

The Burden of Fuel Taxation: Analysing Petrol Prices and Economic Impact in India

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Abstract

Petrol is a key driver of India's economy, affecting inflation, transportation, and the environment. Despite falling global crude prices, domestic fuel costs remain high due to heavy central and state taxes. This paper analyses petrol pricing in Delhi, Mumbai, Chennai, and Kolkata, examining tax structures, transportation costs, and administrative policies.

The study explores whether high fuel prices encourage public transport use, reducing pollution. It also assesses how uniform taxation impacts fuel consumption and regional economic growth. Additionally, the paper evaluates the potential benefits and challenges of bringing petrol under GST to stabilize prices and enhance competition.

Balancing affordability, economic efficiency, and environmental concerns in fuel taxation is essential. This paper offers recommendations for policy reforms to achieve that goal.

Research Methodology

1. Research Design

The present study is designed to use a qualitative research approach with secondary data analysis to study the variations in state-level petrol taxation in four major Indian cities, that is, Delhi, Mumbai, Kolkata, and Chennai. It will study the political and economic factors behind the differences in taxes in scope and breadth. It will adopt a review of the literature, government reports, and international case studies for a balanced perspective.

2. Data Collection

The study uses secondary data from a number of credible sources, which include:

(a) Government and Regulatory Reports:

- Data provided by the Ministry of Petroleum & Natural Gas, PPAC, and state governments' portals.
- Official pricing policy and taxation mechanisms from Indian and international regulatory bodies.

(b) Academic Research:

- Peer-reviewed journal articles and economy studies related to fuel taxation, inflation, and environmental impacts.
- Comparative studies of fuel pricing models across different countries.

(c) Media Reports and Expert Analyses:

- Insights coming from credible policy and economic-research institutions.
- Reports from national and international media outfits commenting on economic and policy issues.

3. Data Analysis

The present study employs SDA to analyze data from multiple sources and explore trends on petrol price, tax structures, with economic and environmental consequences. Data are synthesized for a concise identification of patterns, correlations, and possible policy directions.

4. Validity and Reliability

Only data collected from reputable sources, peer-reviewed journals, and accurate online media are needed for great confidence and reliability. This study strives to avoid pick-and-choose data selection. It will also avoid selective inclusion and exclusion of views and opinions in order to provide an objective and unbiased view of the petrol taxation policy.

5. Ethical considerations

This research adheres to strict ethical standards, basing criticism on credible and transparent sources. Thus, the work is undertaken without personal bias and political manipulations, giving evidence-based rationale for every conclusion. This paper does not selectively present data to mislead or support a political agenda.

Introduction

Petrol is an essential commodity in the modern economy. It highly influences economic growth, living costs, and environmental sustainability. Most major industries are highly sensitive to fluctuations in the price of petrol as almost all depend on it to run their business operations. Important sectors such as transport and petrochemicals are significant multipliers of energy price changes affecting the economic stability. In developing countries like India—home to one of the densest road networks globally—rapid urbanization

and industrialization have further cemented petrol’s role in sustaining mobility and production.

Petrol prices in the state of India vary depending on various influencing factors, which may include tax policies, logistical expenses, and different governance strategies. Fluctuations impact consumption patterns, urban lifestyles, and environmental health. With this in view, the paper attempts to present a careful analysis on petrol pricing in the Indian market, exploring economic and social implications.

Based on four major metropolitan cities—Delhi, Mumbai, Chennai, and Kolkata—it explores petrol pricing patterns, taxation policies, and logistical costs. It further delves into the broader impacts of these factors on daily life and proposes a unified tax structure across states to analyse potential shifts in consumption behaviour and the resulting socio-environmental effects.

Calculation of Petrol Prices in India

The final retail price of petrol consists of three major components: the base price, central excise duty, and state tax (value-added tax or VAT). Only the base price and the central excise duty are relatively constant; the VAT varies drastically between the states. Every state government determines its own rates of taxation.

Elements
Base Price
Freight
Prices charged to Dealer
Add : Excise Duty
Add : Dealer Commission
Add : VAT (Including VAT on Dealer Commission)
Retail Selling Price

The rate of VAT may be charged on several elements that include the base price, freight charges, excise duty, and dealer commission on petrol and diesel. This is because State governments rely majorly on revenues from petrol taxes. Thus, the reduction in VAT cannot go down without them affecting their revenue streams.

