



ISSN Print: 2617-4693
ISSN Online: 2617-4707
NAAS Rating (2026): 5.29
IJABR 2026; SP-10(1): 521-524
www.biochemjournal.com
Received: 01-10-2025
Accepted: 04-11-2025

Kodipaka Srividya
Ph.D. Research Scholar,
Division of Agricultural
Economics, Indian
Agricultural Research
Institute, New Delhi, India

Gudelli Bhavani
Ph.D. Research Scholar,
Division of Agronomy, Indian
Agricultural Research
Institute, New Delhi, India

Poloju Bhavana
Ph.D. Research Scholar,
Department of Agricultural
Extension Education, College
of Agriculture, Rajendranagar,
Hyderabad, Telangana, India

Madasu Alekhy
Ph.D. Research Scholar,
Department of Agricultural
Extension Education, College
of Agriculture, Rajendranagar,
Hyderabad, Telangana, India

Corresponding Author:
Kodipaka Srividya
Ph.D. Research Scholar,
Division of Agricultural
Economics, Indian
Agricultural Research
Institute, New Delhi, India

An assessment of Pradhan Mantri Garib Kalyan Ann Yojana in India

Kodipaka Srividya, Gudelli Bhavani, Poloju Bhavana and Madasu Alekhy

DOI: <https://www.doi.org/10.33545/26174693.2026.v10.i1Sg.6994>

Abstract

Food security is a fundamental global concern that affects every aspect of human life from individual health to economic stability. Globally, achieving food security is an ongoing challenge affected by population growth, climate change, pandemics, and environmental degradation. To address these issues, the Indian government initiated the National Food Security Act (NFS) in the year 2013, and to address these issues during COVID19 pandemic, the Indian government has introduced the Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY). This Study found that, according to eligibility criteria, 12 crore people in India are not covered under the scheme due to a delay in the census and the scheme has benefited most of the migrant families and vulnerable populations of the country during the pandemic. Now, the Government of India has extended it to December 2028 and has confirmed the distribution of fortified rice through the Public Distribution System ensuring nutritional security in India.

Keywords: Pradhan Mantri Garib Kalyan Ann Yojana, food security, NFS, nutrition, pandemic

Introduction

As a famous saying states, “One cannot sleep well, love well, or think well if one has not dined well”. Food is one of the fundamental aspects of human existence. India as a growing economy with a rising population is likely to expect a rise in demand for food. (Ganguly *et al.*, 2013) ^[9]. The necessity for food security has become increasingly urgent in recent years due to significant pressure from the growing population. (Brahmanand *et al.*, 2013) ^[5]. Food security has primarily been addressed from the perspectives of agriculture and markets, while malnutrition has mainly been viewed as a health issue (El Bilali, 2019) ^[6]. The Covid pandemic has threatened to reverse the time of progress on hunger, health, poverty, and education (Béné *et al.*, 2021) ^[2]. Despite several challenges faced during the COVID-19 period, Food security is one of the primary concerns among them. To address this issue, the Government of India started the PMGKAY in the year 2020 to supply five kg of food grains free of cost to eligible ration card holders under NFS. It was originally scheduled to expire in December 2022. Afterward the program was extended up to December 2023 and it has now been prolonged further for the next five years till 2028 for 81.3 Crore people. The people covered under the scheme (about 81.3 Crore) are according to governing provisions under the 2011 Census. Pradhan Mantri Garib Kalyan Yojana which is providing foodgrains free of cost to vulnerable sections of people, contributed an important role in reducing poverty in the country at the minimal level of 0.8 percent in the course of the Covid19 pandemic in 2020. (Bhalla *et al.*, 2022) ^[3]. However, some studies found that the Prevalence of Undernourishment in India increased by 0.6 percentage points, resulting in 11.8 million more people being undernourished in 2022 compared to the previous year (FAO, 2023) ^[7]. Prime Minister Shri Narendra Modi on India’s 75th Independence Day, emphasised the need to address malnutrition and that every individual deserves access to nutritious food for a healthier India. With this goal, the Government of India is committed to ensuring the nutritional security of the people. So the Cabinet recently approved distributing fortified rice under all food security government programmes, including the PMGKAY from July 2024 until December 2028.

