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Ujjwala yojana: Ensuring the well-being of women- declassifying its theory and practice

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Abstract

In India, there are about 10 Crore households that are still deprived of LPG as cooking fuel and have to rely on firewood, coal, dung – cakes, etc. as the primary source of cooking with the most immediate sufferers as women who are largely in charge of cooking food. To tackle this issue with the basic aim to empower the rural women, Ujjwala Yojna was launched by the BJP government in 2016. Many further developments continued to happen afterwards, however, despite the arduous work by the government under this scheme, many challenges still needed to be tackled especially considering the empowerment of women. Keeping this background in mind, this study aims to assess the Yojna on ground with a major focus on the condition of women. Our main goal is to appraise the condition of women after the implementation of Ujjwala Yojana and to find out to what extent women have benefited from this Yojana.

To conduct detailed research in this regard, we have tried to read the Yojna deeply and mention what was on paper given under this Yojna. Further, we have tried to analyse where the Yojna was truly successful on ground and where it lagged. Rather than tracking the whole journey, we have tried to analyse the recent challenges faced by rural women under this Yojna for which a Survey was also done by us in the rural area of Kalyanpuri.

Keywords: Pradhan Mantri Ujjwala Yojana, rural women, LPG gas cylinders provision, Kalyanpuri survey, public administration, recent challenges, Ujjwala Yojana, PMUY, PMUY 2.0, research survey

Introduction

The Pradhan Mantri Ujjwala Yojana (PMUY : Home, n.d.)– The free LPG connection scheme for poor – is to be understood in the context of pitiable life stories of rural women, who perpetually depend on forest firewood for their domestic energy needs and work under hazardous conditions, along with other skewed economic means, and spend a substantial part of their life in smoky kitchens leading to deterioration of their health. Pradhan Mantri Ujjwala Yojana was launched by hon'ble PM of India Shri Narendra Modi on 1/5/2016 from Ballia district of Uttar Pradesh. Launched in 2016, the Ujjwala Yojana was an ambitious central government scheme intended to provide five crore free cooking gas connections to all the poor families living below the poverty line in just 3 years' time i.e., by 2019 (Dabadge, A., Sreenivas, A., & Josey, A. (2018) ^[3]. What has the Pradhan Mantri Ujjwala Yojana achieved so far. Econ Polit Wkly, 53(20), 69-75.). Serving as a boon for both men and women, the Pradhan Mantri Ujjwala Yojana would include offering subsidy in the Jan Dhan accounts of the family's woman head to curb corruption. LPG gas connections would also likely to lead to improvements in the health conditions of poor women who generally depend on firewood and biomass for cooking food, and thus exposed to inhalation of thick and unhealthy smoke (Grassroots Energy Security for India's Poor and Women Empowerment: An Assessment of Pradhan Mantri Ujjwala Yojana 2.0).

Salient Features of the scheme

- The scheme aimed to provide 5 crore deposit free LPG connections to women who were devoid of LPG access and belonged to Below Poverty Line (BPL) which were to be identified from Socio-Economic & Caste Census (SECC-2011) list.
- The scheme proposed to provide Rs.1600 per household to cover security deposit for a 14.2 kg cylinder as well as regulator.

- The cost of the Hot Plate and purchase of the first refill is borne by the beneficiary
- The beneficiaries have the option to take Hot Plate or the first refill or both on loan basis from Public Sector Oil Marketing Corporations (OMCs) at zero interest rate.
- The loan is recovered through the subsidy accruing to the consumer on LPG refills under Direct Benefit Transfer for LPG (DBTL)
- PMUY is likely to result in an additional employment of around one lakh and provide business opportunity if at least Rs. 10000 crores to the Indian industry
- Launch of this scheme provided a great boost to the Make in India campaign as all the manufacturers of cylinders, gas stoves, regulators and gas hose are domestic.

The main mantra of this scheme is - Swachh Indhan, Behtar Jeevan- Mahilaon ko mila samman (clean fuel, better life). The initiative, in line with the dream of creating smokeless villages across the country, has come as a moment of pride for the women in BPL- household for getting LPG connection as an identity of their own and to lead a smoke free, less polluted, convenient and healthy life. Initially, PMUY envisaged a target of 5 crore connection with an allocation of Rs.800 crore over a period of 3 years starting from Financial Year 2016-17. The Cabinet Committee on Economic Affairs has enhanced the target of PMUY from 5 to 8 crore connection with an additional of Rs.4800 crore. The target for the revised scheme was to be achieved by 2020.

Moreover, the identification of prospective beneficiaries under PMUY in addition to the Socio-Economic Caste Census 2011 (Socio Economic and Caste Census (SECC), n.d.) list has been expanded by including the following categories.

- All SC/STs household
- Beneficiaries of Pradhan Mantri Awas Yojana (Gramin), AAY
- Forest dwellers
- Most backward Classes
- Tea and Extra Garden Tribes
- People residing in Island and rivers etc.

However, in 2021, PM Narendra Modi launched PMUY 2.0 (PMUY : New Ujjwala 2.0 Connection, n.d.) by handling over LPG connection, at Mahoba Uttar Pradesh on 10 August 2021. In the Union budget for FY 21-22, provision for an additional one crore LPG connection under the PMUY scheme was announced. This one crore additional PMUY connection aims to provide deposit free LPG connection to those low-income families who could not be covered under the earlier phase of PMUY. Along with a deposit free LPG connection, Ujjwala 2.0 will provide first refill and hotplate free of cost to the beneficiaries. Also, the enrolment procedure will require minimum paperwork. In Ujjwala 2.0, migrants will not be required to submit ration cards or address proof. A self-declaration for both family declaration and as a proof of address will suffice. Ujjwala 2.0 will help achieve the Prime Minister's vision of universal access to LPG.

Focus and Scope

Our research aims to analyse: How many women have been empowered in practice after the implementation of Ujjwala Yojna with a special focus on recent challenges faced by them

The primary focus of this paper has been to understand the success of PMUY in providing women from the BPL strata with cleaner fuel and a healthier life. This research paper tries to include all the barriers that these groups face in availing the benefits of this scheme. This paper covers the on-ground problems, achievements and where along the path, did the scheme lag behind. The scope of this paper ranges from understanding the aid and benefits provided by Pradhan Mantri Ujjwala yojana to the women belonging to the BPL category, the problems faced by them and also the level to which the program has been successful in improving their overall quality of life. On the other hand, this research paper tries to find answers to why many people are not able to avail or are not voluntarily availing the facilities provided by this scheme and to provide challenges as to how the challenges can be tackled.

The paper has tried to analyse the problems faced by the women on a holistic perspective but a survey on a smaller scale with a total of 39 respondents was conducted only in Delhi and hence, the analysis of the survey is restricted to Delhi. Hence, the scope of this paper is limited to the examination of only women-related issues and the overall effect of the Yojna from the lens of rural women.

Review of Literature

Women empowerment through PMUY scheme in Rajasthan: A study of rural households in selected regions

Doctor Yaduveer Yadav, Doctor Pradeep Kumar Sharma and Doctor Kiran Raj: the men empowerment group Pradhan Mantri Yojana PMUY Scheme in Rajasthan: a study on rural household in selected regions (Yadav, 2020)^[6]; this paper attempted to analyze the impact of PMUY scheme on the socio-economic status of women in the rural sector in India and thereby assess the effectiveness of Yojana on women empowerment in the rural sector. The present study is a survey-based approach in which server response was obtained from 187 women living in the rural sector in India the study's findings show that all the dimension of PMUY significantly impact the various aspects of women empowerment.

