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AN ANALYSIS OF OIL AND GAS SECTOR OF INDIA

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Abstract: Oil and gas sector is most indispensable for the economic augmentation of India. In spite of slowdown in global economy, the demand for the crude oil and natural gas is constant in India. The purpose of the study is to explore production, consumption, and the FDI inflows of petroleum products, the Import of crude oil and average crude oil prices from 6 years period from 2010-11 to 2015-16. Research also aims at analysis of revenues and profit of “top five Oil Drilling and Exploration companies” and “top five Oil refinery companies” in India during 2011-12 to 2015-16. It is descriptive study in nature. For the purpose of study secondary data will be used which is collected from the “Government of India ministry of petroleum & natural gas report”, Journals, Newspapers and financial websites.

Introduction

The oil and gas sector are along with the six core industries in India and its plays a foremost role in influencing the Indian economy. India was the world’s third largest oil consumer and 14th largest natural gas consumer in 2015. India has its own oil and natural gas reserves but it is not sufficient for fulfill its demand, so India to fulfill its energy demand from foreign countries. In 2013 India was the world third largest importer of crude oil with 3812000 (bbl/day). According to the “Department of Commerce” in 2015-16 India import Mineral fuels, Mineral oil and products of their distillation, bituminous substances and mineral waxes with the amount of 63,202,188.50 lacs Indian rupees, which was 25.3794% of its total imports. Mr. Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas mentioned that India’s oil demand is estimated to grow up at a CAGR of 3.6 per cent to 458 million Tones of Oil Equivalent (MTOE) by 2040, while demand for energy will more than double by 2040 as economy will grow to more than five times its current size.

Objectives Of Study: -

1. To analyze the production of petroleum product during 2010-11 to 2015-16.
2. To analyze the consumption of petroleum product during 2010-11 to 2015-16.
3. To study the Import of crude oil and average crude oil prices during 2010-11 to 2015-16.
4. To analyze the FDI inflows under petroleum & gas sector during 2010-11 to 2014-15.
5. For study the revenues and profit of top five Oil Drilling and Exploration companies in India during 2011-12 to 2015-16.
6. For study the revenues and profit of top five Oil refinery companies in India during 2011-12 to 2015-16.

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Review Of Literature: -

Anmol Soni (March 2014) Explain the “Global Oil Markets and India’s Vulnerability to Oil Shocks”. The study examining the Energy scenario in India and world, oil volatility, International experience of volatility in crude oil supply, Changing patterns of vulnerability to oil shocks. The study describes the oil consumption of India, Impacts of oil shocks on the Indian economy, the Factors that determine vulnerability to shocks in India. It’s give an overview On Global reserves and production, demand etc. Akansha Sanjay Jain and Nitish Sunil Patil (2015) explain the “Crude Oil Prices and Its Impact on Indian economy”. The study describes about falling of crude prices in global market and the reason behind that. This study also examines the Crude oil price impact on India’s fiscal deficit and trade deficit. This study shows the relation between production and consumption & production and import. This study shows how India’s inflation reacted to the fall in crude prices.

Research Methodology: -

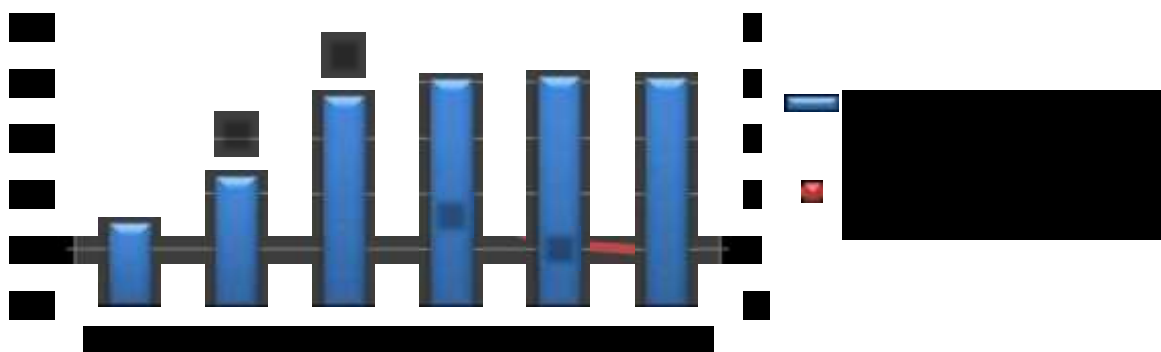
The study is descriptive in nature. For the purpose of study secondary data has been used which is collected from the “Government of India ministry of petroleum & natural gas economics and statistic division New Delhi”, “Department of Commerce” of India, from the website of Wikipedia, ibef.org and “moneycontrol.com”.

