



Wonderful India

Purpose

Annual Sugar Marex Symposium

Prepared by

MEIR Commodities India Limited

Reviewed by

Marex

Date of content

15 October 2024



Contents

- Where MEIR Got It Right & Where We Missed the Mark...
- India Sugar Production Estimates 2024/ 25
- India Sugar S&D
- Ethanol Policy Evolution and Recent Actions
- India's Sugar Diversion to Ethanol in 2024 Defied the Trend
- India set to have ample sugar for ethanol expansion
- Will or when Will India Get Back To Exports ?
- 2024 Indian Monsoon
- Conclusion



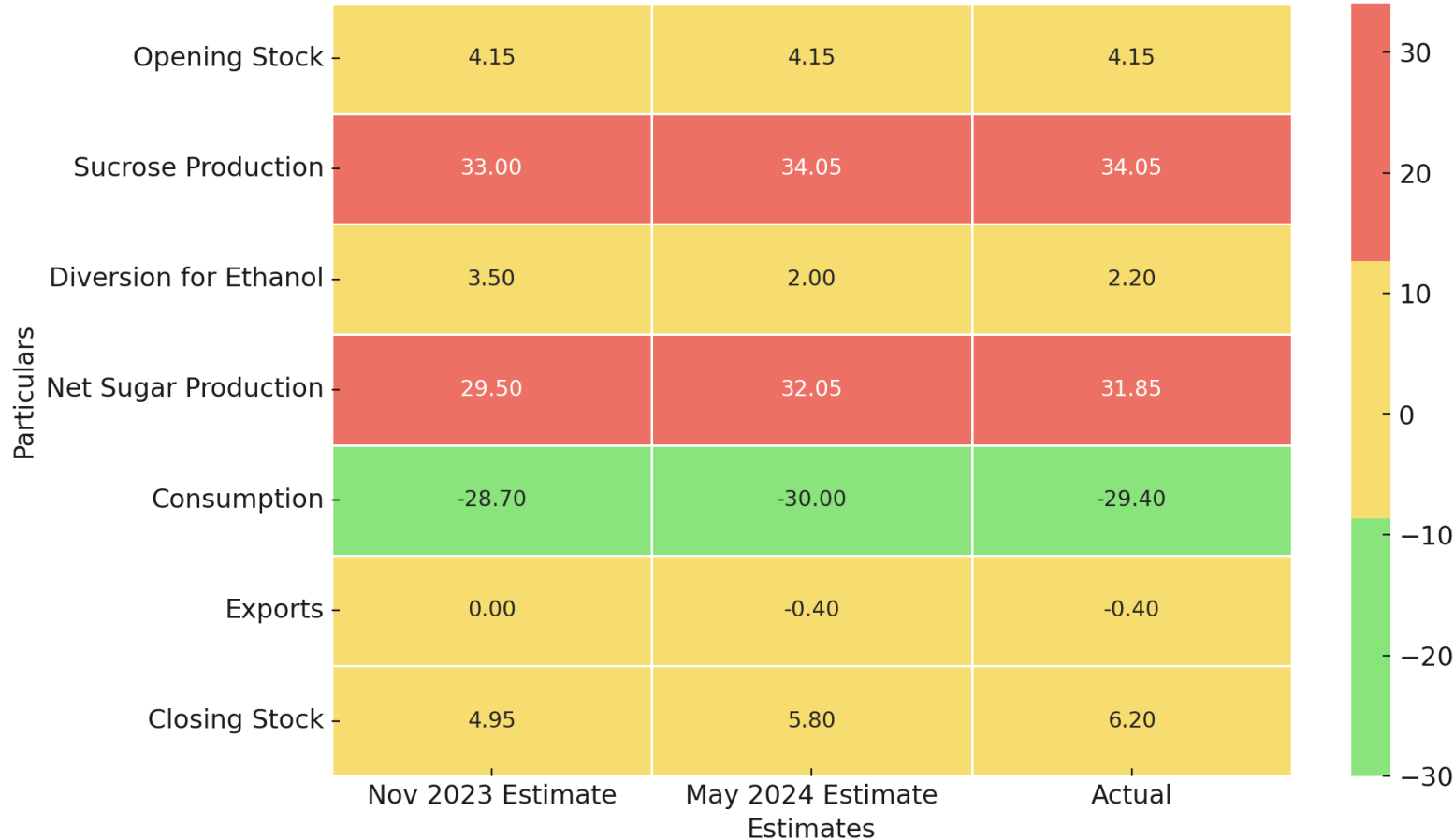
MEIR 2023/24 Forecasts vs. Actual Results & 2024/25 Crop Year Outlook

Speaker **Rahil Shaikh**
(Managing Director, MEIR Commodities India Limited)



Where MEIR Got It Right & Where We Missed the Mark in 2023-24 MAREX

MEIR Forecasts: Heatmap Comparison



Here is a breakdown of what each color in the heatmap represents:

Green: Accurate or very close to the actual outcome.

Yellow : Slight deviation, but within an acceptable range.

Red : Significant deviation from the forecast.

| Comments |
|---|
| Govt of India & sugar associations like ISMA and AISTA (5.7 mmt), trade estimates place the figure between 4 to 5mmt. MEIR's own analysis suggests an opening stock of 4.15mmt. |
| Late rains improved agricultural yields and industrial recovery, increasing sucrose production by around a 1 million tonnes. |
| The government capped ethanol diversion in anticipation of lower sucrose availability and rising domestic sugar prices. Final ethanol diversion figures are expected to fall between 2.1 and 2.5 million metric tonnes (mmt). |
| Net production increased by 2.5 mmt due to reduced ethanol diversion. |
| At the start of the 2023/24 season, we initially projected consumption at 29.5 million metric tons (MMT). After evaluating the monthly quotas and factoring in pilferages, we had revised our estimates in the mid-season to 30 MMT. However, after a further review of the numbers, we downgraded the consumption estimate at 29.4 MMT. Throughout this process, we have remained transparent and aligned with the consumption trends. |
| Data on exports via G2G and NCEL is still being finalized. |
| Stocks are expected to increase with the government focusing on domestic demand and ethanol production. |