The paper also looked upon the barriers to LPG refills according to the responses received from the women in which affordability and easy access to biomass account for about a total of 56 percent of the barriers. It had a multi-layered objective namely to identify, to assess the impact and to propose a conceptual framework of the Pradhan Mantri Ujjwala Yojana and its relation with the social economic factors of women empowerment in the rural areas. The results of the research mainly based on the survey was that a positive relationship was seen between financial independence and managerial power of women with the sustainability of the Yojana.

The limitations of this paper are that it is based on the social economic variables related to the women of the rural areas; while not taking into consideration other factors that can impact the success and growth of this Yojana.

Are we really out of chulha trap: A case study from a district of Maharashtra

Vaishali Bhole Jaiswal, Pravin U Meshram; 2019; Are we really out of the Chulha trap: a case study from a district of Maharashtra ((PDF) Are We Really out of Chulha Trap: A Case Study from a District of Maharashtra | International Journal of Health Sciences and Research (IJHSR) - Academia.Edu, n.d.)

The paper is based on the study which was carried out in the rural area of Nagpur district in the state of Maharashtra. This study used the stratified random sampling technique. The stratification was done at three different levels i.e., district, tehsil and village. To identify the study area, the survey was conducted at two levels- viz., individual and household. This paper tries to categorically understand the application of the LPG as the major fuel in rural areas in the Nagpur district of Maharashtra and issues and challenges in switching to clean cooking food in rural areas of the district. The paper identifies household air pollution as a potential health risk to the women in underdeveloped countries. The paper also focuses on historical programs such as non-conventional energy sources that were initiated to improve cookstoves in 1982 and national programmes on improved *chulha* that started in 1983 and ended in 2004.

It focuses on the fact that even after being an industrialized state, a large percent of rural households in Maharashtra in India uses firewood as the main cooking fuel. Around 68% households in rural areas reported using firewood for cooking.

About 96.2% of the females were aware of the effect of fire on health but on a comparative level they were not aware of the ill effects of firewood gas over small children mainly e the mothers who cook food with their children by the side.

The paper talks of three major constraints towards the success of Pradhan Mantri Ujjwala Yojana in these regions.

1. Lack of Social awareness regarding the government policy and easy availability of biomass and affordability of these traditional fuels
2. The plan of converting subsidy in to loan comes across as a good option initially because of not having to pay a single penny while taking the LPG connection but as soon as the consumers realise they are not receiving any subsidy on the gas cylinder they become careless about refilling it again also in a BPL family which is not able to to meet its and it's very expensive to pay 700 rupees on an average for a refill so this high cost of refill and no subsidy by the government also backlashes the use of the Yojana.

The PPC commission study had identified the distance to the LPG distributor and long waiting time to get a refill are barriers to adoption of LPG. Also, the irregularities in charges of refilling and long distance between in the district centre of refilling discourages people from accessing LPG.

Rural women of Bikaner district and their knowledge level about selected rural development programmes

Rani A and Sareen N; rural women of Bikaner district and their Knowledge about selected ruler development program; 2021. (Chitra *et al.* – 2018 ^[7] - Knowledge of Rural Women Regarding Health Practice.Pdf, n.d.)

The following paper is based on the responses of the respondent i.e., 400 rural women beneficiaries selected randomly for this purpose of the Bikaner Lunkaransar

Korma Nokha and Sri Dungargarh Panchayat Samiti.

The findings of the paper are that 87.75 percent of the respondents had medium knowledge level of the PMUY scheme while 11.25 percent and 7.00 percent of respondents had low and high knowledge level of the scheme respectively. Further the data collected showed that 90.50 percent of respondents had knowledge that PMUY empowers women and protects the health followed by 72.50 percent of the respondents had the knowledge that the scheme provides the financial support of rupees 1600 for each LPG connection. Sadly less than 50 percent of respondents knew that PMUY provides interest free loans to purchase a stove and first refill of gas 34.72 percent of rural women had knowledge about Pradhan Mantri Ujjwala Yojana scheme, which is not even half of the respondents. This paper laid on the premise that a majority of the Indian population lives in the rural areas (65 percent) out of which 48.00 percent are women hence any ruler development program which lays emphasis on women empowerment of these rural regions is very essential for their development.

Women's satisfaction with pradhan mantri ujjwala yojana (PMUY)

Doctor Ranjana Mall and Doctor Sangeeta Rani - Women's satisfaction with Pradhan Mantri Ujjwala – (Publication - International Journal of home science)

The present paper was carried out to understand the discrepancies in the refilling of the LPG cylinders delivered under the Pradhan Mantri Ujjwala Yojana scheme, as a clear increase can be seen in the LPG connections all over the country under this scheme but a fall in refilling rate can also be measured by the empirical data available to us. The present study was carried out in Muzaffar district of Bihar under which 110 women beneficiaries in the age group 35 to 65 years from the two blocks of Kanti and Musahari were selected.

Design of this research is a descriptive survey research and it came out with the following conclusions

- Majority of the respondents were SC-ST followed by the OBC and general caste. More than half of the beneficiaries was Hindu while 35.45 percent of them were Muslim, Sikh 0.91 percent and Christian 2.73 percent.
- More than half of the beneficiaries were illiterate.
- Majority of the beneficiaries were satisfied with the connection subsidy provided by the Indian government.
- Beneficiaries' response indicated that the majority of them were satisfied with the availability of LPG refill.
- The beneficiaries of this scheme showed low satisfaction about the refill subsidy and cost of LPG.
- Majority of the beneficiaries were satisfied with the simplification of the kitchen work with the help of LPG cylinders.

The paper concludes with the recommendation that there is a need to rethink the price and the subsidy provided by the government over the refilling of the cylinders as they are serving as the major drawback behind the low refilling rate of the cylinders provided under the scheme to the people.

Methodology of research

The methodology that has been adopted is a hybrid technique of using both primary and secondary data to have a comprehensive study over the topic.

The primary data: Includes a survey that will be conducted in a rural area of Delhi at Kalyanpuri, a village in East Delhi with the rural women on the beneficiaries and non-beneficiaries of this scheme which included a questionnaire that tried to identify if they know about the scheme and if yes, then how they have benefited from it. The survey is done with a mix of open-ended, close-ended, and subjective questions. Detailed analysis of the survey is presented towards the end of the paper.

Secondary data: Include content available on the internet i.e. surveys, articles, reports, journals, various research papers, etc related to the study. Researchers will be taking part in both qualitative and quantitative research to deeply understand the veridical success and drawback of PMUY to evaluate how much more needs to be done.

Reasons behind launch

During our research, we found that people used to collect firewood as a cooking fuel in the villages. Villagers used to spend their entire day collecting firewood from forests to prepare the day's meal. Collecting, processing and transporting of cooking fuel every day was a major burden for families living in rural India which was expected to be done only by the females who even dropped their education for this work. Not only was the collection of firewood time-consuming and integral part of the daily chore of the womenfolk, but the smoke from the firewood would fill the entire household into a deadly surrounding. These toxic gases from firewood were inhaled by the family members, primarily by the women of the household, making them susceptible to chronic diseases. (WHO Publishes New Global Data on the Use of Clean and Polluting Fuels for Cooking by Fuel Type, n.d.) (Mhamia, A. (2016) [8]. Pradhan Mantri Ujjwala Yojana: a giant step towards better life for all. Pib. nic. in. Retrieved from <http://pib.nic.in/newsite/printrelease.aspx>.)

