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PERFORMANCE OF PETROLEUM AND NATURAL GAS SECTOR IN INDIA - AN ANALYTICAL APPROACH

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Abstract:

The Indian economy is at a critical stage of development. During 2014-15, the growth rate of Gross Domestic Product (GDP) at constant prices is estimated to have increased by 7.3%, with growth in 'Manufacturing' at 7.1% and 'Mining and quarrying' at 2.4%. The revival in growth of the industrial sector and softening of international prices of crude oil led to increase in demand for petroleum products by 4.15% during April-March, 2014-15 over the same period last year. Given the limited domestic availability of crude oil and natural gas the country is compelled to import over 75% of its domestic requirement (petroleum.nic.in). The present study is an endeavour to depict the performance of petroleum and natural gas sector in india.

Key Words: Performance, Petroleum, Natural Gas Sector & India

Introduction:

The oil and gas sector is among the six core industries in India and plays a major role in influencing decision making for all the other important sections of the economy. In 1997–98, the New Exploration Licensing Policy (NELP) was envisaged to fill the ever-increasing gap between India's gas demand and supply. A recent report points out that the Indian oil and gas industry is anticipated to be worth US$ 139.8 billion by 2015. India's economic growth is closely related to energy demand; therefore the need for oil and gas is projected to grow more, thereby making the sector quite conducive for investment.

The Government of India has adopted several policies to fulfill the increasing demand. The government has allowed 100 per cent foreign direct investment (FDI) in many segments of the sector, including natural gas, petroleum products, and refineries, among others. Today, it attracts both domestic and foreign investment, as attested by the presence of Reliance Industries Ltd (RIL) and Cairn India.

Crude Oil and Natural Gas Production:

The crude oil production for the year 2014-15 is at 37.461 Million Metric Tonnes (MMT) as against production of 37.788 MMT in 2013-14, showing a decrease of about 0.87%. Apart from natural decline in the old and ageing fields, production of crude oil was affected due to less production from RJON-90/1 related to operational problems in July, 2014. Rajahmundry and Cauvery assets' production was affected due to closure of wells owing to the GAIL pipeline incident. In Neelam–Heera asset there was reduced crude oil production due to clamping of sub-sea lines. Prolonged bundhs and blockages in Assam also affected production from North Eastern region. For the year 2014-15, production of natural gas is 33.656 Billion Cubic Meters (BCM) which is 4.94 % lower than production of 35.407 BCM in 2013-14. This was mainly due to lower production in Bassein & Satellite fields, underperformance of 6 newly drilled wells in M&S Tapti, seizure of 1 well in KG-D6 and closure of non-associated gas wells of Ravva during October, 2014 due to GAIL pipeline incident near Tatipaka (petroleum.nic.in).

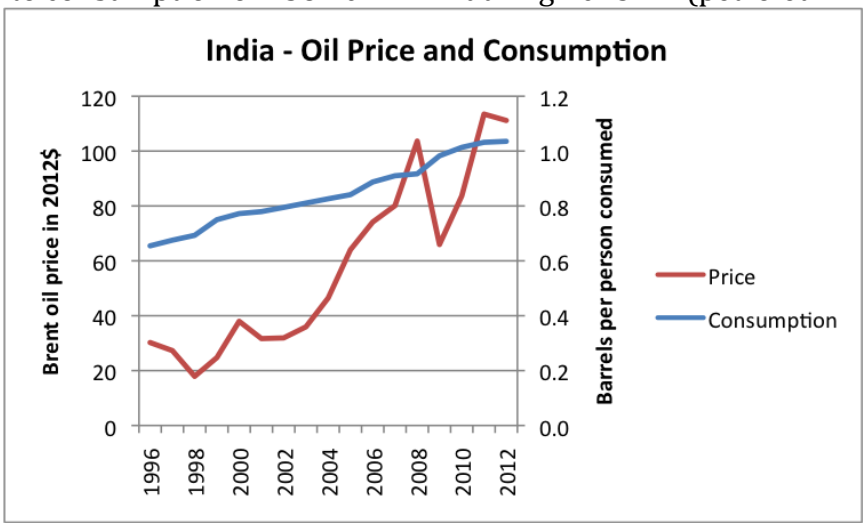
Refining Capacity &Refinery Crude Throughput:

