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India

Sugar Annual

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Report Highlights:

Post's out-year production forecast for Indian centrifugal sugar in marketing year (MY) 2016/17 (Oct-Sept) is 25.5 million metric tons (MMT), a decline of 2.2 MMT from MY 2015/16. Production gains from Uttar Pradesh, Tamil Nadu, and other states will compensate for about one-third of the combined losses from Maharashtra and Karnataka. India will produce 27.7 MMT in MY 2015/16, which also marks a decline from the 30.5 MMT of sugar produced last year. Assuming normal market conditions, India will be a net sugar exporter in MY 2016/17 and imports will be negligible.

Note: All sugar data in the report are raw value basis unless otherwise mentioned.

Commodities:

Sugar Cane for Centrifugal

Sugar, Centrifugal

Production:**Centrifugal Sugar Production will Decline for Second Consecutive Year**

India's centrifugal sugar (henceforth sugar) production in MY 2016/17 (out-year) will decline for a second consecutive year to 25.5 MMT. The out-year production estimate includes 560,000 metric tons (MT) of *khandsari*, a local type of low-recovery sugar prepared by open-pan evaporation. Production gains in Uttar Pradesh, Tamil Nadu, and other states will compensate for about one-third of the combined losses from Maharashtra and Karnataka. Although the average sugar recovery rate will remain modest at 10.9 percent (0.1 percent below last year), lower cane delivery to sugar mills, particularly in Maharashtra and Karnataka, will decrease total sugar production. Cane supplies to *gur* (jaggery or crude, non-centrifugal lump sugar) manufacturing units will return to more normal levels, with out-year *gur* production during reaching 5.7 MMT.

Sufficient beginning stocks will augment the total sugar supply to about 35 MMT (five-year average is 37.5 MMT) and will just meet annual out-year consumption and stock requirements. Following domestic distribution, an additional 1 MMT of sugar may be available for trade or for storage. For the second time in recent years (the last time being in MY 2008/09), Indian sugar production will fall below consumption (27.2 MMT).

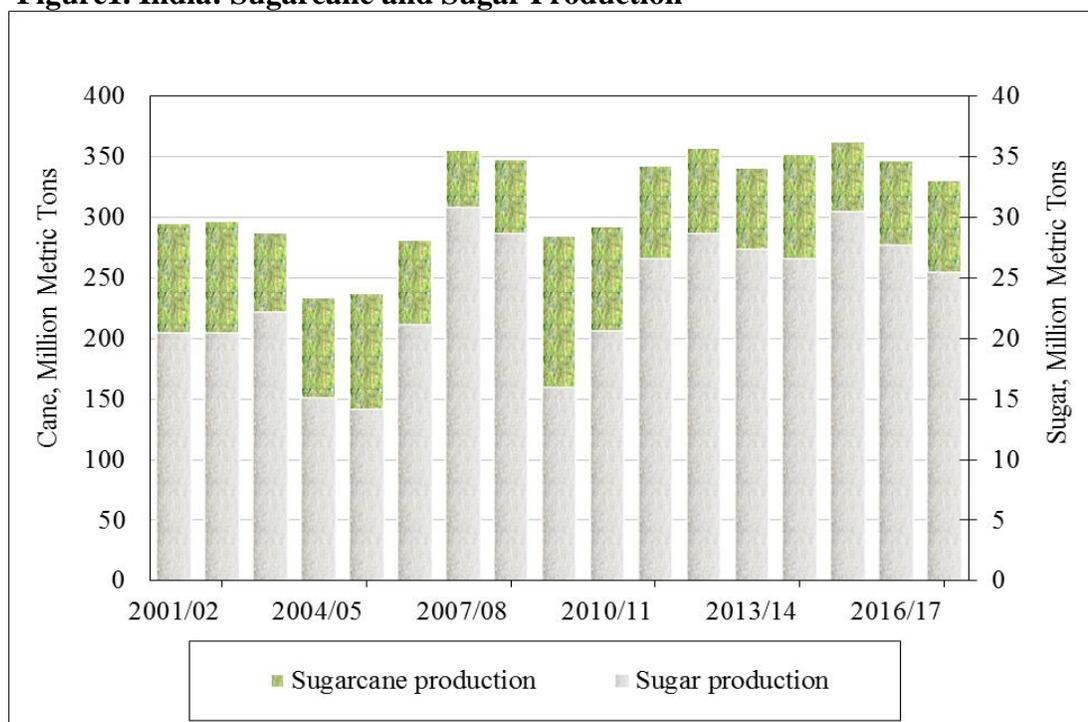
Likewise, sugar production in the current year (MY 2015/16) is revised down by three percent to 27.7 MMT, as per the latest production figures. Maharashtra and Uttar Pradesh (UP) will respectively contribute 33 percent and 28 percent of total production. Last year, India produced 30.5 MMT sugar of which Maharashtra and UP respectively contributed 37 percent and 25 percent.