According to WHO estimates, about 5 lakh deaths in India are due to polluting cooking fuels. (WHO Publishes New Global Data on the Use of Clean and Polluting Fuels for Cooking by Fuel Type, n.d.) Each year, close to 4 million people all over the world die prematurely from illness attributable to household air pollution from inefficient cooking practices using polluting stoves paired with solid fuels. Most of these premature deaths are due to non-communicable ailments such as heart disease, stroke, chronic obstructive pulmonary disease, and lung cancer caused by Indoor Air Pollution from cooking fuels used.

Indoor Air Pollution from firewood is also responsible for a significant number of acute respiratory illnesses in young children along with harming the environment in a very dangerous way. As per a WHO report, smoke inhaled by women from unclean fuel is equivalent to burning 400 cigarettes in an hour. It isn't just the watery-eyed, dry-throated women but also the children who are often in the vicinity during this arduous cooking process women would have more spare time on their hands which they can choose to use as they deem fit. People in rural India suffer tremendously due to the use of polluting fuels.

"Approximately 2.52 million people die due to pollution in India every year household pollution resulting from the burning of biomass chulha (stove) is a major contributor to this statistic," said Swati Mohan, Business Head, National Geographic and Fox Networks Group. (Bhaskar, 2018) [10]

India in traditionally patriarchal societies, such as most of rural India, women are assigned the responsibility of household duties, which includes the preparation of meals and by extension, procuring the means to do so as well. This exposes them to the health risks of indoor air pollution, and beyond it, to the risks and drudgery of procuring the energy sources.

The research study estimates that the annual health burden for India from indoor air pollution to be 1.6–2.0 billion days of work lost in terms of sick days. Disproportionate division of labour within the household results in women collecting over 56 percent fuel wood whereas they contribute little to the household income.

Moreover, women's psychological well-being is likely to be affected by household chores. A study that focused primarily on improved biomass cook stoves, but also analysed the use of other cooking solutions, including kerosene and liquefied petroleum gas (LPG) (Global Alliance for Clean Cook stoves), showed that women who saved time due to clean fuels increased their involvement in social and family activities, including spending time with children and monitoring their studies, but the high initial investment required in clean cooking technology and fuel (i.e., stove, cylinder, gas, regulator, and pipe) has been the most frequently reported barrier to adoption by those with less economic resources and among those collecting wood for free. (Mall, R., & Rani, S. (2020) [11]. Women's satisfaction with Pradhan Mantri Ujjwala Yojana (PMUY). Gen, 16, 14-55.) The 2015 largest rural energy survey in India conducted by Columbia University in collaboration, found that about 95 percent of the rural households expressed their lack of paying capacity as a barrier to adopting LPG. (Preservation and The New Data Landscape - Columbia GSAPP, n.d.) For this affordability was aimed to be targeted under PMUY.

Hence, the crux behind launching PMUY was to give the women the right to clean energy and the right of life free from drudgery and smoke. The main aim was to empower the lives of millions of women by giving incentives to them to use LPG cylinders.

Supposed benefits to womenfolk

The need of the hour was smokeless villages in India and relief from the scourge of cooking for hours in smoke-filled kitchens. Not only was Pradhan Mantri Ujjwala Yojana supposed to help change the energy resources, it also was aimed towards women empowerment. (Nanda, B. C. Pradhan Mantri Ujjwala Yojana as a Tool of Women Empowerment: An Assessment. Mahila Pratishtha, 231.) [13] Below listed are a few major things that according to the policy, were supposed to help women in theory.

Improved status

Adoption of LPG via PMUY enabled women to invest their saved time and effort in collecting solid fuel, to more productive activities. This led to an improved status of women in the household, which further resulted in cleaner fuel choices and better health outcomes. An assessment of these displacement activities within households is important to judge the overall impact of PMUY on women's empowerment.

Women empowerment

This policy is, as they say concerning women - "a small step

for women, a huge step for womankind". No more slogging in front of a stove covered in sweat, ash, and smoke. When the world goes on about women's empowerment and equality of the sexes, everyone forgets to address the pleas of those who don't even realize that they need help, and the best way to imprison a person is when the prisoner doesn't even realize he/she is imprisoned. In this case, it becomes really easy to overlook those who don't realize the risk they are putting themselves in by confining themselves to 'free' fuel and stripping each other of the opportunity to progress. Empowering women has been found to contribute positively to the health of households as women are directly involved in household decisions on energy use and expenditures. The more empowered women are, the lesser their burden, the more likely they are to engage in income-generating activities, and hence, increase the purchasing power of the household.

Relief from the curse of smoke

Ujjwala scheme is special to the poor women as it can provide relief to them from the prolonged exposure to unhealthy smoke and indoor pollution while cooking. During the budget speech for 2016-17, India's Finance Minister had expressed the concern that Indian women from centuries were facing the 'curse' of smoke during cooking. In the Indian household, as most of the domestic work is done by women, the scheme in particular aimed at benefiting the women in both long and short terms.

Creation of ancillary jobs

The rural and urban unemployed youth, engaged in the supply chain of cooking gas, will get employment opportunities from the scheme. As the scheme's coverage increases, the number of youth employed is also likely to increase. The entire process can potentially lead to ancillary job creation and income growth at the bottom.

Opened other avenues

In their free time, these women will get by using LPG, they can get educated, and take care of their children, venture into avenues they previously thought impossible. This is particularly true for rural areas of the country one of the most important advantages of this scheme is the step towards women empowerment.

Breaking patriarchy norms

Empowered women are healthier and ensure healthier households, increasing the likelihood of educated children, which in the long term, leads to an even higher generation of income for the household. Issuing LPG cylinders in the name of female family members also breaks the patriarchy set up, and it gives a feeling of respect and importance to the women. (Sahoo, M. K., Patel, P., & Patel, R. (2018) [14]. Grassroots Energy Security for India's Poor and Women Empowerment: An Assessment of Pradhan Mantri Ujjwala Yojana. Governance & Public Policy, 8(2), 18-27.)

Achievements: where theory met practice

When we start counting on the benefits of this Yojana, we realise that the core of the entire Yojana is women empowerment. Each step taken under this Yojana impacted women's lives deeply. It is seen that a large part of what was written in the document was implemented and brought the desired changes in the lives of rural women. In the early part

of the research paper, facts have already been stated. In this part, the paper has tried to analyse the positives of the yojana. The extension in the no. of beneficiaries from other categories, making the first refill and hot plate free of cost and further extension of the target in 2021 has really done wonders for the rural population. Let us look at some of the major achievements are mentioned below:

1. Persistent increase in LPG Coverage and accelerating LPG Connections: Launched in 2016 to boost the usage of clean cooking fuels and control the related disease burden, the Pradhan Mantri Ujjwala Yojana, estimated on the basis of active domestic connections and estimated households, has claimed success with almost 99.8 percent in April, 2021 from 62 percent in May, 2016 coverage of liquefied petroleum gas in India as said by Union Minister Dharmendra Pradhan. (Mall, R. (2019) [15]. Effect of education on adaptation & sustainability of Pradhanmantri Ujjawala Yojana. Gen, 5(06.58), 166.)

