

4. Covid -19 and Turbulence in Petroleum Products Consumption in India

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Abstract:

A disruption of economic activity in China, USA and European countries due to “lock down” emergency measure to control spread of the COVID-19 reverberate around the world as well as in India. This disruption, in turn, has a direct impact on oil markets. The present article described the change in pattern of usage of petroleum products in India and comprehends the recovery once “unlock” process started in our country. The aviation industry is dented by pandemic situation followed by public & private transport sector. So usage of ATF fell drastically to 55,000 TMT followed by diesel, motor spirit, naphtha and other petroleum products.

4.1 Introduction:

On January 7, 2020 Chinese government announced regarding identification of new virus in the Hubei region of the country and designated as corona virus disease 2019 (Covid-19). By the end of February 2020, cases were reported not only in Asian countries but also throughout Europe and American continent, prompting the World health Organization (WHO) to declare a global emergency and later on as pandemic.

The USA declared national emergency on 3rd March 2020 followed by various countries and drastic measures such as “Lock down” imposed across continents. The Government of India have announced lockdown on 22nd March 2020 initially for twenty one days and later on for another two weeks followed by unlocking phase wise relaxing restrictions slowly but gradually. Till date restrictions are there in various parts of our country. This extended disruption of economic activity across the world and considering the interconnectedness would have long term impact on petroleum products markets.

4.2 The Drop in Economic Activity and Its Effect:

The strict measures to arrest the spread of Covid-19 adopted by governments worldwide and in India have halted the economic activity across the globe, demand for petroleum and petroleum products plummeted. As economies reopened, demand renewed still after effect exist in the market. The severity is such that the total consumption of petroleum products is 213,686 thousand tonne (TMT) in India in 2019-20 and growth in consumption is only 0.21 per cent. This value is lowest in at least previous 10 years as data analysed by ETEnergy World of present decade.

As economic activity slowed sharply in the month of March and April of 2020 so analysis on consumption of petroleum and petroleum products are carried out year wise for the year 2019 and 2020.

High speed diesel (HSD), motor spirit (MS), liquefied petroleum gas (LPG), aviation turbine fuel (ATF), naphtha, bitumen, petroleum coke, lubricants and grease are important petroleum derived products that drive global economy.

According to analysts, petrol pump dealers and executives at OIL Marketing Companies (OMCs) the demand for petrol, diesel and ATF in the country has been severely impacted as economic activity and public movement has come to a near standstill in the month of March and April 2020.

Consumption of petroleum products stood at 17.834 million tonnes in November 2020 in India. This is higher than the 17.759 million tonnes of petroleum products consumed in the preceding month.

There is constant improvement in demand since April 2020 when demand halved due to lock down on year-on-year basis. The demand gap is narrowing down gradually when it crosses in October 2020 to become positive. This is depicted in Figure 4.1.

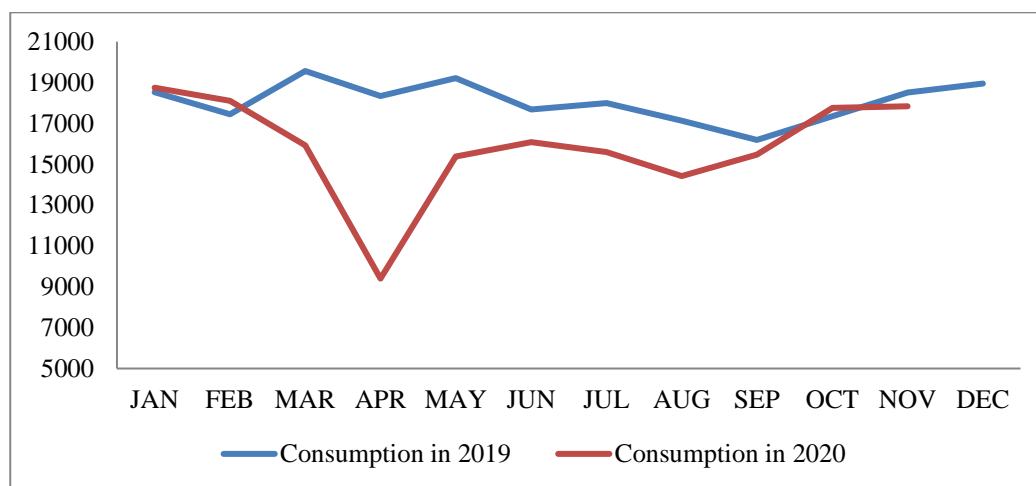


Figure 4.1: Variation in total consumption of petroleum products in India, January 2019 to November 2020. Consumption is in thousand metric tonnes.

