



The Actual Scenario Of LPG Cylinder Refill Booking Affordance Post-Pradhan Mantri Ujjwala Yojana: A Case Study In Jorhat Development Block, Jorhat, Assam.

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Abstract: Pradhan Mantri Ujjwala Yojana (PMUY) is one of the direct intervention initiatives of the government of India. The scheme's first phase was launched in 2016 by the honourable Prime Minister of India, Narendra Modi. He also launched Ujjwala 2.0 on 10th August 2021 via video conferencing. Since this is a successful scheme, the present study tries to find the actual scenario of PMUY in the context of affordance and refill booking of the cylinder under PMUY. The study found that only 13.79% of the respondents received LPG refill bookings from the government only once and 86.21% did not receive the refill bookings even once. Moreover, 61% of the respondents use wood fuel for cooking due to the high price of refill booking and 32% of them use both wood and LPG, while only 7% of the respondents use LPG regularly for cooking.

Keywords: LPG, PMUY, fuel, refill booking, affordance, schedule cast, schedule tribes, tea tribes, BPL families, cylinders, scheme etc.

I. INTRODUCTION

PRADHAN MANTRI UJJWALA YOJANA (PMUY) is one of the largest direct intervention initiatives of the government of India for the women of the rural and urban households of below poverty line (BPL), tea tribes, and backward class families to meet social inclusion all over the country. This scheme was mainly a challenge to the traditional fuel-using cooking practices of most Indian families.

According to World Health Organization (WHO) report(2021), around 2.6 billion people cook using open fires or simple stoves filled with kerosene, biomass, and coal. Again due to poor ventilation systems indoor smoke becomes 100 times higher than acceptable levels for fine particles. Most premature deaths due to non-curable diseases such as heart disease, stroke obstructive pulmonary disease, lung cancer, and many more are the results of indoor air pollution. As per the Global Burden of Disease Study(2019), nearly 60,000 deaths in India in 2019 can be attributed to indoor air pollution.

LPG connection can help reduce indoor air pollution and associated emissions of 41% of the secondary fuel-using households out of a total of 77% of primary and secondary solid fuel users. Moreover, ensuring universal access to clean fuel and technologies is a target of the Sustainable Development Goal on Energy (SDG7). Therefore, in 2016 the GOI took a huge step in addressing the problem of indoor air pollution. As a result, the Pradhan Mantri Ujjwala Yojana was launched on 1st May 2016, in Ballia UP by the Hon'ble PM of India Narendra Modi. However, though PMUY phase I was a successful program, it has faced many challenges some of which are-

1. **Low Consumption of Refills:** under this scheme annual average of refill booking was only 3.21%. Low consumption of refills hindered the recovery of outstanding loans disbursed under the
2. **System Anomalies:** There are deficiencies such as the issuance of connections to unintended beneficiaries, problem with the software of the state-run oil marketing companies in identifying intended beneficiaries, and inadequacies in the deduplication process.

Therefore, prime minister Narendra Modi launched the second phase of the PMUY or Ujjwala 2.0 scheme. The scheme aims to provide maximum benefit to the migrants who live in other states and find it difficult to submit address proof. The scheme provides financial support of Rs 1600 for each LPG connection to BPL households. Along with a deposit for a free LPG connection, Ujjwala 2.0 provides the first refill and a hotplate free of cost to the beneficiaries.

Under Ujjwala 2.0, an additional 10 million LPG connections will be provided to the beneficiaries. Under this scheme, the government has decided to provide piped gas to 21 lakh homes in 50 districts.

II. NEED OF THE STUDY

From the available literature, it was clear that PMUY has achieved great success while providing free LPG connections to the beneficiaries, especially among the developed states of the nation. But while discussing the actual scenario of the scheme, mainly in refill booking of LPG cylinders the status was not clear. States like Assam where a huge population belongs to the BPL family, schedule cast, and schedule tribe ask for a deeper study. Therefore, this paper aims to find out the actualization in the context of PMUY's new gas connection and refill booking system in the Jorhat district of Assam.

