



## Performance of PM-Kisan Samman Nidhi Yojana in Karnataka

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### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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## ABSTRACT

The present study was undertaken with an overall objective to analyse the performance of PM Kisan Sanman Nidhi Yojana by estimating the number of beneficiaries covered, fund disbursed, utilization pattern of fund disbursed under the scheme, source of awareness about the scheme and constraints faced by the beneficiaries in availing the benefits. The study was conducted in Kalyan Karnataka region during 2020-21. The study used both primary and secondary data to fulfill the objectives. The total six districts of the Kalyan Karnataka region were selected for study. From each district 10 beneficiaries were selected. So total samples size of 60 beneficiaries were selected for survey. The study concluded that funds disbursed under PM KISAN scheme is mainly utilized for purchase of seeds (38.33%), fertilizers (15 %) and pesticides (11.67%) in the study area. Most of the beneficiaries became aware about the scheme from the fellow farmers (36.67%) followed by News papers (20 %) and Banks (16.67%). The highest number of beneficiaries was found in Raichur followed by Kalaburagi and Koppal districts in the Kalyan Karnataka region. The maximum number of beneficiaries were found in Uttar Pradesh (22.77%) followed by Maharashtra (10.11%), Madhya Pradesh (7.54%) and Bihar (7.23%). Karnataka stands 7<sup>th</sup> place in ranking which covers 5.16 % of PM Kisan scheme beneficiaries in India.

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## 1. INTRODUCTION

Agriculture plays a vital role in India's economy and accounts 17.80 % of Gross Value Added (GVA) at current prices for the year 2019-20 [1]. India is an agrarian country with 2/3<sup>rd</sup> of its population living in rural areas and most of them dependent on agriculture. In pre-independent India, cooperatives were among the major institutions providing finance to the rural population [2-4]. The All India Rural Credit Survey Committee in 1952 observed that a large share of the credit requirements of rural households particularly the poor came from traditional sources such as relatives, traders, landlords and moneylenders [5,6].

The government of India launched many schemes time to time for the welfare of the small and marginal farmers through financial support but till now these schemes are residual to attain desired goals set by the central government [7]. The small and marginal holding taken together (up to 2 ha of holding) constituted 86.08 % of the total land holding in 2015-16 [8]. Government with a view to augment the income of the small and marginal farmers has approved a Central Sector Scheme, namely, "Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)" in the current financial year. The Scheme takes effect from 01.12.2018 for transfer of benefit to eligible beneficiaries during the financial year 2018-19. The scheme aims to supplement the financial needs of the farmers in procuring various inputs. Under the scheme, Landholder Farmer families with total cultivable holding upto 2 hectares shall be provided a benefit of Rs.6000 per annum per family payable in three equal installments, every four months. It will help all those needy small and marginal farmers who are having arable land two hectares or less than two hectares.

Hence, based on above background, the present study was undertaken with the overall objective of performance of PM-Kisan Samman Nidhi Scheme in Karnataka. Specific objectives of the study.

- To analyze the growth trends in beneficiaries of PM Kisan Samman yojana in India and Karnataka
- To analyze the status and usage of PM-Kisan Samman Nidhi scheme in study area.

- To study the constraints faced by the small and marginal farmers in availing the scheme.

## 2. MATERIALS AND METHODS

### 2.1 Sampling Design and Nature of Data

Karnataka state was purposively selected for the study. Six districts of Kalyana Karnataka region Viz., Bidar, Kalaburagi, Yadgir, Raichur, Koppal and Bellari selected for the study. From each district, 10 beneficiary farmers were selected for the study. So, total sample size of 60 was used to arrive meaningful results. To arrive at meaningful results both primary and secondary data are obtained. Primary data with respect to knowledge and awareness about the scheme and problems faced by the beneficiaries were collected using well structured pretested schedules. Secondary data regarding number of beneficiaries of the scheme was collected from 2018-19 to 2020-21.

### 2.2 Analytical Tools and Techniques Employed

#### 2.2.1 Growth rate analysis

In order to analyze the growth in beneficiaries of the PM Kisan Samman Yojana the CAGR model [9] was used.

$$Y_t = ab^t e^u$$

Where,

$Y_t$  = Dependent variable  
 $a$  = Intercept term  
 $b = (1+r)$  and 'r' is the Compound Growth Rate  
 $t$  = Time trend  
 $u$  = Error term

The above model in the Logarithmic form is expressed as,  $\ln Y = \ln a + t \ln b + u$

$\ln a$  and  $\ln b$  values were obtained using the Ordinary Least Squares Procedures and the  $R^2$  was computed for testing the goodness of fit. Antilog of  $(\ln(b-1) * 100)$  give the per cent growth rate. Significance of the growth rate was tested using 't' test.

