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Understanding Inflation in India: Real Resource Constraints, Sectoral Pressures, and Fiscal Policy - An MMT-Informed Analysis

Student Research Internship Report

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Foundation to Aid Industrial Recovery

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Abstract

This paper examines the drivers of inflation in India through Modern Money Theory's (MMT) resource-constraint lens, critically evaluating whether mainstream demand-side frameworks adequately explain India's inflation experience. The paper uses data from MOSPI, RBI DBIE, PPAC, IMD, and the Unified Portal for Agricultural Statistics covering 2015–2025. The analysis finds that food prices dominate inflation in peak episodes, fiscal deficits and CPI show no consistent co-movement, fuel inflation follows global commodity cycles, and rising foodgrain production coincided with elevated food prices in several years. These findings are all consistent with supply-side rather than demand-driven dynamics. The findings suggest that supply-side interventions are more appropriate policy responses than monetary tightening alone. This paper contributes to the limited literature applying MMT's diagnostic framework systematically to inflation in India.

Keywords: Inflation, Modern Money Theory, India, CPI Decomposition, Supply-Side Economics, Fiscal Policy, Resource Constraints

Contents

1. Introduction

Between 2020 and 2023, Indian households faced some of the sharpest price rises in recent memory. Everyday essentials like vegetables, cooking oil, and fuel became significantly more expensive. This raised a crucial question: why had inflation been such a persistent problem despite repeated monetary interventions, and was the policy response appropriate?

India is an economy where a deficient monsoon can move the CPI, where a war in Eastern Europe raises cooking oil prices, and where a global crude shock translates directly into household fuel bills. These are real resource constraints, which are not fuelled by demand. Yet, India's inflation management framework treats them as demand problems. This emphasises that the mainstream demand-pull approach may be inadequate to understand India's inflation. Here emerges Modern Money Theory (MMT) as an alternative diagnostic lens worth examining.

India adopted flexible inflation targeting in 2016, with a CPI inflation target of 4% with a $\pm 2\%$ band. The primary instrument is the repo rate. This framework assumes inflation to be demand-driven and interest-rate-sensitive. When inflation is driven by real resource constraints and supply-side factors, repo rate hikes cannot fix the underlying problem. MMT's emphasis on real resource constraints and sectoral bottlenecks offers a unified diagnostic framework.

This paper examines what the primary drivers of inflation in India are, and what role real resource constraints play relative to fiscal expansion. The analysis targets the 2015–2025 time period and follows sectoral decomposition of CPI, supply shock timeline, and fiscal-inflation comparison. Data sources include MOSPI for CPI, RBI DBIE for fiscal data, PPAC for crude oil prices, IMD for monsoon rainfall, and the Unified Portal for Agricultural Statistics for foodgrain production. The empirical analysis shows that India's inflation is predominantly driven by food and fuel supply shocks rather than fiscal expansion, consistent with MMT's resource-constraint interpretation.

Section 2 presents the theoretical foundation drawing on MMT's inflation diagnostics and its applicability to India. Section 3 reviews the existing literature spanning mainstream inflation theory, MMT, its critics, and India-specific inflation studies. Section 4 describes the data sources and analytical methodology. Section 5 presents the empirical findings across four dimensions: CPI sectoral decomposition, fiscal decoupling, fuel pass-throughs, and production-price divergence. Section 6 derives policy implications from the findings. Section 7 concludes and identifies directions for future research.

2. MMT Theoretical Framework for India

Economists like W.A. Coulborn and Milton Friedman carried the orthodox view of inflation, or the mainstream view, that inflation arises when there is *"too much money chasing too few goods."* Modern Money Theory (MMT) looks at inflation from a supply-side lens. MMT argues that inflation occurs when there are real resource constraints, sectoral bottlenecks, and the state is spending beyond productive capacity. This gives a diagnostic view of inflation and is especially relevant for countries like India, where these characteristics are especially evident.

2.1. India's Real Resource Constraints

India faces severe environmental stress, like monsoon variability, destructive summers, and overall extreme weather conditions. These factors contribute heavily to agricultural output. A deficient monsoon impacts crop output while causing supply shortfalls in food markets. This consequently leads to food price spikes and rising CPI. When there is such heavy dependency on monsoons for a productive crop season, it is imperative that markets respond to weather conditions.

The other side of India's resource constraints is the overwhelming dependency on oil imports. India is one of the world's largest importers of oil, making it vulnerable to a changing geopolitical climate. The oil crises unleashed by events such as the Russia-Ukraine war of 2022 and the post-COVID crude surge contributed significantly to India's fuel price inflation.

In addition to supply shocks, structural constraints operate across the entire supply chain, from production to procurement to distribution. These include the MSP mechanism, the cold chain deficit, the APMC market structure, fragmented landholdings, and crop skews. Multiple governmental schemes and interventions are in place, yet they have remained some of the most persistent problems in the Indian agriculture sector.