4.3 Lock-Down and Its Impact in Consumption of Petroleum Products:

Motor spirit fell 16.37 per cent to 2156 thousand metric tonnes (TMT) in March 2020 as compared to the corresponding month a year ago, after growing for 30 straight months up to February 2020. The crash in demand happened on April 2020 to 973 TMT. Figure 4.2 explains the trend of motor spirit consumption. From September 2020 onwards the consumption of MS exceeds the pre-pandemic monthly usage. Consumption of motor spirit has been increasing owing to increased preference for petrol driven vehicles, as the strict pollution control norms, improved road conditions and competitive price difference between motor spirit and diesel.

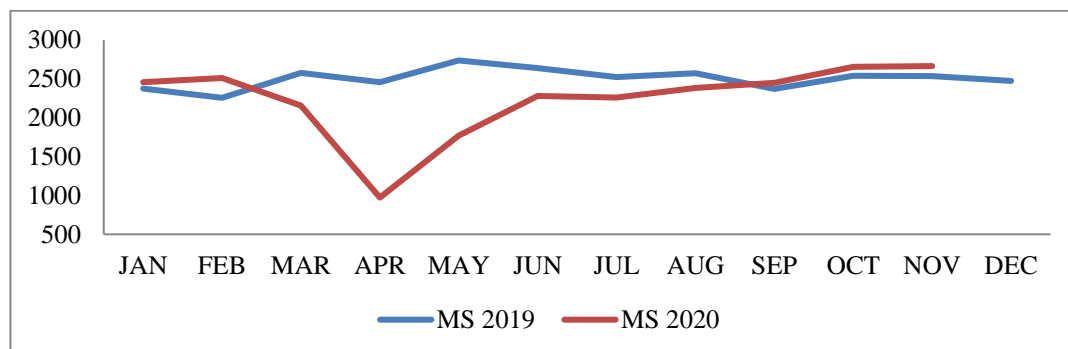


Figure 4.2: Consumption of Motor Spirit (MS) in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

Diesel is the largest consumed fossil fuel in our country. Transport sector, Indian railways along with the agriculture and industrial sector uses diesel. Consumption of diesel fell 55.58 per cent to 3253 TMT in April 2020, as compared to the corresponding month a year ago. In 2019-20, diesel consumption declined 1.13 percent, as compared to the previous financial year. The previous decline in consumption is observed in financial year 2013-14 when consumption declined by 1.03 percent compared to 2012-13. The variation in consumption of diesel has been shown month basis in figure 4.3.

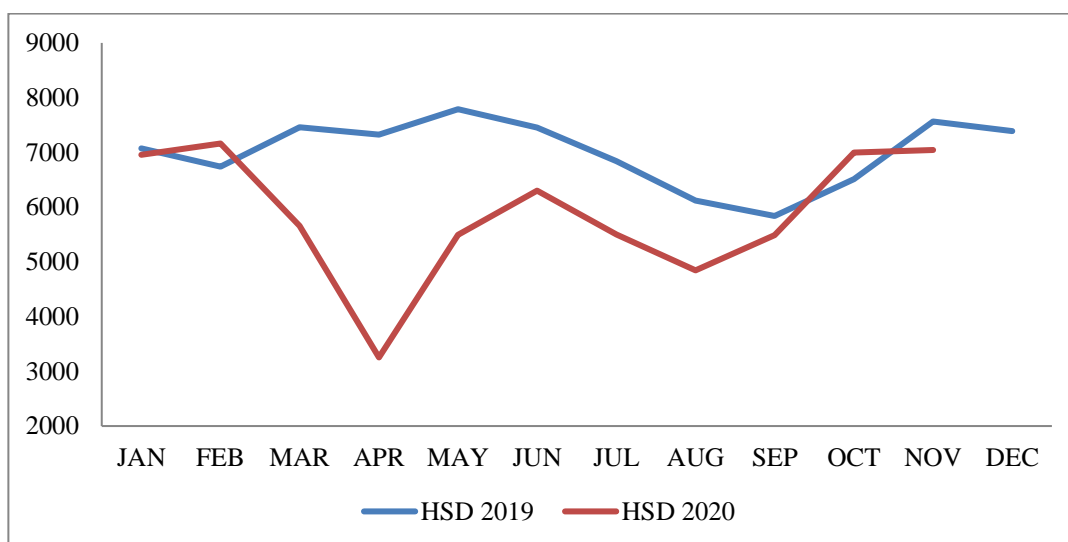


Figure 4.3: Consumption of High Speed Diesel (HSD) in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

