files/25th-20Report.pdf> (accessed 11 June 2009).

<sup>25</sup> Author unknown (2005), Call to check the LPG malaise, In Hindu Times Online, accessible at: <http://www.hindu.com/2005/10/07/stories/2005100714200400.htm> (accessed 11 June 2009).

## 4. Policy Recommendations

As argued above, well intentioned oil sector subsidies do not help the poor since a significant portion is diverted to blend with higher valued gasoline or diesel. Several studies, commissions and expert reports have looked into the diversion of subsidized petroleum products and made recommendations to reduce corruption. But there is no political will on the part of any government to implement them. This is because oil sector subsidies have become a new sacred cow to be milked freely to generate large amounts of black money to the extent of USD8 to USD10 billion per year. This can have devastating impact on governance. Some recommendations are suggested below to reduce corruption in the energy sector. Based on the experience of NGOs who have been fighting corruption in oil sector from the grass roots to the national level, it can be observed that these recommendations will be implemented only if there is a pressure for reform from the public. Only when the public are informed about corruption and how it affects the political fabric of the country will there be pressure to reform the energy sector.

### 4.1 Dismantling the old style subsidy system

First and foremost, the government should avoid fixing energy prices by dismantling the Administrative Pricing Mechanism (APM) and enabling the free market to determine prices. The APM was, as mentioned above, dismantled in 2002 after a very heated debate in India's Parliament, however, once international oil prices began increasing again, the government took away the power of public sector oil companies to fix the prices. Now is the opportune time for the government to finally rid the country of the APM.

Second, the government should avoid selling the same or similar products at vastly different prices through the usage of its irrational taxing policy. When diesel prices are below gasoline prices, demand for diesel is far more than what it would be otherwise. Since diesel and kerosene have more or less the same chemical structure, PDS kerosene is diverted to be blended with diesel. It will be extremely difficult to detect such illegal use of subsidized kerosene meant for poor. Another such example is of residential LPG which is priced considerably below the commercial LPG.

Third, the central government only pays lip service to improving the financial conditions of state electricity boards (SEB) by "forcing" them to sell electricity to cover the cost. The government takes all kinds of measures to prevent SEBs from distributing power free to some preferred customers.<sup>26</sup> In reality, every political party is against the stated objective of operating SEBs to recover their cost so that they are on a sound financial footing. There should be a lifeline tariff for helping the poor, but giving away power free of charge or below cost will hamper the power industry from getting finance as has been repeatedly shown. A revolutionary step has been taken towards removing tariff setting activities from political consideration through the development of an independent regulatory system at the national and state level. There should be minimum political interfer-

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<sup>26</sup> Prime Minister's Council on Trade and Industry (na), Infrastructural Development: Power (New Delhi: Council on Trade and Industry), accessible at: <http://indiainimage.nic.in/pmCouncils/reports/infra/ichap3.htm> (accessed 11 June 2009).

ence in their operations and regulators should be forced to strictly follow the electricity laws while setting prices.

#### **4.2 Design policies to foster access to energy for the poor**

There is a need to assist the poor with cooking fuel requirements, but this can be done through a smart card system as recommended by the Planning Commission rather than providing them with subsidized products through government controlled market outlets.<sup>27</sup> Once the smart card is given to intended beneficiaries, they can get the supply from any dealer. Kerosene prices can be market driven and only those with a smart card will get kerosene at lower prices and thus the subsidy will be paid directly to the dealers based on products sold to those below the poverty line. Thus, diversion of subsidized products can be completely avoided. At the suggestion of the author, a low-tech coupon system, which is similar to the smart card in many ways, was successfully implemented in Karnataka, India. Soon after it was implemented, diversion of subsidized kerosene was completely eliminated. However, because of political pressure, the coupon system was dropped.

Though there was a need to subsidize LPG when it was first introduced to popularize the product, there is no such need today. LPG is a popular cooking fuel and there is a long line of customers waiting for a connection. This policy is not only subsidizing the rich and the middle class, but also encouraging corruption by diverting residential LPG to the higher-priced commercial and automotive sectors. It is strongly recommended to stop subsidizing residential LPG and the price difference between residential and commercial LPG should be reduced to prevent the diversion.

#### **4.3 EITI should adapt a strategy to help fight subsidy driven corruption**

Many oil rich developing countries are well-known to suffer from the “resource curse”. The Extractive Industries Transparency Initiative’s (EITI) strategy of “publish what you pay” has started to make some impact in these countries. On the other hand, oil poor developing countries, besides having to allocate an increasing percentage of export earnings to import energy, also suffer from the “curse of energy subsidies”.

This article has shown how oil sector subsidies, though well intended, can generate enormous amount of black money. This in turn is bound to have a detrimental impact on the governance of any country. Though it is recognized all over the world that subsidies are often diverted and do not reach the poor, the overall amount of black money generated is not fully appreciated.