Methodology:

Compound annual growth rate was used to calculate the growth of distribution of foodgrains under the scheme

$$Y_t = AB^t \dots \quad (1)$$

Where,

Y_t denotes growth in the production of pesticides

A = intercept t = time (year) ($t = 1, 2, 3, \dots, n$)

$$B = 1 + r/100$$

$$r = (B-1) \times 100$$

Where 'r' indicates the annual compound growth rate of distribution of foodgrains

Results and Discussion**Eligibility under scheme**

- Families belonging below the poverty line like Antyodaya Ann Yojana (AYY) and Priority Households (PHH).
- All primitive tribal households.

Table 1: Coverage of the population under PMGKAY according to 2011 census and estimated coverage in 2022.

Census	Urban	Rural	50% of Urban	75% of Rural	Total
Census 2011 (121Cr)	37,71,06,125	83,37,48,852	62,53,11,639	18,85,53,062.5	81.3Cr
2022 Population estimate (141cr)	508,368,361	908,804,812	68,16,03,609	254184180.5	93.5Cr

Source: Author's Computations using Census of India 2011 and Population Estimates 2022 using World Bank open data source.

Are two-thirds of the Population of India in need of free food grains?

The Percentage of beneficiaries under PMGKAY and the population covering under below the poverty line, according to the 2011 census are being compared. It was found that there are 67% of the population covered under the scheme but 21.9% population is below the poverty line there is the question remains unanswered whether it is necessary to provide free foodgrains for the population other than the people under below the poverty line.

Procurement of foodgrains under the scheme

The Foodgrains under the scheme are procured through a Decentralised Procurement Mode. Table 2 shows that the highest procurement was observed during 2021-22, during the COVID-19 pandemic.

Table 2: Procurement of rice and wheat from 2019-2023 in Lakh Metric Tonnes

YEAR	RICE	WHEAT
2019-20	518.26	341.32
2020-21	602.45	389.92
2021-22	575.88	433.44
2022-23	569.66	187.92

Source: Department of Food and Public Distribution

Distribution of foodgrains under the scheme

Pulses are a vital source of protein in comparison to cereals and they can address the issue of nutrition intake for NFSA beneficiaries. During the first phase of the PMGKAY from April to June 2020, the government of India supplied pulses of 1kg of their choice per household free of cost per month to the beneficiaries of the scheme. From July to November 2020 then, chana of 1kg was supplied at zero cost per household per month to the beneficiaries under PMGKAY. The Highest allocation and distribution of pulses is seen in

- Widows, terminally ill, and disabled persons.
- Landless agricultural laborers, artisans of rural areas and marginal farmers.

Beneficiaries under the scheme

The beneficiaries covered in the scheme PMGKAY include the vulnerable and economically disadvantaged households across the country. The list of beneficiaries is a total of 81.3 crore.

- NFSA beneficiaries: 50% of the Urban population of the country and 75% of the rural population of the country.
- Additional beneficiaries during crises and children and women

Table 1 shows the Inclusion of people under NFSA and PMGKAY (about 81.3 Crore) is according to governing provisions under the Census 2011. The population estimate of 2022 is estimated, and around 12 crore people are not covered under the scheme according to beneficiary criteria.

Table 3: Distribution of food grains in phases from April 2020 to December 2022

PMGKAY	Duration	Quantity Distributed in Lakh Metric Tonnes
Phase-I (3 months)	April'20-June'20	112.6
Phase-II (5 months)	July'20-Nov.'20	186.2
Phase-III (2 months)	May'21-June'21	75.2
Phase-IV (5 months)	July'21-Nov.'21	186.7
Phase-V (4 months)	Dec'21-Mar'22	149
Phase VI (6 months)	April'22-Sep'22	217
Phase VII (3 months)	Oct'22-Dec'22	88.27
Total (28 months)	Total (28 months)	1,015

Source: Department of Food and Public Distribution.