While MMT accurately diagnoses India's supply-side inflation problem, its applicability has major constraints that must be acknowledged. MMT was developed primarily as a prescriptive framework for fully monetary sovereign countries. India has external debt, is import-dependent, and is not fully currency sovereign, which largely limits the full realisation of MMT's policy prescriptions. This paper borrows MMT's diagnostic lens while acknowledging its prescriptive limitations in the context of a non-currency-sovereign developing economy.

3. Literature Review

3.1. Mainstream View

The mainstream economics view of inflation, particularly the New Keynesian framework, defines it as arising from excess demand relative to productive capacity. Economists like Milton Friedman, in his *"The Role of Monetary Policy"* (1968), defined the benchmark orthodox view of inflation. According to Friedman, inflation occurs when aggregate demand exceeds aggregate supply, and monetary policy is the primary tool for controlling it. This approach reflects the inflation-targeting framework adopted by the Reserve Bank of India, which relies on adjusting the repo rate to influence money supply and anchor inflation expectations.

While this orthodox position has been revised over time, Blanchard and Bernanke's *"What Causes the U.S. Inflation Surge"* offers a more nuanced perspective. Following an analysis of the COVID-19 inflation period, they concluded that while both demand and supply shocks influence inflation, policy still focuses on demand management. Demand is treated as a sustaining factor of inflation, and interest rate hikes are considered necessary to stabilise inflation expectations. In this model, supply shocks are temporary and manageable, and not the core drivers of inflation. Supply shocks are acknowledged in mainstream frameworks, but inflation is ultimately treated as a demand problem.

3.2. MMT As An Alternative

Modern Money Theory (MMT) offers a fundamentally different framework for understanding inflation. Developed by Bill Mitchell, Warren Mosler, Randall Wray, and Stephanie Kelton, among others, MMT centers supply-side factors as the fundamental basis for inflation analysis.

Randall Wray explains that if government spending pushes total spending beyond the country's productive capacity, inflation arises. Therefore, inflation is the real constraint on fiscal policy. Wray's classic MMT argument repeatedly stresses that inflation episodes are usually not demand-driven, such as, oil shocks, food shocks, and supply bottlenecks are supply-driven phenomena. Hence, raising interest rates may not solve the actual problem.

Inflation, according to MMT, is essentially a real-resource and institutional phenomenon caused by capacity constraints, cost shocks, and distributional conflicts.

3.3. MMT's Critics

Gerald Epstein offers a fundamental critique of MMT with respect to its relevancy to developing economies. MMT's core claim of monetary sovereignty, Epstein argues, while true domestically, becomes practically meaningless for developing countries facing

external constraints.

This is because developing countries often depend on imports for oil, machinery, and technology, which raises import demand. If imports do not rise correspondingly with higher income, the current account deficit widens, foreign exchange reserves fall, external borrowing rises, and the exchange rate comes under pressure. From this perspective, inflation in developing countries may be shaped not only by domestic resource constraints but also by external sector vulnerabilities. This complicates the policy prescriptions implied by MMT.

In response, proponents of MMT, including Éric Tymoigne, have argued that MMT does not deny the existence of real constraints, including external ones, but seeks to identify them more accurately. He argues that currency sovereignty exists in degrees, and thus institutional context matters to Epstein's objections. A country with foreign currency debt, managed exchange rates, and heavy import dependence has less policy autonomy. His key defence is that sectoral balance analysis is the diagnostic tool for identifying these constraints. It is within this qualified application of MMT that this paper situates its analysis of India.

3.4. Food Inflation Evidence from India

There is substantial evidence on inflation in India that highlights the dominant role of food prices and supply-side factors. Michael Debabrata Patra and co-authors show that food price shocks are a primary transmission channel for headline inflation, given food's 45.86% weight in the CPI basket. The analyses by C.S.C. Sekhar and Namrata Thapa demonstrate how disruptions during the COVID-19 pandemic amplified food price volatility through supply chain constraints and logistical bottlenecks. Anirban Sanyal further identifies production shocks and distribution inefficiencies as key transmission mechanisms.

Taken together, this literature shows that inflation in India is strongly influenced by sector-specific supply constraints, especially in agriculture, where output is highly sensitive to climate shocks and structural inefficiencies.

3.5. Energy and Commodity Spillovers

Given India's high import dependence, energy prices , particularly crude oil, play a significant role in shaping inflation dynamics. An empirical study by Fortune Chiugo Ihebuluche shows that the pass-through of oil price changes to inflation varies across countries depending on structural and policy factors, including taxation, subsidies, and exchange rate movements. In India, oil price pass-through is mediated through institutional mechanisms such as excise duty adjustments and subsidy policies, resulting in partial and uneven transmission to retail prices.