Data Analysis:-

Table 5.1:- It’s showing the total production and its growth rate of petroleum products from 2010-11 to 2015-16.

Production of petroleum products		
Year	Production of petro-products (MMT)	Growth rate (%)
2010-11	194.821	
2011-12	203.202	4.301897639
2012-13	217.736	7.152488657
2013-14	220.756	1.387000772
2014-15	221.136	0.172135752
2015-16	220.964	-0.07778019

Figure 5.1:- Figure showing the total production and its growth of petroleum products from 2010-11 to 2015-16.



Sources: ministry of petroleum and natural gas.

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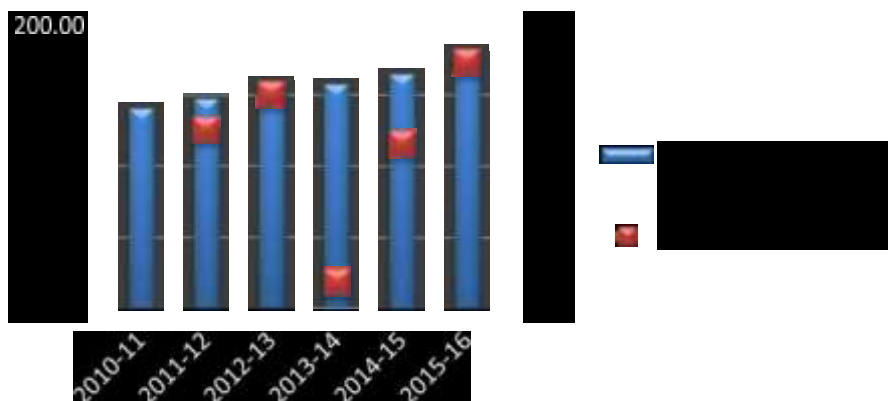
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Inference:- The above graph has shown the total production of petroleum products. In 2010-11 it was 194.82 MMT and it increased to 220.94 in 2015-16. It was increasing in a increasing rate up to 2012-13 but after that it is increasing in decreasing rate from 2012-13 to 2015-16. The average growth rate for this 5 year was 2.58%.

Table5.2:- Table showing the total consumption and its growth of petroleum products from 2010-11 to 2015-16.

consumption of petroleum products		
Year	Consumption of petro-products(MMT)	Growth rate (%)
2010-11	141.04	
2011-12	148.13	5.03
2012-13	157.06	6.03
2013-14	158.20	0.73
2014-15	165.52	4.63
2015-16	176.97	6.92



Sources: ministry of petroleum and natural gas.

Figure 5.2:- It's showing the total consumption and its growth petroleum products from 2010-11 to 2015-16

Inference:- The above graph has shown the total consumption of petroleum products. In 2010-11 it was 141.04 MMT and it increased to 176.972 in 2015-16. It was increasing at a rate of 25% from 2010-11 to 2015-16. The growth rate decreased in the year 2013-14 but from 2013-14 to 2015-16 the growth rate is increasing in increasing rate.

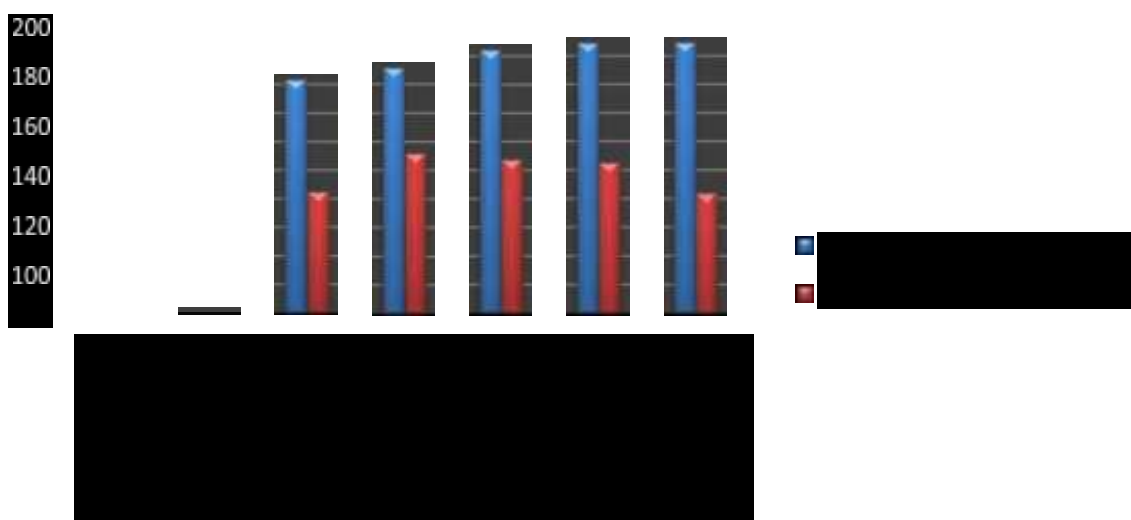
Table5.3:- Table showing the Import of crude oil and average crude oil prices from 2010-11 to 2014-15.

