

MONTHLY REPORT ON INDIGENOUS CRUDE OIL PRODUCTION, IMPORT AND PROCESSING & PRODUCTION, IMPORT AND EXPORT OF PETROLEUM PRODUCTS

January 2017



Petroleum Planning & Analysis Cell

(Ministry of Petroleum & Natural Gas)

1. In this report, indigenous crude oil production, imports and processing as well as production and imports/exports of petroleum products by oil companies are analyzed on a monthly basis to assess the domestic availability of petroleum products in the country for consumption.

Highlights

- Indigenous crude oil production during January, 2017 was higher by 1.3% compared to January, 2016. On cumulative basis, it was lower by 2.8% than that of April 2015 - January 2016. There was a reduction of crude oil production by 0.3 MMT in BH, 0.4 MMT in Mangala and 0.2 MMT in Ravva fields.
- Import of crude oil decreased by 3.8% during January 2017 as compared to January 2016. During the period April 2016 - January 2017, import of crude oil increased by 7.1% over the corresponding period of the previous year.
- Total crude oil processed during January, 2017 was 21.1 MMT, a decrease of 1.4% over January, 2016. On cumulative basis, it was 205.0 MMT, an increase of 6.8% over the period April-January, 2015-16. More than 50% of 13.0 MMT increase on cumulative basis was contributed by Paradip refinery (5.3 MMT) and Essar Oil Ltd. (1.9 MMT). Balance 6.0 MMT increase was contributed by CPCL-Manali, BPCL-Mumbai, BPCL-Kochi, MRPL and RIL refineries by 1.0 MMT each approximately.
- Production of petroleum products during January, 2017 saw de-growth of 0.1% over January, 2016. On cumulative basis a growth of 6.1% was recorded over April 2016 - January 2017. BS IV MS and BS IV HSD production of PSU refineries registered growth of 96.6% and 123.4% respectively during January 2017 as compared to January 2016.
- Imports decreased by 3.9% during January, 2017 over the corresponding period of 2016 due to decrease in domestic consumption of Lubes (14.4%) and petcoke (9.9%). LPG, Lubes and Pet-coke imports contributed to 76.8 % share of total POL imports during January, 2017. Export of POL products decreased by 7.7% during January, 2017 as compared to January, 2016 primarily due to lower production as well as lower surplus availability of POL products especially MS, ATF and HSD for exports, which constitute around 65.4% of total POL exports, during January, 2017.

2. Indigenous crude oil and condensate production

2.1 Indigenous crude oil and condensate production increased by 1.3% during January 2017 as compared to January 2016. Overall indigenous crude oil and condensate production decreased by 2.8% during April 2016 - January 2017 at 30121 TMT as compared to 30984 TMT produced during the same period in the previous year.

- i. OIL's crude oil production in January 2017 was higher by 5.3% as compared to January 2016. However, on overall basis crude oil production was marginally lower by 0.2% during April 2016 - January 2017 as compared to the previous year, due to less than planned contribution from new drilling wells.
- ii. In case of ONGC, crude oil and condensate production in January 2017 was higher by 4.6% as compared to January 2016. However, ONGC's overall crude oil and condensate production decreased by 0.9% during April 2016 - January 2017 as compared to the previous year. The shortfall in production was due to natural decline and increase in water cut in matured fields of Western offshore.
- iii. Indigenous crude oil and condensate production under PSC fields decreased by 6.3% during January 2017 as compared to January 2016. Crude oil and condensate production under PSC fields was lower by 7.2% during April 2016 - January 2017 in comparison to the previous year. The major decline was observed in Ravva and Rajasthan's fields due to under performance of Bhagyam and Mangala wells.
- iv. The overall decrease in production of crude oil was 3.3% during April 2016 - January 2017 in comparison to the previous year. However the overall production of condensate increased by 1.5% during April 2016 - January 2017 as compared to the previous year.