Initially, the scheme was planned to discontinue in 2022 December, but the scheme was then continued till 2023 and then it has been set to continue for an extra five years up to December 2028. In 2023 January, the scheme was unified with the NFSA causing the inclusion of ration free of cost to AAY and PHH households.

After the merger, the only free component of PMGKAY was continued. From January to December 2023 a quantity of 447LMT of foodgrains are disbursed. Table 4 shows The average annual growth of the distribution of foodgrains from 2020-23 is estimated to be 3.96% and the Compound annual growth rate is found to be 14.2%. Table 5 shows The highest food subsidy was released during 2020-21 during covid pandemic.

Table 4: Annual growth of distribution of food grains under PMGKAY

Year	Distribution in Lakh Metric Tonnes	Annual growth for each year
2020	298.8	
2021	301.15	0.7%
2022	417.02	3.8%
2023	447.88	7.4%

Source: Author's computation using data of the Department of Food and Public Distribution

Table 5: Food Subsidy released from 2016-2023 in Rs Crore

Year	Total Subsidy Released
2016-17	105672.96
2017-18	99981.69
2018-19	101127.49
2019-20	119944.35
2020-21	529780.77
2021-22	2,87,001
2022-23	2,12,332
2023-24(provisional)	205250.01

Source: Department of Food and Public Distribution

State Ranking Index

- The State ranking index for NFSA was launched in 2022.
- This "State Ranking Index for NFSA" efforts to record the Scenario and the growth of executing NFSA, PMGKAY, and other government initiatives in the country after the discussion with the states. Odisha has ranked top followed by Uttar Pradesh
- This index mostly concentrates on distribution patterns under the NFSA scheme and in the future it will include procurement of distribution under PMGKAY. The index uses three foundations in ranking the different states and union territories. These foundations are:
 - Coverage, targeting under NFSA.
 - Platform of delivery.
 - Nutritional and dietary strategies.

Strengths of PMGKAY

- **Food Security:** The scheme aims at immediate food security concerns, especially during the pandemic and it provides relief to the vulnerable population in the country.
- **Boosting Rural Economy**
- **Social protection:** A large number of migrant families benefitted almost in May, and June of 2020.
- **Humanitarian aid:** During emergencies like the COVID-19 pandemic, PMGKAY served as a humanitarian aid measure that ensured that vulnerable populations have access to basic food supplies regardless of their economic status. The subsidy programs related to food security are key to induce healthy lives and nutrition and to remove the impact of socioeconomic inequalities on health (Black *et al.*, 2012) ^[4].
- **Economic relief:** By providing free food grains PMGKAY helps alleviate the financial burdens of households, helping them to redirect resources the basic needs such as education, health, etc.

Challenges of PMGKAY

- **Dependency:** Continuous reliance on PMGKAY for free or heavily subsidized food grains may lead to dependency among beneficiaries reducing incentives for self-sufficiency and economic mobility. Sahn and Alderman (1995) ^[12] concluded in their study the rice subsidy program in Sri Lanka prominently the food ration can cause to a significant decrease in work effort.
- **Fiscal Burden:** This scheme involves significant government expenditure on food subsidies which can strain fiscal resources over time. This may limit funding available for investment in infrastructure, health, education, climate change, and other critical sectors required for long-term growth. The programs related to the food subsidy have a vital role in the country's safety network but it has been condemned on various aspects such as that they boon the non-targeted population are more disorganized, and cause more fiscal deficit (Sharma *et al.*, 2013) ^[13].
- **Inefficiencies and leakages:** Despite efforts to improve delivery mechanisms, PMGKAY may face challenges such as leakages, corruption, and inefficiencies in targeting the intended beneficiaries. In the free market, the leakages are a major concern, as it is the ineffective targeting in the programs of food subsidy (Ahluwalia D., 1993) ^[1]

