

A STUDY ON THE IMPLEMENTATION AND PROGRESS OF PRADHAN MANTRI UJJWALA YOJANA IN KARNATAKA

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“ There is no tool for development more effective than the empowerment of women”- Kofi Annan

ABSTRACT

Pradhan Mantri Ujjwala Yojana (PMUY), launched in 2016, is a flagship welfare scheme of the Government of India aimed at providing clean cooking fuel to women from Below Poverty Line households. The scheme seeks to improve health outcomes, reduce indoor air pollution, and empower rural women. This study examines the implementation and progress of PMUY in Karnataka by analysing beneficiary coverage, LPG connections issued, and regional performance. Using secondary data from government reports and official portals, the paper highlights achievements, challenges, and socio-economic impacts of the scheme. The findings indicate substantial progress in expanding LPG access, though issues related to refill affordability and awareness persist.

Keywords: Rural women, LPG, Beneficiary, Karnataka, Health, Environment, Population

INTRODUCTION

Pradhan Mantri Ujjwala Yojana (PMUY), launched in 2016 by the Government of India, is a flagship social welfare programme designed to provide clean cooking fuel to economically weaker households, particularly women. The scheme addresses the long-standing issue of energy poverty by facilitating access to Liquefied Petroleum Gas (LPG), thereby reducing reliance on traditional biomass fuels such as firewood, charcoal, and cow dung. These conventional fuels are major contributors to indoor air pollution, leading to respiratory diseases and other health hazards, especially among women and children.

The key objectives of PMUY include expanding LPG coverage among Below Poverty Line families, improving health and living conditions, empowering women through safer cooking practices, reducing the drudgery of fuel collection, and promoting environmental sustainability. With the introduction of Ujjwala 2.0, the scheme further widened its coverage to include migrant households and strengthened refill support mechanisms. While PMUY has significantly increased LPG penetration across rural and urban India, challenges related to refill affordability, supply accessibility, and sustained usage remain. In this context, the present study analyses the implementation and progress of PMUY in Karnataka through division-wise data interpretation to understand regional disparities and suggest targeted policy measures.

Objectives of the Scheme

1. To provide LPG connections to women belonging to economically weaker households.
2. To reduce dependence on traditional cooking fuels such as firewood and cow dung.
3. To improve health conditions by minimizing indoor air pollution.
4. To empower women by ensuring safe and convenient cooking facilities.
5. To reduce the drudgery and time spent on fuel collection.

6. To promote environmental sustainability through the use of clean energy.
7. To enhance the overall quality of life of rural and urban poor households

LITERATURE REVIEW

Several studies have examined the implementation and impact of the Pradhan Mantri Ujjwala Yojana (PMUY) across India, highlighting both achievements and persistent challenges. Kumar (2024) reported improved health outcomes and time savings among rural households in Bihar, though refill affordability limited sustained LPG usage. Behera and Mallick (2023) identified socio-economic, cultural, and logistical constraints affecting adoption, while Oli and Bisht (2024) observed improved energy affordability among Below Poverty Line families in Uttarakhand but irregular refill patterns due to financial constraints. Yadav and Zaheer (2024) emphasized positive socio-economic impacts on women in Uttar Pradesh, including increased awareness and decision-making capacity. Behavioural studies show that although health and environmental benefits of LPG are widely recognized, economic barriers restrict consistent usage. A multi-state evaluation confirmed reduced indoor air pollution and respiratory issues but highlighted refill cost as a major limitation. Asharaf and Tol (2024) found increased LPG access among poor households, with relatively better outcomes in southern states, while Singh and Verma (2023) noted continued fuel stacking due to income instability and accessibility issues. Overall, these studies indicate that although PMUY has expanded clean fuel access and improved women's welfare, sustained adoption remains constrained by affordability, supply access, and awareness gaps, highlighting the need for region-specific assessments such as the present study on Karnataka.