Government policies determine the fuel prices, and any change in taxation structures can have far-reaching implications for consumers and the economy at large. This paper explores these aspects, discussing how policy interventions can lead to more equitable pricing while ensuring economic stability.

International Prices of Crude Oil (Indian Basket), Petrol and Diesel



Despite a decline in crude oil prices, the retail prices in India are not going down.

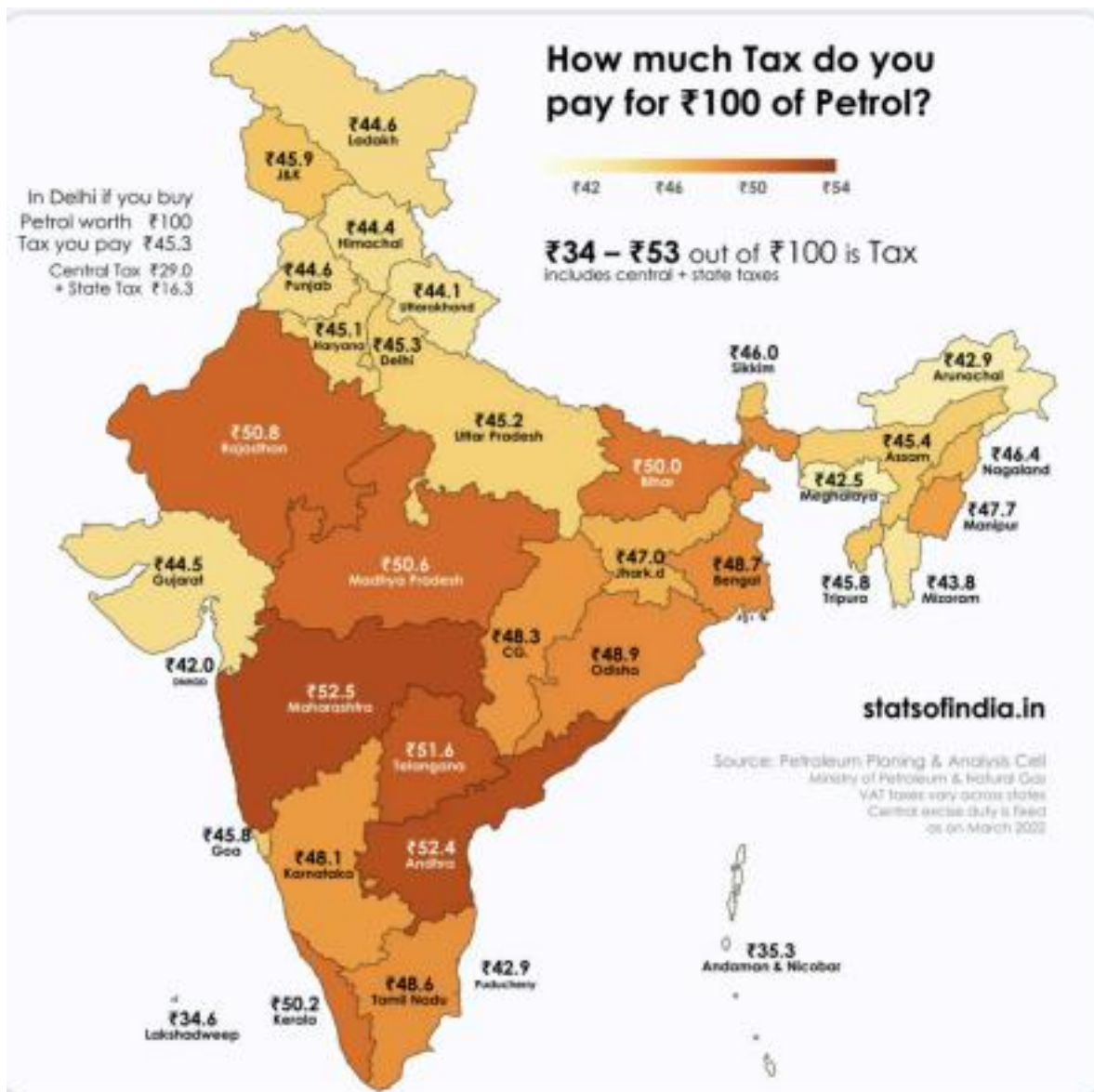
A business standard article released on Sep 13 2024 reads **Crude oil prices drop by 21% since March, but fuel costs continue to sting.**

The Proportion of taxes in the composition of petrol prices in India is exorbitantly high. For most states, taxes make up for more than or almost half the price of petrol is collected as tax.

