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FOSSIL FUEL PRICING IN INDIA- A CRITICAL EVALUATION OF CURRENT STATUS

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ABSTRACT

Fossil fuel (i.e. petrol, diesel) has become an indispensable part of our day-to-day life, and we can't imagine our life without it. But the petrol and diesel prices are sky rocketing, and it is eventually going to affect everything that we use in our everyday life. Poor people are already working hard to earn their livelihood and this hike is definitely going to paralyze these already-burdened people. Within three years petrol price adding fuel to the fire and is still increasing. Petrol or diesel price hike directly or indirectly affects all the major sectors like food, transportation, textiles, auto, fast moving consumer goods etc. This affects the prices of daily essential commodities which are transported on a daily basis. Banking sector is also expected to suffer due to high level of inflation. With rapid economic growth, energy demand in India has been rising rapidly, and India is now the third largest consumer of crude oil in the world. Unfortunately, India has to import most of its oil requirement, which leads to severe pressure on the economy when the oil prices rise. An attempt has been made to critically analyse the recent spurt in fuel prices and its implication in the economy as a whole.

JEL Classification Q41, Q43, Q48.

KEY WORDS: PPAC, OMCs, Crude Oil, Consumption, Dependency, Inflation, Fiscal Deficit, Foreign Exchange Reserve, Exchange Rate, OPEC

I. INTRODUCTION

The rising fossil fuel increases the burden on Indian citizens, which in turn also affecting the government's popularity to some extent. Quite often it also brings into question the government's policy when it comes to taxing basic fuels. More than half of the money that is paid by the consumer goes to the government in the form of taxes. Some posits that the government might compromise on its fuel deregulation policy, which allows oil marketing companies (OMCs) to price their output freely.

But hike in petrol price in turn has a rippling effect. As bulk of the commodities are transported across India on vehicles that run on petrol or diesel, so increase in petrol price results in price rise of these commodities as well. The greatest sufferer here is a common man. He is already bearing the burden of inflation and any increase

in petrol price will further reduce his actual household income. Today every common man spends almost half of his income on food items. If the petrol price in India rising in this manner then every food item will get costlier. It will result in less of savings and more of expenditure. This may, in turn will have chain affect to the real estate, banking and other sectors in India. Eventually, more and more people will be plunged into poverty.

In this backdrop an attempt has been made to analyse critically the implication of recent spurt in petrol and diesel prices to the Indian economy.

II. COMPONENTS OF RETAIL FUEL PRICE

The price of domestic petrol and diesel going forward is likely to depend on the price of crude oil in the international market as well as the policy

preferences of the government. One barrel of crude oil contains about 160 liters of oil priced in US dollars. To calculate price, US dollars are converted first into Indian rupee and then divided it by 160.

Imported crude oil is transported to different refineries in India. India at present has about 20 refineries. Crude oil is then processed into various products like petrol, diesel, coal tar, etc in distillation towers of these refineries. Cost of distillation and cost of refining is also added to the price of petrol. Other

charges like crude custom levy and charges from ports to the refinery are added. Oil companies now pay to the refineries the cost of transporting petrol from refinery to OMC’s tanks. So the retail price of petrol that a consumer pays includes all the above mentioned cost plus commission of a dealer, VAT, excise duty, total duties and taxes.

