

**MONTHLY REPORT ON INDIGENOUS CRUDE OIL
PRODUCTION, IMPORT AND PROCESSING**

&

**PRODUCTION, IMPORT AND EXPORT OF PETROLEUM
PRODUCTS**

June 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 June 2017 was marginally higher by 0.6% than that of June 2016. PSU companies OIL registered a growth of 5.0% and ONGC registered a growth of 3.1% mainly due to increased production in Bassein field during June 2017 as compared to June 2016. However PSC fields registered de-growth of 5.8% during the month mainly due to decline in production in Rajasthan's Mangala fields and Panna Mukta fields.
- Total crude oil processed during June 2017 was 20049 TMT, a marginal decrease of 0.6% over June 2016. However an increase of 5.1% was registered in processing of indigenous crude oil over June 2016.
- Production of petroleum products during June 2017 saw a marginal de-growth of 0.2% over June 2016.
- Crude oil imports during June 2017 increased marginally by 0.2% (36 TMT) as compared to June 2016.
- Import of petroleum products decreased by 2.6% during June 2017 over the corresponding period of 2016. LPG, HSD, Lubes and Pet-coke imports contributed to 77.7 % share of total POL imports during June 2017.
- Export of POL products decreased by 7.3% during June 2017 as compared to June 2016 primarily due to higher consumption of LPG, MS and HSD products leading to lower surplus availability.

2. Indigenous crude oil and condensate production

2.1. Indigenous crude oil and condensate production increased by 0.6% during June 2017 as compared to June 2016. On cumulative basis marginal growth of 0.2% was recorded during April -June 2017 as compared to the corresponding period in 2016-17.

- OIL's crude oil production in June 2017 was higher by 5.0% as compared to June 2016. On cumulative basis growth of 5.2% was recorded during April-June 2017 as compared to the corresponding period in 2016-17.

- In case of ONGC, crude oil and condensate production in June 2017 was higher by 3.1% as compared to June 2016. On cumulative basis growth of 2.7% was recorded during April-June 2017 mainly contributed by Bassein and Mumbai High fields, as compared to the corresponding period in 2016-17.
- Indigenous crude oil and condensate production under PSC fields decreased by 5.8% during June 2017 and 6.2% during April-June 2017 as compared to the corresponding period in 2016-17. In Rajasthan fields around 100 wells were closed either due to higher water cut or required work over job. Poor reservoir performance of Bhagyam wells was another reason for lower production in PSC fields. Closure of certain wells during June 2017 due to well integrity issues and natural decline in Panna-Mukta fields also resulted in lower production. Further, loss of production was reported from KG-DWN-98/3 fields as MA-6H-ST was closed due to sand production on 13 June 2017.
- Indigenous crude oil and condensate production in the country is given in Table-1.

Table-1: Indigenous Crude oil and Condensate production							
(Thousand Metric Tonnes)							
Oil Company	Product	June			April- June		
		2016-17	2017-18^(P)	Change (%)	2016-17	2017-18^(P)	Change (%)
OIL	Crude oil	265	279	5.0	798	840	5.2
ONGC	Crude oil	1694	1740	2.7	5159	5296	2.6
	Condensate	109	120	9.7	333	345	3.9
	Total	1803	1859	3.1	5492	5641	2.7
PSC FIELDS	Crude oil	898	846	-5.8	2709	2541	-6.2
	Condensate	0.3	0.5	56.7	1.6	1.1	-30.1
	Total	898	846	-5.8	2711	2542	-6.2
Total	Crude oil	2857	2864	0.2	8666	8676	0.1
	Condensate	109	120	9.8	334	347	3.7
Grand Total	Crude oil + Condensate	2967	2985	0.6	9001	9023	0.2

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

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.