In the first round, the Union government has released details of twenty-two states which show around a 20 percent increase in actual usage of clean cooking fuel from 2015-'16 to 2019-'20.

The table also gives a clear picture of increase in LPG connections as released by 'National Family Health Survey-5' in 2019-20 as compared to the connections in 2015-16. This has been a great step towards women empowerment as their work burden has reduced to a large extent and their health too is getting better.

Table 1: National Family Health Survey

State	NFHS-4	NFHS-5
Andhra Pradesh	50	78
Bihar	11	30
Gujarat	27	41
Karnataka	32	69
Kerala	51	66
Maharashtra	34	65
Telangana	48	88
West Bengal	11	21

Sources: National Family Health Survey-4; National Family Health Survey-5; PRS.

All India LPG coverage also increased from 61.90 per cent in May 2016 to 94.30 percent in April 2019. This was a momentous achievement for the nation which not only helped many women to cook food easily and improve their health but also helped them to get education and do other stuff as they got free time to come out of their homes and seek various opportunities to gain the respect they deserve.

2. Provision of Loans: In line with the scheme, OMCs have also extended the unsecured and interest-free loan to the PMUY beneficiaries on account of cost of first refill and / or cost of gas stove. As on 31 December 2018, 68.25 percent of beneficiaries have availed loan from the OMCs. Besides this an option for loan was also extended to the beneficiaries to cover the cost of the stove and first refill. A total of 6.24 Cr Households (78 percent) availed the loan facility which showed that incentives given attracted the rural household to take the cylinders impacting the rural women in a positive way.

3. Independence and Identity to women: The biggest achievement as analysed by our study is the recognition that women have been given as a part of this Yojna. As the LPG cylinders are issued in women's names. Knowing that women have to fight for their identity in almost all parts of the world, issuing the cylinders in their name is an achievement in itself. In recent times, easier KYC guidelines and greater prominence to self-certifications has helped make women even more independent. According to oil ministry officials, KYC approvals for 9.5 million new applications have already been received by the public sector oil marketing companies, which is again a positive sign. (Patnaik, S., Tripathi, S., & Jain, A. (2018). A roadmap for access to clean cooking energy in India. *Asian Journal of Public Affairs*, 11(1), e4.)

4. Participation of women in public sphere: Along with this, as we are well aware that since cylinders are issued in the name of women, women need to be consulted and taken to government departments for the due process which will also give them an opportunity to explore, come out of their houses and know about the public sphere. Also, since many of the women didn't have Aadhaar cards which were a compulsion to avail the Yojna, many women also get them made which is also a favourable impact.

5. Mutual Learnings and Awareness: A big advantage of this Yojna, as analysed by us, was also the creation of awareness and breaking of prejudices against LPG cylinders. Considering the fact most of the females are new users, LPG Panchayats were envisioned to discuss safe handling of LPG, and benefits of using LPG over traditional fuels. Through these community meetings, mutual learning was encouraged and women got to learn so many new learnings as to how to use them safely and efficiently.

6. Global Glory: It was even applauded by the IEA whose Executive Director Fatih Birol mentioned that "Providing access to LPG across India by 2020 is a major achievement. It is not an energy issue, it is an economic issue, it is a social issue," in 2020 at a conference. It was globally recognised even by WHO also wherein one of its reports said "While the latest data show ambient air pollution levels are still dangerously high in most parts of the world, they also show some positive progress. Countries are taking measures to tackle and reduce air pollution from particulate matter. For example, in just two years, India's Pradhan Mantri Ujjwala Yojana scheme has provided some 37 million women living below the poverty line with free LPG connections to support them to switch to clean household energy use,"

The biggest beneficiaries are the women from U.P., West Bengal, Bihar, Madhya Pradesh and Rajasthan. A recent testimony to the success of PMUY was seen at a workshop in Delhi associated with International Women's Day 2020 celebrations where large number of PMUY beneficiaries became a part of the workshop and shared their experiences, as to how their lives have improved substantially after the adoption of gas chulhas in their homes. (Step, P. M. U. Y. P. towards Social Inclusion in India.)

Counting on all these achievements do not in any way indicate that this scheme has been completely successful on ground without any flaws. There have been several challenges on ground that this Yojna has been facing. To understand this and to appraise the Yojana as analytically as

possible, the research in the next part will be elaborating the major challenges lately faced by the rural women under this Yojna.

Challenges: what deviated theory from practice

The Pradhan Mantri Ujjwala Yojana was introduced to initiate some work for the well-being of women. A lot of effort was undertaken on the part of the government towards both- policy formulation and implementation. For effective implementation of the policy, Effective Nudging strategy was adopted by the government. Incentivization of the implementing officials too, was done in order to improve the entire process. There have been many achievements too of this Yojna as discussed in the earlier part. Despite all these efforts and substantial progress, a number of loopholes and roadblocks still remain pretty intact in terms of accessibility and affordability due to which women were compelled to use unclean cooking energy resources. Since, in most of the households, cooking is done by females, the most immediate sufferers of this pollution are the women whose lives are at stake. (Mani, S., Jain, A., Tripathi, S., & Gould, C. F. (2020) ^[18]. The drivers of sustained use of liquified petroleum gas in India. *Nature energy*, 5(6), 450-457.)

Even after subsidizing the LPG cylinders, its price still remains to be as high as about ₹ 800, which varied in different areas. This price now is higher than any other fuel that one can use for cooking. Kerosene, for instance can be bought for around ₹ thirty-three per litre and dung cakes and firewood is usually available to the people. In a developing country like that of India, where the number of poor people is high, it becomes very difficult to make a shift to sustainable resources. Since, females are not the earning members of the families and so, they are forced to use the fuel whatever the family can afford and become the most proximate victims of this pollution. A poor family will not care about environmental problems and will stick to the use of cheaper fuels for cooking; reason being lack of capital availability and sustainable resources being comparatively expensive. The overall LPG consumption has not increased significantly, despite a high growth of LPG connections. The gap between LPG connection and customer growth in 2016-17 shows that customers were not buying enough refills. (Sanghera, 2019) ^[19] It has been accepted by most people that using LPG is for sure better than using any other fuel. However, this theory has become very difficult to implement on ground levels. The policy was aimed at making an exclusive shift from all other sources to the use of LPG; that however, has not become possible through PMUY. There have been some changes but they are not long-term ones. The beneficiaries of this policy seem to resist making a complete change and that is majorly because of the incompetence of the policy on real grounds.

In Covid - 19, the problem of inflation increased manifolds. The price of LPG for domestic consumption has increased by 41 percent or ₹ 237.5 per cylinder in the ten months. (Energy News India- Power News India, Energy, Oil and Gas News Is under Construction, n.d.) In 2021 alone, prices were hiked by ₹125 per cylinder with three consecutive hikes in February. It is this spike in the number of users that makes the rise in prices a cause for concern as more than 8 crore people below the poverty line are consumers under the Ujjwala scheme. Moreover, the government did away with the direct benefit transfer on LPG (DBTL) subsidy from

May 2020.

Hence, this challenge of Affordability due to persistent increase in inflation is, without a doubt, the biggest roadblock in the way of PMUY implementation.

