

# The Various LPG Subsidy Schemes and Their Economic Implications on Government Finances in India

*Arun Kumar Kushwaha*

**Abstract:** The LPG (Liquified Petroleum Gas) in India has been an important policy. This policy aims to provide clean and affordable cooking fuel to the citizens. But this scheme has some economic implications on Government finances and its continuation needs to be evaluated on the basis of the effectiveness and efficiency in achieving the desired goals. This research article analyses the economic implications of LPG subsidy in India by examining the year-wise variation in subsidies and its impact on the government's budget, and the distribution of benefits across various income groups.

## I. INTRODUCTION

India is a country with a rich population and diverse economy where energy plays a vital role in growth and development. The LPG subsidy was first introduced on 1<sup>st</sup> June 2013 and has been a key player in the government's energy policy. LPG is widely used for cooking all over India and the LPG subsidy made it more affordable for the common people. However, the LPG subsidy has been a subject of debate for a long time with many experts questioning its economic feasibility. This subsidy aims to provide basic cooking fuel requirements for low-income households but it also puts a significant burden on the government's finances which is compensated by taxpayers money. This subsidy is criticized by some people as wasteful consumption of energy and discouraging the adoption of cleaner alternative fuels. The main aim of this research article is to explore the economic implications of the LPG subsidy in India. In this study, I will also analyze the impact of LPG subsidies on the government's finances, and domestic energy market. In addition to this, an evaluation of the effectiveness of the subsidy is also done to achieve the goals of making LPG affordable for the poor and reducing their dependence on conventional cooking fuels such as wood and charcoal. The findings of this study will provide valuable insights into the LPG subsidy's economic implications, which can be used to inform future policy decisions on the subsidy.

## II. LITERATURE REVIEW

The LPG (Liquified Petroleum Gas) subsidy in India has been a subject of debate and discussion from a policy perspective for several years. Many studies have also examined the economic implications of the subsidy and effectiveness in achieving objectives, and distribution of benefits across different income groups.

KC Roy and CA Tisdell analyze the impact of LPG subsidy on the government's fiscal balance and find that the subsidy has a significant impact on the government's expenditure. The study highlights the need to evaluate the effectiveness and efficiency of the subsidy in achieving its intended objectives.

In an IMF working paper 'The Fiscal and Welfare Impacts of Reforming Fuel Subsidies in India', it has been found that the distribution of LPG subsidies across different income groups and find that the subsidy benefits accrue more to higher-income groups than the lower-income groups. The study suggests that there is a need to design alternative policies that target the most vulnerable sections of the population.

D Singh, S Pachauri, and H Zerriffi evaluate the environmental impacts of LPG (liquefied petroleum gas) as a cooking fuel in India compared to traditional biomass-based fuels. The authors used data from household surveys and (LCA) life cycle assessments to quantify the environmental payoffs of LPG. LPG has the potential to significantly improve the environmental sustainability of household cooking in India but it requires combined efforts from the government, the private sector, and civil society to ensure its widespread adoption and sustainability.

S Jain, VK Gangal - 2020 discusses the rationale for LPG subsidies in India and their effectiveness as a tool for socio-economic upliftment particularly in (U.P.) Uttar Pradesh. The study utilizes trend analysis and graphical representations of secondary data from government websites. Energy subsidies have a direct impact on the social growth of poor and rural families so the government should prioritize planning for energy subsidization to promote overall welfare.

The literature review highlights the need to evaluate the economic implications of the LPG subsidy in India, its effectiveness in achieving its objectives, and the distribution of benefits across different income groups. The review

also suggests the need to explore alternative policies that promote the use of cleaner and more sustainable energy sources while ensuring a sustainable and equitable distribution of benefits.