Sugarcane Planting and Production to Decline to 4.7 Million Hectares and 330 MMT

Assuming a normal 2016 southwest monsoon and favorable planting conditions, cane planting in MY 2016/17 will reach 4.7 million hectares (MH), a slight decline from the 4.9 MH planted this year. Acute water scarcity and abnormal weather conditions in parts of Maharashtra (Marathwada, Solapur, and Ahmednagar) and northern Karnataka discouraged farmers to bring new areas under production. Rather farmers are choosing to ratoon their crop this year, indicating lower yields. Cane yields in UP are expected to rebound due to increasing use of early-maturing and high-yielding varieties (e.g., Co 0238), which will buoy national yield averages. Nonetheless, out-year yields will decline slightly from the current year. The net decline in planted area and the subsequent dip in production will decrease sugarcane production in MY 2016/17 to 330 MMT, five percent below the current year's estimate.

The [second advance estimate](#) from the Ministry the Agriculture (MinAg) calculates sugarcane production in MY 2015/16 at 346.38 MMT, similar to Post's estimate. Sugarcane area planted is revised up by 34,000 hectares to 4.9 MH, reflecting the latest estimate from MinAg. Similarly, the 'final' sugarcane area and production estimates for MY 2014/15 are raised by four and five percent, respectively to 5.1 MH and 362.3 MMT.

Figure1. India: Sugarcane and Sugar Production



Source: Industry and trade sources

Consumption:

Indian sugar consumption in MY 2016/17 is forecast to rise marginally to 27.2 MMT. Post revises consumption estimates for current and previous years as per recent industry estimates. Growing domestic demand from soft drink manufacturers, bakeries, hotels, restaurants, confectionary, and ice-cream manufacturers will support higher consumption. Bulk consumers account for about 65 percent of the total sugar consumption in India. India’s relatively stable economy, stable political situation, rising incomes, young population, and changing consumption patterns are key drivers for food consumption. Most *khandsari* sugar is consumed by local sweet shops and *gur* is mostly consumed in rural households and for feed use.

Market Prices

Sugar prices reached their peak in July 2014 (due to a poor monsoon) and softened by ten percent a year later. During this transition sugar mills sold surplus stock in local markets and partially cleared mounting cane arrears. However later, domestic prices gained some strength following the announcement of mandatory sugar exports in MY 2015/16. During the most recent five months, sugar prices rallied by more than 30 percent and should stay firm, given anticipated tighter supplies in the out-year.

Gur prices remained strong during most part of MY 2014/15 due to larger than anticipated diversion of canes to sugar mills. However, *gur* prices have been stable in response to rising cane supplies (Figure 2) and will remain relatively weak due to increased *gur* production in MY 2015/16. Currently, Indian

wholesale sugar prices range from \$520 to \$550 per MT, while *gur* is selling at a discount of \$100 per MT to sugar.

Figure 2. India: Sugar and Gur Prices in Delhi Market, in INR Per Metric Tons



Source: Industry and trade sources

Trade:

India is likely to be a net sugar exporter in MY 2016/17, assuming normal market conditions, with India forecast to export 1 MMT of (mostly white) sugar. Imports are estimated to be negligible. Current-year sugar exports are estimated at 3 MMT. Total exports will be comprised of 1.8 MMT of white sugar, 100,000 MT of raw sugar, both under open general licenses (OGL), and 1 MMT of refined sugar re-exported under the Advance License Scheme (ALS). Presently, raw sugar exports are not viable. Recent strengthening in domestic sugar prices will encourage mills to sell locally, which will drag on export sales. International sugar prices have strengthened, but more slowly, keeping Indian sugar export sales less competitive. NOTE: Under the ALS, local sugar mills are allowed to import raw sugar at zero duty against a future export commitment.