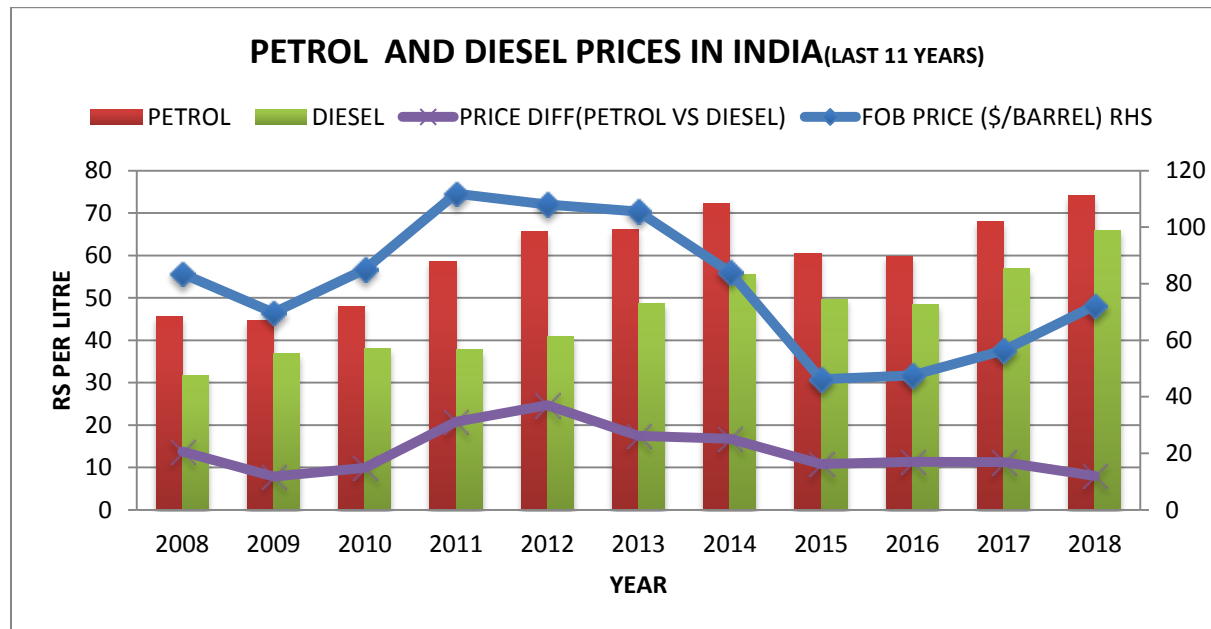
Thus petrol price is the cost price that includes procuring, refining and marketing plus taxes that include central and state taxes.

TABLE-1 PRICE BUILD UP FOR PETROL AND DIESEL AT DELHI (W.E.F.01/06/2018)

COMPONENTS	PETROL		DIESEL	
	RS/LITRE	AS % OF RETAIL PRICE	RS/LITRE	AS % OF RETAIL PRICE
PRICE CHARGED TO DEALERS	38.53	49.22	41.16	59.48
EXCISE DUTY(Centre)	19.48	24.89	15.33	22.15
DEALERS COMMISSION	3.64	4.63	2.53	3.66
VAT (State)	16.64	21.26	10.18	14.71
RETAIL SELLING PRICE	78.29	100%	69.20	100%

Source: Indian Oil Corp.