Anshul Vyas's analysis highlights a divergence between global inflation trends and domestic inflation persistence. This suggests that commodity price resilience sustains India's inflation even when global inflation moderates. These findings further reinforce the view that inflation dynamics in India are shaped by sector-specific factors, with varying degrees of influence and transmission across food and fuel components.

3.6. Monetary Policy Effectiveness

Several studies in India question the effectiveness of repo rate adjustments as inflation-targeting mechanisms. Pulapre Balakrishnan and M. Parameswaran suggest that the decline in inflation in recent years may be associated with easing commodity prices rather than the direct impact of monetary tightening. This raises serious concerns about the appropriateness of demand-management tools in addressing inflation driven by sector-specific supply shocks. In these cases, interest rate increases may worsen economic activity without resolving the primary causes of inflation, exposing a potential mismatch between policy instruments and inflation dynamics.

Existing literature in India on the drivers of inflation has examined food prices, supply shocks, and monetary policy independently. However, there is limited integration of these perspectives. In particular, there is a scarcity of systematic empirical analysis decomposing inflation into its major components to assess the relative contribution of food, fuel, and core sectors over time.

Finally, while Modern Money Theory offers a useful framework for understanding inflation through a supply-side perspective, its application to developing countries such as India remains limited. This paper seeks to address these gaps by providing a sectoral decomposition of inflation dynamics in India, situated within a resource-constraint framework.

4. Methodology

The time period for inflation analysis is 2015–2025. This timeframe was chosen because it captures pre-pandemic, pandemic, and post-pandemic inflation episodes, allowing comparison across different inflationary environments. Monthly CPI data was obtained from MOSPI, including general, food, fuel, and miscellaneous components. Fiscal deficit as a percentage of GDP was obtained from the RBI DBIE portal. PPAC is the source for crude oil Indian basket price and diesel and petrol international prices. IMD provided annual southwest monsoon rainfall data. Foodgrain production volumes were obtained from the Unified Portal for Agricultural Statistics and data.gov.in.

This study uses both descriptive and decomposition analysis. CPI components were grouped into three buckets: food (45.86% weight), fuel (6.84%), and miscellaneous

(28.32%), using the 2012 base year weights from MOSPI. The contribution of each component is calculated as:

$$\text{Contribution (pp)} = \frac{\text{Component Weight}}{100} \times \text{Component Inflation Rate} \tag{1}$$

expressed in percentage points. Annual averages were computed from monthly data for all CPI variables. Fiscal trends, supply shocks, and inflation episodes were examined together to identify patterns. All analyses were conducted using Microsoft Excel and Google Sheets. MMT's resource-constraint framework is used as the interpretive lens, given its emphasis on sectoral bottlenecks and real resource limits as primary drivers of inflation.

Several limitations of this study must be acknowledged. Descriptive analysis cannot establish causality, and therefore deeper econometric study is required to form a well-rounded conclusion. Pulses were excluded from production data due to unavailability, which understates agricultural supply constraints. Moreover, 2025 data is partial, as some series were incomplete. This study is interpretive and exploratory; econometric analysis would deepen the understanding of inflation drivers and extends the future scope for the project.

5. Empirical Analysis

5.1. Sectoral Decomposition of CPI

The CPI decomposition reveals that food is the dominant contributor across the decade. This is especially visible in the high-food-share years: 2020 (59.9%), 2023 (53.2%), and 2024 (70.5%). Notably, during the 2017–18 period, food contribution dropped below 25%, and overall CPI fell correspondingly. The CPI General line tracks food contribution closely, suggesting that headline inflation is largely determined by food price movements rather than broad-based price pressures.

A key analytical point is that if inflation were generalised demand-pull, all three components would rise proportionally together. As the decomposition data shows, that is not the case. Food and fuel spike episodically while miscellaneous inflation remains relatively stable throughout. This pattern is consistent with the MMT analysis that sectoral bottlenecks drive inflation, rather than economy-wide excess demand.

5.2. Fiscal Deficit and Inflation

The central finding of fiscal deficit decoupling is that the fiscal deficit and CPI do not co-move consistently. This is most evident in the 2021 anomaly: the highest fiscal deficit in the dataset stood at 9.2% of GDP, yet food CPI was just 3.69%, which is