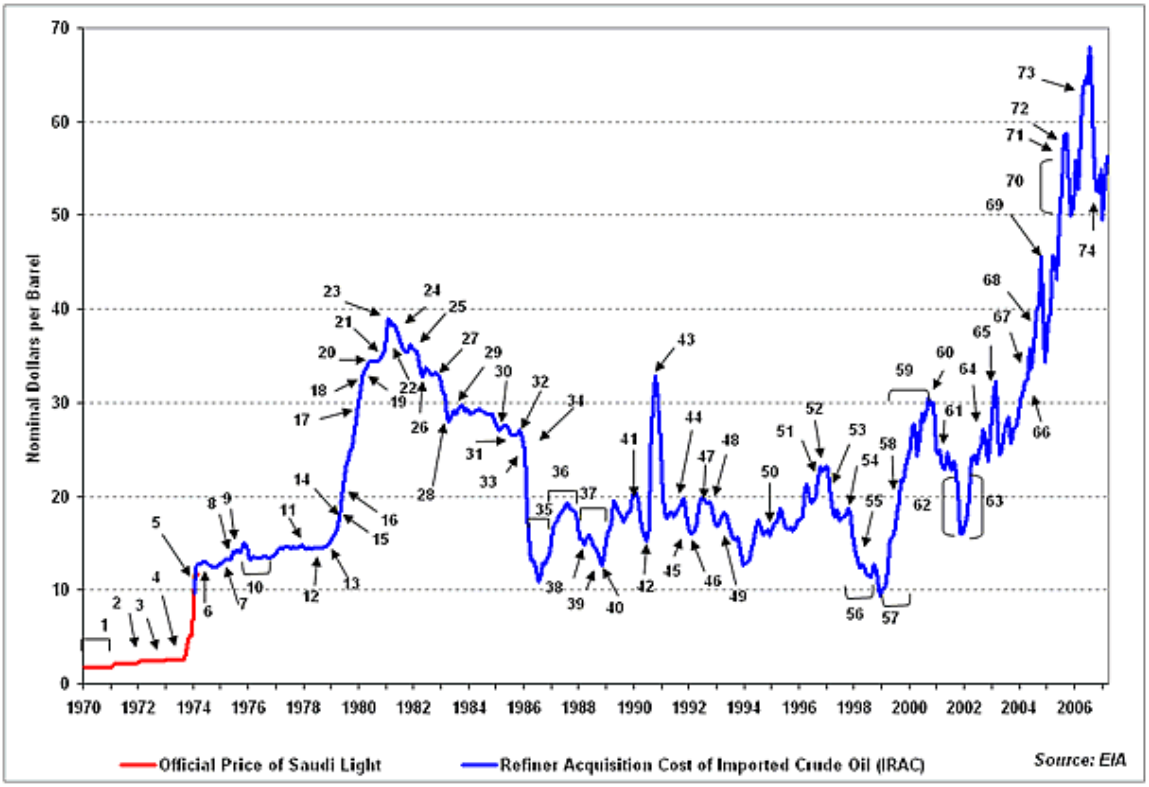
There has been considerable increase in refining capacity in the country over the years, although there was no capacity expansion during 2014-15. The refining capacity stood at 215.066 MMTPA as on 01.04.2015. By the end of 12thFive Year Plan, refinery