III. RECENT TRENDS IN FUEL PRICE IN INDIA AND NEIGHBOURING COUNTRIES



Sources: Petroleum Planning and Analysis Cell (PPAC),

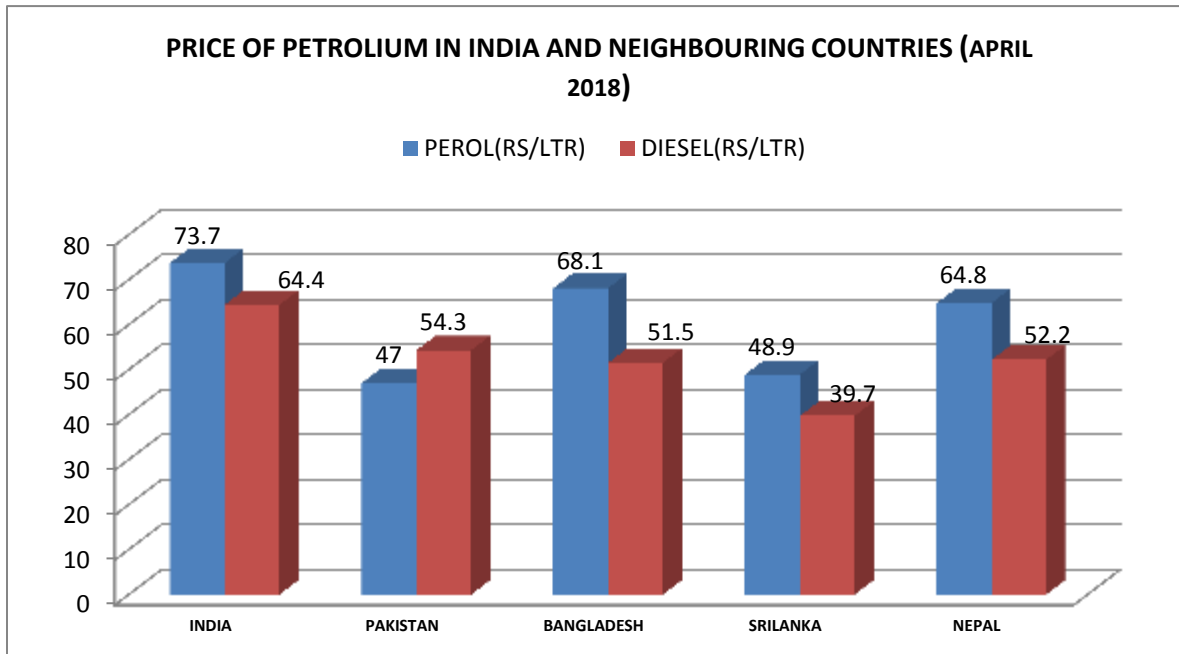
GRAPH-1

Oil is one of the most precious commodities in recent times. Much of the economy depends on oil. This is why prices of oil is important to almost every economy. Global crude oil prices are down nearly 35% this year to \$72 per barrel-levels from \$111/barrel in the year2011. The prices of petrol and diesel in Indian

cities have risen to their highest level today since late 2014. This is very surprising to many since the price of crude oil, a major ingredient in the production of domestic fuels, is now significantly lower than what it was in late 2011-12(Graph-1). When international crude oil prices fell steeply in 2014 and 2015 — as low

as \$46 — domestic fuel prices failed to come down as much because excise duty and vat increased proportionately. Price differences between petrol and

diesel also narrowed down. Whenever crude oil prices have increased; the prices of domestic fuels have been raised steadfastly.



Note: Prices as on April 1, 2018. Prices for India pertain to Delhi.

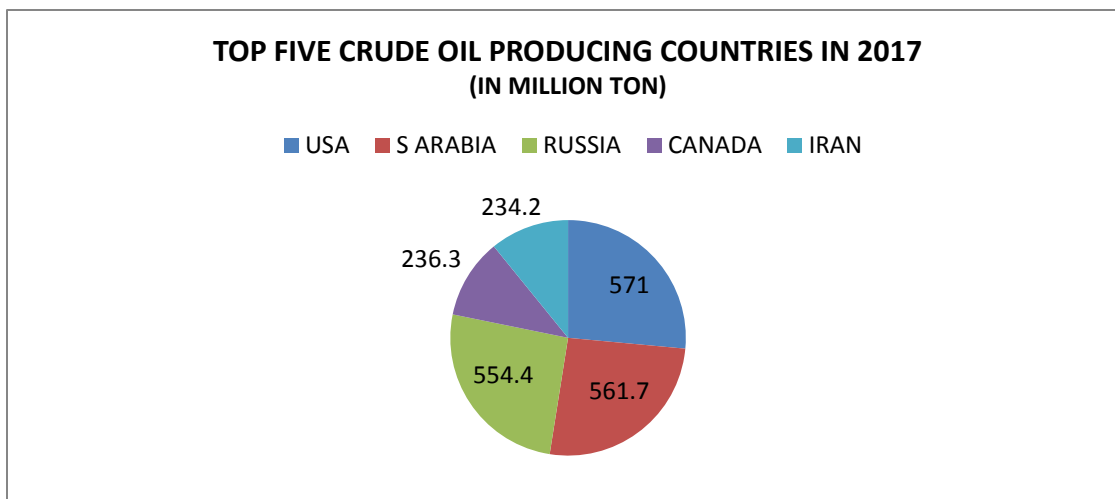
Source: PPAC

GRAPH-2

When compared to other neighbouring countries, India has the highest prices for petrol and diesel. Graph-2

shows that lowest petrol price is in Pakistan and lowest diesel price is in Sri Lanka.