## 2.2.2 Garrett's ranking technique

The constraint faced by the beneficiaries in availing the scheme was analysed through Garrett's ranking technique. Garrett's formula for converting ranks into per cent was given by

$$\text{Per cent position} = 100 * (R_{ij} - 0.5) / N_j$$

Where  $R_{ij}$  = rank given for  $i^{\text{th}}$  factor by  $j^{\text{th}}$  individual  
 $N_j$  = number of factors ranked by  $j^{\text{th}}$  individual

The per cent position of each rank then converted into scores referring to the Table given by Garrett and Woodsworth (1969). For each factor, the scores of individual respondents were added together and divided the total number of the respondents for whom scores were added. These mean scores for all the factors were arranged in descending order, ranks were given and most important factors were identified.

## 3. RESULTS AND DISCUSSION

### 3.1 Status of PM Kisan Scheme Beneficiaries in India and Study Area

The state wise number of beneficiaries covered under PM-KISAN scheme in India is presented in

Table 1. It can be observed from the table that maximum number of beneficiaries was found in Uttar Pradesh state with 22.77 %, which was followed by Maharashtra 10.11 per cent. Madhya Pradesh 7.54 %, Bihar to be 7.23 %, Rajasthan 6.32 %. Gujarat 5.56 %, Karnataka 5.16 %, Andhra Pradesh 5.14 %, Tamil Nadu 4.46 % and in 10<sup>th</sup> place it was Telangana state with 3.64 %. As per the records in the Annual Report of Department of Agriculture and Cooperation 2020, top five performing states under PM-Kisan scheme are Karnataka, Maharashtra, Uttar Pradesh, Arunachala Pradesh and Himachal Pradesh. In Karnataka state, 97% Aadhaar authenticated data. More than 90% beneficiaries in Karnataka are being paid benefits via Aadhaar based payment mode [10,11]. In Maharashtra, Physical Verification Completed to the tune of 99% and Grievance Redressal is up to 60%. In Arunachal Pradesh 98% of Aadhar authentication is done. It can be inferred that maximum number of scattered landholdings is in Uttar Pradesh as the number of beneficiaries in this area is maximum as per the records. Among the northern states Assam and Manipur had the maximum number of beneficiaries which was followed by Tripura, Nagaland, Meghalaya, Mizoram, Arunachal Pradesh.

**Table 1. State wise number of beneficiaries covered under PMKISAN scheme in India**

SL No	State/union territory	Number of beneficiaries	Percentage
1	Uttar Pradesh	23263025	22.77%
2	Maharashtra	10331714	10.11%
3	Madhya Pradesh	7704391	7.54%
4	Bihar	7389216	7.23%
5	Rajasthan	6460898	6.32%
6	Gujarat	5677780	5.56%
7	Karnataka	5268327	5.16%
8	Andhra Pradesh	5251056	5.14%
9	Tamil Nadu	4551016	4.46%
10	Telanagan	3721929	3.64%
11	Odhisha	3670638	3.59%
12	Kerala	3348225	3.28%
13	Assam	2718602	2.66%
14	Chattisgarh	2683711	2.63%
15	Punjab	2328538	2.28%
16	Jharkhand	1811616	1.77%
17	Harayana	1769811	1.73%
18	Jammu and Kashmir	1098293	1.08%
19	Other States	3105188	0.88%
	Total	10,21,53,974	100

Source: Annual Report 2020-21 of PKKISAN, Govt. of India

Note: Data as on 18.09.2020 up to fund distribution of second installment

**Table 2. Status of beneficiaries' year wise in India**

Sl No	Financial Year	Period	Total Beneficiaries	Increase in beneficiary in percentage terms
1	2018-19	December –March	19872	-
2	2019-20	April-July	66317107	132.06
3	2019-20	August-November	87579468	102.21
4	2019-20	December –March	89513340	117.18
5	2020-21	April-July	104895218	97.37
6	2020-21	August-November	102138394	97.14
7	2020-21	December –March	99212363	

Source: Annual reports of PM Kisan, 2018-19 to 2020-21

**Table 3. Total amount released under PM-Ksian Scheme in Karnataka**

Year	Karnataka (Rs in Lakhs)	India (Rs in Lakhs)	Percentage Share of Karnataka in India
2018	390.92	60054.58	0.65
2019	169537.40	2987740.00	5.67