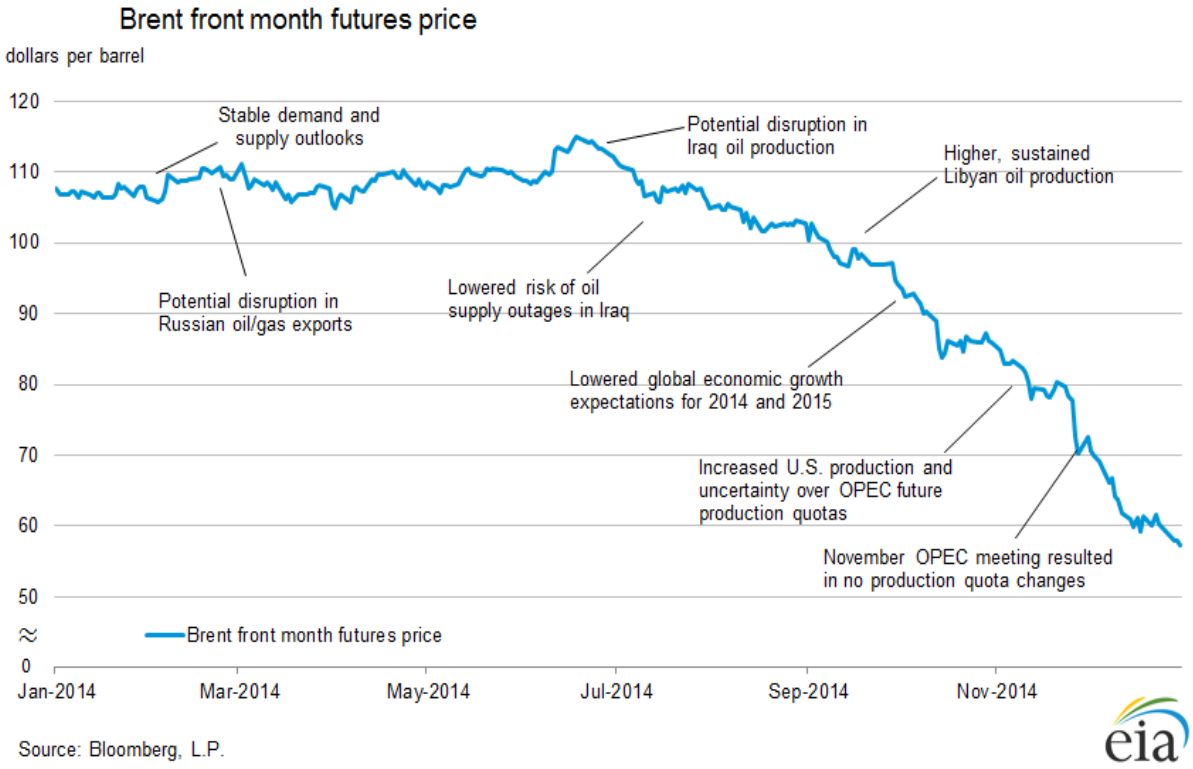
capacity is expected to reach 307.366 MMTPA. Refinery Crude Throughput (Crude Oil Processed) for the year 2014-15 is 223.242 MMT as against 222.497 MMT in 2013-14, showing a marginal increase of about 0.33%. However, shutdown of HMEL's Bhatinda (GGS refinery) during June-September, 2014 owing to VGO Fire Incident in June, 2014 affected crude processing by the refinery during this period. The trend in Refining Capacity and Crude throughput during 2009-10 to 2014-15 (petroleum.nic.in).