III. LITERATURE REVIEW

Yadav, Yaduveer (2020) in the research paper "Women Empowerment Through Pradhan Mantri Ujjwala Yojana (PMUY) Scheme in Rajasthan: A study on Rural Households in Selected Region" attempted to analyse the impact of the PMUY scheme on the socio-economic study of women in the rural sector in India and thereby analyse the effectiveness of the Yojana on Women Empowerment in the rural sector. The result of the study showed that all the dimensions of PMUY significantly influence the socio-economic aspects of women's empowerment.

Patil, Roy, Gore, Ghorpade, Pillarisetti, Chakma, and Juvekar (2021) researched "Barriers to and facilitators of uptake and sustained use of LPG through the PMUY in tribal communities of Pune district". This research highlighted to aware the population's regarding the health benefits of using LPG. The results of the study stated the increasing logistical and financial support to rural distributors through the PMUY.

Ahmed, Sharma (2018) researched "Pradhan Mantri Ujjwala Yojana (PMUY) Step towards Social Inclusion in India". They tried to explore the social inclusion of poor and marginalized BPL families through the PMUY. They found that around 41% of households in India are still using fossil fuel for cooking, PMUY is a big step towards the social inclusion of women belonging to BPL families. Though PMUY is giving a great push towards the use of clean fuel by giving one-time assistance to BPL families affordability will remain a core issue.

Dr. Mall and Dr. Rani (2019) conducted a study on "Women's satisfaction with Pradhan Mantri Ujjwala Yojana (PMUY)" in the Muzaffarpur district of Bihar. In this study, the respondent's satisfaction was mainly measured and analyzed regarding the connection documentation and process, connection subsidy, availability of refills, simplification of the kitchen, etc. Thus the results

of the study revealed the actual picture of implementing the scheme in the rural area. And also made an important recommendation on how the government should make an effort to increase refill subsidies, especially in BPL households.

Dabadie, Sreenivas, and Jorsy (2018) in their article “What has the Pradhan Mantri Ujjwala Yojana Achieved so far?” found that though the program has been successful in introducing a sense of urgency for modern cooking fuels and distributing connection, it has been successful in introducing a sustained change. According to their studies, this is because of issues around the affordability and reliability of LPG supply. Data about the impact and progress of the program publicly is not available, which results in reliance on unreliable reports to amend the program.

Aryan in his research entitled "Unhygienic to Hygienic Environment: A sociological study on Pradhan Mantri Ujjwala Yojana in Jammu Region" (2022) tries to assess the impact of PMUY on the social environment among rural households and how it changed the socio-economic life of rural women after getting LPG connections in Jammu region. The study found that due to the PMUY scheme, there was a positive impact on rural women's lives by improving education, health status, economic development, and also lifestyle changes.

IV.OBJECTIVES OF THE STUDY

- 1) The paper aims to study the actualization of PMUY among the beneficiaries.
- 2) This paper also seeks to analyse the difficulties faced by the respondents regarding applying for a connection and subsidy.
- 3) Another objective of this paper is to find out the affordance of the beneficiaries while refilling the cylinder post PMUY.

V.RESEARCH QUESTIONS

- 1) Is LPG cylinder refill booking affordable for all the beneficiaries under PMUY?
- 2) Is there any problem faced by the desired beneficiaries of PMUY in the case of documentation?

VI.RESEARCH METHODOLOGY

The research is descriptive and exploratory. In this study, an attempt has been made to analyse the actual scenario of LPG cylinder refill booking affordance, after the PMUY scheme, among the respondents of Jorhat block. The respondents are mainly poor, backward, and from the marginalized sections of society. An attempt has been made to understand the realization of the main objectives of the scheme, which is to have clean fuel energy and deposit-free LPG connections to women from poor households with a support of Rs. 1600 per beneficiary for providing a new LPG connection. And also to know the status of three LPG cylinders free of cost and after that Rs 200 subsidy per refill of LPG cylinder.