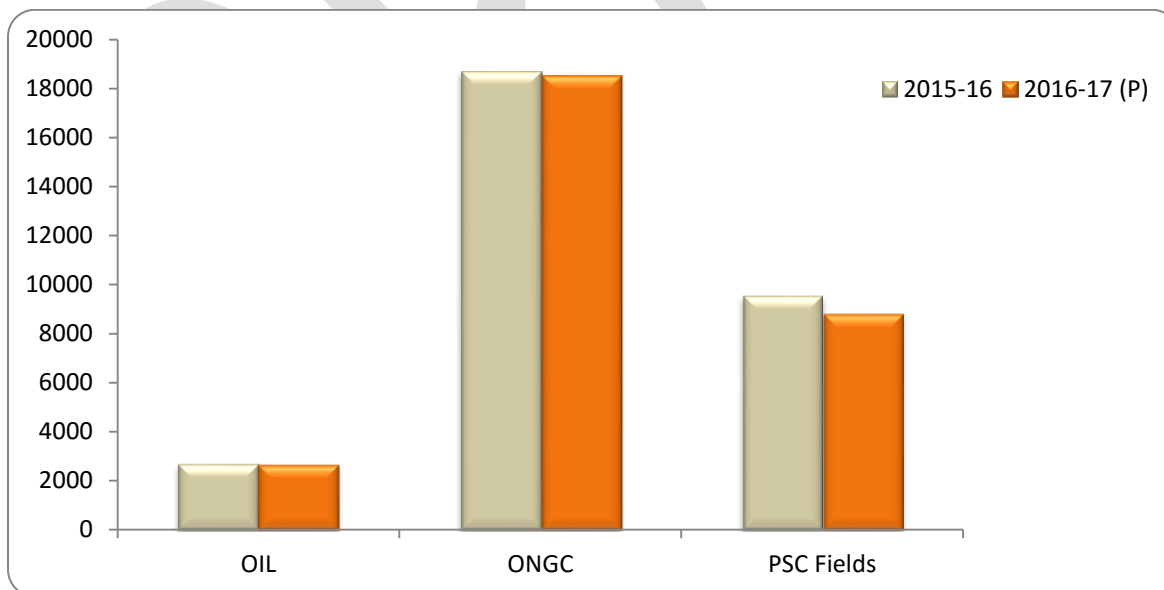
2.2 Indigenous crude oil and condensate production in the country is given in Table-1 and

Figure -1.

Table-1: Indigenous Crude oil and Condensate production							
<i>(Thousand Metric Tonnes)</i>							
Oil Company	Product	January			April- January		
		2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
OIL	Crude oil	260	274	5.3	2711	2705	-0.2
ONGC	Crude oil	1546	1561	1.0	15524	15297	-1.5
	Condensat	285	355	24.4	3187	3249	1.9
	Total	1831	1916	4.6	18711	18546	-0.9
PSC FIELDS	Crude oil	943	884	-6.2	9544	8867	-7.1
	Condensat	2	0.7	-55.5	19	4	-77.5
	Total	945	885	-6.3	9563	8871	-7.2
Total	Crude oil	2750	2720	-1.1	27779	26868	-3.3
	Condensat	287	356	23.9	3206	3253	1.5
Grand Total	Crude oil + Condensate	3037	3075	1.3	30984	30121	-2.8

Note: All figures are provisional. Source : Oil Companies & DGH

Figure-1: Crude oil production including condensate in the country (in '000MT) (April'16 – January'17)



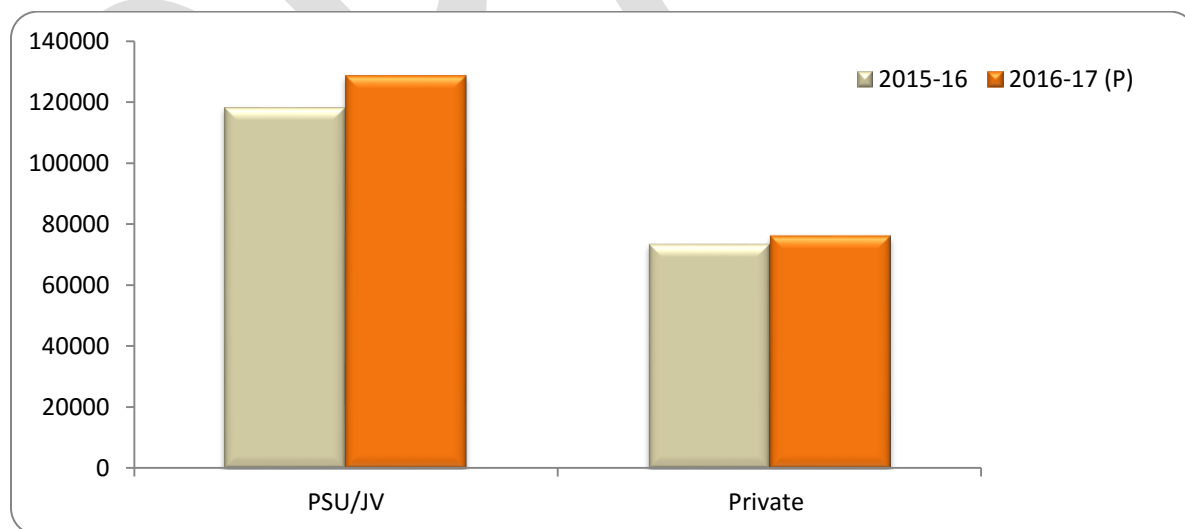
3. Crude Oil processing by Oil Companies