IV. INDIA AND TOP FIVE CRUDE OIL PRODUCING COUNTRIES

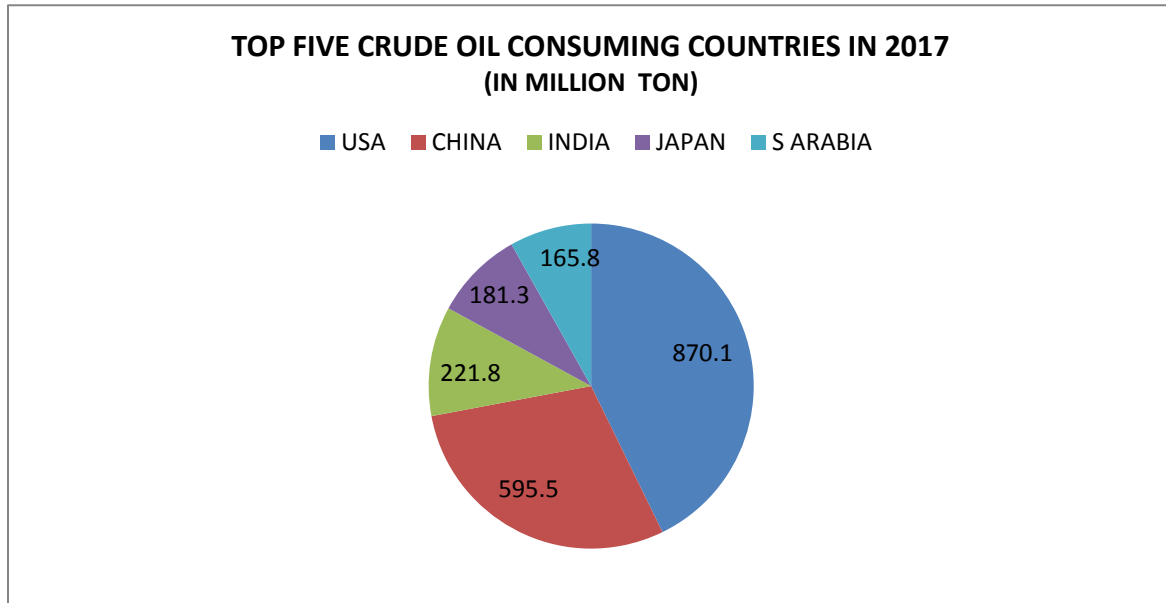


Source: PPAC

CHART-1

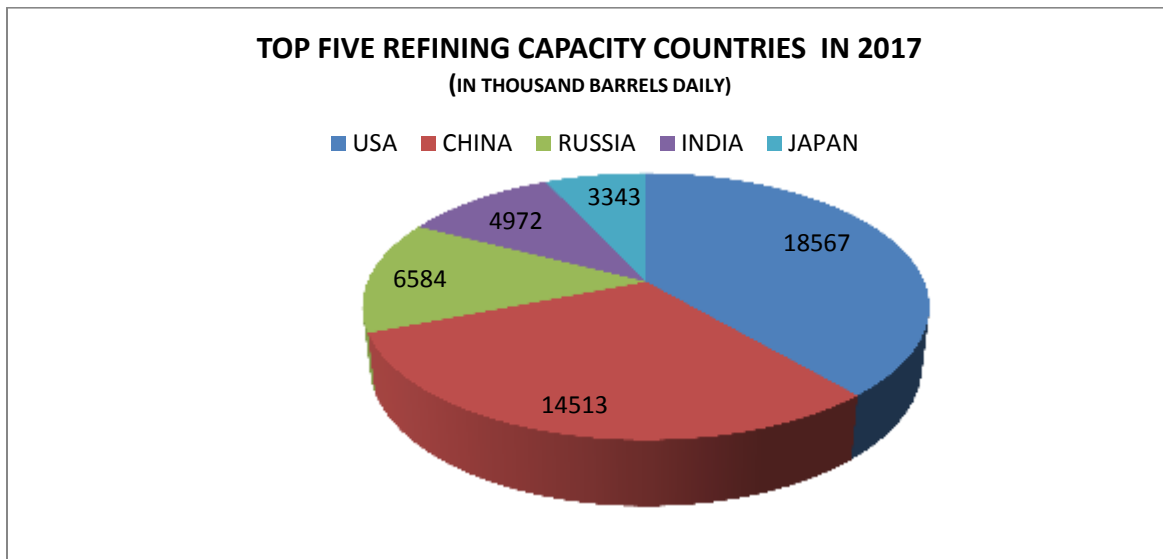
Chart-1 shows the top five crude oil producing countries and their production in million tons whereas chart-2 shows the top five crude oil consuming

countries and their consumption in million tons where India ranked third.