VI.I SAMPLE TECHNIQUE

A multistage and random sample technique was adopted to select the district, block, and respondents for the study.

VI.II SAMPLE DESIGN

In the first stage, the Jorhat district was selected purposively for the study. In the Jorhat district, the Jorhat block was selected.

ASSAM

JORHAT DISTRICT

JORHAT BLOCK

BAGHCHUNG

KAMALABORIA NC
NO 1 CHOWDANG
SEKONIDHORA



The total population in Baghchung is 828. Among the total population, 30% is selected, i.e. 248 respondents were randomly selected from the three villages for the study.

VI.III DATA COLLECTION METHOD

For the study, both primary and secondary data have been used. Primary data are collected from the field survey through a structured interview schedule with a questionnaire designed for the study. Secondary data have been gathered from the internet, published and unpublished research paper, dissertations, thesis, and other publications.

VI.IV METHOD OF DATA ANALYSIS

The obtained data are analysed in a simple percentage method by using tables and pie charts.

VII. DISCUSSION AND ANALYSIS

This chapter includes the results and discussion of the study, which mainly covers the actualization of PMUY among the beneficiaries. In this study, attempts have been made to fulfil the objectives of the study i.e. to analyse the difficulties faced by the respondents regarding PMUY. And also to find out the affordance of the beneficiaries while refilling the cylinder post-PMUY. Here the explorative and descriptive analyses have been conducted with the help of tables and diagrams.

VII.I SOCIO-ECONOMIC CONDITION OF THE RESPONDENTS

In this study, the social and economic status of the respondents has been examined. As these factors influence the life habitat and financial scenario of people very deeply. Literacy rate, gender, number of family members, income, and income source of the family effects are important to lead a healthy and aware life. The socio-economic factors of the respondents are explained below with the help of tables and diagrams.

VII.I.I Gender distribution of the respondents

To know the individual position, the distribution of male and female respondents is as followed-

Gender	Percent
Male	42.86
Female	57.14

Source: Field survey

Table no 1

In the above table, it is seen that there is a majority of female respondents in the survey with a total percentage of 57.14.

VII.I.II Age distribution of the respondents

The age distribution of the respondents is as followed-

Age limit	Percent
20-30	8.92
31-40	19.64
41-50	14.28
51-60	44.64
61-70	12.5

Source: Field survey Table no 2

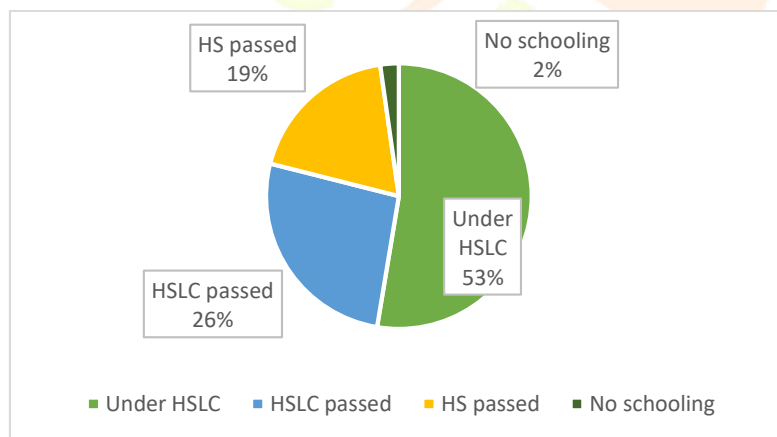
The above table shows that among all the respondents' the majority of the people are from the age group of 51-60 with a percentage of 44.64. Again 19.64% of respondents are from the age group of 31-40.

VII.I.III Religion of the respondents

In the area in which the survey was conducted most of the respondents belong to the Hindu religion.