3.1 Crude oil processed (indigenous/ imported) in the country by PSU/JV/Private sector refining companies is given in Table-2 and Figure -2.

Table-2: Crude Oil Processed						
<i>(Thousand Metric Tonnes)</i>						
	January			April-January		
Oil Company	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
PSU / JV						
Indigenous	2185	2612	19.6	22998	23184	0.8
Imported	11329	10673	-5.8	95411	105565	10.6
PSU/JV	13513	13285	-1.69	118409	128748	8.7
Private						
Indigenous	719	453	-36.9	5628	4842	-14.0
Imported	7184	7374	2.6	67942	71417	5.1
Private	7903	7827	-1.0	73569	76260	3.7
Total of which	21416	21112	-1.4	191979	205008	6.8
Indigenous	2904	3066	5.6	28626	28026	-2.1
Imported	18513	18047	-2.5	163353	176982	8.3

Note: All figures are provisional. Source : Oil Companies

Figure-2: Crude oil processed (in 000MT) (Apr'16 –Jan'17)



Based on processing of indigenous crude oil/condensate and the country's domestic POL consumption, self-sufficiency of petroleum products was 20.3% in January 2017 as against 18.1% during January 2016.

Indian refineries processed 71.1% of high sulphur (HS) crudes during January 2017 as compared to 70.9% in January 2016. On cumulative basis 72.5% HS crudes were processed during April 2016 - January 2017 as against 71.3% during the same period of the previous year (2015-16).

3.2 Significant variations in crude oil processing by refineries are analysed below:

- Crude oil processing by Indian refineries during January 2017 registered de-growth of 1.4% as compared to January 2016. On an overall basis growth of 6.8% was registered during April 2016 - January 2017 over the corresponding period of the previous year.
- In PSU (including PSU, JVs) refineries crude oil processing was lower by 1.7% during January 2017 as compared to January 2016. On a cumulative basis up to January 2017, there was a growth of 8.7% over the same period of 2015-16 due to commissioning of IOCL- Paradip refinery and better capacity utilization of BPCL-Mumbai, CPCL- Manali, BPCL-Kochi, BORL, MRPL and HPCL Mumbai refineries.
- Crude oil processing by private oil refineries decreased by 1.0% during January 2017 compared to January 2016. On cumulative basis up to January 2017, there was a growth of 3.7% over the same period of 2015-16 due to better capacity utilization by RIL-DTA and Essar Oil refineries.
- Indigenous crude oil processed in PSU refineries during January 2017 increased by 19.6% as compared to January 2016 due to increase in processing of Mangala crude by MRPL. Hence indigenous crude oil processed in private refineries decreased by 36.9% during January 2017 compared to January 2016.

4. Production of Petroleum Products

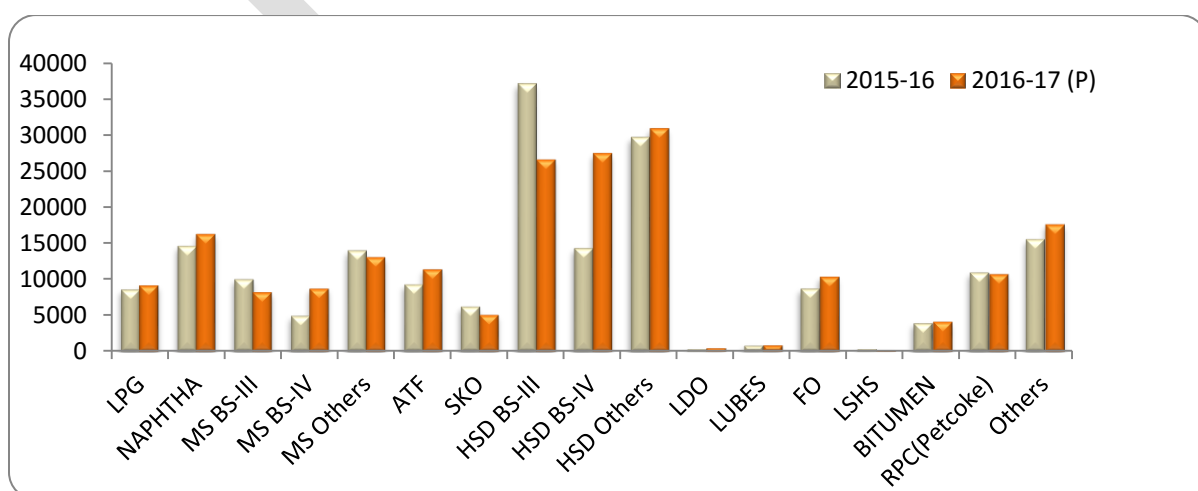
4.1 Petroleum products (grade-wise) production figures in January 2016 and cumulative production up to January 2016 vis-a-vis the same period during the previous year are given in Table-3 and Figure-3:

Table-3 Production of Petroleum Products						
(Thousand Metric Tonnes)						
PRODUCTS	January			April- January		
	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
LPG	1007	973	-3.4	8657	9234	6.7
Naphtha	1639	1667	1.8	14700	16346	11.2
MS BS-III	1056	635	-39.9	10065	8274	-17.8
MS BS-IV	622	1164	87.1	4988	8791	76.2
MS Others	1425	1287	-9.6	14062	13122	-6.7
ATF	1197	1162	-2.9	9352	11432	22.2
SKO	657	502	-23.6	6286	5112	-18.7
HSD BS-III	3766	1744	-53.7	37234	26620	-28.5
HSD BS-IV	1773	3753	111.7	14400	27522	91.1
HSD Others	3124	3049	-2.4	29817	30959	3.8
LDO	37	88	141.1	346	495	43.2
Lubes	92	96	5.2	846	874	3.2
FO	810	1087	34.2	8752	10402	18.9
LSHS	8	19	127.2	341	228	-33.1
Bitumen	509	471	-7.5	3968	4167	5.0
RPC(Pet coke)	1204	1092	-9.3	11002	10763	-2.2
Others*	1654	1779	7.6	15633	17689	13.2
Total of Refineries	20578	20568	-0.1	190449	202030	6.1
Fractionators	236	296	25.4	2814	2898	3.0

Note: All figures are provisional. Source : Oil Companies

* Others include products like Propylene, solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, Mineral Turpentine Oil, Carbon Black Feed Stock, Waxes, Sulphur etc.

Figure-3: Production of petroleum products (in'000MT) (Apr'16 –Jan'17)



4.2 Significant variations in petroleum products production by refineries / fractionators are analyzed below:

- Production of petroleum products from refineries and fractionators marginally decreased by 0.1% in January 2017 as compared to January 2016. On a cumulative basis production was more by 6.1% as compared to the same period of the previous year 2015-16.
- BS- IV production of MS and HSD in PSU refineries have shown an upward trend during April 2016 - January 2017 as shown in figure 4 and 5, inline with Auto fuel policy of introducing BS-IV fuels in more states and regions.

Figure-4: BS-III & BS-IV MS produced by PSU refineries (in'000MT) (April'15-January'16)