RESEARCH GAP

Most existing studies on Pradhan Mantri Ujjwala Yojana focus on national or district-level outcomes, with limited attention to division-wise analysis in Karnataka. Regional disparities in implementation and beneficiary progress remain underexplored. Therefore, this study addresses this gap by examining PMUY performance through division-wise data interpretation to provide region-specific insights for improved policy planning.

Objectives of the Study

1. To analyse the implementation status of PMUY in Karnataka.
2. To assess the progress in LPG coverage among beneficiary households.
3. To identify challenges faced by beneficiaries.

METHODOLOGY

The study follows a descriptive research design using secondary data from official sources such as the Ministry of Petroleum and Natural Gas, PMUY dashboard, and Government of Karnataka reports. Division-wise including Bengaluru, Mysuru, Belagavi, Kalaburagi data on LPG connections and beneficiary coverage across major administrative divisions of Karnataka were analysed using simple statistical tools like percentages and comparative analysis. The results are presented through tables to highlight regional variations in implementation and progress.

PMUY beneficiaries Eligibility Criteria :

1. Applicant must be an adult woman (18 years or above).
2. She should belong to a Below Poverty Line (BPL) household or identified deprived families as per SECC data.

3. Preference is given to women from SC/ST households, Antyodaya Anna Yojana families, forest dwellers, tea garden workers, and other notified vulnerable groups.
4. The household must not already have an LPG connection.
5. Applicant should possess valid identity and address proof (Aadhaar preferred).
6. The LPG connection is issued in the woman's name to promote women's empowerment.
7. Financial assistance is provided for the LPG connection, stove, and first refill, while subsequent refills are borne by the beneficiary.

PMUY in Karnataka

In Karnataka, which has a population of about 6.1 crore with nearly 62% residing in rural areas, the Pradhan Mantri Ujjwala Yojana primarily targets women from Below Poverty Line households belonging to economically and socially vulnerable groups. The state's demographic structure includes sizable Scheduled Caste (around 17%) and Scheduled Tribe (about 7%) populations, along with a large workforce engaged in agriculture and informal sectors, making clean cooking access a critical development concern. PMUY beneficiaries are concentrated mainly in rural and semi-urban regions, particularly in northern divisions such as Belgaum and Kalburgi, where poverty levels and dependence on biomass fuels are relatively higher, while urbanised areas like Bangalore show lower coverage due to greater availability of private LPG connections. Overall, PMUY in Karnataka reflects a demographic pattern shaped by rurality, income disparities, and occupational structure, with the scheme contributing to improved household energy security and women's welfare, though refill affordability continues to influence sustained usage.

District wise PMUY beneficiaries in Karnataka				
Sl.No	District	Connections released under earlier Scheme	Connections released under Ujjwala 2.0	Total connections released under PMUY
1	Bagalkot	130560	64688	195248
2	Bangalore	26104	4133	30237
3	Bangalore Rural	41755	7025	48780
4	Belgaum	252140	160199	412339
5	Bellary	88452	37721	126173
6	Bidar	157017	40427	197444
7	Bijapur (KAR)	147856	66890	214746
30	Chamarajanagar	75317	14805	90122
8	Chikkaballapur	71667	15496	87163
9	Chikmagalur	49860	12159	62019
10	Chitradurga	132236	31057	163293
11	Dakshina Kannada	48504	9593	58097
12	Davanagere	120817	26747	147564
13	Dharwad	73139	41134	114273
14	Gadag	75834	31726	107560
15	Gulbarga	178005	75548	253553
16	Hassan	87141	12794	99935
17	Haveri	130204	43935	174139