VII.I.IV Educational status of the respondents

The educational qualification of the respondents plays an important role in reducing the poverty, inequalities, and unemployment and also in improving the living standards of the people. The figure below shows the educational status of the respondents-



Source: Field survey Figure no 1

The above figure reveals that the educational status of 53% of the respondents is under HSLC. While 26% of them are HSLC-passed and 19% of the respondents are HS-passed. And only 2% of the respondents have no schooling. Thus, it is clear that most of the respondents have basic educational qualifications.

VII.I.V Income source of the respondents

The various income source of the respondents are as followed-

Income source	Percent
Tea garden	23.21
Daily wage	33.93
Small business	10.72
Private sector job	21.42

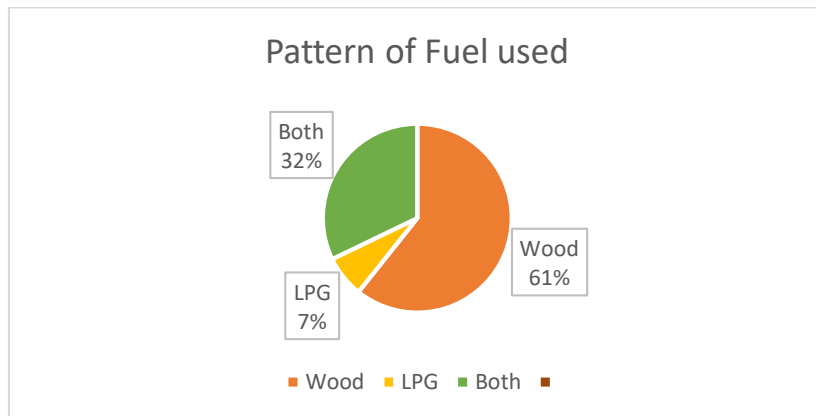
Agriculture	10.72
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Source: Field survey Table no 3

The above figure shows that 33.93% of the respondents earn their living from daily wages. But this source of income is not regular. Again income from the tea garden, small business, and the private job is not sufficient for a healthy lifestyle. Moreover, agricultural income is also seasonal and small farmers do not earn enough for a standard style of living. Thus it is clear that respondents are not well enough to make a proper living.

VII.II Pattern of fuel used by the respondents

The pattern of fuel used by the respondents in their kitchen is as shown below-

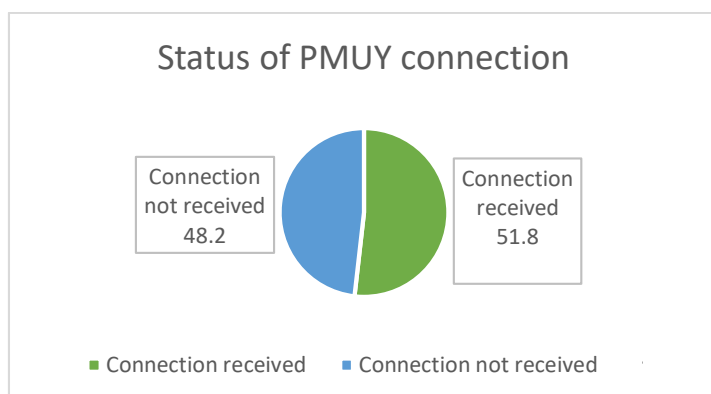


Source: Field survey Figure no 2

The above figure shows that 61% of the respondents use wood for their cooking practices, and 32% of them use wood and LPG. While only 7% of the respondents use LPG regularly for cooking.

VII.III Number of respondents who received PMUY connection

The status of respondents who received PMUY connection is as follows-



Source: Field survey Figure no 3

The above figure shows that 51.8% of the respondents have received a PMUY connection, while a large percentage of respondents i.e. 48.2% still do not have the connection under PMUY.