India Sugar Production Estimates- 2024/ 25



| Particulars | Maharashtra | Karnataka | Uttar Pradesh | Rest of India | All-India |
|--------------------------------|-------------|-----------|---------------|---------------|--------------|
| Total Sucrose Production (mmt) | 11.8 | 6 | 11.64 | 5.29 | 34.73 |
| Diversion to Ethanol (mmt) | 1.97 | 1.80 | 1.11 | 0.28 | 5.16 |
| Net Sugar Production (mmt) | 9.83 | 4.2 | 10.53 | 5.01 | 29.57 |

- The sugar season in Maharashtra and Karnataka is anticipated to commence in the third week of November. After a few weeks of initial adjustments, plants are expected to reach optimum operational capacities by mid-December. Unlike previous years, this season's one-month delay, with operations resuming in December with full capacity, is projected to result in higher-than-average sucrose yields for plants in these states.
- The primary reason is that the majority of crushing will take place during peak winter, which is more favorable for recovery. The industry will have bypassed the typically low-recovery months of October and November due to cane maturity and the retreating monsoon.
- This year, the monsoon arrived on time in India, and the spatial distribution across sugarcane regions was generally favorable, except for some flooding in the southern part of Maharashtra, which is not expected to significantly affect the overall crop. Our team is currently conducting a crop survey in Maharashtra and Karnataka, and we will issue a detailed report following the tour in the coming weeks.
- While most industry experts predict lower sucrose potential for the 2024/25 season compared to 2023/24. In contrast, MEIR has consistently maintained its projection at 34.7 MMT since July 2024.
- **We will be revisiting our state-wise estimates based on insights from our ongoing crop tour in Maharashtra and Karnataka.**