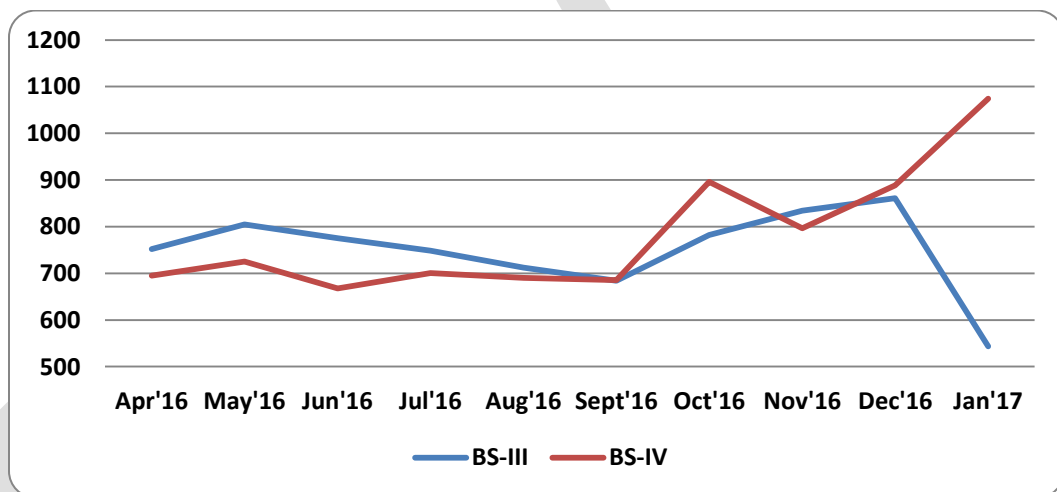
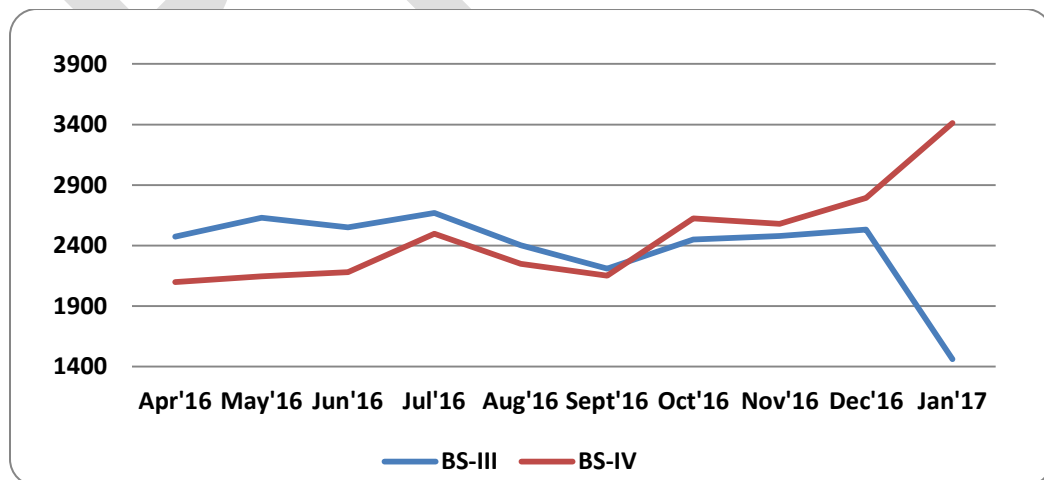


Figure-5 BS-III & BS-IV HSD produced by PSU refineries (in'000MT) (April'15-January'16)



- ATF production decreased by 2.9% in January 2017 as compared to the same period of the previous year. On an overall basis ATF production was more by 22.2 % in April 2016 - January 2017 as compared to the same period of the previous year.
- SKO production decreased by 18.7% during April 2016 - January 2017 as compared to the same period of the previous year.
- Pet coke production decreased by 2.2% during April 2016 - January 2017 as compared to the same period of the previous year.
- FO production showed growth of 18.9% during April 2016 - January 2017 as compared to the same period of the previous year due to shutdown of bottom upgradation units in refineries.

On overall basis petroleum products availability during April 2016 - January 2017 from refineries and fractionators was 202030 TMT against domestic consumption of 161424 TMT leaving a surplus of 40606 TMT. However some petroleum products like MS, naphtha, HSD and bitumen etc. were still imported to meet specific requirements (quality & specifications) of the user industries. Imports were also resorted to, to meet domestic consumption and requirement of certain products like LPG and lubes etc. for which there is a deficit in indigenous production.

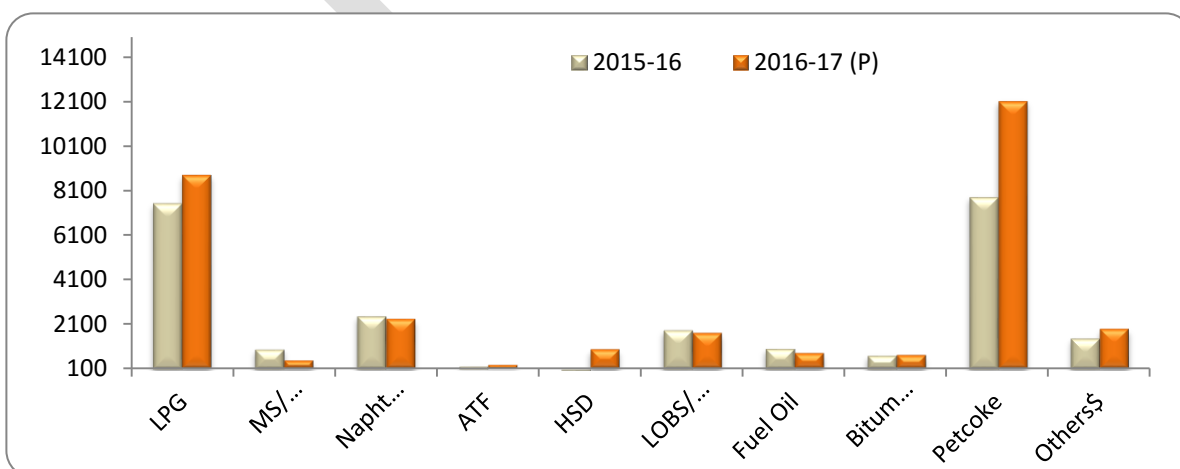
5. Import of Crude oil and Petroleum Products