Source: PPAC

CHART-2



Source: PPAC

CHART-3

In the top five refining capacity countries India ranked fourth in terms of thousand barrels daily (Chart-3). If consumption can be controlled to some extent then a suitable amount of foreign exchange can be earned by

exporting refined fuel oil. But our import dependency rate reached to 82.8% in recent times with the increasing growth rate of consumption (Table-2).

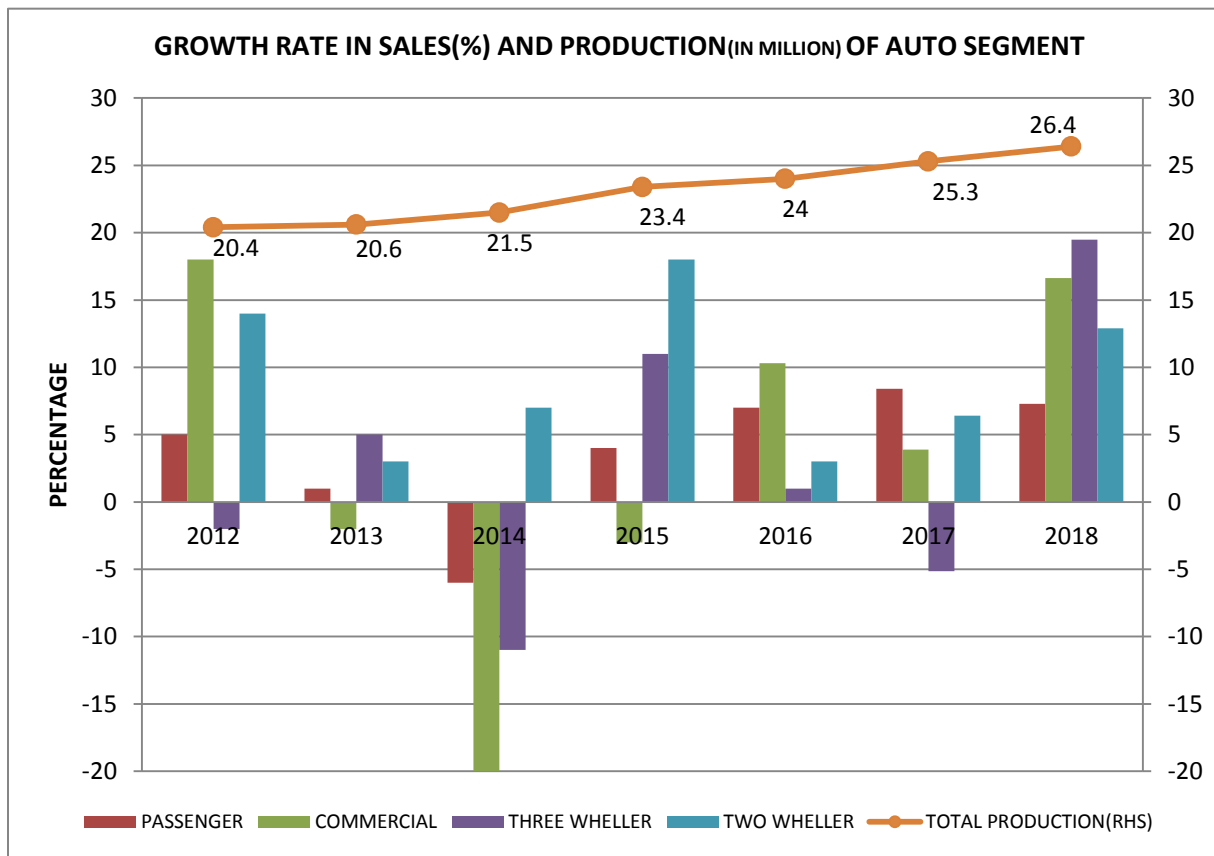
PETROLIUM PRODUCTS

TABLE-2 PRODUCTION, CONSUMPTION, IMPORTS, EXPORTS AND DEPENDENCY

YEAR	PRODUCTION (MMT)	CONSUMPTION (MMT)	GROWTH RATE OF CONSUMPTION	IMPORT (\$ BILLION)	EXPORT (\$ BILLION)	IMPORT DEPENDENCY (PERCENT)	AS A PERCENT OF GROSS IMPORT (%)
2013-14	220.7	158.4	0.9	155.4	60.7	77.3	34.5
2014-15	221.1	165.5	4.5	124.9	47.3	78.3	27.9
2015-16	231.9	184.7	11.6	73.9	27.1	80.6	19.4
2016-17	243.5	194.6	5.4	80.8	29	81.7	21.0
2017-18	254.4	204.9	5.3	101.2	34.9	82.8	21.7