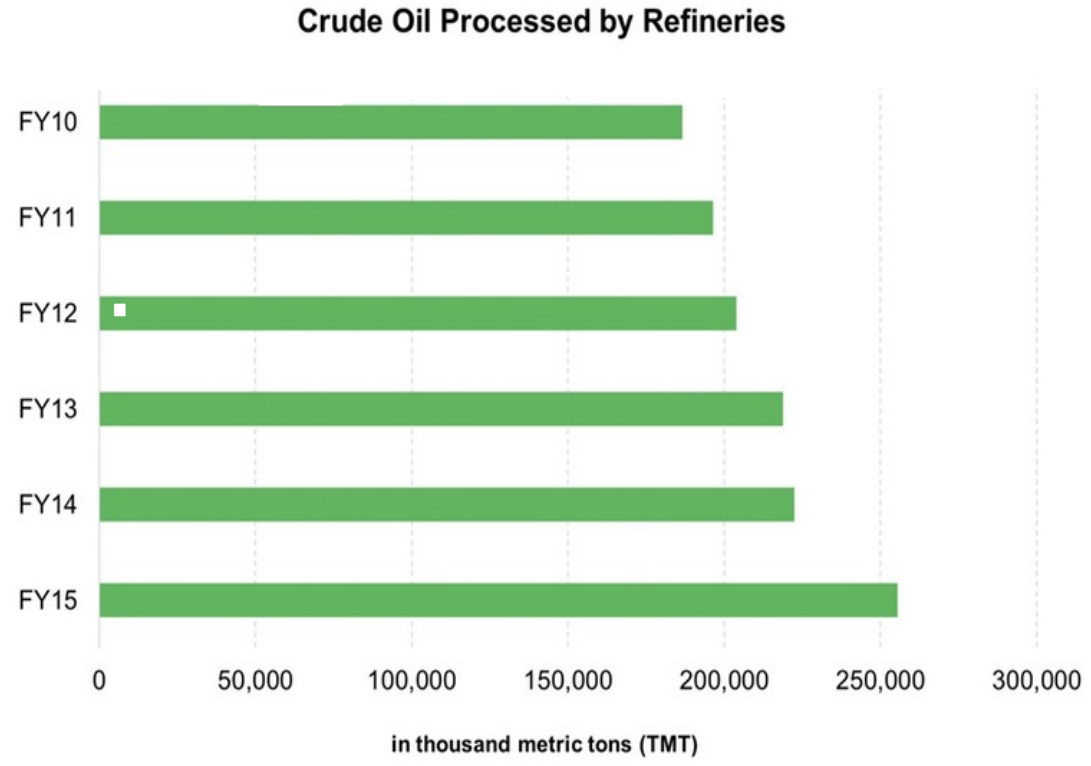
Production and Consumption of Petroleum Products:

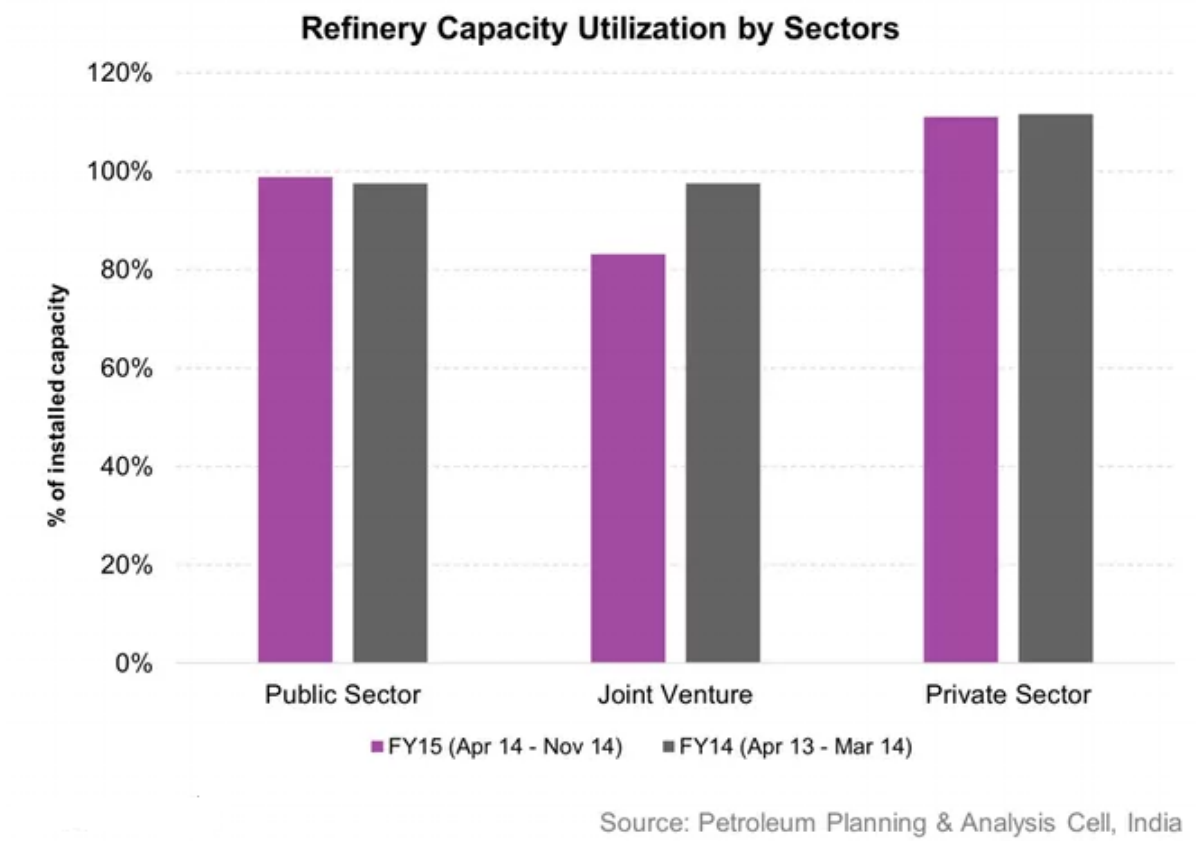
The production of petroleum products is at 221.136 MMT in year 2014-15 as against 220.756 MMT achieved in 2013-14, showing a marginal increase of about 0.17%. However, production was affected due to planned outages in IOCL-Panipat, Koyali & Bongaigaon refineries during April-July, 2014. During the year 2014-15, the consumption of petroleum products in India was164.987 MMT with a growth of 4.15% as compared to consumption of 158.407 MMT during 2013-14 (petroleum.nic.in).






Brent front month futures price
dollars per barrel
120
110
100
90
80
70
60
50
0
Stable demand and supply outlooks
Potential disruption in Iraq oil production
Higher, sustained Libyan oil production
Potential disruption in Russian oil/gas exports
Lowered risk of oil supply outages in Iraq
Lowered global economic growth expectations for 2014 and 2015
Increased U.S. production and uncertainty over OPEC future production quotas
November OPEC meeting resulted in no production quota changes
Brent front month futures price
Jan-2014
Mar-2014
May-2014
Jul-2014
Sep-2014
Nov-2014
Source: Bloomberg, L.P.
eia


Crude Oil Processed by Refineries
FY10
FY11
FY12
FY13
FY14
FY15
0
50,000
100,000
150,000
200,000
250,000
300,000
in thousand metric tons (TMT)
Source: Petroleum Planning & Analysis Cell, India



Import of Crude Oil:

Import of Crude Oil during 2014-15 was 189.432 MMT valued at Rs. 6,87,350 crore which marked a decrease of 0.10% in quantity terms and 20.53% decrease in value terms over the same period of last year. The decline in value terms is related to reduce crude oil prices by around 50% from June'14 to Dec'14. During the year 2013-14 the import of crude oil was 189.238 MMT valued at Rs. 8,64,875 crore. The average international crude oil price (Indian Basket) was US$ 84.20/bbl. during April-March, 2014-15 as compared to US$ 105.52/bbl in the same period of 2013-14, i.e. lower by 20.20% as compared to the same period last year. During the last 6 months there is continuous declining trend in the price of crude oil in the international market. The price of Indian basket crude oil which was at $ 111.84/bbl on 19thJune 2014, has continuously decreased thereafter to US$ 53.64/bbl on 31st March, 2015 (petroleum.nic.in).