Table-2: Crude Oil Processed						
<i>(Thousand Metric Tonnes)</i>						
Oil Company	June			April- June		
	2016-17	2017-18 ^(P)	Change (%)	2016-17	2017-18 ^(P)	Change (%)
PSU / JV						
Indigenous	2206	2468	11.9	6830	7310	7.0
Imported	10294	10194	-1.0	31400	30942	-1.5
PSU/JV	12500	12662	1.29	38230	38252	0.1
Private						
Indigenous	602	483	-19.8	1712	1118	-34.7
Imported	7060	6904	-2.2	20333	21495	5.7
Private	7662	7387	-3.6	22045	22613	2.6
Total of which	20162	20049	-0.6	60274	60865	1.0
Indigenous	2808	2951	5.1	8542	8428	-1.3
Imported	17354	17098	-1.5	51733	52437	1.4

Note: All figures are provisional. Source : Oil Companies

Self-sufficiency of petroleum products on consumption basis was 18.6% in June 2017 as against 17.6% during June 2016 due to increase in indigenous crude oil processing and increased fractionators' production. However on cumulative basis self-sufficiency was 17.1% during April – June 2017 as against 17.7% during April - June 2016 due to reduction in cumulative indigenous crude oil processing and increased cumulative consumption. Import dependency has grown from 75.9% to 82.1% during the last five years due to growing consumption and stagnant indigenous crude oil production.

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

Analysis of the type of crude processed (i.e. Indigenous, low sulphur & high sulphur) in Indian refineries during April-June 2017 is given below:

- Overall indigenous crude oil processing during April-June 2017 decreased by 1.3% over April-June 2016. The decrease was mainly on account of private companies which registered a reduction of 34.7% in processing of indigenous crude oil against 7.0% increase registered by PSU/JV companies during April-June 2017 in comparison to April-June 2016. Mangala

crude oil processed during April-June 2017 was 1985.7 TMT against 2162.8 TMT in the corresponding period of the previous year due to lower production from Rajasthan fields.

- Indian refineries processed 71.3% of high sulphur crudes during June 2017 as compared to 70.9% in June 2016.
- On cumulative basis 73.1% of high sulphur crudes were processed during April - June 2017 as against 71.5% in the corresponding period of 2016-17. There was an overall increase of 1411 TMT in high sulphur crude processing in April-June 2017 over April-June 2016.
- An overall increase of 1.4% was observed in total imported crude oil processed in April-June 2017 over April-June 2016.

4. Production of Petroleum Products

4.1. Petroleum products (grade-wise) production figures in June 2017 vis-a-vis June 2016 and cumulative position in the current year against the previous year are given in Table-3.

Table-3: Production of Petroleum Products						
<i>(Thousand Metric Tonnes)</i>						
PRODUCTS	June			April- June		
	2016-17	2017-18 ^(P)	Change (%)	2016-17	2017-18 ^(P)	Change (%)
LPG	906	984	8.7	2618	2838	8.4
NAPHTHA	1529	1689	10.5	4253	5051	18.8
MS BS-III	867	0	-100	2570	0	-100.0
MS BS-IV	734	1994	171.6	2300	5937	158.1
MS Others	1436	1090	-24.1	4353	3440	-21.0
ATF	1170	1123	-4.0	3385	3393	0.2
SKO	586	357	-39.0	1675	1119	-33.2
HSD BS-III	2932	2	-99.9	8741	2	-100.0
HSD BS-IV	2421	5682	134.7	7371	17259	134.2
HSD Others	3303	2750	-16.7	8690	8529	-1.8
LDO	25	28	9.1	97	111	13.8
LUBES	94	78	-16.7	260	229	-12.0
FO	925	870	-5.9	3093	2454	-20.7
LSHS	28	18	-34.0	75	65	-13.6
BITUMEN	475	421	-11.3	1642	1561	-4.9
RPC(Petcoke)	1065	1133	6.4	3006	3340	11.1
Others	1705	1947	14.2	5710	5608	-1.8
TOTAL, of which	20201	20168	-0.2	59840	60935	1.8
REFINERIES	19924	19842	-0.4	59015	60046	1.7
FRACTIONATORS	277	326	17.5	825	890	7.8

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.