Aviation industry is badly impacted as airlines ceased operation due to restricted movement across border and unwillingness of people to travel. So consumption of ATF touched bottom at 55 TMT in April 2020 from 739 TMT in January 2020 and it recovers steadily to 372 TMT in November 2020. Despite this improvement, the demand is still half of corresponding monthly consumption in 2019.

Data of Petroleum Planning and Analysis Cell (PPAC) showed, ATF consumption declined 3.61 percent to 8,000 TMT in the year 2019-20. This is the first incidence of decline since 2013-14. Figure 4.4 shows shock in aviation industry due to Covid-19.

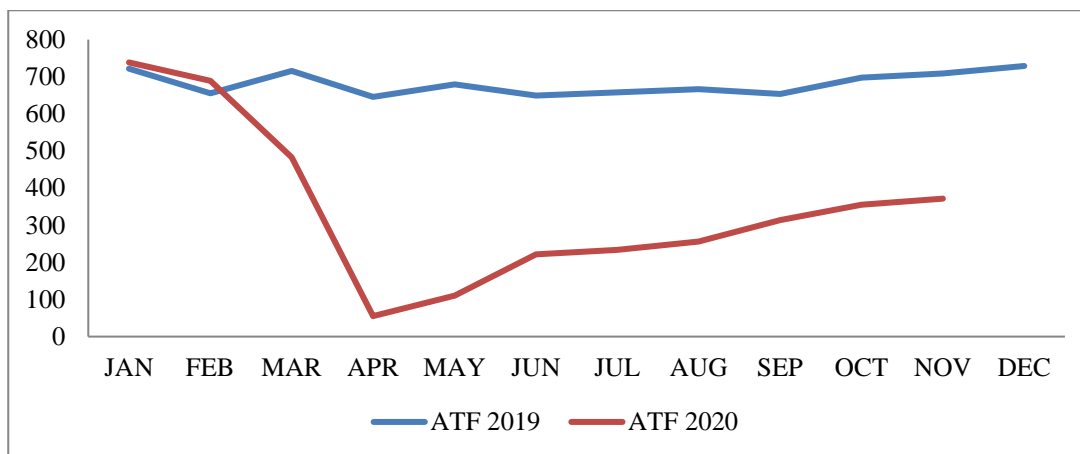


Figure 4.4: Consumption of ATF in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

Though the usage of transportation fuel such as MS, Diesel, and ATF took a beating, Liquefied Petroleum Gas (LPG) used in household showed encouraging trend. The usage of LPG increased marginally in March 2020 as compared to March 2019 and the market is maintaining it till date. LPG consumption stood at 2353 TMT in November 2020, a rise of 4 percent compared to corresponding month of 2019. The usage of LPG is shown in figure 4.5.

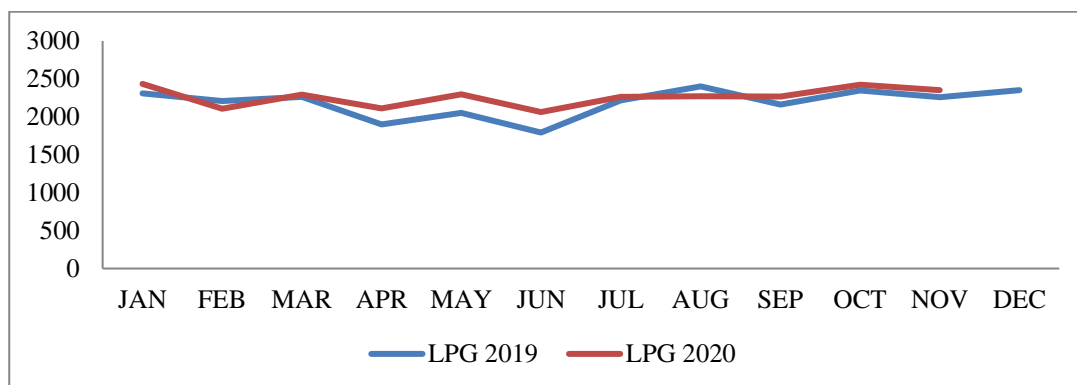


Figure 4.5: Consumption of LPG in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