5.1 Details of import of crude oil and petroleum products are given in Table-4 and Figure-6 below:

Table: 4 ; Import of Crude oil and Petroleum Products						
(Thousand Metric Tonnes)						
IMPORT	January			April- January		
	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
Crude oil						
PSU/JV	11157	10384	-6.9	100440	108063	7.6
Private	6972	7062	1.3	66982	71201	6.3
Sub Total	18129	17446	-3.8	167422	179265	7.1
PRODUCTS						
IMPORTS #	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
LPG	803	901	12.2	7526	8812	17.1
MS/ Petrol	53	0	-100.0	993	476	-52.0
Naphtha	230	190	-17.3	2478	2348	-5.3
ATF	6	23	282.8	229	266	16.2
HSD	2	160	7184.9	44	980	2117.8
LOBS/Lube oil	201	166	-17.4	1855	1712	-7.7
Fuel Oil	270	77	-71.5	1029	811	-21.2
Bitumen	62	68	8.3	719	714	-0.7
Pet coke	1189	1098	-7.7	7809	12125	55.3
Others [§]	117	136	16.2	1489	1904	27.9
TOTAL of	2934	2819	-3.9	24172	30149	24.7
PSU/JV	839	1059	26.2	8525	10299	20.8
Pvt.	2095	1760	-16.0	15647	19850	26.9

Note :All figures are provisional . Source : Oil Companies
DGCI&S data is estimated.
§ Others include SKO, Paraffin wax, Petroleum Jelly, LSWR , Aviation Gas , Pet coke etc.

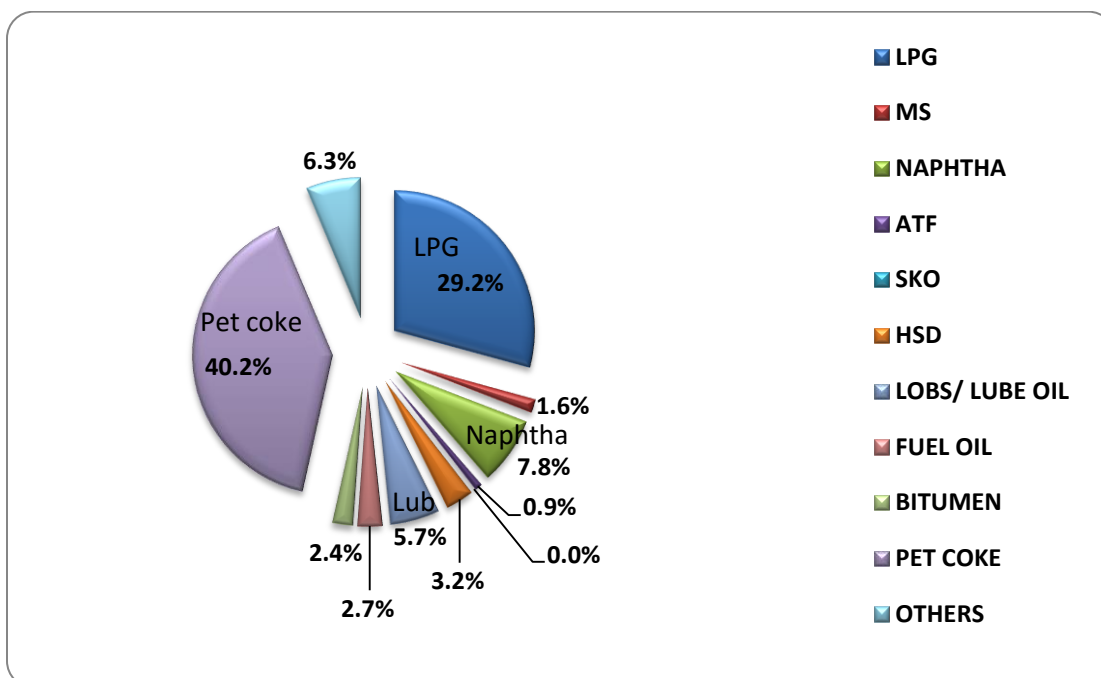
Figure-6, Import of petroleum products (in'000MT) (April'16-January'17)