### III. LPG SUBSIDY IN INDIA

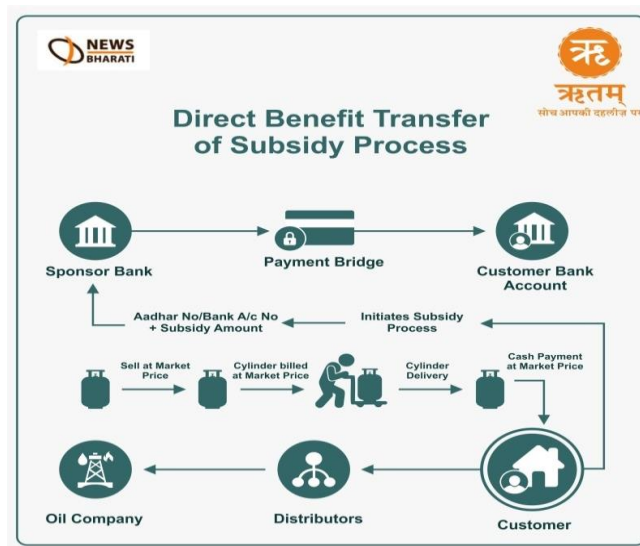
LPG subsidy in India is a government-funded program aimed at providing affordable cooking fuel to households. The subsidy is given in the form of financial assistance on LPG cylinder prices for below-poverty-line (BPL) families and other eligible consumers. The subsidy is provided in the form of a money transfer directly to the beneficiary's bank accounts which are used to offset the cost of LPG cylinder refills. The LPG subsidy program of India is the world's biggest cash transfer program. The Government of India used the Aadhar-based biometric identification system to ensure that poor households in rural India especially women have better access to this program.

The scheme aims to reduce the burden of high cooking fuel expenses on low-income households and to promote the use of cleaner and more efficient cooking fuels. However, like other subsidies in India, this program has also been criticized for being susceptible to corruption and mismanagement, as well as for not being well-targeted to reach the intended beneficiaries.

### IV. VARIOUS SCHEMES FOR LPG SUBSIDY IN INDIA

#### 4.1 DBTL or PAHAL:

The Indian government launched the Direct Benefit Transfer of LPG (DBTL) scheme in June 2013, also known as PAHAL (Pratyaksh Hanstantrit Labh) which was gradually spread in 291 districts. The scheme mandated that consumers must possess a valid Aadhaar number to receive subsidies on LPG. As on 1<sup>st</sup> January 2015, the scheme covers over 15.3 crore consumers across 676 districts of the country. More than 6.5 crore consumers which account for approximately 43% of the total enrolled in this program and received subsidies directly in their bank accounts during the initial phase of this initiative. The scheme has transferred more than Rs. 624 crores to over 20 lakh LPG consumers as of 30th December 2014 Since its formation on 15<sup>th</sup> November 2014.



**Fig.1:** Direct benefit fund Transfer of Subsidy process

#### 4.2 Give it up scheme:

The 'Give It Up' initiative was introduced by the Indian government in March 2015. This campaign was to encourage domestic LPG consumers to voluntarily surrender their LPG subsidy, who can afford to pay the non-subsidized price for LPG. The initiative aims to allow the government to allocate its limited resources to assist the poor - households living below the poverty line (BPL). According to the records as of 31<sup>st</sup> March 2020, almost 1.03 crore customers have voluntarily given up their LPG subsidy.

### 4.3 The Pradhan Mantri Ujjwala Yojana (PMUY):

The Honourable Prime Minister of India Shri Narendra Modi inaugurated the Pradhan Mantri Ujjwala Yojana (PMUY) on 1st May 2016 in Ballia Uttar Pradesh. The primary objective of this scheme is to provide BPL families with access to clean cooking fuel to safeguard the health of women and children who are often exposed to harmful smoke and hazards while cooking with traditional fuels like firewood. The scheme aims to provide 5 crore LPG connections to BPL households over three years with financial assistance of ₹1600 per connection. The initiative also promotes women's empowerment in rural India as the connections are issued in the name of female members of households. The government has allocated Rs. 8000 crores towards the implementation of the scheme. Identification of the BPL families done through Socio-Economic Caste Census Data.



**Fig.2:** Pradhan Mantri Ujjwala Yojana (PMUY) Aim

## V. IMPLICATIONS OF LPG SUBSIDY IN INDIA

The subsidy provided for liquefied petroleum gas (LPG) in India has several implications listed below: -

### 5.1 Households:

LPG subsidies benefit households by reducing the cost of cooking fuel & making it more affordable and accessible to a larger number of people belonging to economically weaker sections.

### 5.2 Government finances:

The subsidy on LPG puts a significant strain on the government's finances as the government must provide the cost of LPG for millions of households across the country.