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

- Production of petroleum products from refineries and fractionators marginally decreased by 0.2% in June 2017 as compared to June 2016. On cumulative basis an increase of 1.8% was registered during April- June 2017 over April -June 2016.
- MS BS-III production was nil in the country.
- HSD BS-III production was nil in the country except in ONGC Tatipaka refinery. The HSD production from Tatipaka Refinery is of BS-III Standards as per the design and the same is being used for internal purpose (not sold to OMCs).
- SKO production continued to show a declining trend with decrease of 39.0% during June 2017 as compared to June 2016. On cumulative basis a decrease of 33.2% was registered during April- June 2017 over April -June 2016.
- On cumulative basis production of FO and bitumen decreased by 20.7% and 4.9% respectively during April- June 2017 over April -June 2016. During the same period pet coke production registered a growth of 11.1% due to fewer shutdowns in bottom Upgradation units during 2017-18 as compared to 2016-17.
- On overall basis petroleum products availability during June 2017 from refineries and fractionators was 20168 TMT against domestic consumption of 16541 TMT leaving a surplus of 3628 TMT. However some petroleum products like naphtha and lubes were still imported to meet specific requirements (quality & specifications) of the user industries. Imports were also resorted to, to meet domestic consumption of LPG and bitumen 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 below:

Table 4: Import of Crude oil and Petroleum Products						
<i>(Thousand Metric Tonnes)</i>						
	June (Month)			April-June (Cumulative)		
IMPORT	2016-17	2017-18 ^(P)	Change(%)	2016-17	2017-18 ^(P)	Change (%)
Crude oil						
PSU/JV	10823	10490	-3.1	32786	32076	-2.2
Private	6808	7176	5.4	20332	21620	6.3
Total	17630	17666	0.2	53117	53696	1.1
PRODUCTS						
IMPORT #	2016-17	2017-18 (P)	Change (%)	2016-17	2017-18 (P)	Change (%)
LPG	796	597	-25.0	2449	2251	-8.1
MS/ Petrol	38	36	-5.3	269	36	-86.5
Naphtha	239	199	-16.8	700	497	-28.9
ATF	33	29	-13.2	84	87	3.4
SKO	0	0	0	0	0	0
HSD	1	461	-	726	916	26.1
LOBS/Lube oil	219	170	-22.3	569	551	-3.2
Fuel Oil	89	76	-13.9	235	250	6.3
Bitumen	79	75	-5.5	347	227	-34.6
Petcoke	1524	1170	-23.2	3429	3472	1.2
Others\$	149	271	82.4	547	583	6.6
TOTAL	3167	3085	-2.6	9355	8869	-5.2
PSU/JV	820	1101	34.2	3484	3191	-8.4
Pvt.	2346	1984	-15.4	5871	5679	-3.3

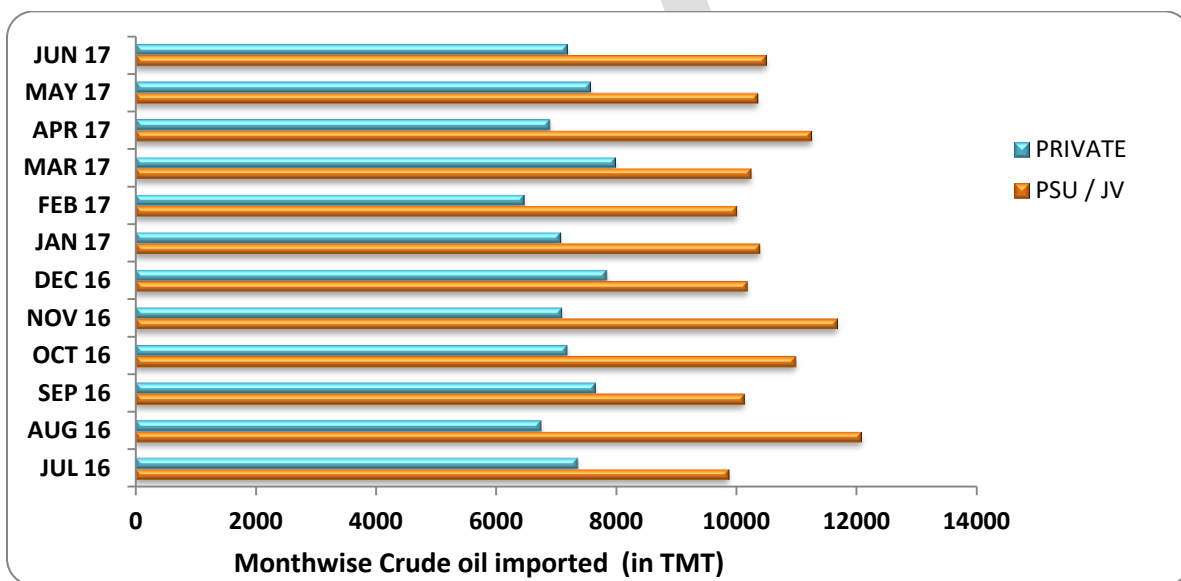
*Note: All figures are provisional. Source : Oil Companies
DGCI&S data is estimated.
\$ Others include SKO, Paraffin wax, Petroleum Jelly, LSWR, Aviation Gas etc.*