5.2 Significant variations in import of crude oil and petroleum products are analysed below:

- Crude oil imports during January 2017 decreased by 3.8% as compared to January 2016. On overall basis crude oil imports increased by 7.1% during April 2016 - January 2017 as compared to the same period during the previous year (2015-16).
- Crude oil imports of PSU/JV oil companies during January 2017 decreased by 6.9% as compared to January 2016. On overall basis crude oil imports of PSU/JV oil companies increased by 7.6% during April 2016 - January 2017 as compared to the same period during 2015-16 due to increase in IOCL's processing capacity by 6206 TMT (13.1%) mainly due to commissioning of Paradip refinery, BPCL by 2138 TMT (7.7%), MRPL by 625 TMT (4.9%) and HPCL by 627 TMT (4.4%) upto January 2017.
- Crude oil imports of private oil companies during January 2017 increased by 1.3% as compared to January 2016. On overall basis crude oil imports of private oil companies increased by 6.3% during April 2016 - January 2017 as compared to the same period during 2015-16 due to increase in crude throughput.
- Import of POL products decreased by 3.9% during January 2017 as compared to January 2016 due to decrease in domestic consumption of Lubes (14.4%) and petcoke (9.9%). Import of POL products increased by 24.7% during April 2016 - January 2017 as compared to the same period of the previous year (2015-16).
- Import of LPG, Lubes and pet coke accounted for 76.8% share of the total petroleum product imports during January 2017 as there is deficit in domestic production vis-à-vis domestic consumption. On cumulative basis import of LPG accounted for 29.2% and pet-coke accounted for 40.2% of the total POL imports during April 2016 - January 2017.
- The share of all major products in the cumulative imports of the country during April 2016 - January 2017 are shown in the figure-7 below:

Figure-7, % Share of petroleum products in imports (April'16-January'17)



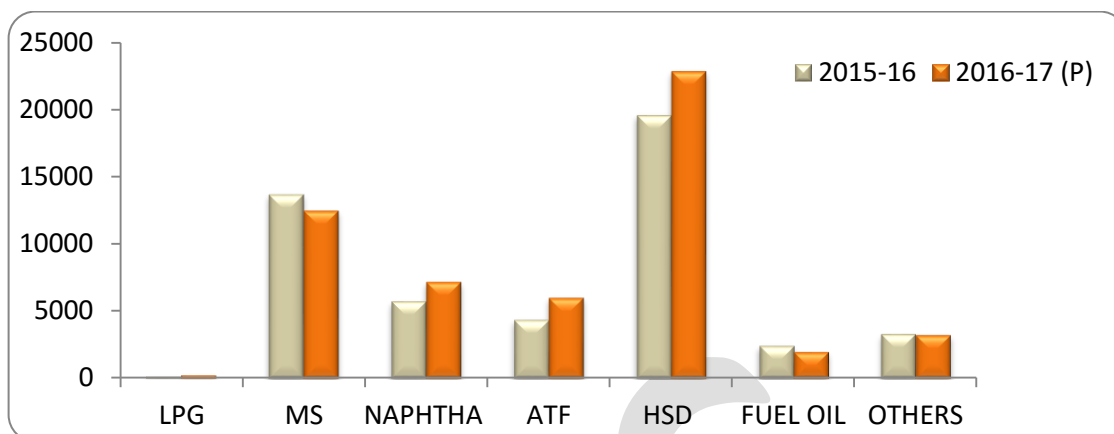
6. Export of Petroleum Products

6.1 The details of export of petroleum products are given in Table-5 and Figure-8 below:

Table:5,Export of Major Petroleum Products						
(Thousand Metric Tonnes)						
EXPORT	January			April- January		
	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
LPG	12	28	142.8	148	261	75.8
MS	1500	1035	-31.0	13728	12537	-8.7
NAPHTHA	581	802	38.0	5756	7223	25.5
ATF	693	537	-22.5	4390	6037	37.5
HSD	2375	1824	-23.2	19616	22919	16.8
FUEL OIL	164	94	-42.5	2441	2004	-17.9
OTHERS%	300	872	190.9	3325	3263	-1.9
TOTAL	5624	5194	-7.7	49403	54243	9.8

Note : All figures are provisional . Source : Oil Companies
 % Others in export include CBFS, VGO, Hexane, Benzene, MTO, Sulphur etc.