### 5.3 Energy security:

The government aims to improve energy security and reduce dependence on imported oil by promoting the use of LPG over other more polluting fuels such as kerosene, wood, charcoal, etc.

### 5.4 Environment:

Encouraging the use of LPG over other fuels can have a positive impact on the environment by reducing emissions of greenhouse gases (GHG) and other harmful pollutants.

### 5.5 Misuse:

The subsidy system has faced criticism in the past for being susceptible to misuse. The subsidized LPG cylinders are being sold on the black market or used for purposes other than cooking.

### 5.6 Targeting:

The government has faced challenges in targeting the subsidy to the intended beneficiaries due to leakages and inefficiencies in the distribution system of the subsidy.

## VI. IMPLEMENTATION OF PAHAL SCHEME

There was approximately 29.2 crore (292 million) LPG consumers in India till March 2021 (According to mopng.gov.in) & out of which 25.7 crore (257 million) were active consumers under the PAHAL Scheme. This represents coverage of over 88% of all LPG consumers in the country. The implementation of the PAHAL Scheme has also resulted in significant savings for the government. According to the Ministry of Petroleum and Natural Gas, the total subsidy savings due to the implementation of the scheme were approximately Rs. 1.57 lakh crore (approximately USD 21 billion) between 2015 and 2021.

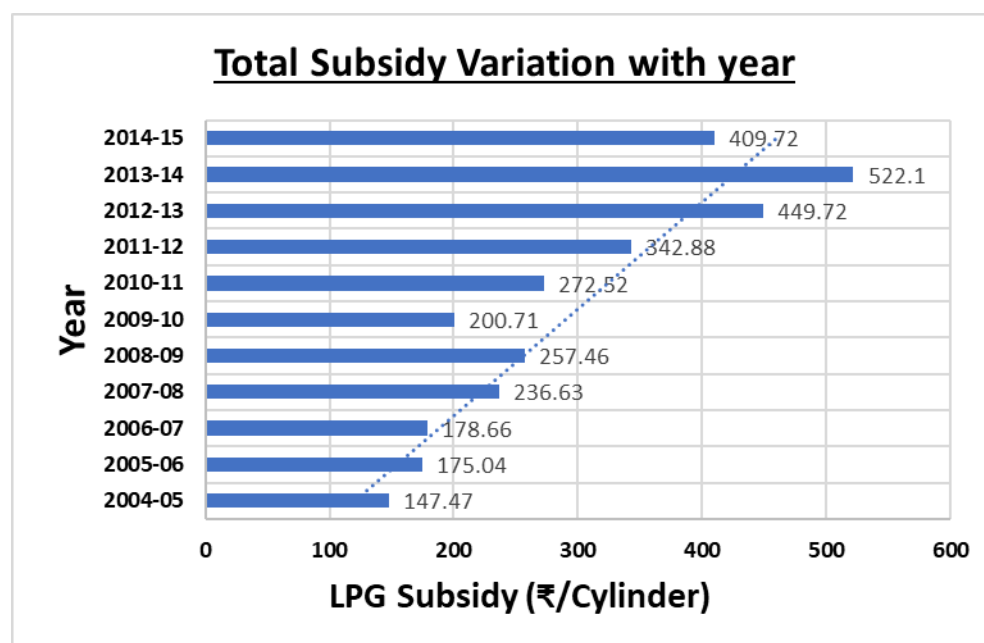
## VII. SUBSIDY VARIATION

### 7.1 Increment in Subsidy:

The government increased the cylinder subsidy for domestic customers before June 2020. This move was aimed at providing relief to the common people who were already struggling with rising fuel prices.