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Sources: ministry of petroleum and natural gas.

Figure: 5.3: Figure showing the Import of crude oil and average crude oil prices from 2010-11 to 2014-15.

Inference:- The above graph has shown the total Import of crude oil and average crude oil prices. In 2010-11 the Import of crude oil was 163.595MMT and it increased to 189.435 MMT in 2014-15. It was increasing at a rate of 15.79% from 2010-11 to 2014-15. The growth rate decreased in the year 2013-14 but from 2013-14 to 2015-16 the growth rate is increasing in increasing rate.

Table5.4:- It's showing the total FDI inflows under petroleum & gas sector from 2010-11 to 2014-15

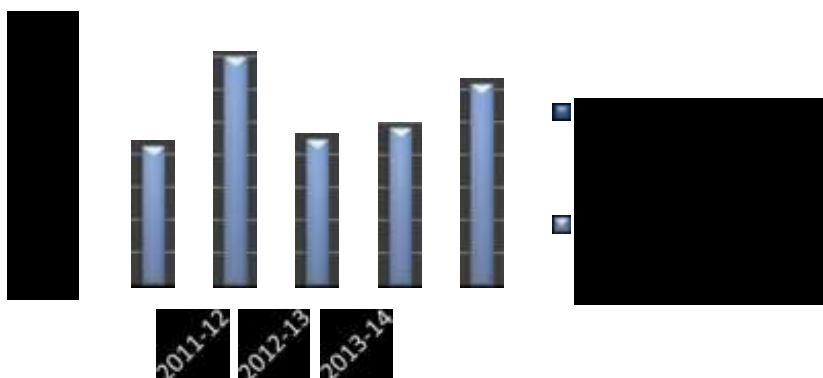
Import of crude oil and average crude oil prices		
Year	imports of crude oil (MMT)	average crude oil prices (Indian basket USD/bbl)
2010-11	163.595	85.09
2011-12	171.729	111.89
2012-13	184.795	107.97
2013-14	189.238	105.52
2014-15	189.435	84.156

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Sources: ministry of petroleum and natural gas.

Figure5.4:- It's showing the total FDI inflows under petroleum & gas sector from 2010-11 to 2014-15

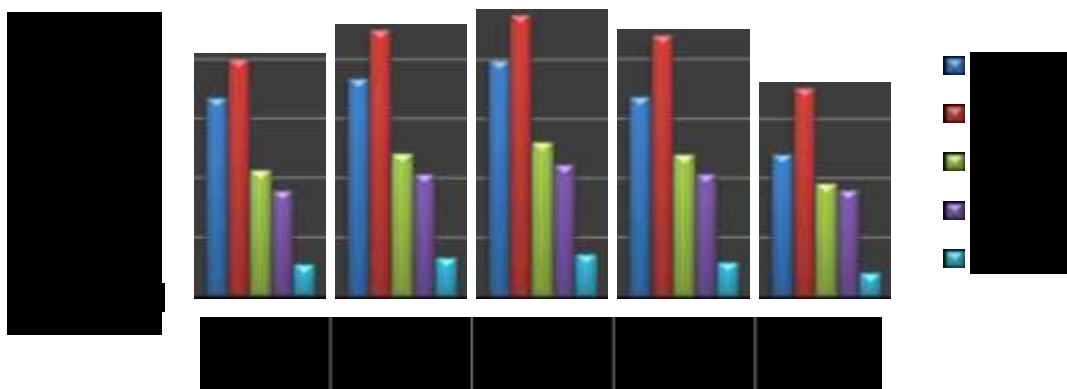
Inference- : The above graph has shown the growth of FDI inflow in petroleum and oil sector. In 2010-11 it was 21383 million USD and it increased to 30931 million USD in 2014-15.