Myanmar, Somalia, Nepal, Sudan, Sri Lanka, Saudi Arabia, Kenya, Vietnam, UAE, Turkey and Tanzania are among the key markets for Indian sugar this year. Indian sugar exporters prefer Southeast Asia, Asia, Africa and Middle East markets due to lower shipping cost and expanding demand. Imports are estimated upwards of a million tons (mostly raw sugar) but under ALS.

In MY 2014/15, India exported close to 2.6 MMT of sugar. Of total exports, 1 MMT is estimated to be crystal white sugar, with another million tons as refined sugar re-exported under the ALS. Further, about 500,000 MT are believed to be raw sugar exports, permitted under export subsidy program for MY 2014/15.

Trade Policy

Imports

On April 29, 2015, the Union Cabinet approved to increase the duty on sugar imports under the OGL from 25 to 40 percent. The objective of increasing the tariff was to discourage imports, prevent excessive inventory, and support local sugar prices. On August 21, 2014, the Government of India (GOI) raised its tariff for refined and raw sugar from 15 to 25 percent ([Customs Notification No.26/2014](#)). Kindly refer to our GAIN report [IN5130](#) for more information.

Exports

Sugar can be exported under the OGL. According to the Ministry of Commerce's [Notification No 3/2015-2020](#), shippers are no longer required to register sugar quantities prior to exporting with the Director General of Foreign Trade (DGFT) in an effort to expedite export sales. India's export subsidy scheme for raw sugar exports, which had been implemented during the last two marketing years, lapsed in September 2015 as it did not yield sales in terms of volume.

On September 18, 2015, GOI introduced the minimum indicative export quota ([MIEQ](#)) for selling 4 MMT of sugar (raw, white/refined) in MY 2015/16. The export quota has been prorated among sugar factories by considering their average sugar production in last three marketing years. The program seeks to revive sugar exports, inject cash flows and offset surplus sugar in MY 2015/16. However, given the water shortages (for irrigation and drinking) in parts of Maharashtra and Karnataka, many sugar mills will find difficult to meet the prescribed sugar export quota. As a result, mills expect their quotas to be reallocated or relaxed.

Stocks:

Ending stocks in MY 2016/17 are forecast at 7 MMT and will be just sufficient to meet India's three-month consumption requirement. Stocks for the current sugar season are revised up from 6.9 MMT to 9.7 MMT to reflect the latest estimate.

Policy:

Sugarcane Production and Pricing Policy

Research and Extension Services

The GOI supports research, development, training of farmers, transfer of new varieties, and improved production technologies (seed, implements, pest management) to sugarcane growers as to raise yields and recovery rates. The Indian Council of Agricultural Research conducts sugarcane research and development at the national level. State agricultural universities, regional research institutions, and state agricultural extension agencies support these efforts at the regional and state levels. Central and state governments also support sugarcane growers by ensuring finances and input supplies at affordable prices.

To increase the area of cultivation and production in the country, the GOI has implemented the "Sustainable Development Fund of Sugarcane Based Cropping System Area under Macro Management Mode of Agriculture" program in various sugarcane growing states. Additionally, under Rashtriya

Krishi Vikas Yojana (National Agriculture Development Program), state governments have been given flexibility to choose their priorities for the formulation of crop development projects, including sugarcane.

At the current exchange rate, the GOI collects \$3.63 (INR 240) per MT of sugar produced by mills in support of the Sugarcane Development Fund (SDF), which is used to support research, extension, and technological improvement in the sugar sector. The SDF is also used to support sugar buffer-stock operations, provide a transport subsidy for sugar exports, and provide an interest subsidy on loans for the installation of power generation and ethanol production plants. In March 2008, the GOI enacted the SDF (Amendment) Bill, 2008, enabling the government to include the use of SDF funds for debt restructuring and soft loans to sugar mills.