Now that we know how the petrol prices are calculated we can look at the data of this composition of petrol prices in these four cities.

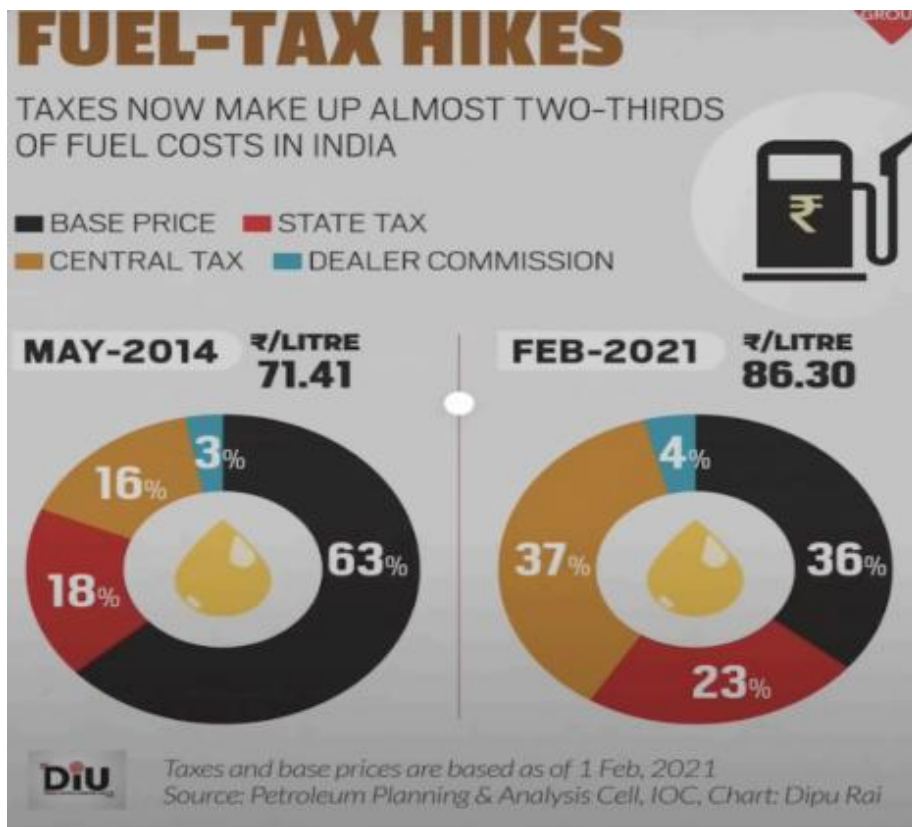
In Delhi, if you buy petrol worth 100 rupees you pay 45.3 rupees as tax.

This includes Mumbai (Maharashtra) at Rs. 52.5, Chennai (Tamil Nadu) at 48.6 rupees and Kolkata (West Bengal) at 48.7 rupees. In seven states half of the price of petrol is collected as tax. This includes Maharashtra at Rs. 52.5, Andhra Pradesh at Rs. 52.4, Telangana at Rs. 51.6, Rajasthan at Rs. 50.8, Madhya Pradesh at Rs. 50.6, Kerala at Rs. 50.2 and Bihar at Rs. 50, according to Stats of India.



From this we can derive that due to the amount of taxes in the price of petrol, that is, excise duty and VAT, imposed on petrol by the government there is an increase in the overall price of petrol.

In May 2014 the base price of petrol constituted 63% of the total price. In contrast, in Feb 2021, the base price was reduced to 36% only and there was a significant increase in the taxes. In 2021, almost 60% of the price of petrol consisted of taxes.



Does this increase in taxes reflect a rise in international oil prices?