Figure-8: Export of Petroleum Products (in '000MT) (April'16 – January, 17)



6.2 Significant variations in export of petroleum products in the country are analysed below:

- I. Export of petroleum products decreased by 7.7% during January 2017 as compared to January 2016. Overall export of POL products increased by 9.8% during April 2016 - January 2017 as compared to the same period of the previous year.

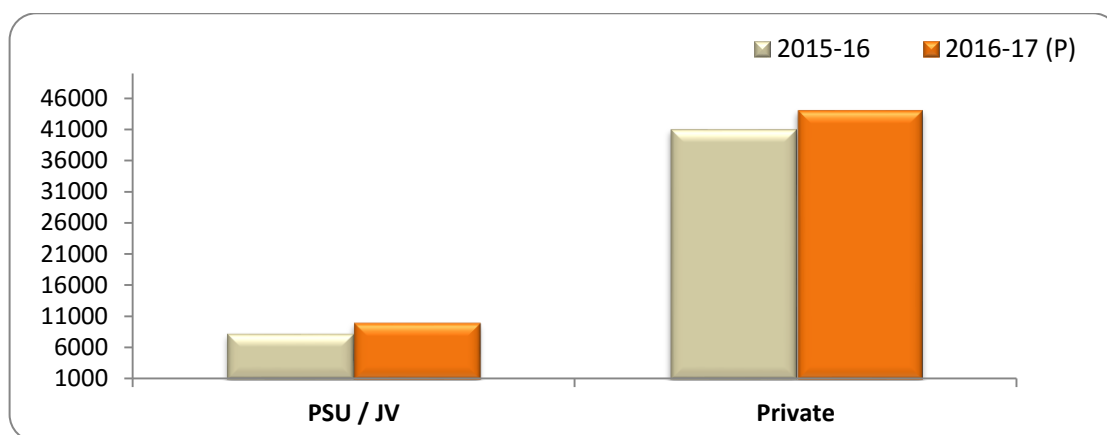
Export of POL products, mainly naphtha, increased by 38.0% during January, 2017 as compared to January, 2016. However exports of MS, ATF and HSD decreased by 31.0%, 22.5% and 23.2% due to decrease in production during January, 2017 as compared to January 2016. On cumulative basis Naphtha, ATF and HSD exports registered growth of 25.5%, 37.5% and 16.8% as compared to the same period of the previous year. During April 2016 - January 2017 FO exports declined by 17.9% as compared to the same period of the previous year.

- II. Trend of export of petroleum products by PSUs / JVs and Private sector in the country is given in Table-6 and Figure-9 below:

Table-6: Export of Petroleum Products						
(Thousand Metric Tonnes)						
Oil Company	January			April- January		
	2015-16	2016-17 ^(P)	Change (%)	2015-16	2016-17 ^(P)	Change (%)
PSU / JV	886	996	12.4	8358	10087	20.7
Private	4739	4198	-11.4	41045	44156	7.6
Total	5624	5194	-7.7	49403	54243	9.8

Note :All figures are provisional . Source : Oil Companies

Figure-9: Export of Petroleum Products: PSU vs. Private (in '000MT)(April'16 – January,17)



Salient features of exports by PSU/JV and Private oil companies

- PSU/JV oil companies' exports registered growth of 12.4% during January 2017 as compared to January 2016. On a cumulative basis PSU/JV exports have shown growth of 20.7% during April 2016 - January 2017 as compared to the corresponding period of the previous year. MS, Naphtha, ATF, FO and HSD made major contribution (80.7%) in PSU/JV exports.
- Private oil companies' petroleum products exports decreased by 11.4% in January 2017 as compared to January 2016. On a cumulative basis private oil companies' petroleum products exports increased by 7.6% during the period April 2016 - January 2017 as compared to the corresponding period of the previous year. MS, HSD, Naphtha and ATF were the major contributors (93.9%) in private exports.
- Private oil companies' export of POL products accounted for 80.8% of total petroleum product exports during January 2017 as compared to 84.3% of the previous year. On a cumulative basis during April 2016 - January 2017 private oil companies' export of POL products accounted for 81.4% of total petroleum product exports as compared to 83.1% of the previous year.

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