Limited doorstep delivery, as mentioned above, is another humongous challenge in front of the people and the government. According to research, most of the beneficiaries are of the view that the supply of cylinders is not an issue. (Das, B. (1976) [20]. A Study of Socio-Economic Condition of the Women of Mandai Block with special reference to Central Governments Developmental

Schemes Implemented in Tripura. Journal of Huazhong University of Science and Technology ISSN, 1671, 4512.) The problem was that there is a lack of doorstep delivery in many areas. However, in the pandemic, late delivery too was a huge problem faced. The people, as a result, have to travel long distances in order to pick the cylinders. For single women, this is even a bigger issue as there is no male member to assist them which makes the problem very serious. Limited home delivery is specific to areas like Madhya Pradesh, Chhattisgarh, Uttar Pradesh, etc.

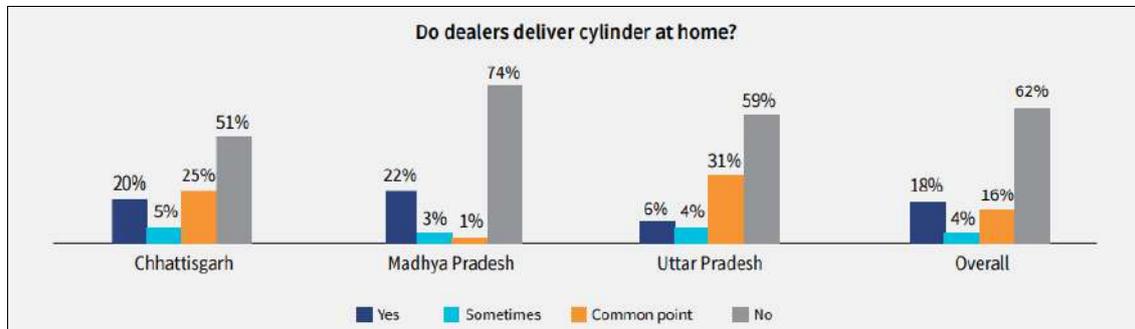


Fig 1: (Source: PMUY : Home, n.d.)

The problem of cooking stoves and first LPG cylinders is also a major one. Under Pradhan Mantri Ujjwala Yojana, beneficiaries have the option of getting the cooking stove and first LPG cylinder via the LPG distributor on an interest-free equated monthly instalment (EMI) basis. The EMIs are expected to be recovered from subsidies on future cylinder refills. This leads to a structural problem. Since stove and associated expenses cost around ₹1,600 and the subsidy per refill is in the range of around ₹200 to ₹300, it would take five to seven refills for the loan to be repaid. (Energy News Monitor | Volume XIV; Issue 46 | ORF, n.d.) During this period, beneficiaries are expected to pay the full unsubsidised price of the refill. Since PMUY beneficiaries would typically be poor households, they would find it extremely difficult to come back for refills if they have to buy LPG at unsubsidised prices five to seven times. In this way, the problems faced by rural women are never solved and they have to continue to face the drudgery.

Awareness issues: Too lead to major setbacks in policy implementation. Many people in the rural areas are unaware of the benefits of using LPG cylinders. More than that, they are unaware of the harmful impacts of other fuels on them. If they all were to be made aware of the serious cardiovascular and respiratory problems that the traditional *chulas* would impede on them, the scheme might see some level of improvement. Rural women living in rural and backward areas are not familiar with the concept of using LPG as a cooking fuel and thus, think of it as a complex phenomenon. (Why Have Improved Cook-Stove Initiatives in India Failed? - ScienceDirect, n.d.)

LPG distribution: Is tricky too. The consumers of LPG are increasing day by day but the LPG providers and suppliers remain the same. From April 2016, the increase in the total number of suppliers has taken place at 9%, which is nowhere to compare with the increase in consumers. This increase in consumers is leading to a slow provision of LPG cylinders to houses, which in a way is discouraging as till

the cylinder reaches them, they've to switch back to their original sources. The discrepancy between increase in the number of distributors and consumers is much worse in some states. For example, in Bihar and Chhattisgarh, the total number of distributors went up by only 5 percent and 18 percent respectively while the number of consumers increased by 84 percent and 91 percent respectively. It is unlikely that distributors would be able to service consumers effectively in this situation, and points to a need to increase the number of LPG distributors rapidly in rural areas. (Manjula, M. (2019) [23]. How Gender-sensitive Are India's Energy Policies? Economic & Political Weekly, 54(3), 19.)

Now another major problem with the scheme is that the people are taking the free LPG connection but not continuing with it. The scenario is that in a year a family needs to spend around Rs.5000 on the refilling of the cylinder apart from the one-time connection that they are getting for free. So what people are doing is, they are taking the connection and using the free first cylinder of it. But after that gets over they are not using the LPG any more. They are again moving back to using cheap unhealthy fuel with the direct adverse impact on rural women.

Safety above anything else, has been an issue. Given the increase in connections, especially to below poverty line (BPL) households, safety has been a major concern. The likelihood of accidents has increased not only because of the lack of amenities in beneficiary households but also because of lack of awareness. The Ministry of Petroleum and Natural Gas (MoPNG) has taken cognisance of this fact and has recently launched the LPG panchayat programme to increase awareness about safety-related issues. However, a lot more needs to be done in order to avoid accidents, including regular inspections and adherence to safety procedures. Compliance to such procedures should be monitored by the OMCs and also reported for every distributor. Data related to accidents, loss of life and property and the action taken should also be reported publicly. Again, since, in most families, women cook food,

they are directly under such threats.

Behavioural issues too, form a major part of the PMUY challenges. People in backward states and areas are more than often not concerned about health issues and are guided by many prejudices. In states like that of Chhattisgarh, beneficiaries state that the women in their households are now used to the smoke and thus they don't see any adverse health effects. Also, the women have been using the traditional chulas ever since and have thus accepted it as a cooking mode. They're so used to the traditional methods that making an instant shift to sustainable methods is now quite uncomfortable and weird for them, making them understand is also a big challenge.

Targeting beneficiaries is a whole another problem that deserves separate attention. The key target audience of this scheme are women belonging to low-income or BPL families. In this class of consumers, those who do not have an LPG connection in their household can apply for a connection under the expanded scheme. In addition, the LPG connection will only be provided under the name of women beneficiary of the BPL household.

Reaching the targeted audience in real life however, is very difficult. This was the key challenge in allotment of free LPG connections, as there was a lack of authentic data that could help identify poor households with 100 percent accuracy. In many cases, women have not been given the access to go out and apply for the Yojna in their name which is also an obstacle in achieving the purpose. Though the government used the SECC-2011 data, it was reported that many deserving households were left out during the field work. (SECC 2011, n.d.)^[24]

Above stated are the major challenges faced by both, the rural women as well as the government in the way of smooth implementation and success of the Ujjwala Yojana. Apart from the ones listed above, there are many other practices that are carried out under the nose of the government. There are people who admit tampering of cylinders, selling them at high costs, black marketing, staking of cylinders, exploiting the poor families, etc. However, official records of such practices are hardly available and therefore, it becomes more than difficult to track them and control them. These activities, though not given enough emphasis, act as termites in the wood of peaceful development.

The Gap

Having read both- the achievements as well as the challenges before the scheme, one can easily conclude that many gaps and cracks were embedded in the entire process. Even after the various implementation strategies undertaken by the government for smooth execution, the programme was not entirely- a success. There were certain arenas in which the policy formulation lagged and certain areas in which the execution lacked.

