

# A Study on Reasons and Effects of Hike in Petrol Prices

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**Abstract:-** “NATURE” is something that nurtures your mind body and soul. And Fuels are one of the richest wealth created by the nature for Homo sapiens. But today, especially India the price of these fuels mainly petrol and diesel are moving towards sky. The present research is about what are the main reasons for increase in the fuel prices and study about the areas that are severely affected due to these hikes. India is highly dependent on Iraq followed by Saud Arabia for importing crude oil. The research observes the trend of fuel prices before the Pandemic, during the pandemic and after the pandemic. And also studies the human perception towards invention of electric vehicles and how various sectors like manufacturing, logistics, FMCG etc. are affected due to these hikes. The study uses various statistical tools to observe the trend of fuel prices.

**Keywords:-** Nature, Fuel, Wealth, India, Research, Human, Trend and Prices.

## I. INTRODUCTION

In general, Fuels are non- renewable substance that are used to produce heat or power, usually by being burned. These non – renewable sources include manly following 3 types of fuels.

- Solid fuels - e.g.: wood, coal etc.
- Liquid fuels – e.g.: petrol, diesel, gas etc.
- Gaseous fuels – e.g.: hydrogen, coal gas etc.

The present study concentrates on the reasons for the price hike in fuels like manly petroleum and diesel. In the current fiscal year India has imported 18,000 tonnes of petroleum and 39,000 tonnes of Diesel. Taxes are the highly effecting factor that results in the increment of prices. The tax collected by central government is called as Excise duty /tax and tax collected by state is called as Value added tax (VAT). The rate of tax differs from state to state in India. It was observed that in case of petrol the central government had raised the excise duty to Rs.32.98 from Rs.19.98 per litre on and state government has raised to Rs.31.83 from Rs.15. 83. International market rates also play a key role in deciding the Indian fuel prices. During the pandemic period, to recover the losses from corona virus, international exporters especially Saudi Arabia had cut down their daily output of crude production by one million barrels to create demand and rise in the prices of international markets. Almost 84 % of the Indian crudes dependent on imports only. Every common man is severely affected due to these

price hikes. Even a person who do not owns also gets effected because he/she is however dependent on public transport. The present study is to exactly understand the trends of fuel prices manly between three periods as mentioned below:

- Before lockdown – from March 24, 2019 to March 24, 2020.
- During lockdown – between March 24, 2020 – March 23,2021.
- After lockdown - after March 24, 2021 to Present.

## II. OBJECTIVES

- To analyse the reasons for the sudden increase in the fuel prices.
- To understand the effects of the increased prices on economy and other fuels.
- To examine the actions taken by public in such situation.
- To acknowledge the alternatives and advantages and disadvantages due to increased fuel prices.

## III. SCOPE AND METHODOLOGY

The study based on the prices of fuels like petrol between the periods like before lockdown, during lockdown and after lockdown. The study is based on primary data like based on Questionnaire and knowing the perception of various respondents to analyze the reasons and their opinions. And some part of the study based on secondary data like fuel prices trend and information about fuel.

## IV. DATA ANALYSIS AND DISCUSSION

**Table-1: Gender Classification of Respondents**

Gender of the respondents	Frequency	Percent
Male	86	57.3
Female	64	42.7
Total	150	100.0

### ➤ Interpretation

In the sample size of 150 respondents as mentioned in table -2, about 42 % of the respondents comprises of female and the rest of 57% are of male respondents. As a conclusion, it can be observed that survey consists high number of males only.

**Table-2: Age of sample respondents**

Age of sample respondents	Frequency	Percent
less than 18 years	24	16.0
19-22 years	57	38.0
23-25 years	39	26.0
greater than 26 years	30	20.0
Total	150	100.0

➤ *Interpretation*

Among the given size of 150 respondents, it was observed that as presented in the table -3, 16 % are the respondents who are below 18 years, 38 % belongs to the age group of 19-22 years, whereas 26 % falls in the category of 23-25 years and the rest i.e.20 % are above 25 years. As a conclusion we can say that majority of the correspondents are between 19 -22 age group.

➤ *Regression Test Results*

The regression analysis is applied to analyse the impact of high prices, electronic vehicles and metal prices on income of the respondent. Here, the independent variables are high prices, electronic vehicles and metal prices, dependent variable is income of the respondent. The regression analysis is applied in three stages.

**Table-3: Correlation Table**

Model Summary				
Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.381 <sup>a</sup>	.145	.128	1.137

The correlation results show that, the relationship between dependent variable (income) and independent variables (high prices, electronic vehicles and metal prices) is having low degree of positive correlation ( $r = 0.381$ ). The computed  $r^2$  (coefficient of determination) is 0.145, i.e., 14.5 percent of variance in the dependent variable is explained by independent variables

➤ *Correspondence Analysis:*

Correspondence Table					
Education	Are people willing to opt for electric vehicles due to increased fuel prices?				
	Extremely likely	Likely	Neutral	Unlikely	Active Margin
10+2	11	6	2	6	25
Graduation	20	28	15	6	69
post-graduation	9	13	13	4	39
Others	1	5	4	7	17
Active Margin	41	52	34	23	150

Cross tab results show that association between education and people willingness to opt for electric vehicles due to increased fuel prices. The active margin shows that in a column individual total of extremely likely, Likely,

Neutral, Unlikely and in a row wise the total of education 10+2, graduation, post-graduation, others.

**V. CONCLUSION**

Government should take proper actions in reduction of prices. India should stop or solely reduce high dependency on foreign countries for fuel. Non-renewable resources should be used properly or else whole economy get destroyed. Manufacturing of electric vehicles and using solar energy should be developed and now it's time to live with Nature and use Renewable resource only.

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