Figure5.5:- Figure showing the total revenues of top five oil refinery companies in India by Market Capitalization from 2011-12 to 2015-16.

revenue of Top 5 Oil refinery companies in India by Market Capitalization					
years	2011-12	2012-13	2013-14	2014-15	2015-16
company name	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenue (In Rs.Cr.)
Reliance	336,096.00	368295	399053	337797	240740
IOC	401,675.68	450,611.20	476,627.38	441,670.18	352849.41
BPCL	213,674.75	241,795.98	261,529.19	240,286.86	191315.49
HPCL	179,361.41	207,833.62	224,245.78	207,794.59	180,709.24
MRPL	54,117.65	65,807.55	72134.96	58,267.53	40504.56

Sources:- Moneycontrol.com

Figure5.5:- Figure showing the total revenues of top five oil refinery companies in India by Market Capitalization from 2011-12 to 2015-16.



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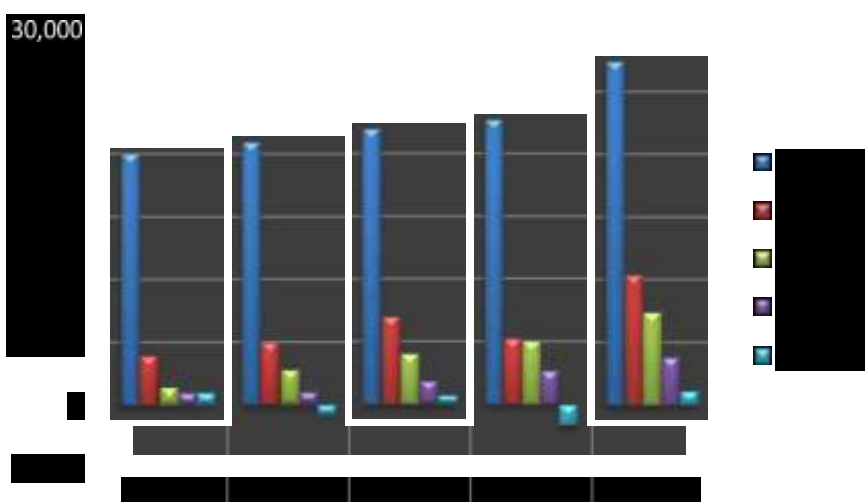
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Inference-: The data shows all the five companies revenues increased from 2011-12 to 2013-14 but these company revenue decreased from 2014-15 to 2015-16.**Table5.6:-** Table

showing the total profit of top five oil refinery companies in India by Market Capitalization from 2011-12 to 2015-16.

profit of Top 5 Oil refinery companies in India by Market Capitalization					
years	2011-12	2012-13	2013-14	2014-15	2015-16
company name	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)
Reliance	20,040	21,003	21,984	22,719	27417
IOC	3,954.62	5,005.17	7,019.09	5,273.03	10399.03
BPCL	1,311.27	2,642.90	4,060.88	5,084.51	7431.88
HPCL	911.43	904.71	1,733.77	2,733.26	3,862.74
MRPL	908.58	-756.91	601.18	-1,712.23	1,148.16



Sources-: Moneycontrol.com

Figure5.6:- Figure showing the total profit of top five oil refinery companies in India by Market Capitalization from 2011-12 to 2015-16.

Inference-: The data shows all the five companies profit increased from 2011-12 to 2013-14. In the year 2014-15 IOC and MRPL profit was lower than their previous year profit .companies revenue decreased from 2013-14 to 2015-16. But in the year 2015-16 all these companies profit was higher than its previous year profits.

Table 5.7:- Table showing the total revenues of top five Oil Drilling and Exploration companies in India by sales from 2011-12 to 2015-16.