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

- Crude oil imports during June 2017 increased marginally by 0.2% (36 TMT) as compared to June 2016. On cumulative basis an increase of 1.1% (579 TMT) was registered during April-June 2017 as compared to April-June 2016 due to increased crude oil processing in IOC-Paradip and BPCL-Kochi refineries.
- During June 2017 RIL DTA and SEZ diversified their crude purchase portfolio by importing crude from Congo Republic, Angola and Oman.
- On cumulative basis Iraq with share of 20.6% has relegated Saudi Arabia to second rank with share of 17.3% in crude oil exports to India during Q1 of 2017-18.

- Crude oil imports of PSU/JV oil companies during June 2017 decreased by 3.1% as compared to June 2016 mainly due to HMEEL planned shutdown. On cumulative basis PSU/JV companies registered a decrease of 2.2% in crude oil imports in April-June 2017 as compared to the corresponding period of the previous year.
- Crude oil imports of private oil companies increased by 5.4% during June, 2017 and 6.3% during April-June 2017-18 as compared to corresponding period of previous year due to higher capacity utilization.

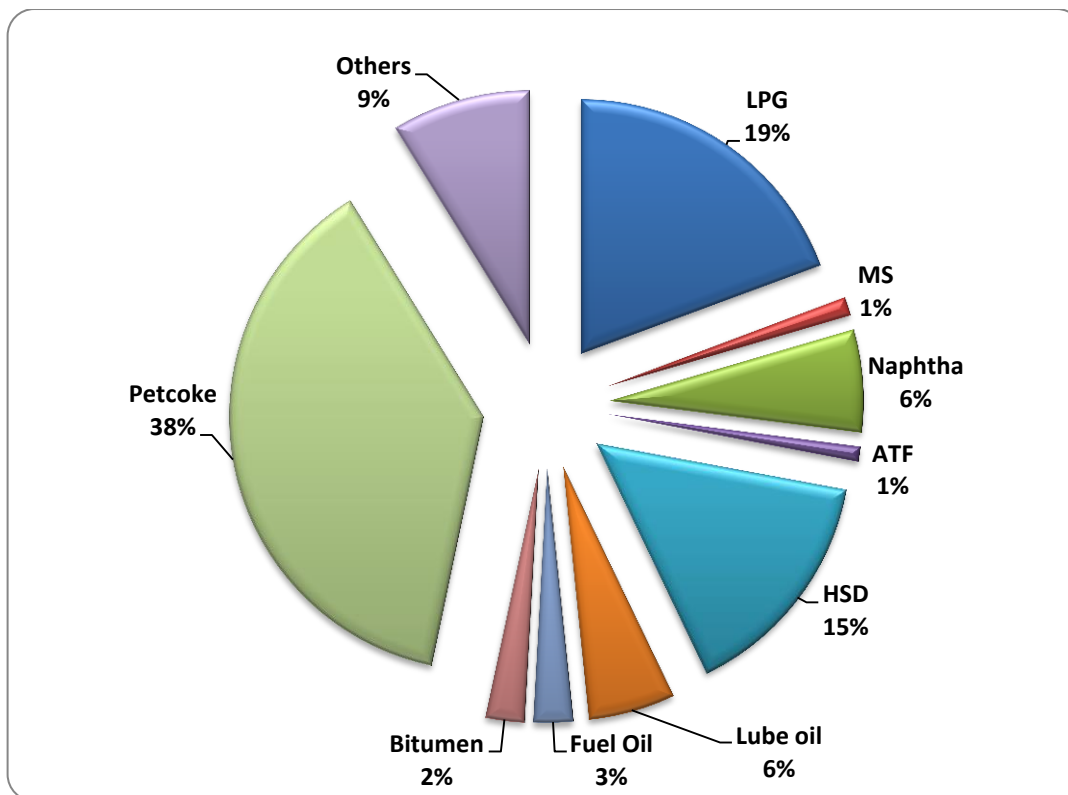
Figure-1 Crude oil imports by PSU/JV and Private oil companies (July 2016- June 2017)