Source: PPAC

V. CONTRIBUTION OF AUTOMOBILE SECTORS



Source: SIAM Reports 2018

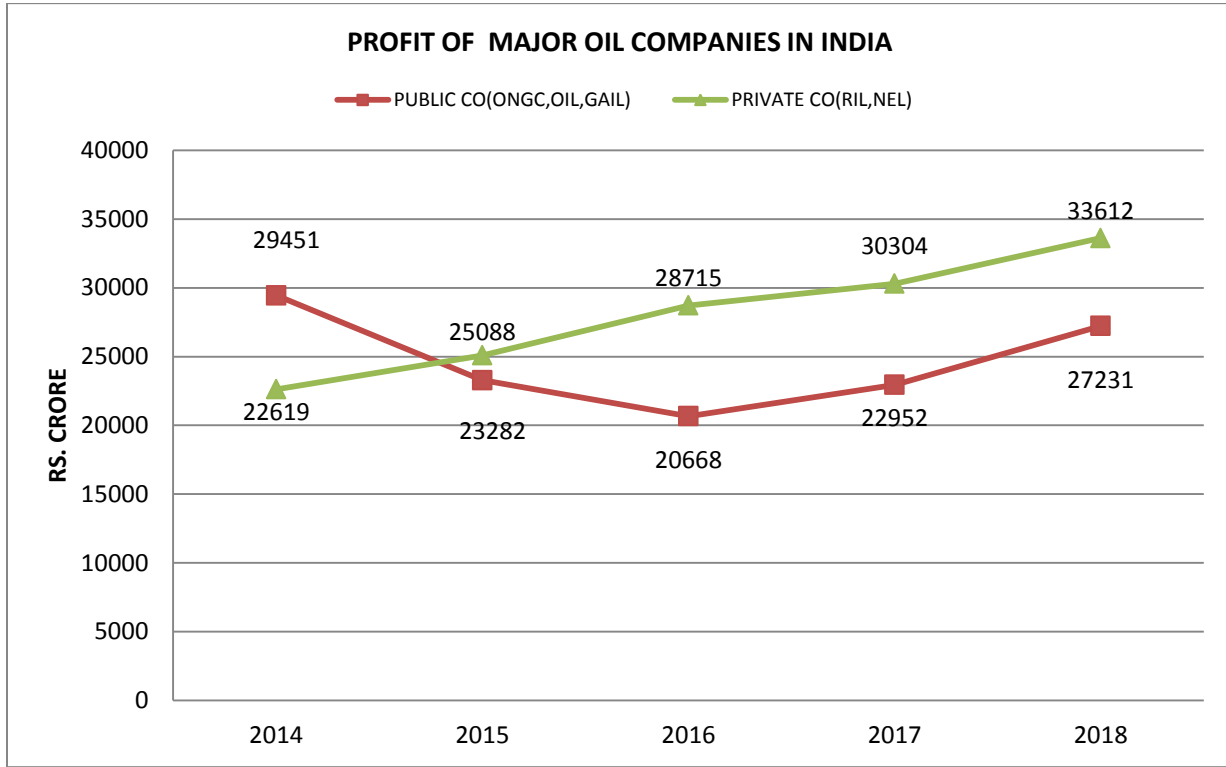
GRAPH-3

The automobile sector consumes almost one third of India’s oil. In India oil and supply volatility affects inflation through the transport sector. Essential goods and consumer durables are largely transported by road and when diesel or petrol prices are increased, the prices of these goods also increase affecting the poor and middle class people. A study undertaken by SIAM (Society of Indian Automobile Manufacturers) to

check the correlation between the two attributes indicated that the relationship between the fuel price hike and the vehicle purchase was not so strong. Graph-3 shown a big jump in the growth rate of sale in all segment of automobiles in the year 2018 and a steady growth of production from 2012 to 2018 which may otherwise contributing to more demand for fuel

consumption in the years to come and resulting in higher demand for imports of crude oil.