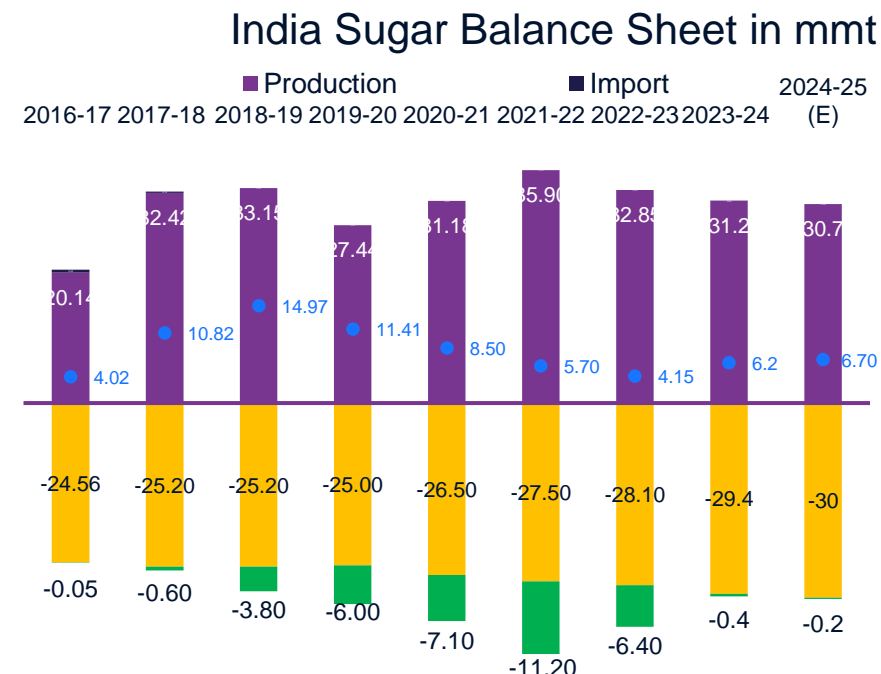


India Sugar S&D

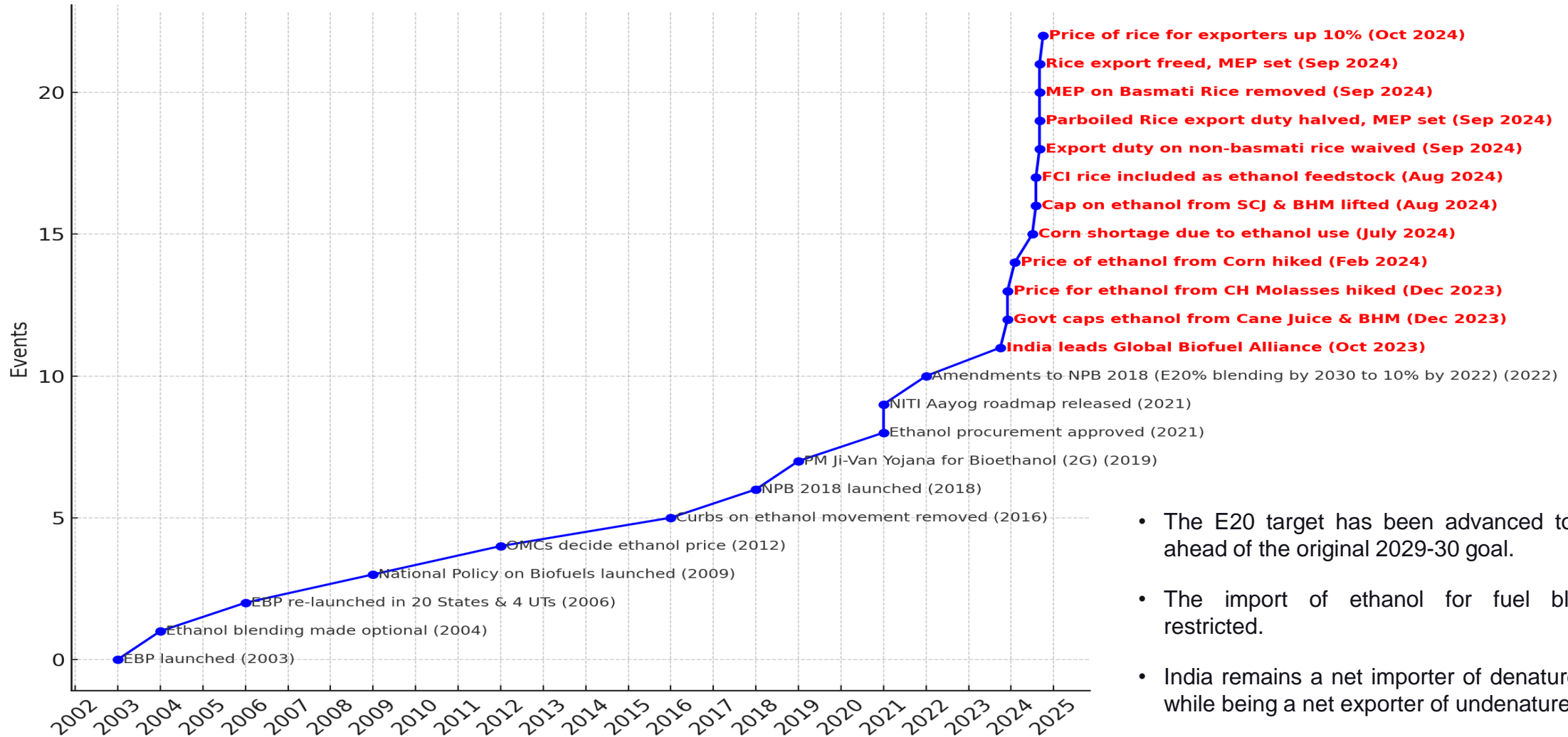


| MEIR | | |
|------------------------------|-------------|-------------|
| Particulars | 2023-24 (E) | 2024-25 (F) |
| Opening stock in MMT | 4.15 | 6.2 |
| Sucrose Production in MMT | 34.05 | 34.73 |
| Diversion for ethanol in MMT | 2.2 | 5.16 |
| Net Production in MMT | 31.85 | 29.57 |
| Consumption in MMT | -29.4 | -30 |
| Exports in MMT | -0.4 | -0.2 |
| Closing stock in MMT | 6.2 | 5.57 |

| Govt. (Est) | | |
|------------------------------|-------------|-------------|
| Particulars | 2023-24 (E) | 2024-25 (F) |
| Opening stock in MMT | 5.7 | 7.8 |
| Sucrose Production in MMT | 34.05 | 33.3 |
| Diversion for ethanol in MMT | 2.2 | 5.16 |
| Sugar Production in MMT | 31.85 | 28.14 |
| Consumption in MMT | 29.4 | 30 |
| Normative closing stock | 0.4 | 0.2 |
| Closing stock in MMT | 7.8 | 5.69 |



- Intense lobbying for exports permission at the recent Indian conference led many to believe that the Govt of India might relent. Notably, this demand has been put forth by the industry now for about six months.
- The math of sugar availability, consumption requirements, and diversion to ethanol for the high-priority EPB programme does not leave any scope for exports unless sucrose production in 2024/25 is equal to or higher than 34.2 MMT in 23/24. The current consensus sucrose production estimate is 33.3 MMT.
- Although MEIR estimates 24/25 sucrose production is at 34.7 MMT, it doesn't expect sugar exports to be permitted before February/ March when India will be in the 5th month of crushing season and a firm assessment of production is available.
- India maintains two distinct balance sheets: one by the government and the other by trade houses. Currently, there is a discrepancy between our opening stock figures and those by the government (We have 1.55MMT lower OS in 2023-24). We anticipate reconciling these numbers once we have greater clarity and confidence in the stock data.

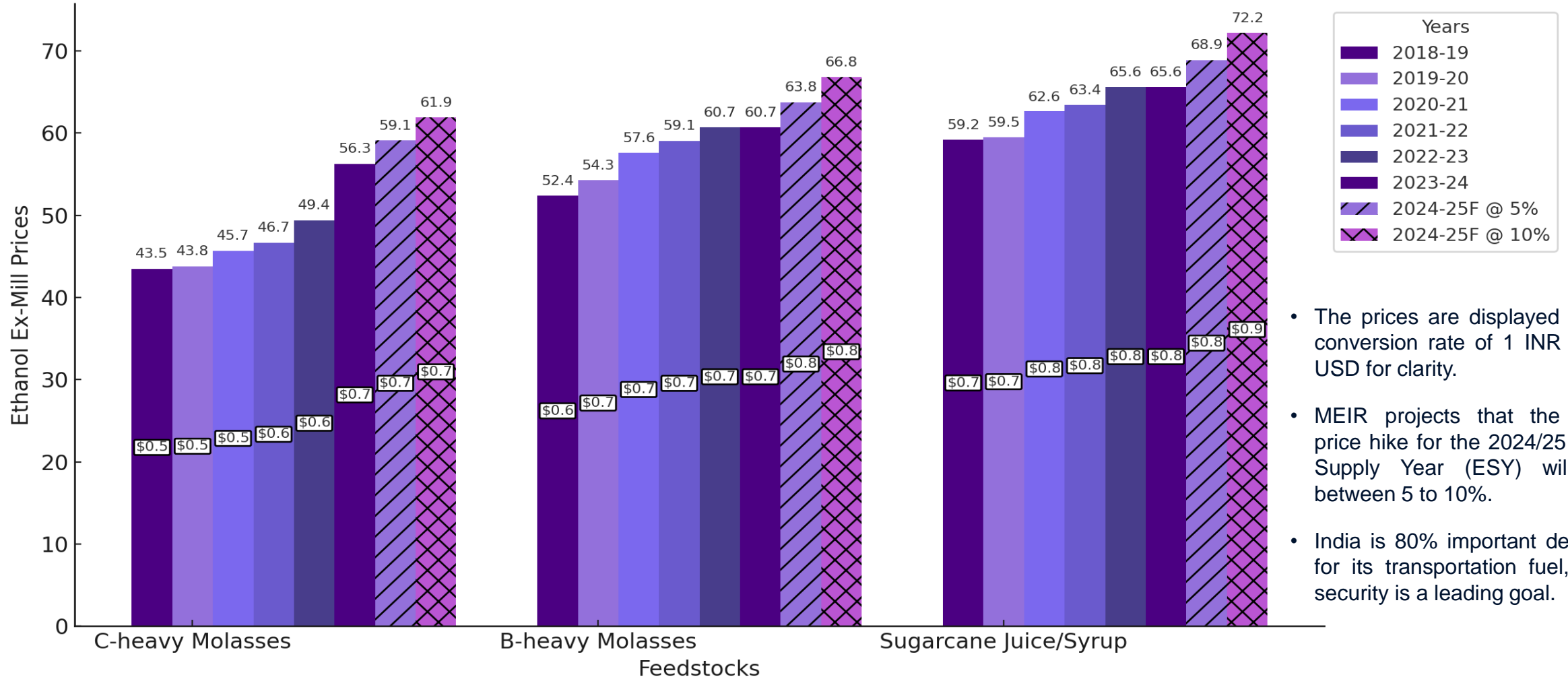


- The E20 target has been advanced to 2025-26, ahead of the original 2029-30 goal.
- The import of ethanol for fuel blending is restricted.
- India remains a net importer of denatured ethanol while being a net exporter of undenatured ethanol.