EITI should consider the implementation of a new strategy to compute the real impact of subsidies using generally acceptable assumptions and compare it with foreign aid received by the countries. Why should foreign governments dole out millions of dollars of aid money while the political leaders of developing countries earn millions? Such a com-

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<sup>27</sup> India Planning Commission (2006), Integrated Energy Policy: Report of the Expert Committee (New Delhi: Planning Commission), accessible at: [http://planningcommission.nic.in/reports/genrep/rep\\_intengy.pdf](http://planningcommission.nic.in/reports/genrep/rep_intengy.pdf) (accessed 11 June 2009).

parison will compel the governments to streamline the subsidy system, reduce subsidies or adopt a more efficient system of helping the needy.

## Appendix I: India's oil, gas and power value chain

	Product	Total	Other	Total	Profit	Income	Value	Public	Private	Total Govt
	Cost	Revenues	Taxes	Costs		Tax	Generated	sector	Sector	Revenues
	\$MM	\$MM	\$MM	\$MM	\$MM	\$MM	\$MM	\$MM	\$MM	\$MM
Oil Private		1468	495	353	620	186	1468	0	1468	130
Oil Govt.		8995	3032	3039	2924	877	8995	8995	0	1228
Gas Private		1056	0	246	809	243	1056	0	1056	170
Gas Govt.		3706	0	741	2965	889	3706	3706	0	1245
<b>Upstream Total</b>		<b>15226</b>	<b>3527</b>	<b>4379</b>	<b>7319</b>	<b>2196</b>	<b>15226</b>	<b>12701</b>	<b>2524</b>	<b>8497</b>
Oil pipelines		136	0	0	136	41	136	136	0	136
Gas pipelines		317	0	0	317	95	317	317	0	317
<b>Midstream Total</b>		<b>453</b>	<b>0</b>	<b>0</b>	<b>453</b>	<b>136</b>	<b>453</b>	<b>453</b>	<b>0</b>	<b>453</b>
Private Oil Co	11697	13757	0	652	1407	422	2059	0	2059	422
National Oil Co	33082	36371	0	1515	1774	532	3289	3289	0	532
<b>Total Refining</b>	<b>44780</b>	<b>50128</b>	<b>0</b>	<b>2167</b>	<b>3181</b>	<b>954</b>	<b>5348</b>	<b>3289</b>	<b>2059</b>	<b>2729</b>
Marketing										
LPG	3938	5576	315	1085	237	71	1638	1474	164	149
Gasoline	3614	11029	4326	464	2625	787	7415	5932	1483	1470
Distillate	17250	33966	8388	1500	6828	2048	16716	13373	3343	3824
Kerosene	3856	2040	413	190	-2420	0	-1816	-1453	-363	-1936
Jet Fuel	1613	1849	129	80	27	8	236	189	47	15
Residual Oil	3351	4859	536	254	718	215	1508	1056	452	352
Others	11516	14119	1842	607	154	46	2604	1822	781	75
<b>Total Marketing</b>	<b>45138</b>	<b>73439</b>	<b>15951</b>	<b>4181</b>	<b>8169</b>	<b>3177</b>	<b>28300</b>	<b>22393</b>	<b>5907</b>	<b>23076.54</b>
Residential	60	42	3	10	-31	0	-18	-18	0	-31
Commercial	967	677	54	142	-486	0	-290	-290	0	-486
Industry	1950	1365	109	169	-863	0	-585	-585	0	-863
Power	1785	1250	100	155	-790	0	-536	-536	0	-790
<b>Total Gas Use</b>		<b>3333</b>	<b>267</b>	<b>476</b>	<b>-2171</b>	<b>0</b>	<b>-1429</b>	<b>-1429</b>	<b>0</b>	<b>-1904</b>
Power										
Hydro	1590	5484	274	460	3159	948	3893	3893	0	2211
Oil fired	1420	343	17	58	-1152	0	-1077	-1077	0	-1152
Gas fired	4544	2742	137	345	-2284	0	-1802	-1802	0	-2284
Coal Fired	25611	22894	1145	4482	-8344	0	-2717	-2717	0	-8344
Nuclear	888	857	43	216	-289	0	-31	-31	0	-289
Other	1775	1714	86	0	-147	0	-61	-61	0	-147
Imports	249	240	12	302	-323	0	-9	-9	0	-323
<b>Total Power</b>	<b>36077</b>	<b>34273</b>	<b>1714</b>	<b>5862</b>	<b>-9380</b>	<b>948</b>	<b>-1804</b>	<b>-1804</b>	<b>0</b>	<b>-7666</b>
<b>Total Oil &amp; Gas</b>		<b>76991</b>	<b>19899</b>	<b>11605</b>	<b>13515</b>	<b>6463</b>	<b>45019</b>	<b>34528</b>	<b>10491</b>	<b>29415</b>