The simple answer is no. At first glance, it might seem like prices have gone up, which is true when compared to 2020 or 2019. But they are still not as high as they were in 2014, a time when taxes were much lower. This shows that the increase in taxes isn't just about oil prices going up globally. Other factors, like government policies, revenue needs, or economic conditions, also play a role. So, while oil prices do have an impact, they don't fully explain why taxes have been raised.

To better understand the whole petrol pricing framework in India it is important that we talk about deregulation. The government had periodically intervened in the retail prices of fuel, in 2010 (Dr Manmohan Singh) deregulated the price of petrol and gave liberty to Oil Marketing Companies to fix the price of petrol based on the calculation of their cost and profit. Further deregulation of diesel was implemented in 2015 (Narendra Modi). The rationale of deregulation is to manage the cost of the oil prices by retailers like BPCL, Indian Oil Corporation, HPCL as these companies were suffering due to losses and the compensation from the government did not reach them on time. The deregulation of petrol prices in 2010 and diesel prices in 2014 gave companies the rights to revise the prices. Despite these changes made in the system, the oil prices are at a skyrocketing level, and the

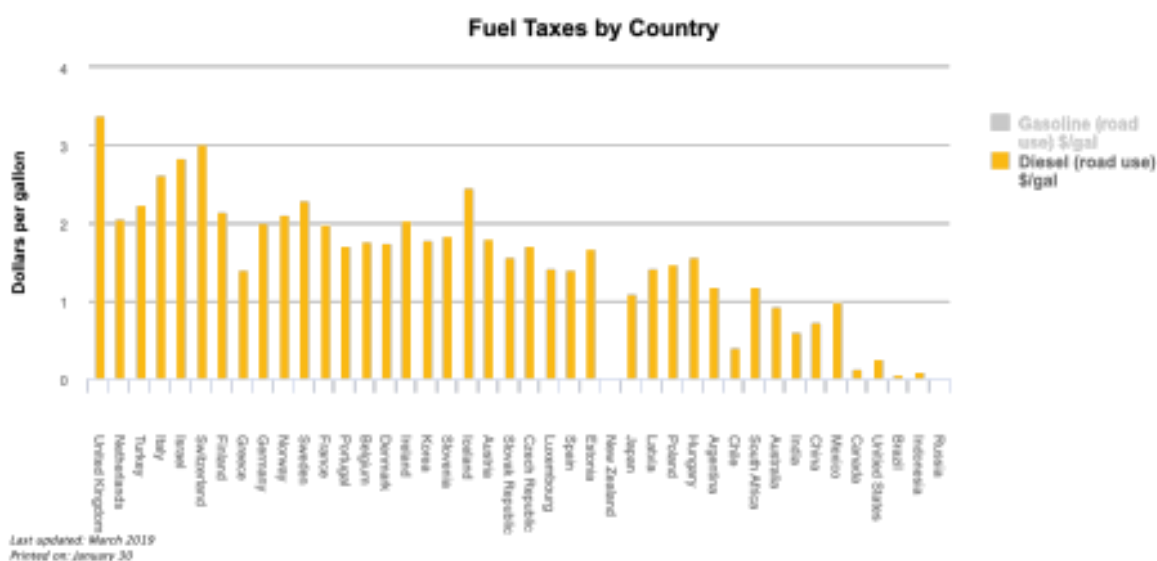
progressive promises made by the political parties during the times of election are nowhere helpful at this critical juncture.

Then the question becomes is this price hike, as claimed by the centre and state governments, due to a hike in international oil prices. We can observe that there is always a rise in domestic prices with the rise in international prices. But the same is not true when there is a decline in international prices. For this, we need to understand that the oil prices are made up of three factors. First, Processing and refining costs of Crude Oil. Second, there is state and central tax to be considered and thirdly, a dealer's commission.

The methodology of prices shows the various costs involved in the production of fuels from the initial stages to the final stage. Petrol and diesel are refined and processed from the crude oil and it is distributed by the retailers in the final stage. The cost involved in the initial stage of processing, refining and freight charges of petrol come at the base price of Rs 30.09 (April 2021). The Central excise duty is Rs 36.47, the state duty is Rs 20.96, the dealer commission is Rs 3.65. and the final retail price is Rs 91.17 which includes a major portion as tax. Although the base price was high, the retail price was comparatively low in May 2014.