Ethanol Prices of CHM, BHM & SCJ and 2024/25 forecasts

Ethanol Prices with Forecasts for C-heavy Molasses, B-heavy Molasses, and Sugarcane Juice

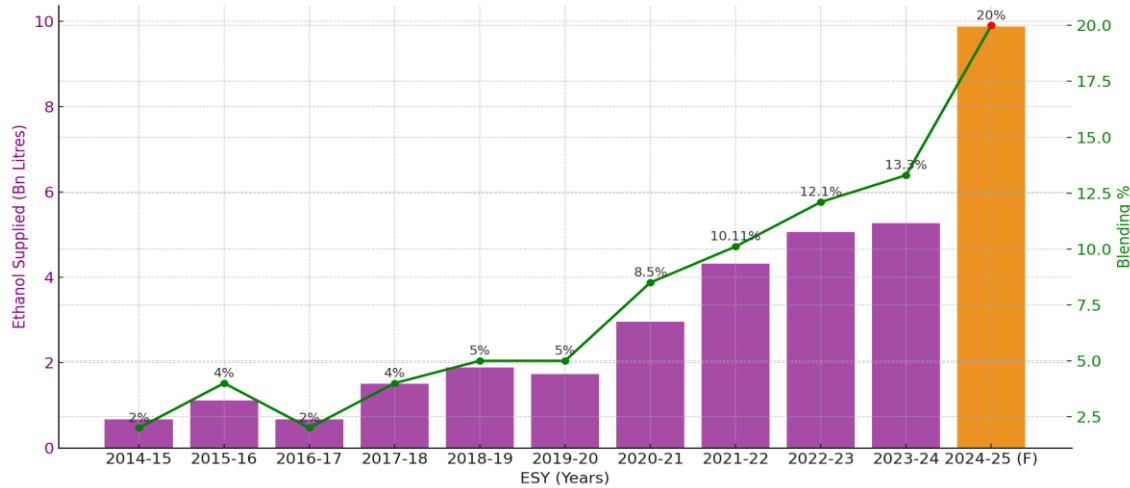




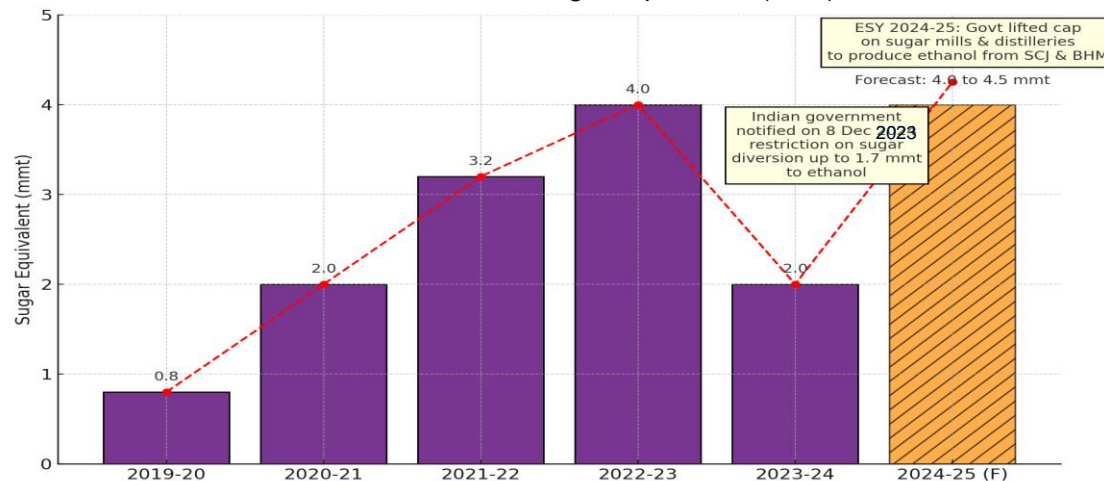
India's Sugar Diversion to Ethanol in 2024 Defied the Trend



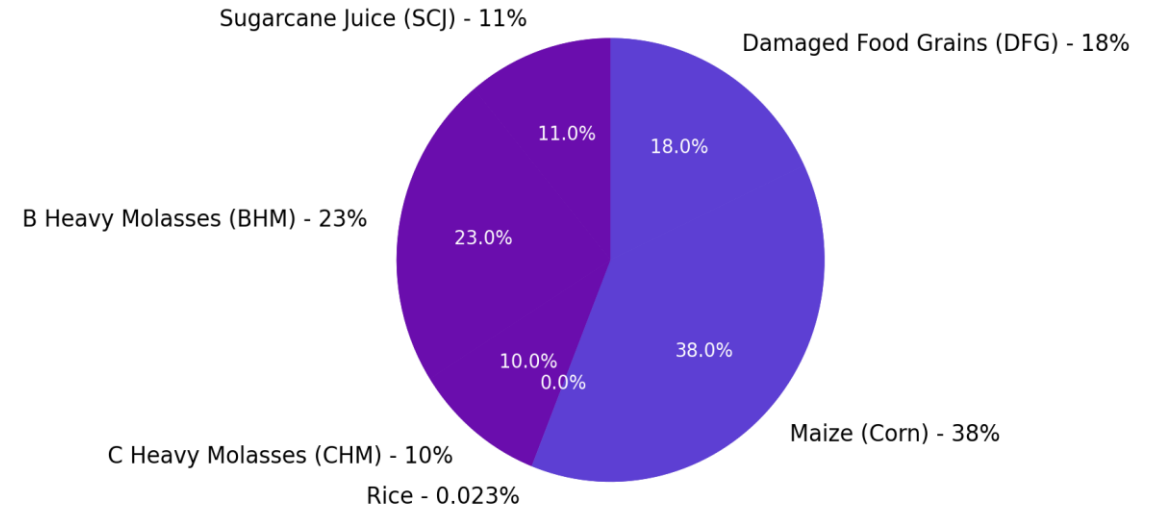
Ethanol Supplied in Bn Litres & Blending %



Ethanol Diversion in Sugar equivalent (mmt)



Ethanol Supply Mix in ESY 2023-24
Grain Ethanol (56%) vs Sugarcane Ethanol (44%)



- India's sugar diversion to ethanol in 2024 defied the trend with a restriction in Dec 2023.
- The decrease in sugarcane ethanol was offset by increased production of grain based ethanol.