**Table.1:** Total Subsidy on Domestic LPG (₹/Cylinder)

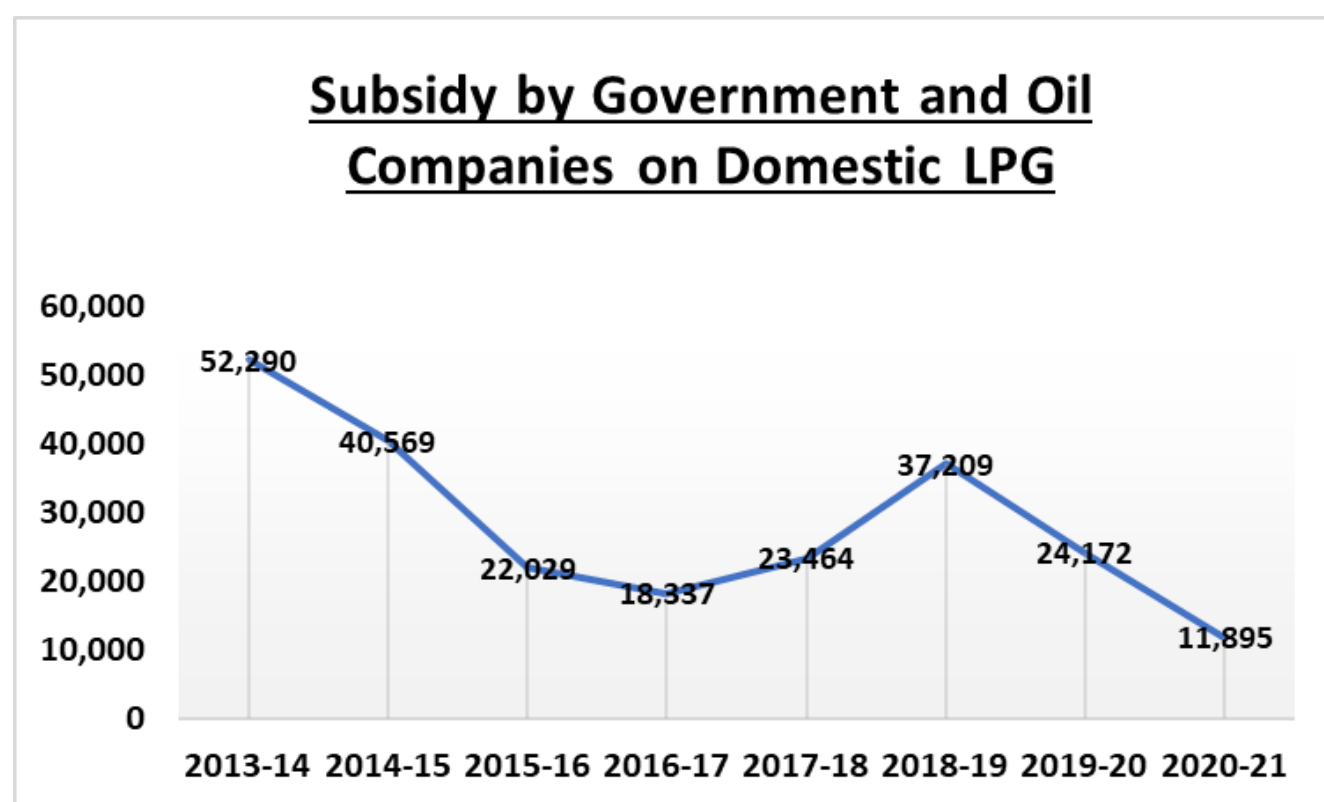
Year	Domestic LPG		
	By Govt. Budget	By Public Sector Oil Companies	Total Subsidy
2004-05	22.58	124.89	147.47
2005-06	22.58	152.46	175.04
2006-07	22.58	156.08	178.66
2007-08	22.58	214.05	236.63
2008-09	22.58	234.88	257.46
2009-10	22.58	178.13	200.71
2010-11	22.58	249.94	272.52
2011-12	22.58	320.3	342.88
2012-13	22.58	427.14	449.72
2013-14	22.58	499.52	522.1
2014-15	0	409.72	409.72