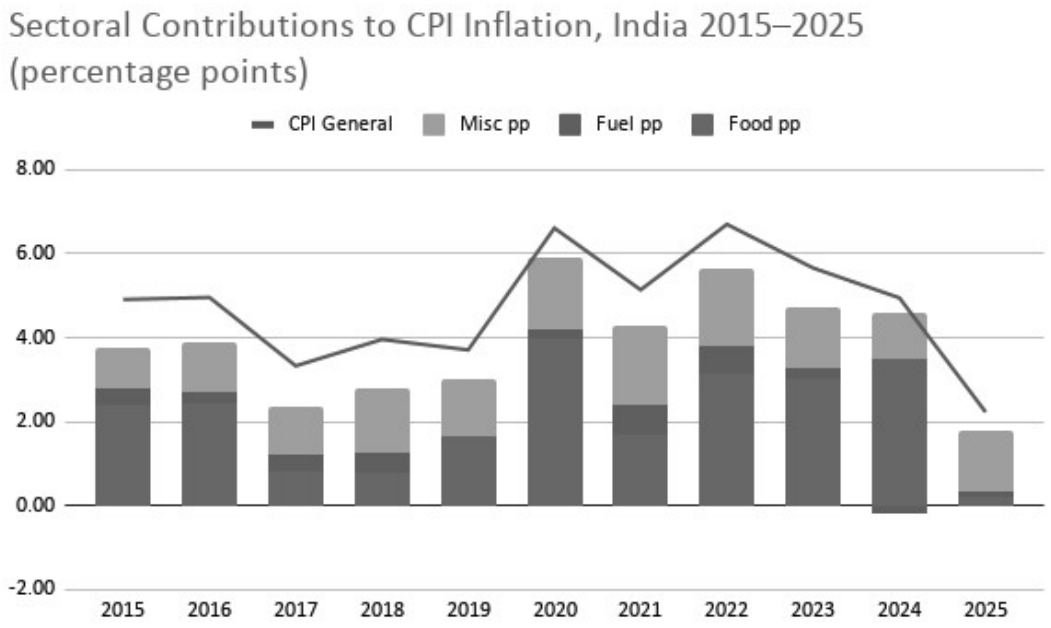

Figure 1: Sectoral Contributions to CPI Inflation, India 2015–2025 (percentage points).
Source: Author's calculations based on MOSPI data.

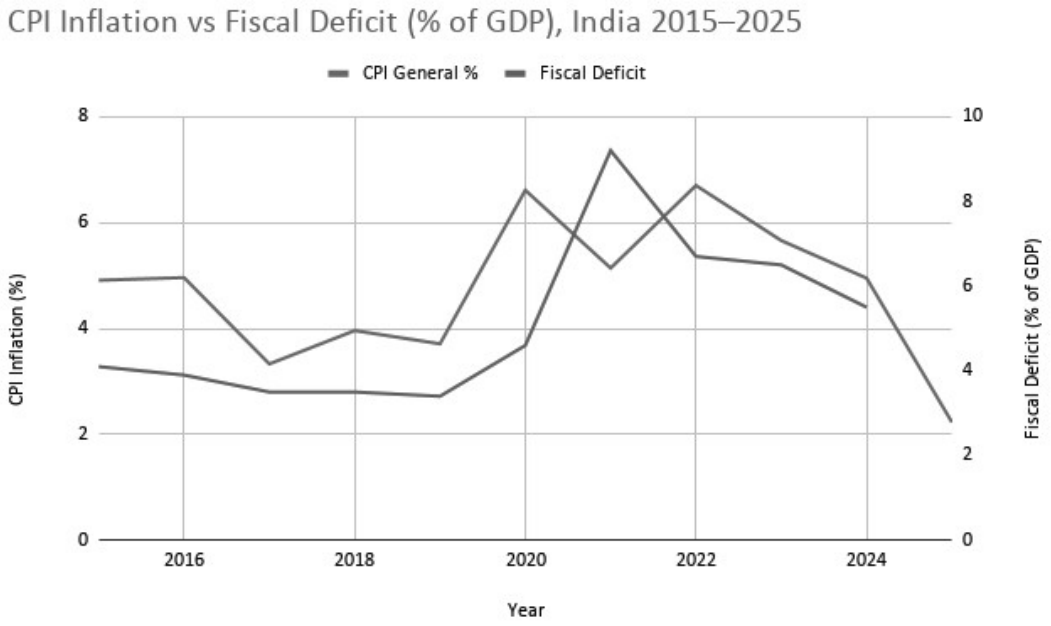

Figure 2: CPI Inflation vs Fiscal Deficit (% of GDP), India 2015–2025.
Source: MOSPI, RBI DBIE.

one of the lowest readings outside 2017. Moreover, in 2020, a moderate fiscal deficit of 4.6% coincided with a CPI spike to 6.61%, driven entirely by COVID-induced supply disruption.

These findings lead to an important conclusion: if fiscal expansion caused inflation, 2021 should have been the most inflationary year. The data suggests instead that supply-side shocks are the primary drivers of inflation in India, coming in sharp contrast to the mainstream belief that fiscal deficits drive inflation. In 2020, COVID-induced supply chain disruptions increased food prices despite moderate government spending. In 2021, global commodity price increases drove fuel CPI above 10% while food inflation remained subdued. This pattern is inconsistent with demand-pull dynamics.