Thus, this shows that an increase in the prices of petrol is not always due to an increase in the international prices of oil but rather due to taxes. This results in the exploitation of the Indian tax payer. If we compare this to the position of other countries we see a sharp contrast.

According to the US department of energy, this is the taxes paid on fuel by different countries.



Since the rise in fuel prices in India isn't directly linked to international oil prices, it's important to look at what's actually causing it. The main reason state governments aren't lowering taxes—and in turn, petrol prices—is that they depend heavily on these taxes for their revenue. Across India, fuel taxes make up a big part of state budgets. Cutting them would mean a major loss of revenue, which could impact spending on things like infrastructure, healthcare, and education. So, even if global oil prices fluctuate, state governments keep fuel taxes high to maintain financial stability and fund public services.

How does the government get away with it then?

The government manages to sustain high fuel taxes without facing significant backlash due to the way elections and voter demographics function in India. One key factor is the demographic composition of the electorate and the role of welfare measures in securing voter support. During election seasons, political parties often engage in the distribution of goods, subsidies, and other benefits—commonly referred to as "freebies"—as a means to strengthen their voter base. To secure votes, parties often provide goods, cash transfers, and other benefits to the public, creating a loyal voter base. These distributions, which take place right before elections, give the impression that the government is actively working for the people. However, these large-scale giveaways come at a high financial cost. Once the elections are over, the government looks for ways to recover the money spent, and one of the most effective ways to do this is

through taxation—fuel taxes being a key source of revenue. This creates a cycle where pre-election benefits are offset by post-election tax hikes, allowing the government to maintain financial stability while still appearing to prioritize public welfare. As a result, taxation policies, particularly on essential commodities like fuel, are often influenced by political strategies rather than purely economic considerations.

Politics of Freebies and Fuel taxation: Political and Economic Viewpoint

Political parties in India have utilized free cash, goods, and even subsidies during election periods. Such measures may create a loyal voter base but simultaneously impose a significant financial burden on the government. In order to offset the costs of these incentives during elections, governments often depend on indirect taxation, particularly on essential goods such as petrol and diesel (Mukherjee & Badri, 2021).

One such major independent source of income for India's central and state governments is fuel taxation. According to the Petroleum Planning and Analysis Cell (PPAC, 2022) fuels taxes including central excise duty and state value added tax VAT accounts for nearly 60%

of the retail price of petrol. When the world oil price lowers, the government has a habit of increasing domestic petrol prices alongside taxation rates which results in revenue loss for other sectors. This allows the government to compensate revenue loss from other sectors by adjusting taxes. High taxes help the government raise money that is often used in welfare and election incentives (Subramanian, 2020). This ultimately results in a recommendation imbalance, as the taxes impose inflation along with an increase in transportation costs and living costs for citizens (Rao & Singh, 2023).

Other reasons for the regional bias in pricing across states is the VAT differentials. As an example, the price of petrol in Mumbai is always on the higher side of the spectrum when compared to Delhi due to VAT collection in Maharashtra which is above 25% in addition to around 19% in Delhi (Indian Oil Corporation, 2023). These regional differences in pricing are detrimental to economic activities and especially to the logistics and transportation sector which depends on fuel significantly. Further, the operational costs for businesses increases inflation, which helps the negative scenario that disproportionately affects these lower-income households (Bose, 2021).

Further, there is little consensus on the impact of high taxation of fuel on the environment. Expensive fuel will, as some studies indicate, increase the use of public transport and lower emissions (Sharma & Gupta, 2022). However, this assumption fails to consider the lack of public transport systems in most Indian cities, which compels the middle class to use private cars even when fuel is costly. At the same time, while it is suggested that high taxes would increase the use of electric vehicles (EVs), the take up

is very slow because of the inadequate EV charging stations and high prices of EVs in the initial phase (Sridhar et al., 2023).

One possible policy change is integrating petrol into the Goods and Services Tax (GST) which can bring about a single price regime in the country and mitigate price fluctuations. On the other hand, state governments are often unwilling to give up fuel tax collection as it occupies a bulk share of their revenue sources (Aggarwal & Tiwari, 2023).