**Fig.3:** Variation of subsidies from 2004 to 2015 in Rs/Cylinder

**Table.2:** Subsidy by Government on Domestic LPG (Rs. Crore)

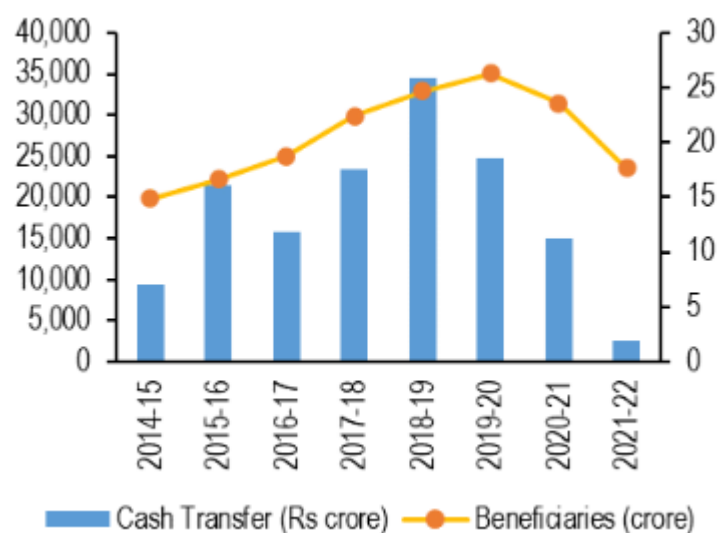
Year	Subsidy (Rs. Crore)
2013-14	52,290
2014-15	40,569
2015-16	22,029
2016-17	18,337
2017-18	23,464
2018-19	37,209
2019-20	24,172
2020-21	11,895



**Fig.4:** Variation of subsidies in Crore rupees

#### *7.2 Saturation and decrease in Subsidy:*

In the fig-4 we can see that the Government of India reduced the LPG subsidy as part of its effort to offset the additional financial burden caused by the COVID-19 pandemic. The reduction in subsidies was intended to help the government in managing its fiscal deficit. This reduction in subsidy was needed due to lower revenue collections and increased expenditure on healthcare and relief measures.



**Fig.5:** Cash Transfer and Beneficiaries

There is a big change of -11% in the 2022-23 budget for LPG Subsidy. GOI has removed LPG subsidies for poor households in its budget for the April 2023-March 2024 fiscal year, defying market expectations of an extension because of state and general elections in 2023-24.

**Table.2:** Allocation for the Ministry of Petroleum and Natural Gas (in ₹ crore)

Major Heads	Actual 2020-21	Revised 2021-22	Budget 2022-23	% change
LPG subsidy	35,195	6,517	5,813	-11%
Kerosene subsidy	3,259	-	-	-
SPR	2,428	374	811	117%
Pipeline and seismic programme	971	1,537	1,798	17%
Others	337	418	518	25%
<b>Total</b>	<b>42,190</b>	<b>8,846</b>	<b>8,940</b>	<b>1%</b>

Note: SPR = Strategic Petroleum Reserves, Others include PM JI-VAN yojana, among others.

## VIII. CONCLUSION

The LPG subsidy plan in India is an important initiative of the government that aims to provide affordable cooking fuel to households and reduce indoor air pollution and improve health conditions. This program has been successful in reaching millions of needy households and had a positive effect on their lives especially in economically weaker sections. The government has implemented various schemes and policies to promote the use of LPG for cooking purposes. The number of LPG users in India has increased significantly due to these efforts. This has led to a significant reduction in the use of traditional fuels such as firewood and kerosene, which were causing indoor air pollution and health hazards in households. However, the difficult economic conditions in India due to the COVID-19 pandemic have put pressure on the government's finances. Keeping this in mind, the Government of India has canceled the LPG subsidy for the households in the budget for the April 2023- March 2024 fiscal year. While there are concerns about the sustainability of subsidies in the current economic climate but the government's efforts to promote LPG usage have brought about significant positive changes.

## REFERENCES

- [1] Roy, K. C., & Tisdell, C. A. (1998). Budget Deficit and Subsidies: Obstacles to Economic Reforms in India\*(1). South African Journal of Economics, 66(1), 52-63.
- [2] The Fiscal and Welfare Impacts of Reforming Fuel Subsidies in India  
By Rahul Anand, Mr.David Coady, Mr.Adil Mohommad, Mr.Vimal V Thakoor, Mr.James P Walsh
- [3] Singh, D., Pachauri, S., & Zerriffi, H. J. E. R. L. (2017). Environmental payoffs of LPG cooking in India. Environmental Research Letters, 12(11), 115003.
- [4] Jain, S., & Gangal, V. K. (2020). Impact Of LPG Subsidy On Socio-Economic Upliftment: A Study In Uttar Pradesh.
- [5] mopng.gov.in
- [6] iisd.org