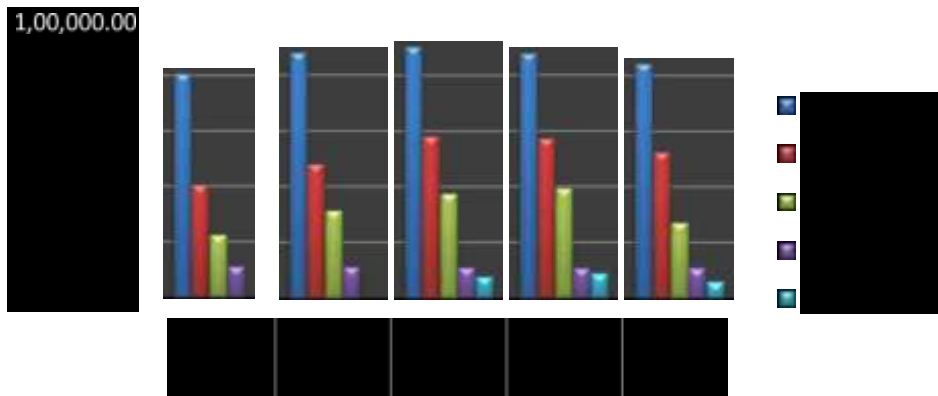
Revenue of Top 5 Oil Drilling And Exploration companies in India by sales					
years	2011-12	2012-13	2013-14	2014-15	2015-16
company name	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenues (In Rs.Cr.)	Revenue (In Rs.Cr.)
ONGC	80,968.07	88442.08	90,603.47	88,237.53	84,560.24
GAIL	40,829.83	48,287.20	58,406.45	57,602.84	52771.85
Petronet LNG	22,780.74	31,649.15	37,831.33	39,655.73	27303.87
Oil India	11,308.60	11,456.32	11,241.34	11,019.86	11140.77
Gujurat Gas	N.A	2.27	7,907.50	9,113.40	6150.53

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Sources:- Moneycontrol.com

Figure 5.7:- Figure showing the total revenues of top five Oil Drilling and Exploration companies in India by sales from 2011-12 to 2015-16.

Inference :- The data shows all the five companies revenues increased from 2011-12 to 2013- 14 but these companies revenue decreased from 2014-15 to 2015-16 due to decreasing price of crude oil in the global market.

Table 5.8:- Table showing the total profits of top five Oil Drilling and Exploration companies in India by sales from 2011-12 to 2015-16.

Profits of Top 5 Oil Drilling And Exploration companies in India by sales					
years	2011-12	2012-13	2013-14	2014-15	2015-16
company name	Profit (In Rs.Cr.)	Profit (In Rs.Cr)	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)	Profit (In Rs.Cr.)
ONGC	25,122.92	20925.7	22094.81	17732.95	16003.65
GAIL	3,653.84	4,022.20	4,375.27	3,039.17	2298.9
Petronet LNG	1,057.54	1,149.28	711.92	882.52	914.02
Oil India	3,446.92	3,589.34	2,981.30	2,510.20	2330.11
Gujurat Gas	N.A	-3.87	28.43	443.58	152.95

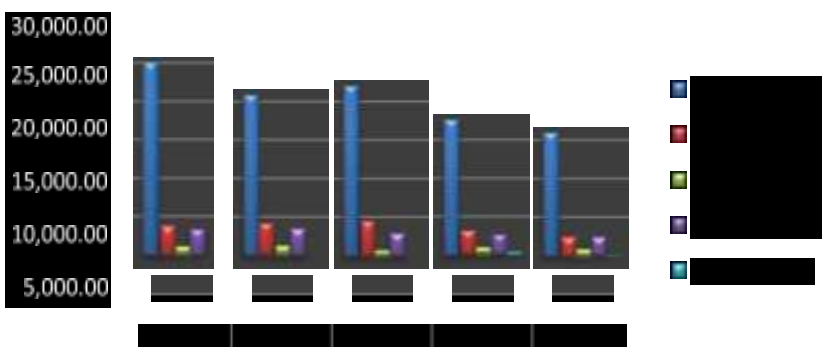


Figure 5.8:- Figure showing the total profits of top five Oil Drilling and Exploration companies in India by sales from 2011-12 to 2015-16.

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Inference:- The data shows all the five companies profits increased from 2011-12 to 2013-14. In the year 2014-15 only Petronet LNG and Gujrat Gas profit increased but other companies profits decreased. In the year 2015-16 all these company's profits was below than their previous year profits except Petronet LNG. These companies profit was low because of the decreasing price of crude oil in the global market.

Conclusion:

India is an emerging economy it needs energy for the economic growth. So, the demand of the energy is growing rapidly. The crude oil price is decreasing from 2014 -15 in international market because of the excess production, which creates significant impact on import, production, consumption of crude oil in India. It also made impact on the revenues and profits of Indian "oil refinery" and "oil drilling and exploration" companies. From 2014, the revenue of oil refining companies is decreasing. But Profit of oil refinery and oil marketing companies is increasing while profit of oil drilling and exploration companies is decreasing. Because oil drilling and exploration companies are selling crude oil in a low price to oil refinery so their revenue and profit is decreasing, While the profit margin of oil refinery companies is increasing because they are getting crude oil at a low price. In despite of slowdown in global economy the consumption of Crude oil and natural Gas is increasing in India.

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