- Import of POL products marginally decreased by 2.6% during June 2017 as compared to June 2016. On cumulative basis a decrease of 5.2% was registered during April-June 2017 due to reduction in import of MS (86.5%) and naphtha (28.9%) as compared to April-June 2016. However, there was an increase in imports of HSD by 26.1% due to implementation of BS-IV auto fuel standards across the country from 01.04.2017.
- In June 2017 HSD imports of 457 TMT were undertaken by PSU OMCs from UAE, South Korea and Singapore to bridge the demand-supply gap for compliance of BS-IV specification norms.

- The percentage share of major products in the cumulative imports of the country during June 2017 is shown in the following figure-2:

Figure-2: Percentage share of petroleum products in imports (June 2017)



- Import of LPG (19.3%) was undertaken by PSU oil companies during June 2017 mainly to meet supply-demand gap of domestic consumption. Import of petcoke (37.9%) was mainly done by cement and steel industry as a cheap substitute of coal.

6. Export of Petroleum Products

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

Table 5: Export of Major Petroleum Products						
(Thousand Metric Tonnes)						
EXPORT	June (Month)			April-June (Cumulative)		
	2016-17	2017-18 ^(P)	Change (%)	2016-17	2017-18 ^(P)	Change (%)
LPG	30	27	-9.0	86	85	-1.0
MS	1491	1208	-19.0	4419	3693	-16.4
NAPHTHA	602	767	27.3	1689	2212	31.0
ATF	643	570	-11.3	1915	1614	-15.7
HSD	2248	2036	-9.4	5746	6235	8.5
SKO	1	2	44.3	4	5	8.4
LDO	0	0	0.0	0	5	0.0
LOBS/ LUBE OIL	4	1	-80.9	7	1	-79.5
FUEL OIL	182	79	-56.7	388	321	-17.3
BITUMEN	6	2	-64.0	14	4	-71.3
PET COKE	1	7	686.3	2	75	3625.8
VGO	0	141	100	42	335	702.2
OTHERS	165	141	-14.9	536	562	4.8
PRODUCT EXPORT	5372	4979	-7.3	14849	15147	2.0

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

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

- Export of petroleum products decreased by 7.3 % during June 2017 as compared to June 2016 primarily due to lower surplus availability of POL products like MS and ATF in the private sector, which constituted 35.7% of total POL exports during the month. On cumulative basis the export of petroleum products increased by 2.0% during April-June 2017 as compared to April-June 2016.
- Tertiary amyl methyl ether (TAME) exports of 11 TMT were again reported by RIL-DTA which is used for enhancing octane number of gasoline pool in refineries.

- Trend of export of petroleum products by PSUs / JVs and private sector in the country is given in Table-6 below:

Table 6: Export of Petroleum Products						
<i>(Thousand Metric Tonnes)</i>						
	June (Month)			April-June (Cumulative)		
Oil Company	2016-17	2017-18 ^(P)	Change(%)	2016-17	2017-18 ^(P)	Change (%)
PSU / JV	1079	1207	11.9	2601	3287	26.4
Private	4293	3771	-12.2	12248	11860	-3.2
TOTAL	5372	4979	-7.3	14849	15147	2.0
<i>Note: All figures are provisional . Source : Oil Companies</i>						

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

- PSU/JV oil companies' exports registered growth of 11.9% during June 2017 as compared to June 2016 wherein export of naphtha, ATF and HSD to Nepal and Bhutan contributed 74.1%. On cumulative basis PSU/JV companies' exports registered a growth of 26.4% during April-June 2017 as compared to the corresponding period of the previous year.
- Private oil companies' petroleum products exports registered a decrease of 12.2% in June 2017 as compared to June 2016 mainly due to decrease in export of MS, HSD and ATF. On cumulative basis private companies registered a de-growth of 3.2% in exports of petroleum products during April-June 2017 as compared to April- June 2016.
- Private oil companies' export of POL products accounted for 75.8% of total petroleum product exports during June 2017 as compared to 79.9% in June 2016. On cumulative basis private oil companies' exports of POL products accounted for 78.3% during April-May 2017 as compared to 82.5% in April-June 2016.

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