5.3. Fuel Inflation and Imported Price Pressures

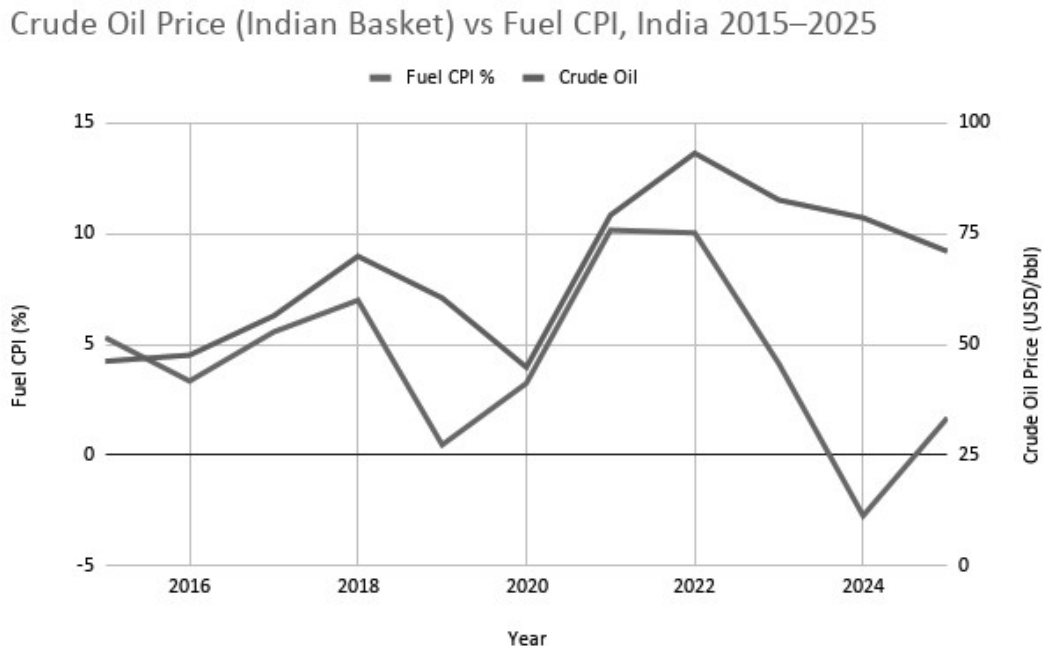

Figure 3: Crude Oil Price (Indian Basket) vs Fuel CPI, India 2015–2025.
Source: PPAC, MOSPI.

There appears to be a near-mechanical relationship between crude oil prices and fuel CPI, as evident in Figure 3. The key episodes illustrate this relationship clearly: crude rose 76.7% in 2021, prompting fuel CPI to hit 10.16%. As crude fell in 2024, fuel CPI turned negative at −2.74%.

India's government acts as an institutional mediation point, partially buffering crude shocks through excise duty adjustments and subsidies, resulting in incomplete but economically significant pass-through to retail prices. This volatility in fuel CPI cannot be attributed to domestic demand conditions; rather, it follows global commodity cycles

with a lag. Fuel inflation in India is a direct real resource-constraint story, supporting the MMT view. India's structural import dependence makes it vulnerable to external price shocks.

