

RESEARCH ARTICLE

Performance of PMKISAN scheme in India with Special Reference to Tamil Nadu – An insight into Distribution

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ABSTRACT

Pradhan Mantri Kisan Samman Nidhi scheme is an income support scheme implemented by the Government of India to help farmers at the time of cultivation for the purchase of agricultural inputs. Cash transfer programme positively impacts, increasing the consumption pattern, nutritional status and eliminating rural poverty. The study analyzed the performance and progress of the state under the PMKISAN scheme and also estimated the proportion of income to the total annual income of the households. The results indicate that large share of beneficiary belong to Uttar Pradesh (20.82 percent), followed by Maharashtra (8.98 percent) and Madhya Pradesh (7.08 percent) and in case of Tamil Nadu, districts like Villupuram, Tiruvannamalai, Salem and Cuddalore have the highest beneficiaries. The lowest share was observed in states like Goa, Lakshadweep, and Puducherry, etc.; the reason for the lesser registration of beneficiaries might be due to problems with the land documents of farmers, i.e., mismatching of names. The results also found that it has positive impact on redistribution of income to small and marginal farmers where the income share to their annual income is higher in all the districts of Tamil Nadu. Digitization of land records and other information would help increase the number of beneficiaries among the states which has a lesser share.

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INTRODUCTION

Agriculture plays a major role in the economic growth of developing countries like India. With the increase in global population and demand for food supply, agricultural land is under pressure to meet global demand through increasing productivity. With reduction in agricultural land area, adoption of modern technologies, tools and high yielding varieties are at greater need to increase productivity which also require huge capital investment by the farmers. In India, about 146 million rural households have operational land holdings and 86.08 percent of farmers have marginal and small land holdings (Agricultural census, 2015) whose income is less than the poverty line. About 57.8 percent of rural households depend on agriculture as the primary source of income (Situation Assessment Survey, NSO 2021). With slow pace of structural transformation in agricultural sector, the income level of the rural households is lesser and there exists a wider

gap between income of rural and urban households. Policy makers and government institutions are involved in boosting the rural economy by implementing various schemes and subsidy programmes to the farmers. Some of the predominant schemes are Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Paramparagat Krishi Vikas Yojana (PKVY), Pradhan Mantri Fasal Bima Yojana (PMFBY), National Mission for Sustainable Agriculture (NMSA) and Pradhan Mantri Kisan Samman Nidhi Yojana (PMKISAN). The total budget allocation by the Government of India during 2021-22 to the Ministry of Agriculture and Farmers welfare (MoAFW) was Rs. 1,31,531 crore which is 14 percent higher when compared to previous year budget. Among the total budget, around 76 percent of the budget is proposed for PM-KISAN, PMFBY and interest subsidy

on short-term credit. PMFBY was implemented to provide insurance coverage and financial support to the farmers in the event of crop failure due to natural calamities. The scheme was compulsory for loanee farmers but made optional from kharif 2020 and voluntary for non-loanee farmers (Tiwari *et al.* 2020). PM-KISAN is a direct cash transfer scheme initiated to increase the livelihood status of small and marginal farmers. It aims at providing social security to all small and marginal farmers in the country through supplementing the financial needs of the farmers in procuring various inputs like seeds, fertilisers etc., and also to protect the farmers from the usurious moneylenders for meeting such expenses. This would provide liquidity to the farm households to meet their expenditure and it helps in boosting demand in rural economy. A sum of Rs. 6000/- is given in three intervals in a year before the crop seasons (Kharif, rabi and summer) and are credited through Direct Benefit Transfer (DBT) mode. So far 7 instalments have been released and 3.76 crore (33 percent of registered) farmers received all the 7 instalments and 10.69 crore (93 percent of registered) farmers received at least one instalment. Over 12 crore registered farmers have been benefiting from this scheme. The Government spending towards this scheme has increased in successive years. Since, implementation the budget has increased from Rs. 20,000 crores in 2018-19 to Rs. 65,000 crores during 2021-22 which is 49 percent of the total budget allotted to MoAFW. A number of similar schemes has been formulated by many state governments, initially by Telangana state called the Rythu Bandhu scheme where Rs. 8000/- is provided to farm households in two instalments to supplement income of the farmers. Large number of studies (Taaffe *et al.* 2017, Kusuma *et al.* 2017, Chioda *et al.* 2016, Aizer *et al.* 2016) discusses the effectiveness of cash transfer programmes and indicates that there is a positive effect of the programmes on increasing the consumption level, education, nutritional status etc. The successive rate of programme also depend on the condition or environment under which it is provided and it also depends on the traceability of the whether it has reached the beneficiary or not. Hence, this study focuses on analysing the progress and performance of PM-Kisan scheme in districts of Tamil Nadu as well as the share of PM-Kisan scheme in total annual income of the households.

METHODOLOGY

The present study is based on the secondary data,

the state wise number of beneficiary registered and government expenditure on PM-Kisan scheme was compiled from <http://www.pmkisan.gov.in>. The data pertaining to operational holdings was collected from agriculture census (2011) and the household income of farmers was compiled from the Situation Assessment Survey (2019). The performance of states and districts of Tamil Nadu was studied in terms of proportion of beneficiary to the potential beneficiary i.e., number of operational holdings in each state and district. The income share from the scheme has also been studied for each district. Since the proportion of income for each land holding category is different, the income share from the scheme has been studied separately for each land holding category.