VI. REVENUE OF MAJOR OIL COMPANIES AND GOVERNMENT OF INDIA



Source: PPAC

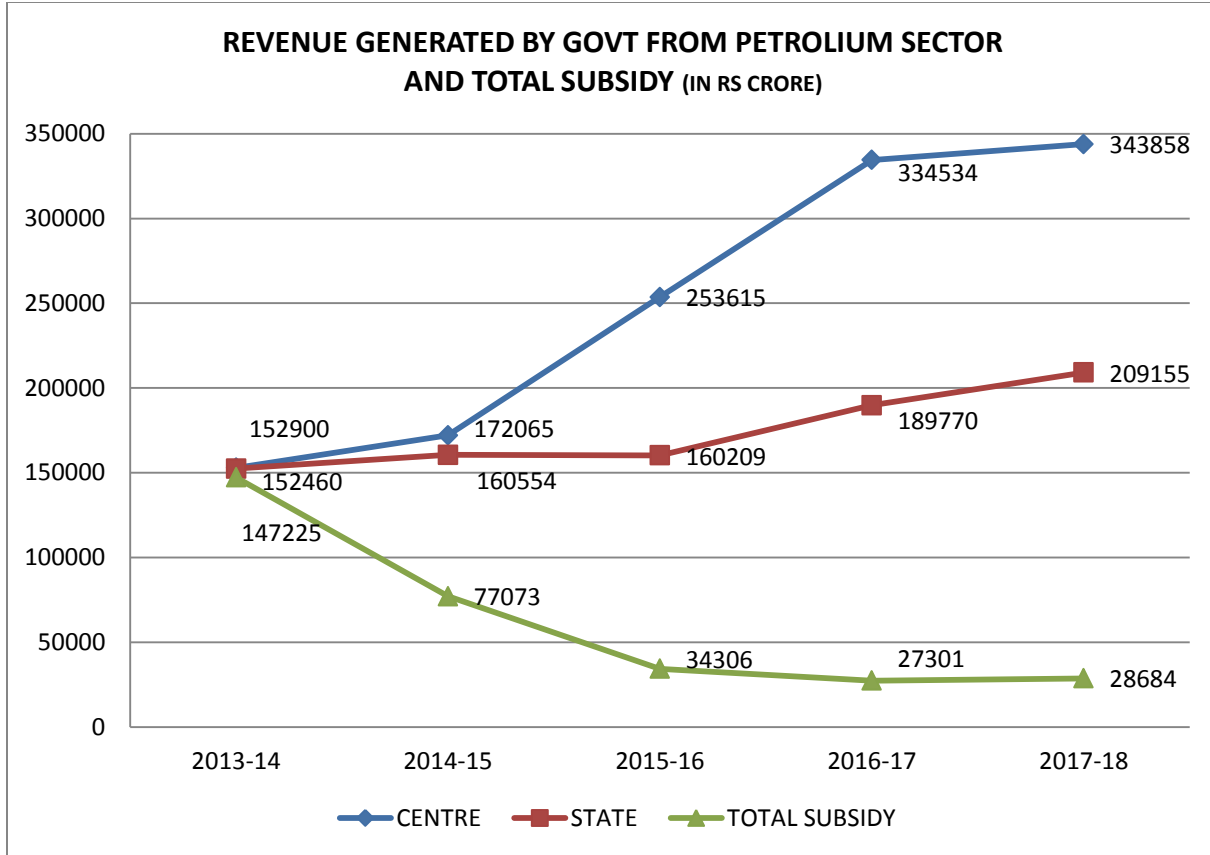
GRAPH-4

Earlier, the price of petrol and diesel in India was regulated, i.e. the government was solely responsible in the deciding the retail price. The government started deregulating the pricing of petrol in 2010 and diesel in 2014. This allowed oil marketing companies to determine the price of these products, and revise them in every night. Although profit earning capacity has grown up steadily to the private sector companies compare to the public sector companies in recent years (Graph-4). Before 2015 the picture was different but after 2015 profit of public sector oil companies(ONGC,OIL,GAIL) shows a declining trends whereas private sector oil companies(RIL,NEL) shows a steady growth.