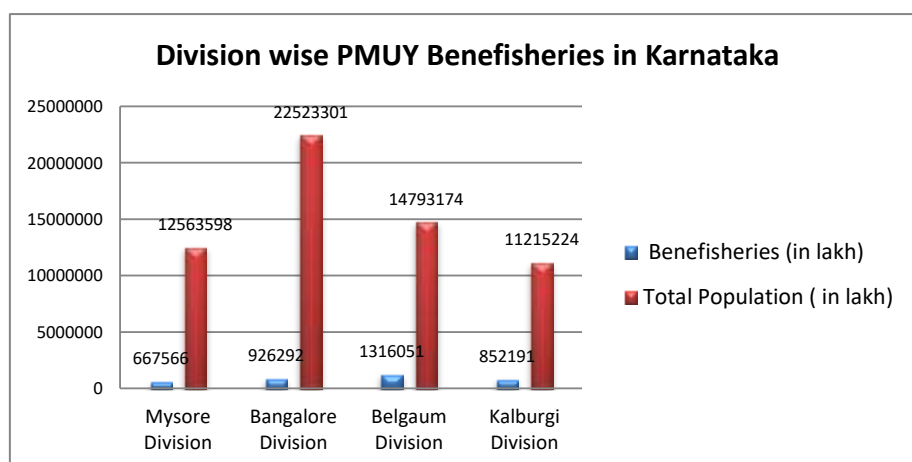
18	Kodagu	11900	5839	17739
19	Kolar	71197	18158	89355
20	Koppal	109719	56904	166623
21	Mandya	122223	22218	144441
22	Mysore	141473	21262	162735
23	Raichur	210510	43721	254231
24	Ramanagar	51683	12828	64511
25	Shimoga	74127	12907	87034
26	Tumkur	178371	29984	208355
27	Udupi	27735	4743	32478
28	Uttara Kannada	68753	28993	97746
29	Yadgir	108488	44525	153013

Source: Ministry of Petroleum and Natural Gas

The district-wise PMUY data in Karnataka shows wide variation in LPG connections released under the Pradhan Mantri Ujjwala Yojana, with Belgaum recording the highest total connections 4.12 lakh, followed by Raichur 2.54 lakh, Gulbarga 2.53 lakh, Bijapur 2.14 lakh, and Tumkur 2.08 lakh, reflecting stronger outreach in northern and interior districts. In contrast, Kodagu shows the lowest distribution 0.18 lakh, followed by Bangalore 0.30 lakh and Udupi 0.32 lakh, indicating limited scheme penetration in more urbanised and less poverty-concentrated regions. Overall, the pattern highlights greater PMUY impact in economically backward rural districts, while urban and coastal areas exhibit comparatively lower coverage.

Sl.No	Division	Beneficiaries	Total Population
1	Mysore Division	667566	12563598
2	Bangalore Division	926292	22523301
3	Belgaum Division	1316051	14793174
4	Kalburgi Division	852191	11215224

Source: Ministry of Petroleum and Natural Gas

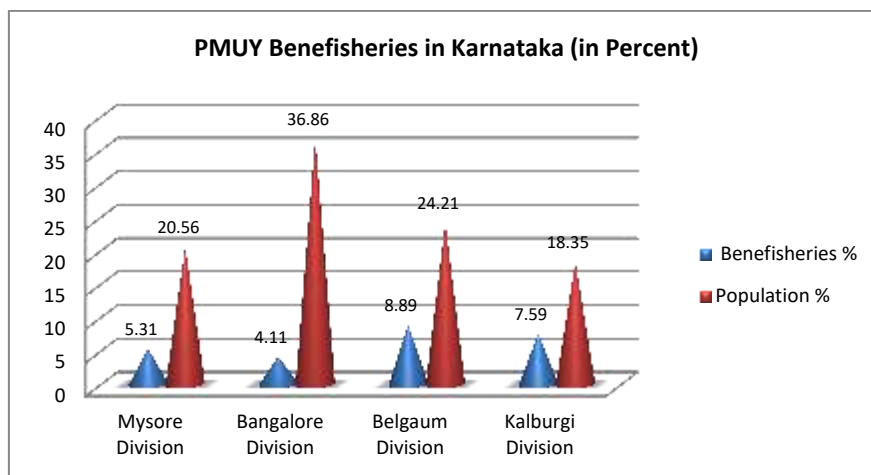


The PMUY beneficiary distribution across divisions in Karnataka shows notable regional variation when viewed alongside population size. Belgaum Division records the highest number of beneficiaries