Areas of Concern

As stated by the United Nations (UN) (2020) The removal of hunger and access to nutritious food by 2030 are important goals among the 17 sustainable development goals. The Food Security and Nutrition Report of 2023 stated that the aid 74.1% of Indian people did not have a means for a balanced diet in 2021. The Global Hunger Index report states that India ranks 111th out of 125 countries with a score of 28.7 which implies that, India has a serious hunger level. A study that has collected data from WHO, UNICEF, and FAO Reports concluded that there is severe undernourishment in India (Gulati *et al.*, 2023) ^[10]. According to the NFHS-4 data (2015-16), Under the age of five 38% of children are stunted (low height for weight) and 20% of children are wasted low weight for height with malnutrition. So government should focus on improving the nutritional security in the country and better access to the people.

Conclusion

The coverage and identification of beneficiaries should be efficient. The country severely needs to shift from staple commodities to nutritionally sensitive food systems. The quality and variety of food grains provided should be improved. The providing of staple commodities at affordable prices rather than free, because anything that is provided free comes with hidden costs and future obligations. Shifting of focus from open hunger to hidden hunger and increasing skill development programs so that people will be less reliant on subsidized projects.

Competing interests disclaimer

Authors have declared that they have no known competing financial interests OR non-financial interests OR personal relationships that could have appeared to influence the work reported in this paper.

Funding: No funding was received for conducting this study

References

1. Ahluwalia D. Public distribution of food in India: coverage, targeting and leakages. *Food Policy*. 1993;18(1):33-54.
2. Béné C, Bakker D, Chavarro MJ, Even B, Melo J, Sonneveld A. Global assessment of the impacts of COVID-19 on food security. *Glob Food Secur*. 2021;31:100575.
3. Bhalla S, Bhasin K, Virmani MA. Pandemic, poverty, and inequality: evidence from India. Washington (DC): International Monetary Fund; 2022.
4. Black AP, Brimblecombe J, Eyles H, Morris P, Vally H, O'Dea K. Food subsidy programs and the health and nutritional status of disadvantaged families in high-income countries: a systematic review. *BMC Public Health*. 2012;12:1099.
5. Brahmanand PS, Kumar A, Ghosh S, Chowdhury SR, Singandhupe RB, Singh R, *et al*. Challenges to food security in India. *Curr Sci*. 2013;104:841-846.
6. El Bilali H. Research on agro-food sustainability transitions: where are food security and nutrition? *Food Secur*. 2019;11(3):559-577.
7. FAO, IFAD, UNICEF, WFP, WHO. The state of food security and nutrition in the world 2023: urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum. Rome: FAO; 2023.
8. Food and Agriculture Organization of the United Nations. FAOSTAT [database]. Rome: FAO; 2023.
9. Ganguly K, Gulati A. The political economy of food price policy: the case study of India. WIDER Working Paper No. 2013/034. Helsinki: UNU-WIDER; 2013.
10. Gulati A, Jose S. India-Africa in G21: the challenge of nutrition security. ICRIER Working Paper No. 16. New Delhi: Indian Council for Research on International Economic Relations; 2023.
11. International Institute for Population Sciences. National Family Health Survey (NFHS-4), 2015-16. Mumbai: IIPS; 2017.
12. Sahn DE, Alderman H. The effect of food subsidies on labor supply in Sri Lanka. *Econ Dev Cult Change*. 1996;45(1):125-145.
13. Sharma VP, Alagh M. Food subsidy in India: its components, trends, causes and reforms for public policy. *Indian J Agric Econ*. 2013;68(2):195-221.
14. United Nations. Sustainable Development Goals. New York: United Nations; 2020.