The GOI establishes a minimum support price (MSP) for sugarcane based on recommendations from the Commission for Agricultural Costs and Prices (CACP), consultations with state governments, and sugar industry and cane growers' associations. In MY 2009/10, the GOI announced a new fair and remunerative price (FRP) system that links cane prices with miller's incomes. Several state governments augment the MSP/FRP, typically by 35-40 percent, due to political populism rather than market pricing. Sugar mills are required to pay the "state advised price" (SAP) to sugarcane farmers irrespective of market prices. A forecast of a smaller cane crop normally encourages millers to pay higher cane prices, resulting in prices which exceed the MSP/FRP in most of the growing states.

Production Subsidy

On November 18, 2015, the GOI's Cabinet Committee on Economic Affairs approved a production subsidy at the rate of INR 4.50 per quintal of sugarcane crushed in MY 2015/16 (Oct-Sept) to offset cane cost. The [sugarcane production subsidy](#) will be provided to farmers on behalf of the sugar millers which are indebted to cane farmers for old crop sales. Qualifying sugar millers must have exported at least 80 percent of the indicative sugar export quota, and achieved 80 percent of respective targets of ethanol production. The export quota of four MMT of sugar for MY 2015/16 has been allotted to mills based on their average sugar production for last three seasons ([GAIN IN6001](#)).

Sugar Marketing Policy

Following the deregulation of sale of sugar in India in 2013, the GOI continued to subsidize sugar for consumers by allowing state governments to procure sugar from the market through open tenders. The gap between open market prices and public distribution system (PDS) sale prices/retail issue price is covered by the GOI. The new system has been adopted by 30 states/Union Territories (UTs). After two years of its implementation, the GOI reviewed the 'decontrol of sugar marketing' in 2015 and allowed states/UTs to either absorb the additional cost, if any, on account of handling, transportation and dealer's commission or pass it on to consumers by including it in the retail issue price (INR 13.50 per kg). The GOI provided INR 45 billion to subsidize the additional cost borne by States/UTs. Industry sources expect that the sugar industry will continue to be subject to production controls by state governments, including sugar industry licensing, specified cane procurement areas for sugar mills, and cane pricing. For more information please refer to [GAIN IN4029](#).

Ethanol Program

Last year, the GOI doubled its ethanol blending (with gasoline) target from five to 10 percent. The targeted ethanol blending program is based on a National Grid, finalized in consultation with states which link the distilleries to the government-owned petroleum depots and regulates quantities to be supplied. The focus of the forward integration is the price-fixing mechanism for supply of ethanol to the state-run oil marketing companies (OMCs), avoiding the GOI excise on ethanol sales for blending with gasoline (e.g. help mills save INR five rupees/liter of ethanol), and link ethanol sales to the sugarcane subsidy (see sub-title production subsidy above) as to incentivize sugar millers achieve blend targets.

Further, clearing cane arrears will help mills reduce their debt and facilitate forward integration. Official data from the Directorate of Sugar, Ministry of Food and Public Distribution indicates that cane arrears have declined ten percent in last four years, to 32 percent as of March 15, 2016.

In December 2014, the GOI announced a price-fixing scheme for parastatal OMCs to procure fuel to accelerate sugarcane crushing operations. The program fixes landed-ethanol prices at OMC depots from INR 48.50 to INR 49.50/liter, a three-five percent increase over the previous price. India's ethanol program is based on sugar molasses, a by-product of the sugar industry, and not directly from sugarcane or corn as in other countries. For more on India's ethanol program, please refer India's Biofuel Annual 2015 GAIN report [IN5079](#).

Production, Supply and Demand Data Statistics:

Sugar, Centrifugal Market Begin Year	2014/2015		2015/2016		2016/2017	
	Oct 2014		Oct 2015		Oct 2016	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
India						
Beginning Stocks	8227	8227	9947	10607	0	9707

Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	30240	30460	28530	27700	0	25500
Total Sugar Production	30240	30460	28530	27700	0	25500
Raw Imports	1100	1000	900	1100	0	0
Refined Imp.(Raw Val)	0	0	0	0	0	0
Total Imports	1100	1000	900	1100	0	0
Total Supply	39567	39687	39377	39407	0	35207
Raw Exports	500	500	1500	100	0	0
Refined Exp.(Raw Val)	1925	2080	1000	2800	0	1000
Total Exports	2425	2580	2500	2900	0	1000
Human Dom. Consumption	27195	26500	28000	26800	0	27200
Other Disappearance	0	0	0	0	0	0
Total Use	27195	26500	28000	26800	0	27200
Ending Stocks	9947	10607	8877	9707	0	7007
Total Distribution	39567	39687	39377	39407	0	35207

Note: Stocks include only milled sugar, as all *khandsari* sugar produced is consumed within the marketing year. Virtually no centrifugal sugar is utilized for alcohol, feed, or other non-human consumption.