Another petroleum product Naphtha, commonly used as a solvent, cleaning fluids and dry cleaning agents, paint and varnish diluents, rubber industry solvents have bypassed the pandemic situation. Naphtha demand increased 7.77 percent to 1345 TMT in November 2020. For the financial year 2019-20, the demand for naphtha increased 1 percent to 14268 TMT. Figure 4.6 shows the usage of naphtha in 2019 and 2020.

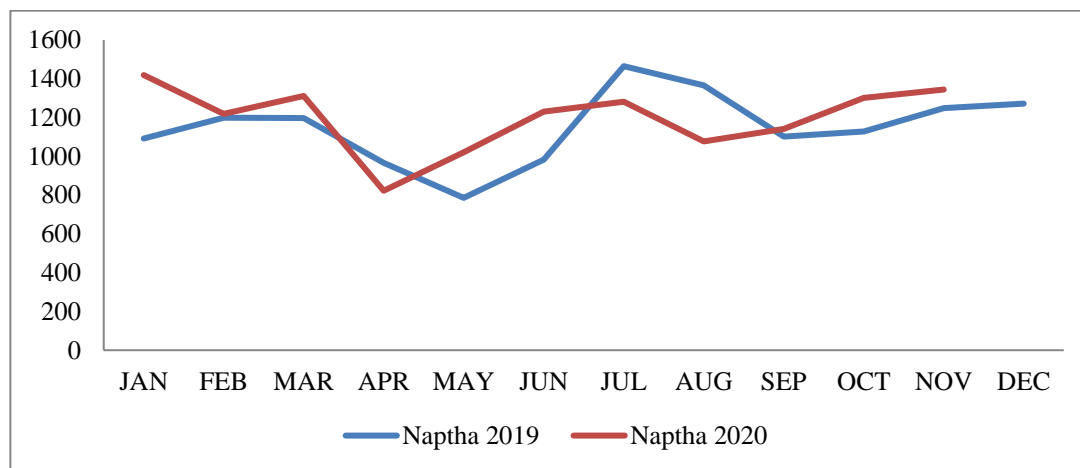


Figure 4.6: Consumption of naphtha in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

According to Care Ratings, cumulative capacity utilization of refinery has been around 81 percent in the period April-October 2020 compared with 101 percent capacity utilization achieved in the same period in 2019.

Fall in demand with the outbreak of the Covid-19 and restrictive measures compel refiners trim their capacity utilization to protect their margin and remain afloat.

Overall consumption has fallen by 15.7 percent as compared to same period in last year but regained the market as the country is channeling towards the unlock process. The usage of superior kerosene oil (SKO), light diesel oil (LDO), lubricants and grease, FO & LSHS, bitumen, coke and other petroleum products are shown in figure 7 to 14.