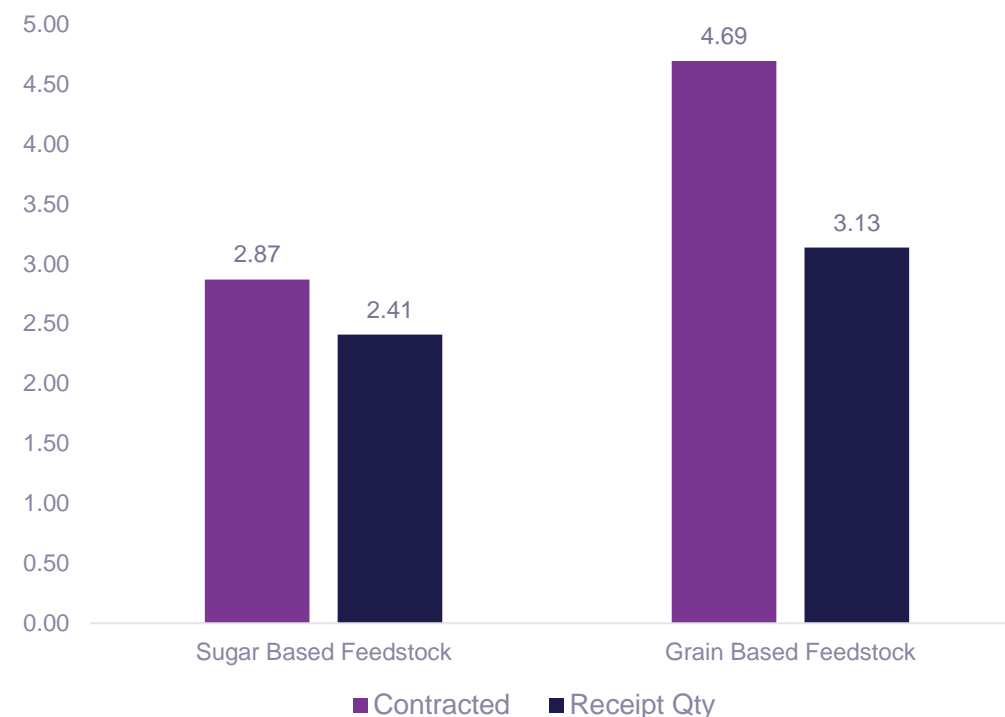


Ethanol Supply in ESY 2023/ 24



| Ethanol Supply as on 15 September 2024 (bln ltr.) | | |
|---|-------------|---|
| Feed Stock | Contracted | Receipt Qty(till 15 th Sept) |
| Sugarcane Juice / Syrup | 0.71 | 0.60 |
| B-Heavy Molasses | 1.54 | 1.29 |
| C-Heavy Molasses | 0.62 | 0.52 |
| Sugar Based Feedstock | 2.87 | 2.41 |
| Damaged Food Grains (100% Broken Rice) | 1.51 | 0.98 |
| Surplus Rice | 0.17 | 0.0013 |
| Corn | 3.01 | 2.15 |
| Grain Based Feedstock | 4.69 | 3.13 |
| Grand Total | 7.56 | 5.54 |

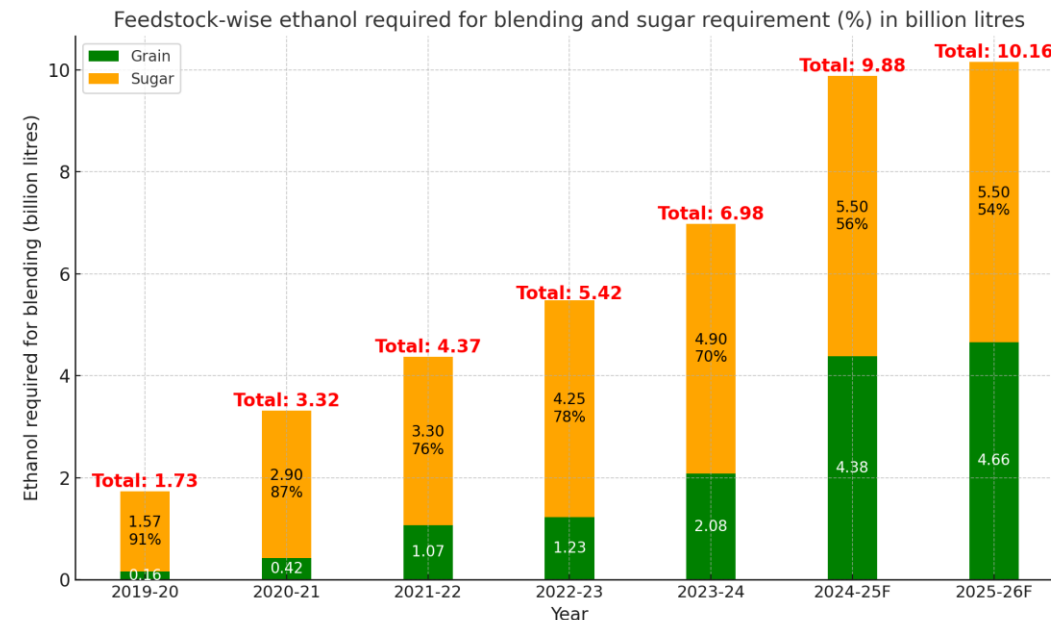
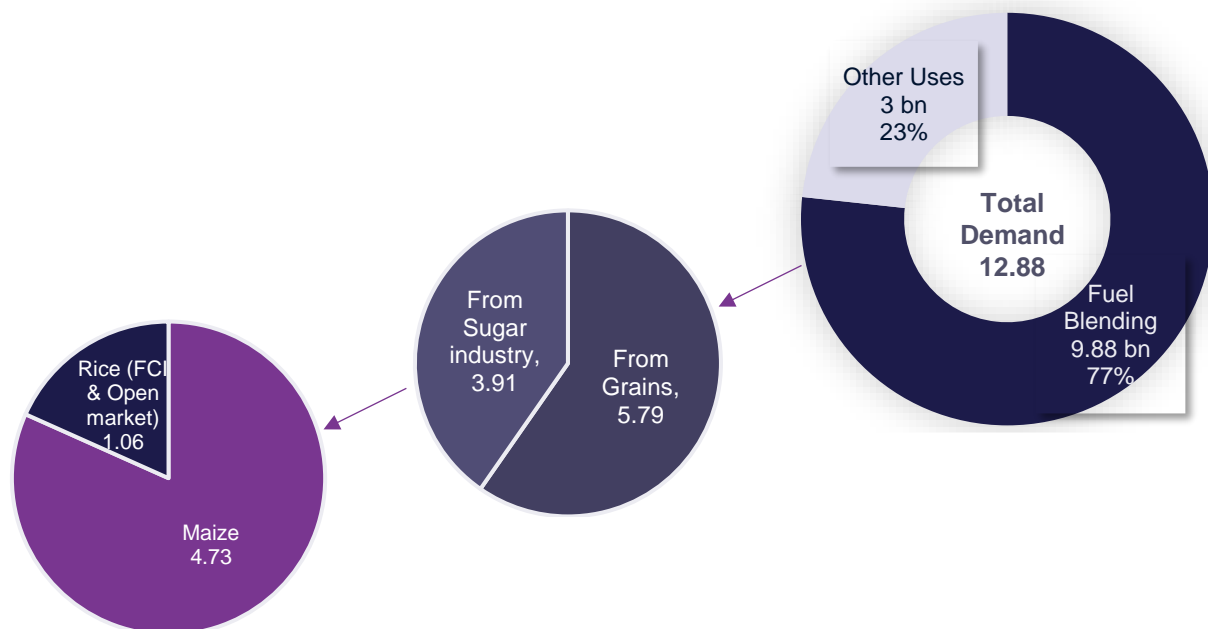
Ethanol Supply as on 15.09.2024 (in Bln Ltr.)
Sugar vs Grains