**Table 4. District wise number of beneficiaries in Kalyan Karnataka region during 2019**

SL No	Name of the District	Number of Beneficiary
1	Yadgir	69034
2	Raichur	142786
3	Kalaburagi	112632
4	Bidar	87423
5	Bellary	98231
6	Koppal	100281

Source: As per the records available at PMKissan.org web portal

Table 2 present the status of growth of beneficiaries in India. It can be observed that during the first disbursement period of 2019-20 there is a growth of 132.06 % among the beneficiaries over the previous disbursement period. In the left-over period of study there is growth of 102.21 %, 117.18 %, 97.37 % and 97.14 % respectively. In the financial year of December-March of 2018-19, the total number of beneficiaries was 19872. In 2019-20, from April-July it was 66317107, In August to November of same year 87579468 and in the third disbursement it was 89813340 beneficiaries. In the financial year of 2020-21 of April- July, it was 104895218, August – November 102138394 and in the last disbursement that is from December-March it was 99212363.

### 3.2 Status of PM Kisan Scheme Beneficiaries in Karnataka

The total amount released under PM Kisan scheme in Karnataka to the beneficiaries in 2018 and 2019 can be depicted in the Table 3. It can be observed from the table that in the year 2018, amount disbursed to the beneficiaries was

around Rs 390.92 lakhs and in the country the amount that was disbursed was Rs 60054.58. The share of the Karnataka in the country was a meager with 0.65 %. In year 2019 it was observed to be Rs 169537.38 lakhs disbursement in Karnataka state. As in India it was Rs 2987740.40 lakhs having the share of Karnataka in total disbursement of 5.67 %. It can be observed that there is a considerable increase in the number of beneficiaries as the disbursement rate in percentage which was 0.65 % in 2018 grew to 5.67 % in the year 2019. It implies that farmers are quite aware about the things.

The district wise total number of beneficiaries in Kalyan Karnataka region is depicted in Table 4. Among the six districts of Kalyana-Karnataka region with undivided of Ballari, maximum number of beneficiaries was found in the Raichuru district with 147286, which is followed by Kalaburagi district 112632, Koppal district with 100281 beneficiaries, Bellari with 98231, Bidar with 87423 and Yadgir to be 69034 beneficiaries. Maximum number of fragmented landholdings is in Raichur district which indicates highest number of beneficiaries.

### 3.3 Socio-Economic Status of PM Kisan Scheme Beneficiaries

The socioeconomic status of the beneficiaries is depicted in Table 5. The average level of education of the farmers is 8.30, and average age of the farmers was around 47 Years. Approximately each farmer has a livestock with one in number. Yearly average income from the farm source was obtained to be Rs 52,361 and from livestock i.e., milk etc was average Rs 12,547. Another source of income through other means was on an average Rs 7,485.

### 3.4 Source of Awareness about PM-Kissan Scheme

Table 6 depicts the source of awareness about PM-Kissan scheme in beneficiaries. Among the 60 beneficiaries who were interviewed, awareness about the scheme was from fellow farmers which were around 22 with the percentage of 36.67 %. The next source of awareness was found in through the news paper with 12 accumulating around 20.00 % of the whole. Farmers revealed that around 10 people obtained the information from banks, accumulating the share of 16.67 %. Around six farmers revealed that the information was obtained through Television which was having the share of 10.00 % of the whole. This was followed by information obtained through RSK, KVKs, Cooperatives established in the villages and through the mobile.

### 3.5 Usage of PM-KISSAN Fund by the Beneficiaries in Study Area

Table 7 presents the usage of PM-KISSAN fund by the beneficiaries. Among the farmers interviewed, 23 farmers have inferred that usage of fund was utilized for purchase of seeds with 38.33 %, for the purchase of fertilizers it was around 9 farmers who revealed with a share of 15.00 %. Around eight farmers informed that they have utilized the fund for field preparation. Seven farmers exhibited, for the purchase of pesticides they utilized the fund which had a share of 11.67 %. Around four farmers informed that they utilized the amount for providing the wage to the labour. Three farmers each inferred that the fund was utilized for purchase of Insecticides, use for personal/domestic use and used for other expenses respectively. The study results are in with Deepak Varshney et al. [12] they reported that the farmers who received benefits from the PM-GKY scheme spent significantly more on the procurement of seeds, fertilizers, and pesticides.