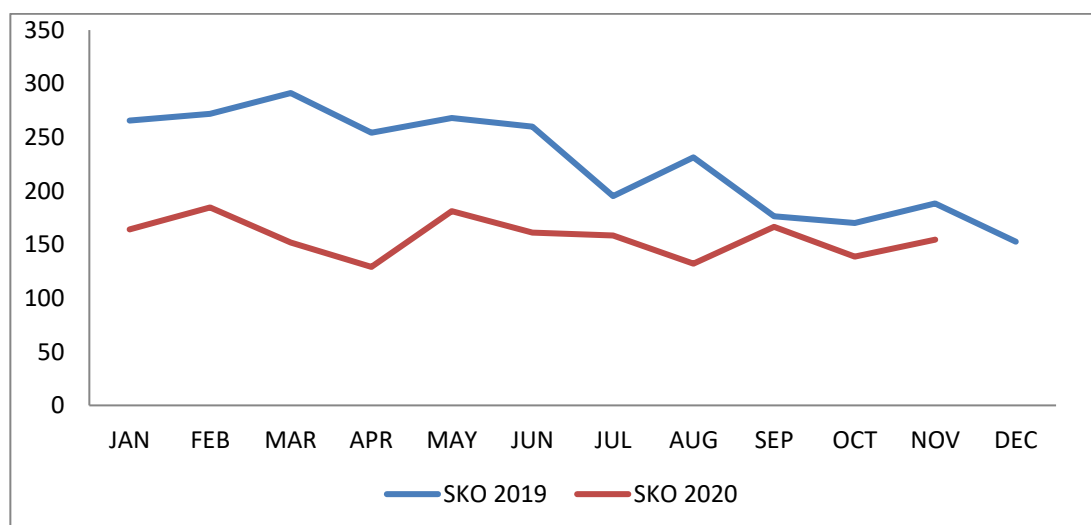


Figure 4.7: Consumption of SKO in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

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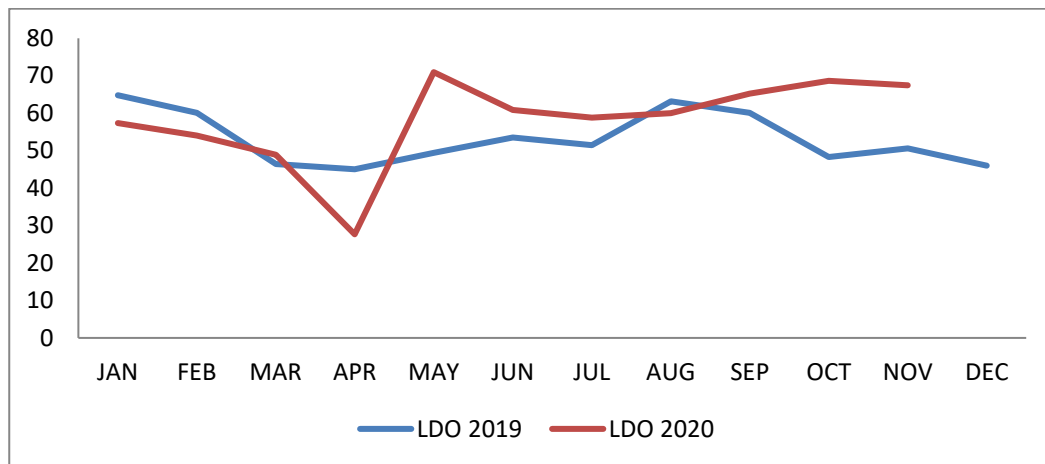


Figure 4.9: Consumption of LDO in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

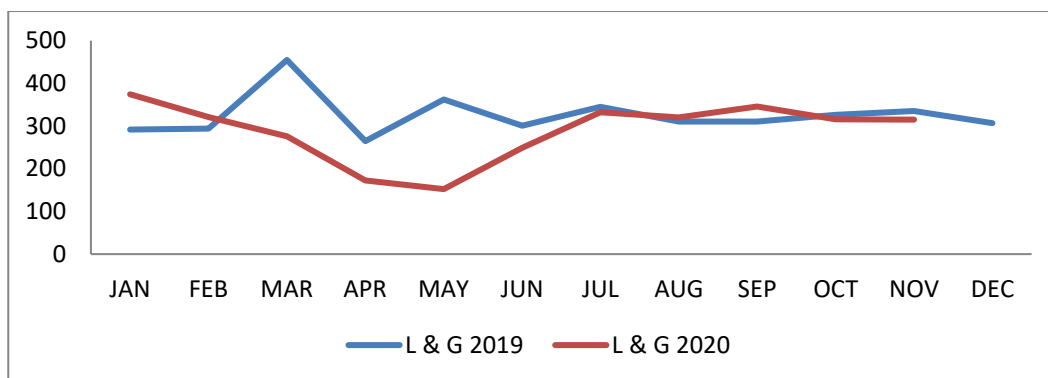


Figure 4.10: Consumption of lubricants and grease in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