- According to MEIR estimates, an additional 0.5 billion liters of ethanol is expected to be produced between 15th September and the end of October. This includes 0.1 billion liters from B-heavy molasses, 0.1 billion liters from damaged food grains (100% broken rice), and 0.3 billion liters from corn.



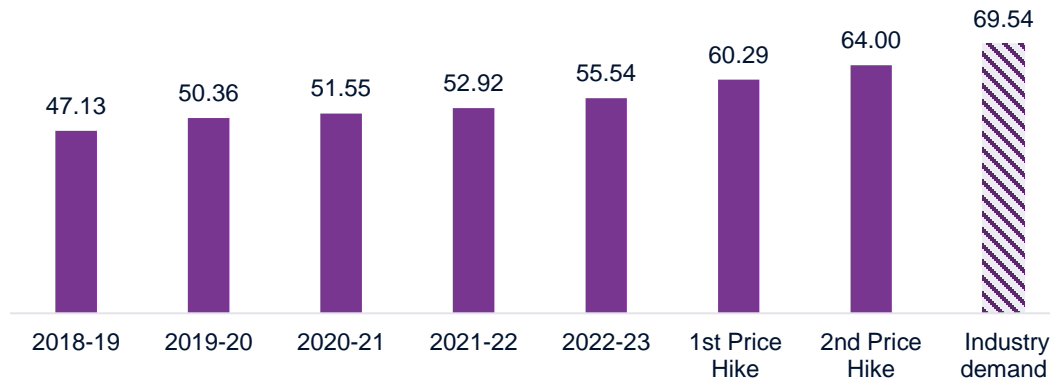
Ethanol Supply Outlook for ESY 2024/ 25



- According to the government think tank NITI Aayog, a total of 9.88 billion liters of ethanol will be required in 2024-25 to achieve a 20% ethanol blend in fuel.
- Oil companies have issued a tender for 9.16 billion liters of ethanol, and manufacturers across the country have submitted offers exceeding this quantity, with more than 9.7 billion liters offered—surpassing the requirement by about 6%.
- For the second year in a row, offers from grain-based ethanol sources have outpaced those from sugar-based sources, with grain-based ethanol contributing 60%, while the sugarcane route accounts for 40%.
- In this scenario, the implied sacrifice of sucrose for ethanol production is significant, with 5.16 million metric tons (MMT) of sugar diverted to ethanol.
- Specifically, 2.32 billion liters of ethanol from sugarcane juice will result in a 3.48 MMT reduction in sugar, while 1.47 billion liters from B-heavy molasses will lead to a sacrifice of 1.68 MMT of sugar

Ethanol Prices of Other Feedstocks and its challenges

Ethanol prices for Damaged Food Grain



Ethanol prices for Maize /Corn



Ethanol prices for Surplus Rice by FCI



Maize is anticipated to play a crucial role, but faces challenges:

- Strong demand growth from the food, poultry, and starch industries, poultry expanding at a double-digit rate and others between 5-7% pa.
- Production of corn, growing at 3.5% pa is not keeping in place with rising demand. Meir expects the price incentive exerted by demand-pull to cause a significant acreage increase for corn at the expense of soybeans, pulses, etc.
- Difficulties in marketing of DDGS due to high mycotoxin content.