Under the Pradhan Mantri Ujjwala Yojana, a significant gap can be noticed between what the government wanted it to be and what it turned out to be. It looks like there were many pointers that should have been evaluated and worked on before the implementation of the policy. The number of LPG suppliers, for instance, was a very basic mistake on the part of the government. If the supply of LPG was to be increased, the supplier ratio should have been worked upon accordingly. Also, the continued subsidising of the cylinders could have reached a better solution. Awareness about using

the LPG cylinders safely and efficiently should have been paid more attention to. There were many cases in which the households were unaware of the usage of the cylinders, thus, leading to mishaps. (Kaur-Sidhu, M., Ravindra, K., Mor, S., John, S., & Aggarwal, A. N. (2019)^[25]. Respiratory health status of rural women exposed to liquefied petroleum gas and solid biomass fuel emissions. *Air, Soil and Water Research*, 12, 1178622119874314.)

Implementing the policy and getting the cylinders to all the needy is a whole another lagging point. The recognition of the beneficiaries was faulty, leading to a 'not-so-accurate' distribution of the subsidized cylinders. Also, activities like those of tampering of the cylinders, black marketing, storing huge quantities took place. Despite the effective nudging implementation and incentivisation of distributing officers, unlawful activities still are taking place, having a major impact on the policy's image and execution.

Just like most of the other policies, corruption and underground illegal dealings had a major destructive role in this policy too. One however, has to accept that the achievements that this policy made, were remarkable. The initiative in itself is highly commendable as it was one of the few policies that aimed at bringing about improvements in the areas of environment and women. A little more effort could have brought the theory and practice into congruence and made PMUY a benchmark of successful policies.

Kalyanpuri: Survey analysis

As a part of this research, a survey was conducted on the rural women on '23rd and 24th October, 2021' to understand the impact and influence of Ujjwala Yojana on the rural women.

Due to the paucity of time, the survey was conducted to a smaller scale in *Kalyanpuri*, a Village in East Delhi Tehsil in East Delhi District of Delhi State on a total of thirty-nine respondents (rural women). All of them were below poverty line. In some cases, women were not comfortable sharing their name or their mobile number, so they were not forced and the name of the male member of the family was taken. The person who went for the survey verbally asked the questions and took responses. The main aim of the survey was to know how many people are availing Ujjwala Yojana and how many are not.



Image 1: Taken by our research team

For this purpose, two questionnaires were prepared. One was for those who were taking LPG cylinders under Ujjwala Yojana in which questions were regarding subsidies, effect of the Yojana on their lives, problems faced before using this, price of cylinders charged to them, etc. Second was for those who were not availing Ujjwal yojana wherein questions asked were related to the kind and cost of fuel

they use, problems faced by them, any other scheme availed by them, if they have heard about PMUY, etc. Another related goal of this survey was also to create awareness among those who did not know about this Yojana and inform them about a brief of this Yojana so that in future they can avail this.

The major findings of this survey are mentioned below:

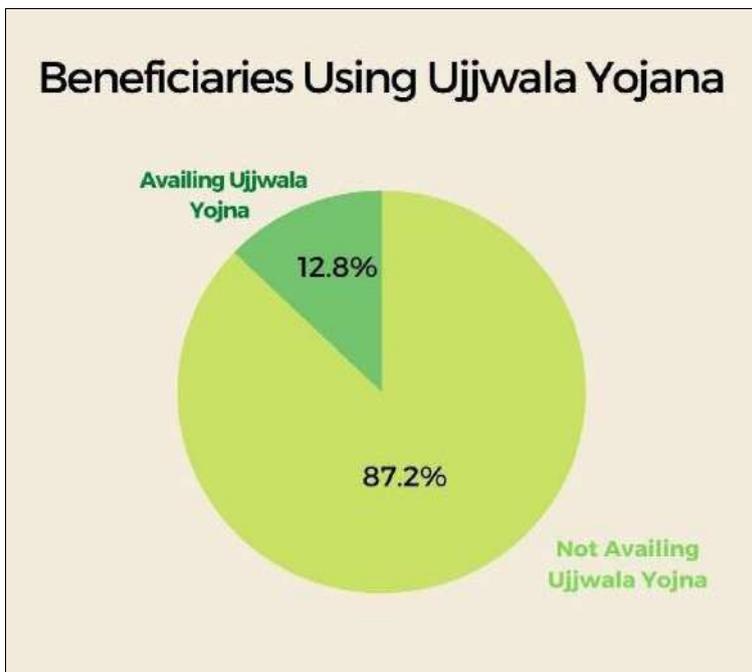


Image 2: Made by our team

Surprisingly, it was found that out of the thirty-nine households, only five are taking advantage of the Ujjwala Yojana. This shows that 87.2 percent of the households were not using Ujjwala Yojana.

All of them were taking advantage of the Ujjwala Yojana

for five years. All of them got LPG. Cylinders and LPG connection for free which lines with the Yojana as prescribed in the earliest phase wherein only the cylinder and connection were given for free.

Unawareness among People

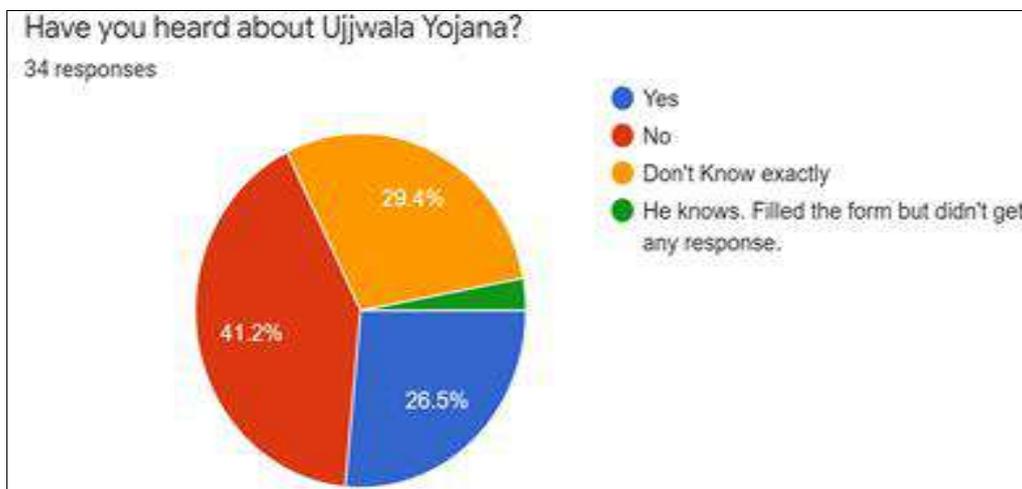


Image 3: Made by our team based on the survey

Even after five years of the implementation of Ujjwala Yoojna, it was found by us that the majority of women did not know about it, especially being a resident of NCT of India, hence it was clearly evident that a lot of work has to

be done to spread awareness on ground. This is because no policy can be successful if the people who need them don't even know about it and hence, efforts for better efficient implementation should be done.