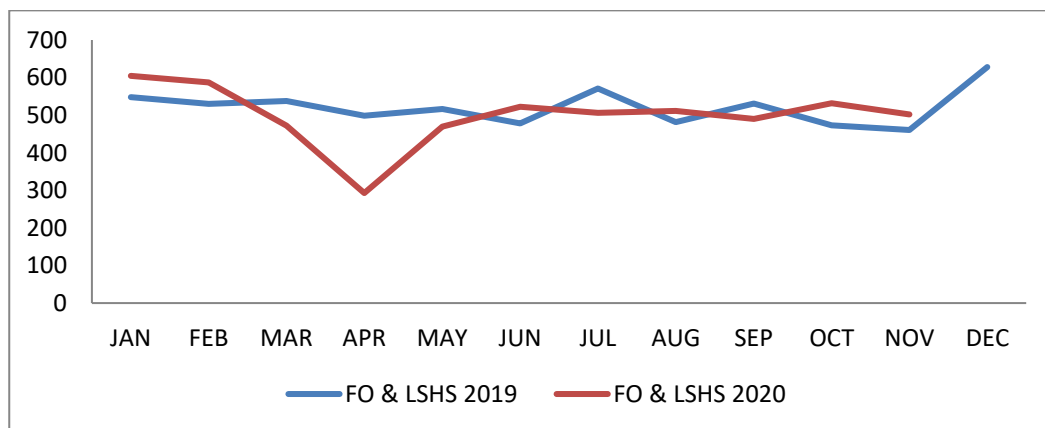


Figure 4.11: Consumption of FO & LSHS in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

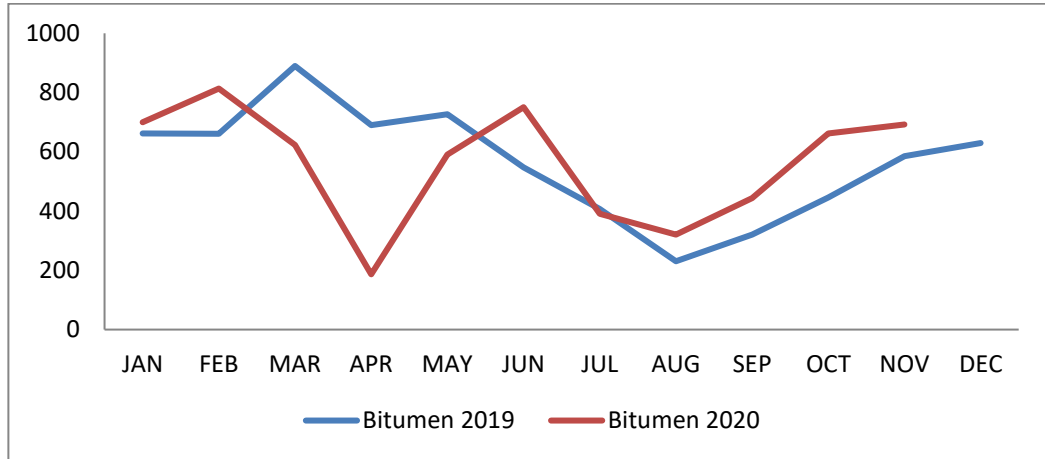


Figure 4.12: Consumption of bitumen in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

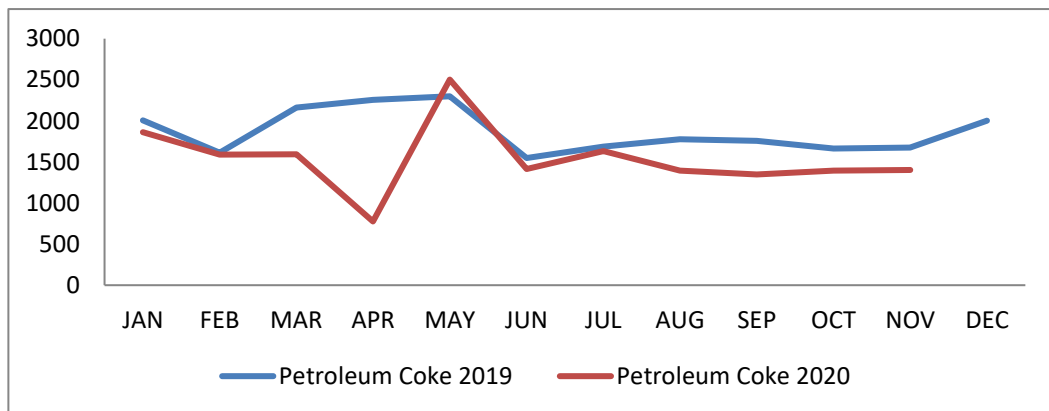


Figure 4.13: Consumption of petroleum coke in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