Imports & Exports of Petroleum Products:

During April-March, 2014-15 imports of petroleum products were 20.423 MMT valued at Rs. 72,778 crore which shows an increase of 22.16% in quantity terms and 2.45% decrease in value terms against the same period of previous year. The quantity of petroleum products imported during 2013-14 was 16.718 MMT valued at Rs. 74,605 crore. During April-March, 2014-15 the exports of petroleum products were 63.928 MMT valued at Rs. 2,88,563 crore which shows a decrease of 5.80% in quantity terms and 21.65% decrease in value terms against the exports of 67.864 MMT valued at Rs. 3,68,279 crores for the same period of last year. During April-March, 2014-15 the import of LNG is 15.470 MMT valued at Rs. 63,110 crore which marked an increase of 18.71% in quantity terms and 18.39% increase in value terms against imports of 13.032 MMT of LNG, valued at Rs. 53,307 crores was imported for the same period of previous year (petroleum.nic.in).

Foreign Direct Investment Inflows:

In order to attract Foreign Direct Investment (FDI) in the sector, the FDI policy has been further liberalized. FDI for petroleum refining by CPSEs has been allowed with 49% foreign equity under the automatic route instead of approval through Foreign Investment Promotion Board. Year-wise FDI inflows under Petroleum & Gas sector is given in Table-7 below. It may be observed that inflow of FDI in petroleum and natural gas has varied considerably over the years that could at least be partly due to the bulkiness of investment in the sector. The highest FDI inflow was received in 2011-12 at Rs. 9955.17 crores contributing almost 6% of total FDI inflow in the economy. During the year 2014-15, FDI inflow was received Rs. 6473.22 crores contributing almost 3.42% of total FDI inflow in the economy (www.petroleum.nic.in).

Highlights on Petroleum & Natural Gas Sector during 2014-15:

- India has total reserves of 763.476 MMT of Crude Oil and 1488.73 BCM of Natural Gas as on 01.04.2015.
- The total number of exploratory and development wells and metreage drilled in onshore and offshore areas during 2014-15 was 637 and 1352 thousand meters respectively.
- Crude Oil production during 2014-15 is 37.461 MMT which is 0.87% lower than 37.788 MMT produced during 2013-14. (Table-II.11) Gross Production of Natural Gas during 2014-15 is 33.656 BCM which is 4.94% lower than the production of 35.407 BCM during 2013-14.
- The flaring of Natural Gas in 2014-15 is 2.59% of gross production which is 2.17% higher than that in 2013-14.
- The refining capacity stood at 215.066 MMTPA as on 01.04.2015. By the end of 12th
- Five Year Plan, refinery capacity is expected to reach 307.366 MMTPA.
- The Crude processed during 2014-15 at 223.242 MMT is 0.33% higher than 222.497 MMT crude processed in 2013-14 and the pro-rata capacity utilization in 2014-15 was 103.80% as compared to 103.46% in 2013-14.
- The production of petroleum products during 2014-15 was 221.059 MMT registering an increase of 0.17% over last year's production at 220.756 MMT.
- The country exported 63.928 MMT of petroleum products against the imports of 20.423 MMT during 2014-15.
- The sales/consumption of petroleum products during 2014-48 was 164.987 MMT (including sales through private imports) which is 4.15% higher than the sales of 158.407 MMT during 2013-14.
- The total number of retail outlets of Oil Marketing Companies as on 31.03.2015 has gone up to 53419 from 51868 on 31.03.2013.
- The total numbers of LPG consumers of Public Sector Oil Marketing Companies as on 31.03.2015 were 18, 19, 02, 266 against 16, 62, and 58,759 as on 31.03.2014.

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