Rice is more efficient for ethanol production compared to other feedstocks, but there are concerns:

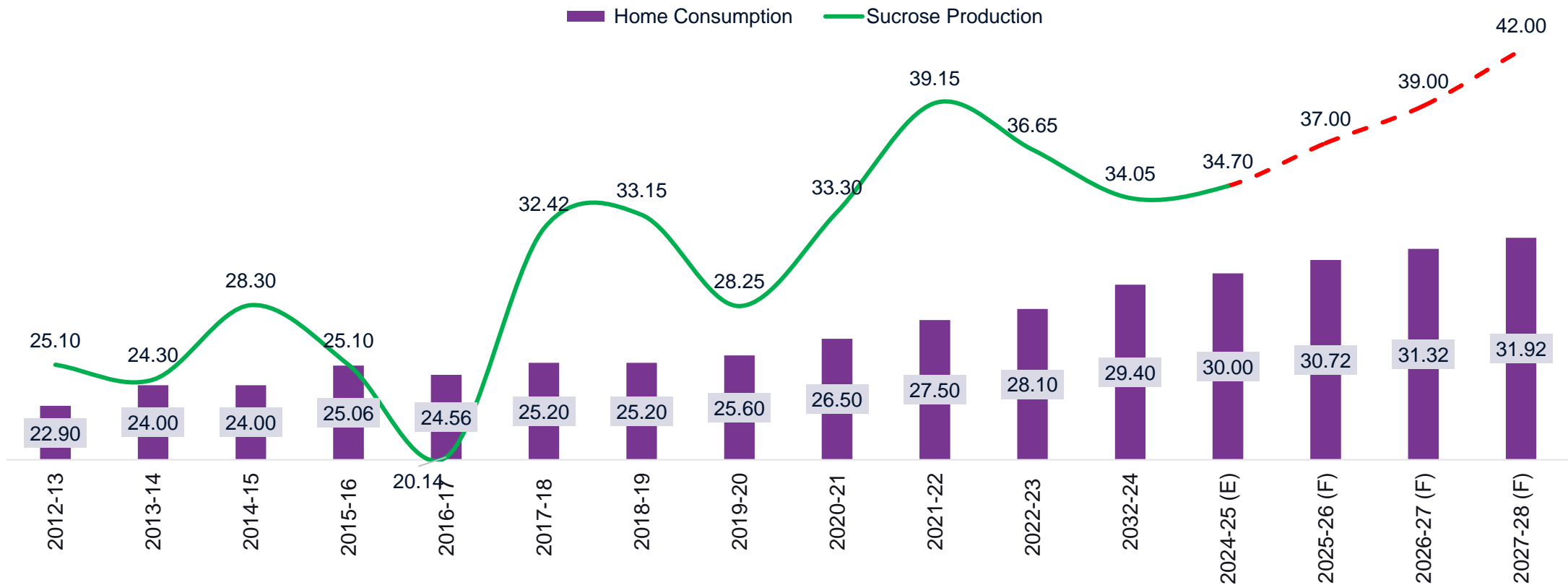
- Issues of food security.
- Rising prices of Rice reflected in rice ethanol prices being kept unchanged.
- Following the removal of the restraint on exports of white rice, exports of 100% broken rice (the mainstay of rice ethanol) have commenced (though not permitted), potentially squeezing the availability as input for ethanol.
- Balancing rice exports with the demand for ethanol production.
- **Higher dependence on grains for EBP could bring to the fore food vs fuel in India, which has a population of 1.45 Bn.**



When Will India Get Back To Exports ?

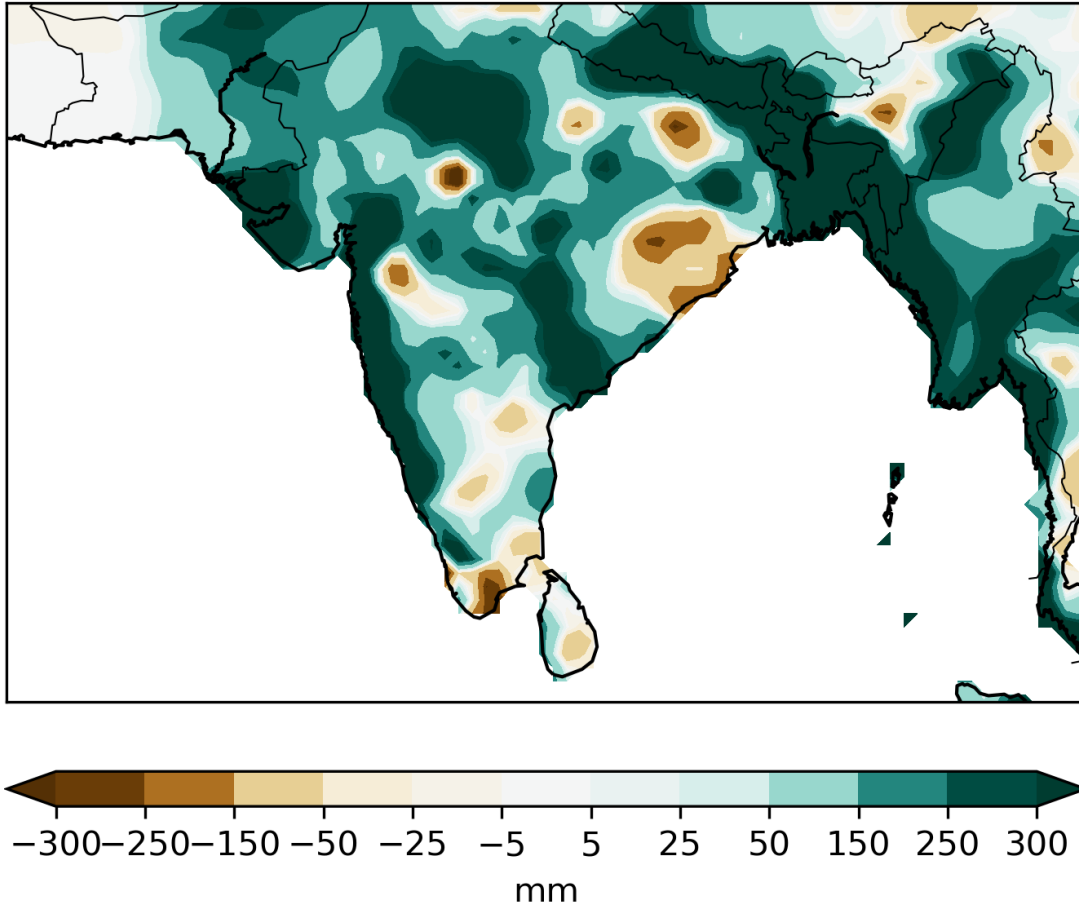


India will continue as a Sucrose surplus nation in the future



The stated policy of Govt of India is to give priority to food, followed by ethanol, with exports being last priority.