Table 2. India: Sugarcane, Centrifugal, Area in Thousand Hectares and others in Thousand Tons

Sugar Cane for Centrifugal Market Begin Year	2014/2015		2015/2016		2016/2017	
	Oct 2014		Oct 2015		Oct 2016	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
India						
Area Planted	4874	5144	5060	4918	0	4700
Area Harvested	4874	5144	5060	4918	0	4700
Production	347000	362333	350000	347000	0	333000
Total Supply	347000	362333	350000	347000	0	333000
Utilization for Sugar	265600	265400	252000	245000	0	225000
Utilization for Alcohol	81400	96933	98000	102000	0	108000
Total Utilization	347000	362333	350000	347000	0	333000

Note: Virtually no cane is utilized directly for alcohol production. 'Utilization for alcohol' in the PS&D includes cane used for *gur*, seed, feed and waste. 'Utilization for sugar' data include cane used to produce mill sugar and *khandsari* sugar

Table 3. India: Sugarcane Area, Production, and Utilization

Sugar Cane	Area ¹	Yield ¹	Product ¹	Sugar ¹	Khandsari ²	Gur ²	Seed ²
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	Mha	MT/ha	MMT	MMT	MMT	MMT	MMT
1990/91	3.69	65.39	241.05	122.32	13.18	76.63	28.93
1995/96	4.15	68.02	282.09	174.76	10.00	67.27	30.06
2000/01	4.32	69.35	299.32	176.65	11.00	75.75	35.92
2001/02	4.41	67.09	295.95	180.32	10.50	69.62	35.51
2002/03	4.52	63.58	287.38	194.33	9.50	49.07	34.49
2003/04	3.94	59.39	233.86	132.51	10.00	63.29	28.06
2004/05	3.66	64.74	237.08	124.77	9.50	74.36	28.45
2005/06	4.20	66.93	281.17	188.67	8.50	50.26	33.74
2006/07	5.15	69.03	355.52	222.00	10.00	80.86	42.66
2007/08	5.06	68.81	348.18	249.91	7.00	49.49	41.78
2008/09	4.44	64.19	285.02	145.00	6.50	99.32	34.20
2009/10	4.18	70.01	292.30	185.55	6.50	65.17	35.08
2010/11	4.89	70.09	342.38	240.00	7.50	53.79	41.09
2011/12	5.08	71.07	361.03	257.00	7.00	53.70	43.32
2012/13	5.06	67.38	341.20	251.50	7.00	41.75	40.94
2013/14	5.01	70.26	352.14	234.32	8.00	67.56	42.25
2014/15	5.14	70.44	362.33	265.40	8.00	45.45	43.48
2015/16	4.92	70.52	347.00	243.00	8.50	53.86	41.64
2016/17	4.71	70.07	330.36	225.00	9.00	56.72	39.64

Note: Figures for 2015/16 and 2016/17 are FAS estimates.

Source: ¹ Directorate of Economic and Statistics, Ministry of Agriculture

² FAS/New Delhi Estimate.