Imposition of GST on petrol would necessitate a supplementary compensatory mechanism to be crafted for the states in order to sidestep the revenue consequences and make sure that the fuel is inexpensive for consumers.

Impacts of Different Petrol Prices

The high prices of petrol in India are mostly due to the heavy taxes imposed on it. The actual cost of crude oil is much lower than the final price consumers pay, but the combination of central excise duty and varying state-level VAT significantly inflates the price. This creates disparities in petrol rates across states, affecting everything from transportation costs to consumer spending habits. Consumers are left struggling with an ever-increasing financial burden while businesses, particularly in logistics and manufacturing, experience rising operational costs. However, despite the increasing prices of petrol and the resulting higher cost of goods and services, wages and salaries have not seen a proportional rise, exacerbating inflation and reducing the purchasing power of the common man.

As of 13th January 2025, petrol prices in Chennai, Delhi, and Mumbai are Rs.101.23, Rs.94.77, and Rs.103.5 respectively. The primary reasons for these variations are differences in VAT, logistical costs, and dealer commissions. While these differences may seem minor, they have a significant impact on daily life. The cost of living is directly influenced by fuel prices, as higher transport costs lead to increased prices for goods and services. This affects everything from grocery prices to the cost of public transportation, putting an even greater strain on middle-class and lower-income households. With stagnant income levels, families are forced to make difficult choices, cutting back on essential expenses to accommodate their growing fuel budgets.

Inflation due to rising petrol prices reduces consumers' purchasing power. Transportation costs increase, which raises the operational expenses for businesses, and these costs are then passed on to consumers. For instance, the distance between Chennai Central railway station and Marina Beach is 4.2 km, whereas the distance between New Delhi railway station and India Gate is 5.2 km. Even though metro services are available in both cities, the fares for Rapido in Chennai are Rs.106 for

bikes and Rs.156 for autos, whereas in Delhi, the charges are Rs.52 for bikes and Rs.89 for autos. While petrol prices are not the only reason for this gap, they definitely play a role in determining fare structures and overall transportation costs. Over time, such differences widen economic disparities between states, making it more expensive for people to live and work in certain cities.

The gap in petrol prices across different cities has also led to the emergence of a petrol mafia. Traders buy fuel from regions where it is cheaper and sell it in areas where prices are higher, making huge profits. This black-market trade not only distorts fair pricing but also leads to revenue loss for the government. Additionally, petrol adulteration is a common issue in such activities, resulting in poor fuel quality and increased pollution levels. This has

environmental consequences, as vehicles using adulterated fuel emit more pollutants, contributing to deteriorating air quality in major metropolitan areas.

Consumer behaviour has also changed due to rising fuel costs. Many people are shifting towards public transport, which reduces congestion and pollution. However, in cities where public transport infrastructure is weak, this transition is not feasible. The automotive industry is also facing the heat, as higher fuel prices make private vehicle ownership more expensive. This affects Micro, Small, and Medium Enterprises (MSMEs) that supply parts to the automobile industry. Reports indicate that transporters and freighters are pushing for a 10-15% hike in freight charges due to increasing fuel costs, which will have a cascading effect on prices of essential commodities. The impact of rising fuel costs extends beyond daily transportation and affects the entire supply chain, leading to higher expenses for businesses and consumers alike.

Should Petrol Be Included in GST? Petrol plays a crucial role in the economy because transportation costs impact the prices of almost everything. Yet, it is subject to multiple layers of taxation, both by the central government and state governments, through excise duty and VAT. This raises an important question—should petrol be brought under GST?

State governments rely heavily on VAT from petrol for revenue, which is why they are reluctant to bring it under GST. If petrol were taxed under GST, states would lose a major chunk of their earnings. But does that justify the high tax burden on consumers? The government claims that these taxes are necessary for infrastructure development and public welfare schemes, yet the common man sees little relief from these high costs.

Taxing petrol multiple times creates inefficiencies. It leads to price differences across states and complicates the tax system. A uniform tax under GST would simplify pricing and ensure consistency across the country. The cascading effect of high fuel costs on transportation and goods makes a strong case for tax reform. If petrol were brought

under GST, it could help control inflation, stabilize prices, and boost economic efficiency. Additionally, it would eliminate the loopholes that allow price manipulation and black-market activities.