VII.IV LPG refill booked by the respondents

The number of respondents who got the connection, and after that also booked LPG refill under PMUY are as shown below-

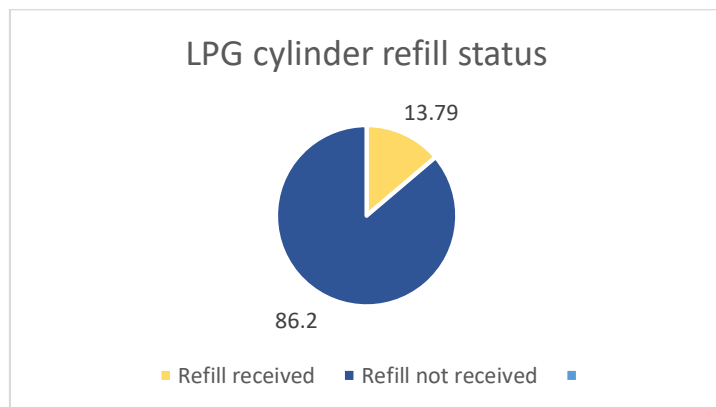
Status of refill booking	Percent
Regularly	20.7
Every 3-5 months	68.96
Never	10.34

Source: Field survey Table no 4

The table above shows that the majority of the respondents, i.e. 68.96% of the respondents book an LPG cylinder only every 3-5 months whenever they feel the need.

VII.V Refill provided by the government

The respondents who got LPG refill provided by the government under the PMUY are as follows-



Source: Field survey Figure no 4

The table above shows that, among the respondents who have got the PMUY connection, only 13.79% of them have got the refill facility only once. While the majority of them i.e. 86.21% have not received any LPG refill booking as per the scheme.

VIII SUMMARY AND CONCLUSION

The paper analyses the actualization of the PMUY scheme by identifying the actual scenario of the households in case of fuel used in their households. The main aim of the scheme was to provide the households with a healthy and clean cooking practice by minimizing the use of coal, firewood, and cow dung and substituting them with LPG by providing a free gas connection along with a support of Rs 1600 and Rs 200 subsidy per gas cylinder for up to 12 cylinders. Through this paper, an attempt has been made to know the actual number of people getting the free LPG connection and the support for refilling the gas cylinder under the PMUY scheme. The findings of the study can be summed up as follows-

- A lot of the respondents were not aware that they need to apply for the free LPG connection under the scheme. So due to the lack of awareness and inadequate information, many of the respondents do not have a gas connection.
- The unavailability of documents at the time of applying for a PMUY LPG connection also acted as a barrier while fulfilling the objective of the scheme.
- Not having a bank account in the name of the women of the household was also an important barrier to the actualization of the scheme.
- Most of the respondents are not financially literate. Moreover, they are not comfortable going to a bank and opening a bank account. Applying for a gas connection was also a headache for many of the respondents, especially among the elderly ones.
- The educational qualification of the respondents is not so high. Due to this, they are not aware of the health hazards caused by firewood, cow dung, coal, etc. As in many areas, firewood is easily available they prefer to use those as fuel for cooking rather than LPG.

- As in the PMUY scheme, the gas connection is provided to the BPL families, scheduled cast, and socially deprived sections of the society, it is not surprising that the financial condition of the beneficiaries is not well enough. The respondents under the study earn their living mostly from their daily wages, private job, tea garden jobs, and small business and agriculture. But these sources of income do not generate a regular income flow and also they are not sufficient enough for daily living expenses. Due to this, even after the subsidy of Rs. 200, almost all the respondents have to struggle to book a refill of an LPG cylinder. Thus affordability is still a major concern for households while shifting from solid fuels to cleaner fuels as the amount of subsidy does not act as a great relief for the poor in to consume LPG cylinders regularly.

The PMUY is a big step in addressing the social inclusion of poor and needy people in society. This scheme tries to remove the various health hazards caused due to solid fuel in cooking by providing free gas connection and support for refilling the cylinder. Though this one-time assistance is a great help to poor households, it is not a permanent solution and also not an affordable one to continue with for BPL families. Thus biofuel is still a more preferable, cheap, easily available, and most used in most poor households. And it will remain so until the BPL families can develop the capacity of using clean and healthy fuel energy.

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