### 3.6 Constraints Faced by Beneficiaries in Availing Benefits of Scheme

Table 8 presents the problems faced by the beneficiaries in availing the PM-KISSAN Scheme in Kalyan-Karnataka region. Among the ten notified problems, the first problem faced by the farmers was delay in the disbursement (68.37), followed by inability of opening the bank account

**Table 5. Socioeconomic status of the beneficiaries (N=60)**

SI No	Particulars	Details
1	Average Education	8.30
2	Average Age (years)	47.52
3	Average Livestock	1.35
4	Income from the crops (Rs)	52,631
5	Livestock Income (Rs)	12,547
6	Non Farm income (Rs)	7,485

**Table 6. Source of awareness about PM-Kissan Scheme in beneficiaries (N=60)**

SI No	Particulars	Number of farmers	Percentage
1	TV	6	10.00
2	Newspaper	12	20.00
3	RSK	4	6.67
4	Cooperatives	2	3.33
5	Banks	10	16.67
6	Fellow Farmers	22	36.67
7	KVKs	3	5.00
8	Mobile SMS/Whatsapp	1	1.67
	Total	60	100

**Table 7. Usage of PM-Kissan fund by beneficiaries (N=60)**

SI No	Particulars	Number of farmers	Percentage
01.	Purchase of Seeds	23	38.33
02.	Purchase of fertilizers	9	15.00
03.	Purchase of Pesticides	7	11.67
04.	Purchase of Insecticides	3	5.00
05.	Used for providing wage to labour	4	6.67
06.	Usage for personal/domestic use	3	5.00
07.	Used for field preparation	8	13.33
08.	Used for other expenses	3	5.00
		60	100

**Table 8. Problems faced by beneficiaries in availing the scheme in study area (N=60)**

SI No	Problem Statement	Garret score	Rank
1	Delayed disbursement	68.37	1
2	Inability of opening the bank account	65.97	2
3	Non availability of basic amenities	57.90	3
4	Literacy Problem	52.57	4
5	Non availability about the information in uploading the details	45.73	5
6	Fear of being defaulter in future	45.63	6
7	Lack of Adhaar updating centers	41.53	7
8	Demand of commission by commission agents	41.30	8
9	Complex documentation procedure for opening the bank account	41.00	9
10	Lack of Awareness about the scheme	40.07	10

(65.97), non availability of basic amenities (57.90), literacy problem (52.57), non availability about the information in uploading the details (45.73), fear of being defaulter in future (45.63), lack of Adhaar updating centres (41.53), demand of commission by commission agents (41.30), complex documentation procedure for opening the bank account (41.00) and lack of awareness about the scheme (40.07) respectively.

#### 4. CONCLUSION AND POLICY SUGGESTIONS

The study concluded that the Karnataka stands in the 7<sup>th</sup> position in number of beneficiaries since the scheme inception. Highest number of beneficiaries was identified in Uttar Pradesh and least were found in Ladakh. In Kalyan-Karnataka region maximum numbers of beneficiaries were identified in Raichur district and least was found in Yadagir district. The maximum number of beneficiaries was found in Uttar Pradesh (22.77%) followed by Maharashtra (10.11%), Madhya Pradesh (7.54%) and Bihar (7.23%). The Karnataka stands 7<sup>th</sup> place in ranking which covers 5.16 % of PM Kisan scheme beneficiaries in India. Majority of these beneficiaries got awareness about the scheme through the fellow

farmers (36.67%) followed by News papers (20 %) and Banks (16.67%) in the study area. The study concluded that funds disbursed under PM KISAN scheme is mainly utilized for purchase of seeds (38.33%), for the purchase of fertilizers (15 %) and pesticides (11.67%). The beneficiaries revealed that they are facing the problem of fund disbursement as the fund is not disbursed timely due to the technical issues such as failure in OTP registration vide through mobile etc.

The study concluded that there is a positive response for the scheme as the number of beneficiaries is increasing year by year, Government should take the initiative in disbursing the amount without any hindrance. Majority of the beneficiaries have inferred that there is a complex documentation to disburse the amount. In this regard documentation of the scheme may be reduced with hassle free disbursement of the fund.

#### CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

## HIGHLIGHTS

The study concluded that funds disbursed under PM KISAN scheme were mainly utilized for purchase of seeds (38.33%), fertilizers (15 %) and pesticides (11.67%) by the beneficiaries in the study area. The study concluded that most of the beneficiaries opined that the delay in disbursement of funds is the main constraints followed by inability of opening of bank accounts in the study area. The beneficiaries revealed that they are facing the problem of fund disbursement as the fund is not disbursed timely due to the technical issues such as failure in OTP registration vide through mobile etc. The study concluded that there is a positive response for the scheme as the number of beneficiaries is increasing year by year. Government should take the initiative in disbursing the amount without any hindrance of complex documentation of the scheme.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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