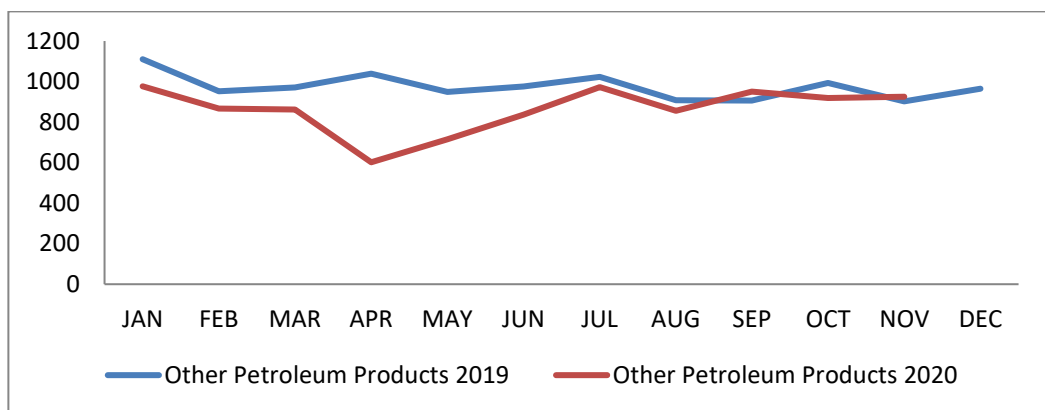


Figure 4.14: Consumption of other petroleum products in India, January 2019 to November 2020. Consumption is in thousand metric tonnes (TMT).

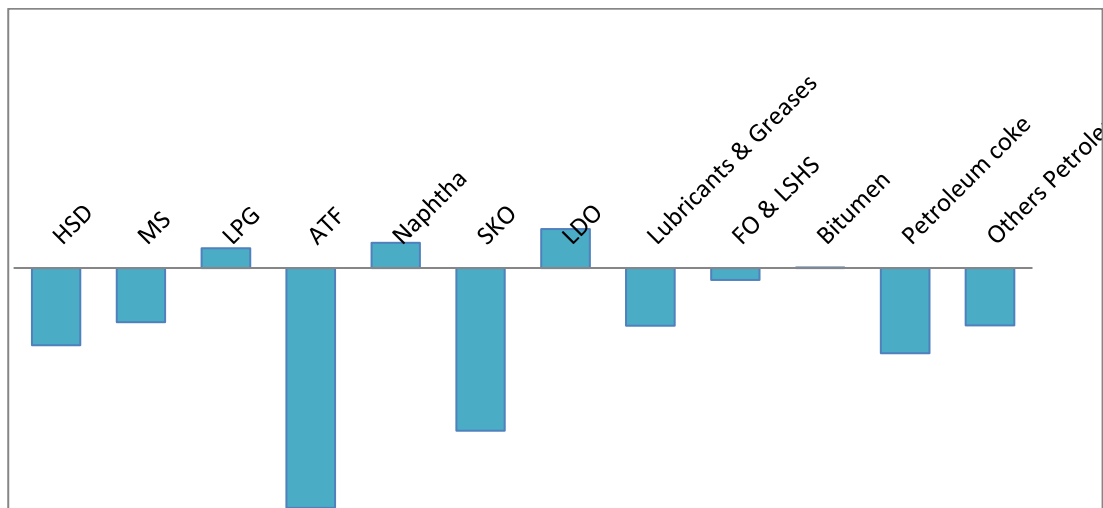


Figure 4.15: Net change in consumption of various petroleum products in India in the period January- November 2020 compared to same period in the year 2019.

4.4 Conclusion:

The pandemic situation in 2020 have effected everyone from poor to rich, child to elderly people, daily workers to industrialist, house wife to entrepreneurs. This once in a century phenomenon altered the economics of every person and this has direct influence on purchasing capacity of people. This dented the consumption of petroleum products in our country immensely affecting the economy. The study shows transportation industry specifically aviation industry consumed the shock due to the COVID-19 situation; time requires to heal the damage. Data analysis shows the market bounce back considerably once channelling the unlocking process. The good news of vaccination will boost confidence in market but caution must be maintained considering the new strain of covid-19 found in the UK.

4.5 References:

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