Table 4. India: Mill Sugar Production by State, in thousand metric tons, crystal weight basis

↓ State / MY →	2013/14	2014/15	2015/16	2016/17
	Final	Revised	Estimate	Forecast
Andhra Pradesh	9.8	9.0	8.0	8.0
Bihar	4.4	5.3	5.6	5.5
Gujarat	11.7	11.4	10.0	11.0
Haryana	5.0	4.7	4.8	5.0
Karnataka	42.0	50.0	42.0	35.0
Maharashtra	77.1	105.0	85.0	68.0
Punjab	4.4	4.7	4.5	4.5
Tamil Nadu	17.0	12.0	14.0	15.0
Uttar Pradesh	65.0	71.0	72.0	76.0
Others	7.6	7.0	8.1	5.0
Total	244.06	280.10	254.00	233.00

Table 5. India: Commodity, Centrifugal Sugar, Price Table
(Prices in INR per metric ton)

Year	2014	2015	2016	Percent Change
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January	32,600	30,000	31,750	6
February	31,800	28,500	32,480	14
March	32,300	27,300	34,240	25
April	33,500	27,600	36,300	32
May	35,000	27,300		
June	37,500	25,700		
July	35,000	24,800		
August	34,500	26,400		
September	32,800	27,200		
October	32,200	29,200		
November	31,700	28,700		
December	29,800	31,100		
Exchange Rates:	60.85	64.13	66.39	
	Local Currency INR/US \$			

Note: Exchange rates for 2014, 2015 and 2016 refer to respective Marketing Years (October–September).

Source & Contract Terms: Indian Sugar Mills Association and NFCSF; month-end prices in the Delhi wholesale market.

Table 6. India: Commodity, Gur, Price Table
(Prices in INR per metric ton, actual weight basis)

Year	2014	2015	2016	Percent Change
January	28,800	28,000	29,000	3.57
February	28,500	33,000	29,500	10.61
March	29,000	31,000	30,750	0.81
April	30,000	29,000	31,000	6.90
May	36,000	31,000		
June	35,000	31,500		
July	37,000	33,000		
August	36,000	30,000		
September	36,000	31,000		
October	32000	30,000		
November	29000	28,500		
December	27500	31,000		
Exchange Rate:	60.85	64.13	66.39	
	Local Currency INR/US \$			

Note: Exchange rates for 2014, 2015 and 2016 refer to respective Marketing Years (October-September).

Source & Contract Term: Indian Sugar Mills Association and NFCSF; month-end prices in the Delhi wholesale market.

Table 7. India: Comparative Commodity Support Price Table, INR per metric ton, Minimum Support Price (MSP) or Fair Remunerative Price (FRP)

Marketing Year	2012/13	2013/14	2014/15	2015/16
Wheat	13,500	14,000	14,500	15,250
Rice (Grade A)	12,800	13,450	14,000	14,500
Sugarcane	1,700	2,100	2,200	2,300
State Advised Price (SAP) for Sugarcane, by State				
Uttar Pradesh	2,750-2,900	2,750-2,900	2,750-2,900	2,700-2900
Haryana/Punjab	2,350-2,760	2,750-3,000	2,800-3,100	2,950-3,500
Southern States ¹	2,200-2,500	2,500-2,650	2,200-2650	2,650-2,850

¹: Sugar mills pay market price.

Source: Indian Sugar Mills Association

Note: Latest media report indicate that the Commission for Agricultural Costs and Prices, GOI has recommended a FRP for sugar season 2016/17 at INR 230 per quintal at 9.5 percent recovery level. With every increase in recovery by 0.1 percentage point, the FRP will increase by INR 1.46/quintal.

Table 8. India: Import Trade Matrix, Centrifugal Sugar, MY 2014/15, In Metric Tons

Period	Raw Sugar	White Sugar	Total
October	-	3	3
November	-	21	21
December	-	65	65
January	-	30	30
February	-	93	93
March	-	105	105
April	-	43	43
May	-	115	115
June	-	80	80
July	-	228	228
August	-	227	227
September	-	130	130
Total		1,140	1,140

Source: Industry and trade source.

^: Estimated. Month wise break-up data unavailable

Table 9. India: Export Trade Matrix, Centrifugal Sugar, MY 2014/15, In Metric Tons

Period	Raw Sugar	White Sugar	Total
October	-	88,179	88,179
November	-	124,149	124,149
December	-	135,685	135,685
January	-	162,236	162,236
February	-	193,513	193,513
March	-	192,397	192,397
April	-	111,835	111,835
May	-	128,490	128,490
June	-	186,867	186,867
July	-	235,195	235,195
August	-	160,028	160,028
September	-	224,704	224,704
Total	500,000 #	1,943,278	2,443,278

Source: Industry and Trade sources.

#: Estimated. Month wise break-up data unavailable