5.4. Production-Price Divergence

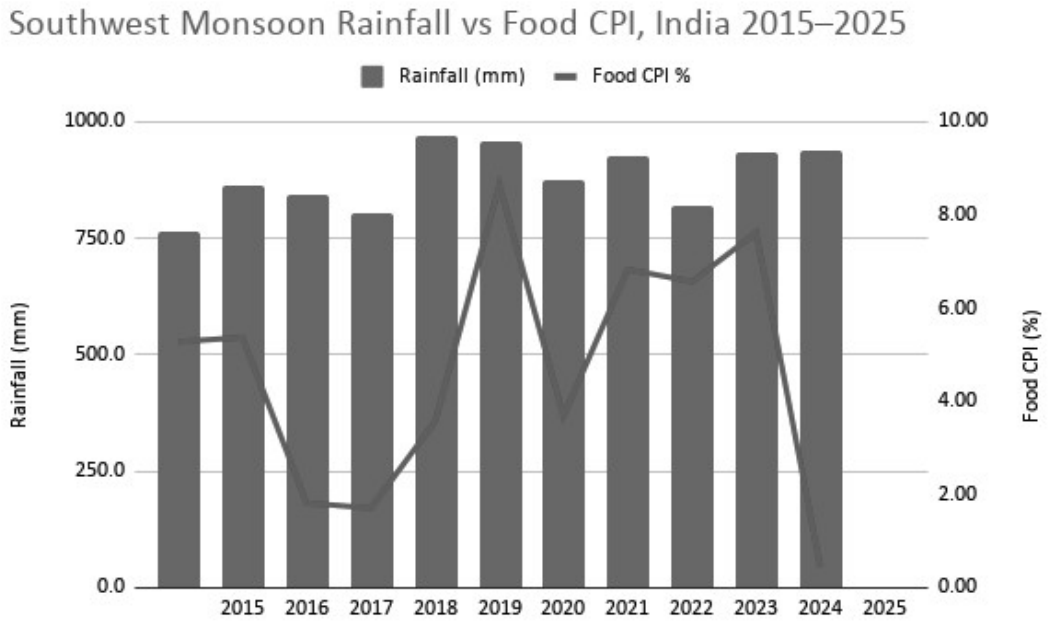

Figure 4: Southwest Monsoon Rainfall vs Food CPI, India 2015–2025.
Source: IMD, MOSPI. Note: Long Period Average (LPA) = 868.6 mm. Years with rainfall below LPA indicate deficient monsoons.

Evidence from the production data reveals foodgrain production rising consistently across the decade: +4.3% in 2019, +4.0% in 2020, and +5.1% in 2022. Yet food CPI remained elevated in these same years. The 2022–23 case provides the strongest example: production grew 5.1% but food CPI was 6.83%, driven by disrupted edible oil and fertiliser imports during the Russia-Ukraine conflict, as opposed to domestic supply failure.

Figure 4 reveals that not all deficient monsoon years produced high food inflation. The 2017–18 period is an anomaly, with deficient rainfall but low food CPI. It demonstrates that monsoon alone does not explain food inflation, and that institutional factors like distribution systems and import dependence matter significantly.

In 2024–25, production surged 7.8% and the external commodity shock resolved simultaneously; food CPI collapsed to 0.45%, demonstrating that when both supply improved and external pressures eased, inflation fell regardless of fiscal stance. This reinforces the MMT point: the primary inflationary constraint was external and structural, not domestic fiscal expansion.

6. Policy Implications

Empirical findings show that inflation is supply-side and sectoral in nature. This raises a critical question about the appropriateness of the mainstream policy response. Repo rate hikes suppress demand economy-wide, but the data shows that demand was not the problem in most inflation episodes. Using a demand-side tool to fix a supply-side problem does not address root causes and may hurt growth unnecessarily. Findings from Balakrishnan and Parameswaran's analysis show that commodity price moderation drove the decline in inflation and not rate hikes, further supporting the MMT position.

From the sectoral decomposition data, food drives 50–70% of inflation in peak years. The policy response should therefore target food supply directly. Three targeted interventions emerge from this analysis: investment in cold chain infrastructure to smooth food price volatility; reforming the APMC market structure; and strengthening buffer stock management. This connects with the PDS data. Wheat stocks fell to historic lows in 2022–23, coinciding with the food inflation spike. The MMT framework becomes relevant here: government spending on productive agricultural capacity is non-inflationary because it expands real supply.

India's structural vulnerability to global crude cycles is a real resource constraint that cannot be fixed by monetary policy. Policy responses must target reducing this structural dependency through strategic expansion of the petroleum reserve and accelerating the transition to renewable energy. This is a long-term structural argument: rate hikes do nothing to reduce oil import dependence, and thus policies must target domestic resilience.

Éric Tymoigne adds a distributional dimension to the inflation debate, arguing that inflation often reflects struggles over income shares. He advocates for taxation as an anti-inflationary tool that absorbs excess spending power without suppressing productive activity, and supports the job guarantee programme as an automatic stabiliser that maintains employment while anchoring wage-price dynamics. These are MMT prescriptions designed for currency-sovereign economies and must therefore be applied carefully to India's context.

The broader reframing that MMT offers is that inflation is a structural governance problem, not merely a monetary management problem as mainstream frameworks suggest. India therefore needs a multi-instrument approach that combines targeted supply-side interventions with careful fiscal management. Monetary policy has a role to play, but it must complement supply-side measures rather than serve as the primary solution.

7. Conclusion

This paper examined whether India's inflation experience is consistent with Modern Money Theory's resource-constraint interpretation. It examined the research question: what are the primary drivers of inflation in India, and what role do real resource constraints play relative to fiscal expansion? By employing sectoral decomposition, supply shock timelines, and fiscal-inflation comparison across 2015–2025, the paper assessed the real drivers of inflation in India.

Food dominates India's inflation in every high-inflation episode, peaking at 70.5% of total CPI in 2024. Fuel inflation follows global commodity cycles mechanically, the 2021 crude surge and 2024 deflation are externally driven by the COVID crisis and Russia-Ukraine war respectively. Fiscal deficit and CPI do not co-move, the 2021 case is the clearest anomaly. The 2022–23 case, where rising production coincided with elevated food CPI, confirms external shock dominance. Taken together, these findings are more consistent with the MMT resource-constraint interpretation than with the mainstream demand-pull narrative.