Total Rainfall Anomaly (June to September)



- The Indian 2024 monsoon season saw 108% of its long period average according to the IMD.
- The Indian 2023 monsoon season saw 94% of its long period Average. Uneven rainfall throughout the season resulted in drier than normal conditions through June and August in key cane growing regions in Maharashtra and Karnataka.
- Unlike the 2023 season, 2024 saw more consistent rainfall throughout the season and an absence of significant breaks in monsoon rainfall during July and August.
- Maharashtra and Karnataka saw above normal rainfall over the 2024 monsoon season which supported significant improvements in reservoir levels in each state.
- The 2024 monsoon has significantly benefitted sugarcane growth and the sugar industry, particularly in Maharashtra and Karnataka. The consistent rainfall and improved soil moisture have supported healthy crop development, leading to higher expected yields for the 2024/25 season compared to the uneven conditions experienced in 2023.
- Additionally, the increased reservoir levels provide better irrigation capacity, ensuring continued support for both existing crops and new plantations. Favorable weather conditions has been encouraging farmers to expand sugarcane acreage, resulting in a robust supply for upcoming seasons.
- 2024 Monsoon has set stage for bumper crop in 2025/26.



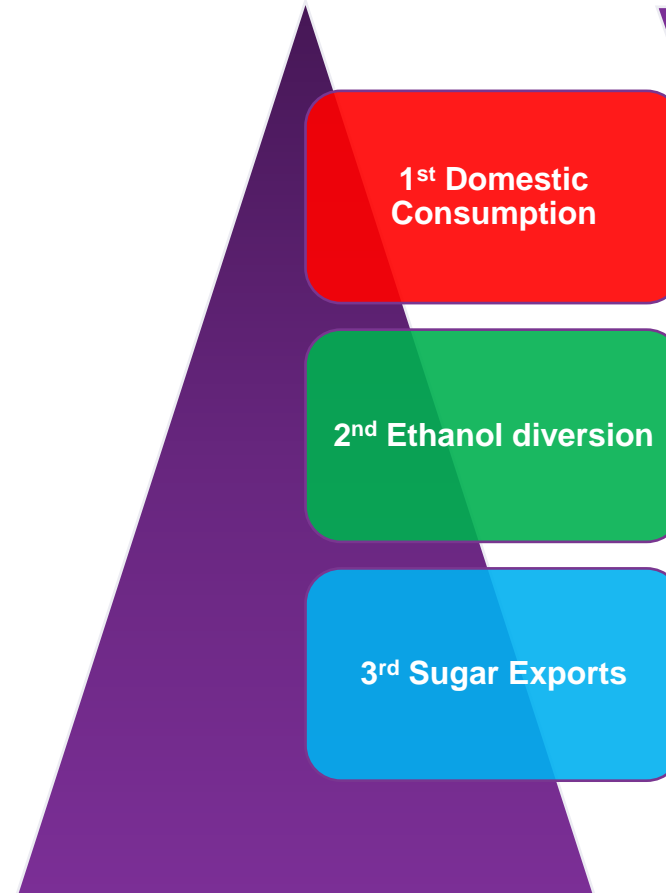
Conclusion

- Government Decision Timeline regarding exports: Expected by February/March 2025 if sucrose production exceeds 34 MMT.
- The sugar industry's demand for an increase in the Minimum Selling Price (MSP) is likely to be deferred to Q1 2025.
- Sugar MSP and Ethanol Prices:
Current MSP: Rs. 31,000 (\$369) PMT, potential 12-15% increase.
Ethanol prices may rise 5-10% for 2024/ 25.
- Government Intervention: As always will remain a significant influence on the market.

Long-term Sugarcane Prospects:

- Sugarcane offers 50-60% higher returns compared to other crops.
- Farmers receive the mandated price for sugarcane, unlike many other crops.
- Area under sugarcane expected to grow with sufficient irrigation and normal monsoons.

Government Priority



Ranking by profitability





This document has been prepared by Marex for information purposes only.

The Marex ® group of companies includes Marex Financial (including the Marex Solutions division), Marex Spectron International Limited, CSC Commodities UK Limited, Tangent Trading Limited, Marex Spectron Europe Limited, Marex North America LLC, Marex Capital Markets Inc., Marex Derivative Products Inc., Marex Spectron USA LLC, Spectron Energy Inc., Marex Australia Pty Ltd, Marex MENA Limited, Marex Hong Kong Limited, Marex Spectron Asia Pte. Ltd., Spectron Energy (Asia) Pte. Ltd., Marex France SAS (including the BIP AM division), X-Change Financial Access, LLC, Starsupply Petroleum Europe B.V., Volcap Trading Partners Limited, Volcap Trading Partners France SAS, Arfinco S.A, HPC SA (including its subsidiaries and branches), OTCex Hong Kong Limited and OTCex LLC (individually and collectively "Marex").

Information in this document should not be considered as advice, or as a recommendation or solicitation to purchase or otherwise deal in securities, investments or any other products. It has been prepared for institutional clients, is not directed at retail customers and does not take into account particular investment objectives, risk appetites, financial situations or needs. Recipients of this document should make their own trading or investment decisions based upon their own financial objectives and financial resources.

This document may contain forward looking statements including statements regarding our intent, belief or current expectations with respect to Marex's businesses and operations, market conditions, results of operation and

financial condition, capital adequacy, specific provisions and risk management practices. Readers are cautioned not to place undue reliance on these forward-looking statements which may be subject to change without notice. While reasonable care has been used in the preparation of forecast information, actual results may vary in a materially positive or negative manner. Forecasts and hypothetical examples are subject to uncertainty and contingencies outside Marex's control. Past performance is not a reliable indication of future performance.

The information in this document is current as at the date of publication. No part of this document may be redistributed, copied or reproduced without prior written consent of Marex. While reasonable care has been taken to ensure that the facts stated are fair, clear and not misleading, Marex does not warrant or represent (expressly or impliedly) the accuracy, completeness or fitness for purpose or use of any information in this document. Any opinions expressed may be subject to change without notice. Marex accepts no liability whatsoever for any direct, indirect or consequential loss or damage arising out of the use of all or any of the data or information in this document.

This document has been approved by Marex Financial ("MF"). MF is incorporated under the laws of England and Wales (company no. 5613061, LEI no. 5493003EETVWYSIJ5A20 and VAT registration no. GB 872 8106 13) and is authorised and regulated by the Financial Conduct Authority (FCA registration number 442767). MF's registered address is at 155 Bishopsgate, London, EC2M 3TQ.

©2023 Marex. All rights reserved.