Petroleum and its by-products are one of the key source of revenue for Governments at both Central and State levels. One of the key questions for price

rationalization of diesel and petrol will be its budgetary implications. The excise revenue was 22.98 % of the total tax revenue (inclusive of States’ share) of the Central government in 2016-17 revised budgets. The excise revenue from diesel and petrol constituted 84.9 % of the total excise revenue and almost 20 % of Centre’s total tax revenue.

The central government’s revenue from excise on petrol and diesel increased annually at a rate of 46% between 2013-14 and 2017-18. During the same period, the total sales tax collections of states (from petrol and diesel) increased annually by 9%. The figure below (Graph-5) shows the trend in overall collections of the central and state governments from petroleum (including receipts from taxes, royalties, and dividends). While the total subsidy shows a declining trends.



Source: PPAC

GRAPH -5

VII. IMPACT OF CRUDE OIL PRICE ON INDIAN ECONOMY

As we know, India is not a self-sufficient country in the production of petroleum. It remains one of the largest importers from the OPEC countries. The Indian economy has entered a period characterized by slow growth with high level of inflation. The Government’s decision (to control fiscal deficit) to hike the prices of petrol, diesel and LPG was inevitable due to the sharp increase in international prices of crude as well as India’s dependence on imports to meet much of its consumption.

The rate of inflation (WPI) increased to 115.5% on 2018 (Table-3) is mainly due to increased oil prices as oil is an universal input that directly & indirectly enters into the cost of production of every other commodity.

India’s total oil consumption is about 4.1 million barrels per day. It imports more than 80% of its total oil consumption. Oil accounts for about 21.7% of India’s gross imports. The recent escalation in petroleum prices has a cascading effect on the essential commodities which invariably has affected the common man. Uncertainty is here about future as increased price of petrol has affected adversely. The present scenario indicates that there is no clear visibility in forecasting about the future situation.

TABLE-3 PRESENT SITUATION OF INDIAN ECONOMY

YEAR	EXCHANGE RATE (US \$)	GDP GROWTH RATE (%)	TRADE BALANCE (\$ BILLION)	FOREX RESERVE (\$ BILLION)	GROSS FISCAL DEFICIT (PERCENT)	INFLATION WPI 2010-11=100
2013-14	61.15	6.4	-135.7	303.7	-4.5	112.5
2014-15	65.46	7.4	-137.7	341.4	-4.1	113.9
2015-16	67.09	8.2	-118.7	355.6	-3.9	109.7
2016-17	64.45	7.1	-108.5	370	-3.5	111.6
2017-18	66.66	6.7	-156.8	424.4	-3.5	115.5

Source: PPAC

The oil barons believe that OPEC countries will drive oil prices even higher in order to meet their increasing revenue needs. If the crude oil prices fail to stabilize or fall, the government may decide to look at either reducing taxes on these fuels or forcing OMCs to incur losses by selling at lower prices.

VIII. CONCLUSIONS

At this juncture of sky-high oil prices, the need for research into alternative fuels & energy technology increases. To reduce dependence on crude oil imports India should develop alternative sources of energy. India is the fourth largest producer of wind energy. India should use energy more efficiently. For every unit of GDP, India consumes more energy than other developed countries. Indian railways the largest consumer of diesel is using a blend of high-speed diesel and bio-fuel in some regions on an experimental basis. The bio-fuel is made partially from renewable resources such as agricultural residues, non-edible oils and bio-degradable fractions of industrial and municipal wastes. India's first bio-fuel-powered flight (Spice Jet) that aims to reduce costs of air travel by replacing the costly aviation turbine fuel was successfully tested on 27th August 2018. A great step initiated by the Indian Institute of Petroleum, Dehradun.

Value of rupee in comparison with dollar is going to be weaker day by day in the international market. Increase in number of vehicles also causes hike in petrol prices. To cope with the situation of variations in prices of crude oil especially when the prices rise, the need for development of innovative technology like green technology and other sources assume more importance. Developing alternate sources of energy like solar energy wind energy etc. Government should provide more funds for development of alternate sources of energy as well as develop high capacity goods and public transport system. At last but not least, we have to use fossil fuel judiciously so that our future generations can also use it, and thus lead to a sustainable development.

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