The findings of the paper support MMT's diagnostic framework that inflation in India is sectoral and structural, and not generalised. However, full MMT policy prescriptions face real constraints in India's non-currency-sovereign context, as Epstein's critique highlights. This paper contributes to the existing MMT literature by providing empirical grounding for applying MMT's diagnostic lens to a developing country. This is something the existing literature has not done systematically.

The core limitation of this paper is that while descriptive analysis explains the drivers of inflation, it cannot fully establish causality. The pulse production data gap also understates agricultural constraints. These findings are interpretive, suggesting consistency with MMT but not constituting proof. These limitations define the boundaries of the study's claims without undermining its core findings.

Future research directions could incorporate econometric analysis such as VAR models or Granger causality tests between fiscal deficit and CPI, which would strengthen causal claims. Extending the MMT framework to other developing countries with similar structural characteristics, such as those in South Asia and Sub-Saharan Africa, would deepen understanding of inflation in these contexts. Building on Tymoigne's distributional argument, future work could explore CPI-Rural vs CPI-Urban divergences and income-group-specific inflation baskets. The job guarantee and taxation proposals from MMT economists also deserve empirical testing in the Indian context specifically.

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Appendices

A. Sectoral Decomposition Table

Table 1: Sectoral Decomposition of CPI Inflation – India (2015–2025)

Year	Inflation Rates (%)				Contribution (pp)				Food %
	CPI	Food	Fuel	Misc	Food	Fuel	Misc	Residual	Share
2015	4.91	5.28	5.30	3.45	2.42	0.36	0.98	1.15	49.3%
2016	4.96	5.37	3.34	4.28	2.46	0.23	1.21	1.06	49.7%
2017	3.33	1.82	5.56	3.99	0.83	0.38	1.13	0.99	25.1%
2018	3.96	1.71	6.99	5.35	0.78	0.48	1.52	1.18	19.8%
2019	3.71	3.57	0.46	4.76	1.64	0.03	1.35	0.69	44.1%
2020	6.61	8.64	3.24	6.09	3.96	0.22	1.72	0.71	59.9%
2021	5.14	3.69	10.16	6.71	1.69	0.69	1.90	0.86	32.9%
2022	6.70	6.83	10.03	6.44	3.13	0.69	1.82	1.06	46.7%
2023	5.66	6.57	4.12	5.06	3.01	0.28	1.43	0.94	53.2%
2024	4.95	7.62	−2.74	3.82	3.49	−0.19	1.08	0.57	70.6%
2025	2.23	0.45	1.68	5.23	0.21	0.11	1.48	0.43	9.3%

Notes: Weights: Food & Beverages: 45.86%, Fuel & Light: 6.84%, Miscellaneous: 28.32% (CPI 2012 base, MOSPI). pp = percentage points contributed to overall CPI. Residual covers clothing, housing, and pan/tobacco sub-groups. Annual figures are simple averages of monthly data.

Source: Author's calculations based on MOSPI data.

B. Supply Shock Timeline

Table 2: Supply Shock Timeline – India (2015–2025)

Year	Crude $/bbl	Crude YoY %	Diesel Intl $	Rain (mm)	Dep. LPA %	Prod (LT)	Shock	Food CPI %	Fiscal % GDP
2015	46.17	–	–	765.4	−11.9	–	YES	5.28	4.1
2016	47.56	+3.0	–	863.7	−0.6	2497.9	–	5.37	3.9
2017	56.43	+18.7	–	843.7	−2.9	2573.8	–	1.82	3.5
2018	69.88	+23.8	82.51	802.4	−7.6	2611.7	YES	1.71	3.5
2019	60.47	−13.5	71.78	969.4	+11.6	2723.9	–	3.57	3.4
2020	44.82	−25.9	47.86	956.7	+10.1	2832.7	YES	8.64	4.6
2021	79.18	+76.7	88.45	874.6	+0.7	2865.8	YES	3.69	9.2
2022	93.15	+17.6	128.08	925.0	+6.5	3013.3	YES	6.83	6.7
2023	82.58	−11.3	101.25	820.0	−5.6	3059.0	YES	6.57	6.5
2024	78.56	−4.9	89.41	934.8	+7.6	3296.8	–	7.62	5.5
2025	70.99	−9.6	92.11	937.2	+7.9	–	–	0.45	–

Notes: LPA (Long Period Average rainfall) = 868.6 mm (IMD). Shock flagged where rainfall deviation $< -5\%$ LPA, crude oil YoY change $> \pm 20\%$, or known exogenous event (COVID 2020, Russia-Ukraine 2022). Production in Lakh Tonnes; includes Rice, Wheat, Maize, Jowar, Bajra, Ragi – pulses excluded due to data unavailability.
Sources: PPAC (crude & fuel prices), IMD (rainfall), Unified Portal for Agricultural Statistics (production), MOSPI (food CPI), Union Budget/RBI (fiscal deficit).