Need for LPG Cylinder

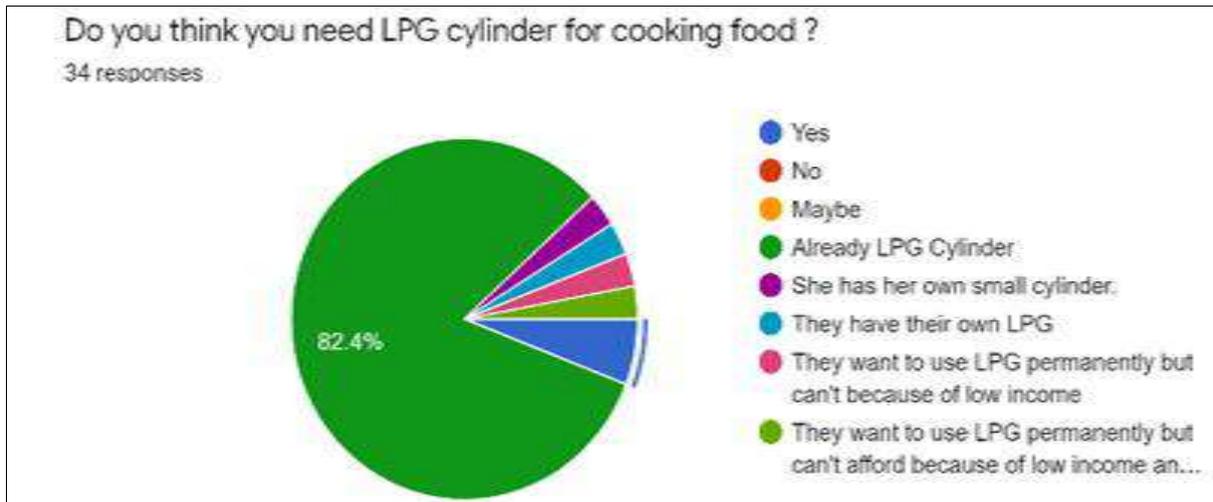


Image 4: Made by our team

When asked the females availing the PMUY, it came before us, that this yojana has provided a lot of ease in cooking to all the females and life has become much more comfortable. their workload has reduced to a large level. Even 82.4 percent of the people who are not availing the PMUY are also using LPG cylinders but they have to buy either at higher rates in black or the supply is irregular. Those who are not able to afford it are still using kerosene and cow dung cake. This clearly shows the lack of unawareness, corruption and dire need of the LPG cylinders. Lack of proper implementation is a big reason behind this unawareness and corruption.

Problems Faced

The females who are taking LPG connections told us that all of them faced the problem of irregular fuel supply before availing the Ujjwala Yojana and one female even faced respiratory problems due to this. Irregular fuel supply is faced even by the females who are not availing PMUY. This clearly shows how impactful Ujjwala Yojna has been in not only dealing with the health problems of females but also providing them with a regular fuel supply. Most of them who are not availing PMUY use LPG cylinders only but since, the prices are so high for which also forces some people to use other domestic fuel like kerosene or cow dung simultaneously for cooking fuel.

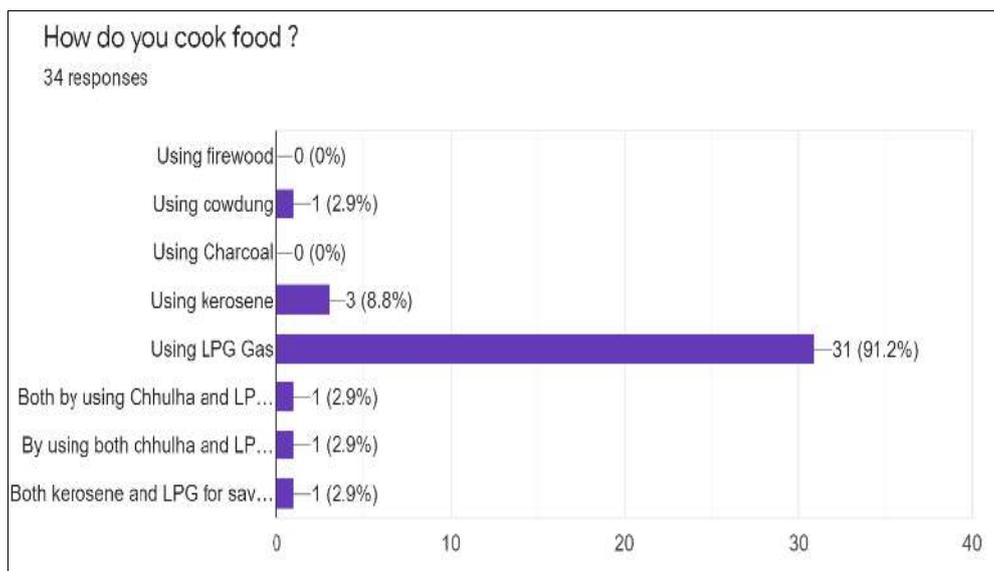


Image 5: Made by our team

This is a very alarming situation not only because many people, despite having economic problems, have not availed PMUY but also because this use of alternate fuel causes them to waste their time in arranging for fuel along with other health problems. This even burns a whole in their

pocket as some of them are even buying it in black. In pandemic, this has been even a greater problem as many even lost their job or get less payment. Managing finances for other things like education, clothes, health, etc. and fuel requirements has been very tough for the majority of them.

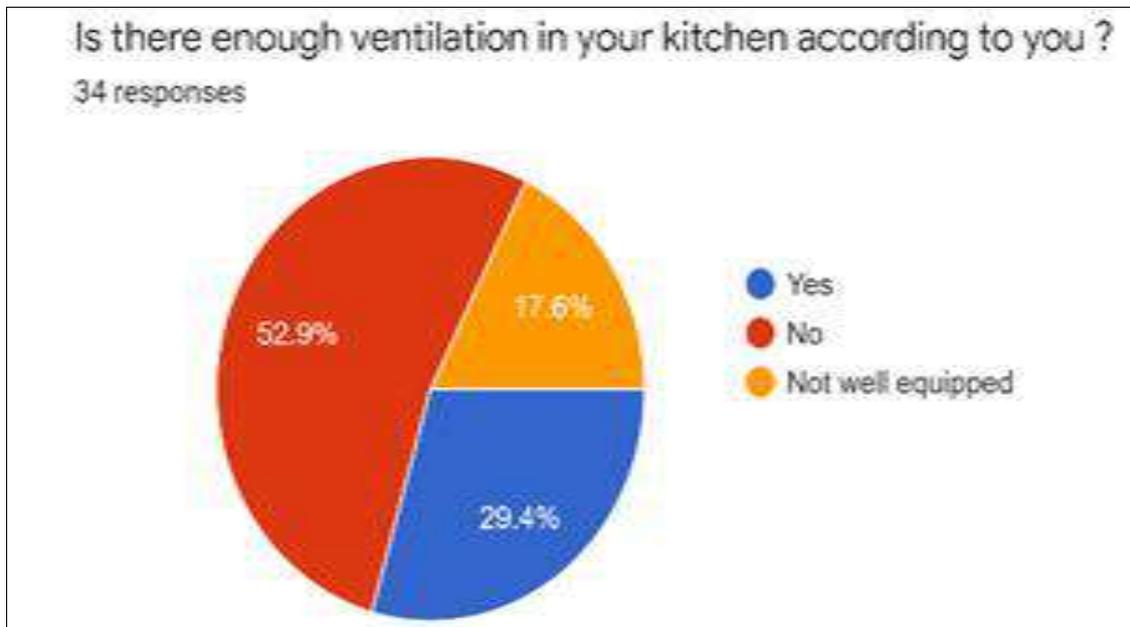


Image 6: Made by our team

Another major challenge which we noticed as part of this survey is that kitchen of many of the households were ill-equipped and not ventilated. (see the figure) In such cases, using LPG cylinders can also be harmful as cooking of any kind produces some pollutants which can be harmful if inhaled and in case of poorly ventilated kitchens, this can cause major health problems.