13,16,051 with a total population of 1,47,93,174, indicating comparatively stronger scheme outreach in this largely rural region. Bangalore Division, despite having the largest population 2,25,23,301, accounts for only 9,26,292 beneficiaries, suggesting relatively lower penetration, possibly due to urbanisation and greater access to private LPG connections. Kalburgi Division reports 8,52,191 beneficiaries from a population of 1,12,15,224, reflecting fairly effective coverage among economically weaker households, while Mysore Division shows the lowest beneficiary count 6,67,566 against a population of 1,25,63,598, indicating moderate implementation. Overall, the data highlights better PMUY reach in Belgaum and Kalburgi divisions, while Bangalore and Mysore divisions demonstrate scope for enhanced awareness and enrolment efforts.

Division wise PMUY Beneficiaries in Karnataka (in Percent)			
Sl.No	Division	Benefisherries %	Population %
1	Mysore Division	5.313493794	20.56393637
2	Bangalore Division	4.112594331	36.86585074
3	Belgaum Division	8.896339623	24.21327782
4	Kalburgi Division	7.598519655	18.35693507

Source: Ministry of Petroleum and Natural Gas



The PMUY beneficiary distribution across divisions in Karnataka shows marked regional disparities, with Belgaum Division recording the highest beneficiary share 8.89% against a population share of 24.21%, followed by Kalburgi Division with 7.59% beneficiaries and 18.36% population, indicating comparatively stronger scheme reach in these less urbanised regions. Mysore Division accounts for 5.31% beneficiaries despite holding 20.56% of the population, reflecting moderate coverage, while Bangalore Division, although accommodating the largest population share 36.86%, reports the lowest beneficiary proportion 4.11%, suggesting relatively limited PMUY penetration, likely influenced by urbanisation and alternative LPG access. Overall, the data highlights better programme impact in Belgaum and Kalburgi divisions, with scope for improved outreach in Bangalore and Mysore.

PROGRESS AND IMPACT

The scheme has significantly reduced dependence on traditional fuels such as firewood and cow dung. Improved indoor air quality has positively affected women’s health. Time saved from fuel collection

has enabled greater participation in income-generating activities. However, affordability of refills and supply accessibility continue to affect regular usage.

CHALLENGES

Despite the notable achievements of Pradhan Mantri Ujjwala Yojana, several challenges continue to affect its effective utilization. The high cost of LPG refills remains a major constraint for low-income households, limiting regular usage. Many beneficiaries also have limited awareness regarding available refill subsidies and support mechanisms. Supply issues in remote and rural areas further restrict timely access to LPG cylinders. As a result, some households partially revert to traditional fuels such as firewood and cow dung, leading to fuel stacking. Additionally, the absence of sustained behavioural change communication hampers the complete transition to clean cooking practices, indicating the need for stronger awareness and outreach initiatives.

SUGGESTIONS

To enhance the effectiveness of Pradhan Mantri Ujjwala Yojana, it is essential to increase refill subsidies for vulnerable households to encourage sustained LPG usage. Strengthening rural distribution networks can improve accessibility, especially in remote areas. Regular awareness programmes highlighting the health and environmental benefits of clean cooking fuel should be conducted to promote behavioural change among beneficiaries. Introducing alternative payment options and micro-credit facilities for LPG refills may help address affordability constraints. Furthermore, consistent monitoring at the district level is necessary to assess implementation progress, identify local challenges, and ensure timely policy interventions.

CONCLUSION

Pradhan Mantri Ujjwala Yojana has played a significant role in expanding access to clean cooking fuel and improving the socio-economic well-being of women in Karnataka. The division-wise analysis reveals notable progress in LPG coverage, though regional disparities and challenges related to refill affordability, supply accessibility, and sustained usage persist. While the scheme has contributed to better health outcomes and reduced dependence on traditional fuels, achieving long-term behavioural change remains a concern. Strengthening subsidy support, improving rural distribution systems, and enhancing awareness initiatives can further improve the effectiveness of the programme. Overall, PMUY represents an important step towards energy equity and women's empowerment, and continued policy focus is essential to ensure its sustainable impact across all regions of Karnataka.

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