Shock Descriptions:

Year	Primary Shock / Notes
2015	Deficient monsoon (−12% LPA); second consecutive year
2016	Demonetisation November 2016; near-normal monsoon
2017	Post-demonetisation supply disruption; normal monsoon
2018	Crude +24%; below-normal monsoon (−8% LPA)
2019	Onion crisis; above-normal monsoon; crude −14%
2020	COVID supply chain collapse; crude crash −26%
2021	Global commodity surge; crude +77%; fuel CPI >10%
2022	Russia-Ukraine war: edible oil, fertiliser, fuel spike
2023	El Niño; uneven monsoon (−5.6% LPA); vegetable price spike
2024	Above-normal rain; fuel deflation; food CPI persists
2025	Food CPI collapses; services inflation sticky

C. Master Dataset

Table 3: Master Dataset – India Inflation Analysis (2015–2025)

Year	CPI %	Food CPI %	Fuel CPI %	Misc CPI %	Fiscal Def % GDP	Crude $/bbl	Diesel Intl $/bbl	Petrol Intl $/bbl	Rain (mm)	Dep LPA %	Prod (LT)	Prod YoY %	Wheat (LT)
2015	4.91	5.28	5.30	3.45	4.10	46.17	–	–	765.40	−11.90	–	–	–
2016	4.96	5.37	3.34	4.28	3.90	47.56	–	–	863.70	−0.60	2497.90	–	985.10
2017	3.33	1.82	5.56	3.99	3.50	56.43	–	–	843.70	−2.90	2573.80	3.00	998.70
2018	3.96	1.71	6.99	5.35	3.50	69.88	82.51	75.58	802.40	−7.60	2611.70	1.50	1036.00
2019	3.71	3.57	0.46	4.76	3.40	60.47	71.78	66.94	969.40	+11.60	2723.90	4.30	1078.60
2020	6.61	8.64	3.24	6.09	4.60	44.82	47.86	47.68	956.70	+10.10	2832.70	4.00	1095.90
2021	5.14	3.69	10.16	6.71	9.20	79.18	88.45	89.66	874.60	+0.70	2865.80	1.20	1077.40
2022	6.70	6.83	10.03	6.44	6.70	93.15	128.08	107.00	925.00	+6.50	3013.30	5.10	1105.50
2023	5.66	6.57	4.12	5.06	6.50	82.58	101.25	93.85	820.00	−5.60	3059.00	1.50	1132.90
2024	4.95	7.62	−2.74	3.82	5.50	78.56	89.41	85.50	934.80	+7.60	3296.80	7.80	1179.50
2025	2.23	0.45	1.68	5.23	–	70.99	92.11	81.31	937.20	+7.90	–	–	–

Notes: LPA = 868.6 mm. '–' indicates data not available. Production includes Rice, Wheat, Maize, Jowar, Bajra, Ragi; pulses excluded. All CPI figures are annual averages of monthly data.
Sources: MOSPI (CPI), RBI DBIE (fiscal deficit), PPAC (crude/fuel), IMD (rainfall), Unified Portal for Agricultural Statistics / data.gov.in (production).

D. Data Sources

Table 4: Data Sources

Variable	Source	Database / Publication	URL
CPI General, Food, Fuel, Miscellaneous (monthly)	Ministry of Statistics and Programme Implementation (MOSPI)	Consumer Price Index Press Releases	mospi.gov.in
Fiscal Deficit (% of GDP)	Reserve Bank of India	Database on Indian Economy (DBIE) – Public Finance	dbie.rbi.org.in
Crude Oil Price — Indian Basket (FOB, USD/bbl)	Petroleum Planning and Analysis Cell (PPAC)	Monthly Ready Reckoner	ppac.gov.in
Diesel and Petrol International Prices (USD/bbl)	Petroleum Planning and Analysis Cell (PPAC)	Monthly Ready Reckoner	ppac.gov.in
Annual Southwest Monsoon Rainfall (mm)	India Meteorological Department (IMD)	All India Rainfall Time Series	mausam.imd.gov.in
Foodgrain Production Volumes (Lakh Tonnes)	Unified Portal for Agricultural Statistics	Crop Production Statistics	upag.gov.in
Foodgrain Production (supplementary)	data.gov.in	All India Production Dataset	data.gov.in
CPI Weights (2012 base year)	MOSPI	CPI Technical Notes	mospi.gov.in
Long Period Average Rainfall (868.6 mm)	India Meteorological Department (IMD)	IMD Climate Normals	mausam.imd.gov.in