A uniform taxation system would reduce disparities, lower costs for industries, and benefit consumers. However, state governments fear revenue losses, and this remains a major hurdle in implementing the reform. A possible solution could be a revenue-sharing model between the central and state governments to compensate for potential losses. The

government could also look into alternative revenue streams, such as congestion pricing in urban areas or additional levies on luxury vehicles, to make up for the revenue gap.

Despite collecting massive amounts of tax revenue from petrol, there has been little effort to redirect these funds toward sustainable energy alternatives. The government has enough resources to subsidize electric vehicles and invest in green fuel research, yet such initiatives remain largely neglected. This raises questions about whether high petrol prices are genuinely about environmental concerns or just a means of revenue generation. Countries like Norway and Germany have successfully used fuel taxes to fund sustainable transportation projects, but India has yet to follow suit.

There are also concerns about the impact of lower fuel prices on consumption. If petrol prices drop too much, demand could surge, leading to environmental issues. However, this does not justify excessive taxation without providing alternative solutions. In India,

where the middle class bears the brunt of high taxes, such policies disproportionately affect ordinary people. The wealthy are largely unaffected, and the poor often receive subsidies, leaving the middle class to struggle with inflated prices. Without a proper alternative energy infrastructure, keeping petrol prices artificially high only adds to economic distress.

As the Government of India cannot control the price hike since it is an essential income catalyst for the Indian economy. The gradual increase in fuel prices impacts other sectors, mainly transportation. As the price increases day by day and the income of the people is not increasing. One suggestion is a fuel price monitoring framework, the insights of the proposed research work emphasize the benefits for middle-class people. The proposed fuel price monitoring framework segregates petrol and diesel prices into three slots, namely premium, luxury, and economic, concerning the cost of the user's vehicle and brand. The FASTag technology, which works on RFID, detects the vehicle brand and price and that information is passed to the IoT devices. The IoT structure actuates the fuel machine, which is also connected to the internet. A public cloud is maintained to analyse the vehicle price and brand, and the results will be returned to the petrol machine to finalize the fuel price slot. This concept is discussed in the paper

'Feasible fuel (petrol/diesel) price monitoring technology in India without affecting government profit' by P.C. Prabhu Kumar, T. Ramathulasi, and P. Venkateswarlu Reddy.

Another suggestion is instead of excessive taxation, the government should focus on better long-term strategies. This could include rationing petrol consumption or investing in alternative energy infrastructure. If robust alternatives are available, petrol prices could be

lowered without significantly increasing demand. A balanced approach that considers both economic fairness and environmental sustainability is the need of the hour. The transition to renewable energy must be a priority, ensuring that India does not remain overly dependent on fossil fuels in the future.

In conclusion, while including petrol in GST is a complex issue, the potential benefits outweigh the challenges. A uniform tax regime would bring consistency, curb inflation, and make taxation more transparent. However, a transition plan that ensures revenue stability for state governments is necessary. Addressing these concerns while prioritizing economic fairness and sustainable energy solutions will lead to better fuel pricing policies in India. Policymakers must act with foresight, considering the long-term impact of taxation policies on both consumers and the economy at large.

Conclusion

This paper has explored the pressing issue of petrol pricing and its far-reaching impact on society and the economy. We have examined the reasons behind fluctuating prices in Chennai, Delhi, Mumbai, and Kolkata and discussed how government policies, particularly taxation, play a crucial role in determining fuel costs. It is evident that a substantial portion of petrol prices is due to heavy taxation rather than international oil price fluctuations.

The research has also highlighted the consequences of high petrol prices on daily life, inflation, and even the rise of illegal fuel trade. While taxation is necessary for government revenue, excessive fuel taxes burden the common man, affecting transportation costs and overall economic stability. A balanced and fair policy approach is needed—one that ensures government revenue without overburdening consumers.

If the government is willing, it can implement tax reforms, such as bringing petrol under GST, to make pricing more uniform and transparent. A well-structured policy change is the need of the hour to address both economic fairness and sustainability. Without timely intervention, fuel prices will continue to strain households and businesses, worsening economic inequality. It is up to policymakers to act in the interest of the people and the nation's long-term economic health.

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