One person even mentioned that he filled the form of availing PMUY but they did not get any response. Hence, some mechanism to give response to each form and no form is left unanswered should be made more efficient. Some of them even got less gas in the cylinder which is a sheer mark of corruption and malpractices prevailing in our society which needed to be taken care of for the proper management. Maximum number of people were not even aware of the Yojna, hence, a lot of efforts are needed to be done for creating awareness.

Impact of Covid Times

The households which were availing the Yojna are getting LPG cylinders at normal rates even in the Covid – 19 times. None of them got any support from the government in the pandemic in regards to the cooking gas. Most of them faced several problems in the pandemic. None of them are getting subsidies which is a major problem faced by the people. However, we analysed that not getting subsidies, increase in the rate of LPG cylinders as well as late delivery of the cylinder, have prompted them to revert to older methods which is very dangerous as it would ultimately reverse the entire purpose of the PMUY.

This can be considered as one of the major drawbacks of the Yojna on ground level where prices of the cylinders are stopping them from availing the cylinders.

Scope of Improvement in Future

All the women under a survey who were availing this Yojna wanted the subsidies to be given again. This clearly showed that subsidies played a very important part in the lives of the rural households to take full benefit of the yojana and smoothly function their lives. Not getting subsidies has impacted their lives in a very negative way but has also

forced them to stop using cylinders especially in the pandemic. As studied by us, people on a large scale demand for subsidies and reduction in the price of LPG cylinders. Although, it was mentioned in the news that the next leg of the Pradhan Mantri Ujjwala Yojana (PMUY) is going to focus on affordability of Liquefied Petroleum Gas (LPG or cooking gas) refills but no work in this regard has been done yet. Some of them even said providing employment to the poor and increasing their daily wages should be considered so that they can afford these cylinders. Control on inflation was also emphasised. (Josey, A., Sreenivas, A., & Dabadge, A. (2019). Beyond Ujjwala: Ideas to enhance LPG use sustainably.)

Hence, at the end, from the survey, we analysed that definitely has impacted the lives of the rural women in a big way and caused many positive impacts in the lives of rural women for the good but still there is discrepancy between what was mentioned in law and the procedure of implementation and what is actually implemented. The most major obstacles in achieving the goals of the Ujjwala Yojna was the hike in prices of the LPG cylinders and not providing subsidies which in many cases are forcing these people to again use harmful methods of cooking which might ultimately destroy the main purpose of the policy, that is, Swachh Indhan, Behtar Jeevan.

Forward-looking suggestions

- As recommended by the Standing committee on Petroleum and Natural Gas, our study would also like to suggest that the government must include poor families residing in urban/semi-urban areas within the ambit of the PMUY scheme.
- As seen in the survey conducted by us as well in other reports, major problems faced by the beneficiaries is the cost of LPG cylinders and no subsidies. So, provision of subsidies and reduction in cost is also suggested.
- Another major issue is that of awareness and hence various means like, rallies campaigns, nukkad nataks, workshops, seminars, webinars, pamphlets, poster, etc. should be promoted at local and national level. school and College students can also be chosen for this

creation of awareness.

- Proper and detailed information in local language at the centre should be available so that people can easily avail this Yojna as most of them are illiterate.
- In the above research paper, we noticed how people were facing problems with receiving the refill cylinders. The number of dealers should be increased to fill the “white spaces”. Providing home delivery options should be a major concern of the government. This might help with LPG provision and along with that, unemployment too.
- Alternate LPG booking methods too, need to be introduced. A lot of people can find the procedure to be cumbersome and thus, might simply retract from using the scheme. Various options should be made available to the people to choose from.
- The government can even advise LPG dealers to establish additional warehouses near the locations of PMUY beneficiaries. This might actually make the entire process easier and help in better networking.
- Another less talked about issue was that women were given LPG cylinders under the Yojna but they were not well aware as to how to take safety precautions, approximately when to order a refill, and how to check if the LPG cylinder is leaking or not. To deal with the problem, proper literacy should be provided to each woman to take proper safety measures while using these cylinders to avoid any mishap. Some programs have been conducted but they need to gain a bigger ground.
- It is recommended that a better picture of the real situation can be presented if the government will use the data from the consumers’ side instead of the demand side so that the problems faced and the provisions available to the rural households are directly made available without any discrepancy.
- Some program/policy for better ventilation in the kitchen should also be made as most of the rural households had poorly ventilated kitchens. This is important as despite using LPG cylinders, there is a possibility of mishaps and health issues due to inhaling of pollutants from the cooking food.
- Most of the people are not able to afford the fuel as they are either not having employment or have a lesser pay, hence, the government is also suggested to work more enthusiastically on all the employment policies for providing better employment opportunities, particularly targeting rural people, so that they can afford cleaner fuel.
- The paper also recommends linking LPG with the Public Distribution System to increase its reach to rural areas with ease. This would be highly beneficial. Since PDS already has a well developed network in our country, especially in rural areas, including LPG cylinders within its ambit can be quite poignant.
- Promoting the use of modern technology for more accuracy in data collection and distribution of cylinders to avoid black marketing, commercialisation or concentration of LPG cylinders by local authorities for their own use (like pradhan of villages).

Conclusion

With the analysis of several papers and conducting a survey

in the village of Kalyanpuri, the paper has been able to conclude that the impact of Ujjwala Yojna on women has been a shade of grey. There have been positives as well as negatives. In some places, we have found out that there has been complete alignment in the theory and practice. There have been areas where the policy has been highly successful, for instance, it has promoted rural India to change their fuel, even those who don't know about the Yojna had awareness about LPG cylinders and the harmful effects that conventional fuels are causing. The achievements of PMUY have been clearly enlisted in the paper. However, there have been many areas where the theory and the practice were asymmetrical and where the impact of PMUY was not as it was supposed to be. For instance, less gas in LPG cylinders, affordability issues, people reverting back to older fuels, people's unawareness among others have raised several questions on the real success of this policy. On top of it, the pandemic had worsened the situation. All the problems were aggravated in the Covid-19 and women were forced to do a trade off with their health by choosing cleaner fuel or spending money on their children's education, family health and other daily requirements.

Having noticed that there was a discrepancy between theory and practice, even considering that if implemented more carefully, it could have had much better impact, the paper has to acknowledge the accolades that this policy has earned. It has not only ensured the well-being of women and prevented them from this smoky dungeon but also helped in enhancing the status of the women by giving them recognition and improving their quality of life.

Having a scope of improvement is always good for the progress of a nation and hence, after doing this detailed analysis, the paper has even mentioned recommendations that were thought to bring positive changes in the life of rural women. Paper ends with the hope that all the loopholes in the Ujjwala Yojna will be catered to and filled as soon as possible. If efforts are made precariously, rural women will be impacted in a much broader way and hopefully there will be no discrepancy between theory and practice in promising welfare of women.

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