RESULTS AND DISCUSSION

State wise progress of PMKISAN

The state wise number of beneficiaries registered under the PM-Kisan scheme is presented in table 1. The total number of farmers registered under the scheme as on 30th March, 2022 is 125 million. The highest number of beneficiary is registered in Uttar Pradesh 26.11 lakhs (20.82 percent), followed by Maharashtra 11.27 lakhs (8.98 percent), Madhya Pradesh 8.88 lakhs (7.08 percent), Bihar 8.35 lakhs (6.66 percent), Rajasthan 7.82 lakhs (6.24 percent), Gujarat 6.42 lakhs (5.12 percent), Andhra Pradesh 5.65 lakhs (4.51 percent), Karnataka 5.07 lakhs (4.05 percent), West Bengal 4.82 lakhs (3.84 percent) and Tamil Nadu 4.75 lakhs (3.79 percent). Among the major states Haryana (1.56 percent), Jammu and Kashmir (0.97 percent), Himachal Pradesh (0.79 percent) and Uttarakhand (0.74 percent) ranks lowest with less than 20 lakhs of beneficiary registration. The Union Territories and small states like Goa (0.01 percent), Lakshadweep (0.00 percent), Delhi (0.01 percent), Puducherry (0.01 percent) and Chandigarh (0.00 percent) have less than 20,000 beneficiary.

Performance of states with respect to PMKISAN

The performance of states were estimated using the operational land holding data taken from agriculture census 2015-16 and the data for 2020-2021 was projected by epolate function in STATA using the agriculture census data from 1995-96 to 2015-16. The Ministry of Agriculture & Farmers Welfare also considers the state wise operational land holding to identify the number of farmers to be covered under



Table 1. State wise Percentage share of total beneficiary in PM-KISAN over land holding (as on 02nd April, 2022)

State	Total No. of Beneficiaries	Percentage to total no. of beneficiary	Total No. of Operational land holdings	Beneficiary over operational holdings (%)
Andaman and Nicobar Islands	17287	0.01	12105	142.81
Andhra Pradesh	5654077	4.51	3872720	146.00
Arunachal Pradesh	97320	0.08	117208	83.03
Assam	3187456	2.54	2763199	115.35
Bihar	8358711	6.66	16634395	50.25
Chandigarh	465	0.00	782	59.46
Chhattisgarh	3862781	3.08	4275064	90.36
Delhi	17164	0.01	21187	81.01
Goa	11439	0.01	71106	16.09
Gujarat	6422871	5.12	5755642	111.59
Haryana	1956924	1.56	1638719	119.42
Himachal Pradesh	986004	0.79	1032853	95.46
Jammu And Kashmir	1211475	0.97	1383621	87.56
Karnataka	5077565	4.05	9529289	53.28
Kerala	3690226	2.94	8336203	44.27
Lakshadweep	2619	0.00	9749	26.86
Madhya Pradesh	8881953	7.08	11133893	79.77
Maharashtra	11271344	8.98	16871913	66.81
Manipur	477316	0.38	150348	317.47
Meghalaya	198351	0.16	255233	77.71
Mizoram	187664	0.15	87668	214.06
Nagaland	207628	0.17	214653	96.73
Odisha	3760292	3.00	5064234	74.25
Puducherry	11186	0.01	34452	32.47
Punjab	2341709	1.87	1132872	206.71
Rajasthan	7825342	6.24	8420796	92.93
Sikkim	13298	0.01	68136	19.52
Tamil Nadu	4752765	3.79	7757670	61.27
Tripura	242270	0.19	567909	42.66
Uttar Pradesh	26118219	20.82	24317794	107.40
Uttarakhand	932094	0.74	849960	109.66
West Bengal	4822697	3.84	7362117	65.51

Data source: <http://pmkisan.gov.in>; <http://agcensus.dacnet.nic.in/>

Authors Calculation

the scheme. Hence, Operational land holdings is considered as a proxy for the identifying the potential beneficiary.

The results indicate that the states like Manipur (317.47 percent), Mizoram (214.06 percent), Punjab (206.17 percent), Andhra Pradesh (146 percent),

Andaman and Nicobar Island (142.81 percent), Haryana (119.42 percent), Assam (115.35 percent) and other states like Gujarat, Uttarakhand and Uttar Pradesh has a greater number of beneficiary than the potential beneficiary (operational land holding).



Many of the North Eastern States like Manipur has community-based land ownership, it might not be possible to assess the quantum of Land holder farmers. Similarly, many of the land holding is owned jointly in many of the states where the families having land under joint ownership is also considered to be owner of the land and is permitted to avail the benefit (Kavitha et al. 2020). States like Assam, Punjab and Haryana have more beneficiary than potential, it may be due to faulty identification of beneficiaries for which the states are reverifying the list. But this may be also due to reverse tenancy i.e., small and marginal lease out lands to large farmers. The states like Nagaland (96.73 percent), Himachal Pradesh (95.46 percent), Rajasthan (92.93 percent), Chhattisgarh (90.36 percent), Jammu and Kashmir (87.56 percent) have more than 85 percent of potential beneficiaries. The states like Goa (16.09 percent), Sikkim (19.52 percent), Lakshadweep (26.86 percent) and Puducherry (32.47 percent) account for less than 40 percent of potential beneficiaries. The reason for less beneficiary may be due to states that have not completely digitised the land records, document problems, farmers themselves have not enrolled for the scheme

and in some of the north eastern states identification of beneficiary itself has been a major problem due to community based ownership. In Kerala more than 40,000 farmers could not receive fourth instalment due to mismatch in the documents (Aadhar card and PMKISAN portal).

District wise progress of PMKISAN in Tamil Nadu

In Tamil Nadu, the total number of beneficiary registered in the scheme was around 4.75 lakhs. District wise total number of beneficiary registered in PM-Kisan scheme is shown in table 2. It is observed that highest number of beneficiary were registered in Villupuram district 5.27 lakhs (11.10 percent), followed by Tiruvannamalai 4.04 lakhs (8.51 percent), Salem 2.79 lakhs (5.88 percent), Cuddalore 2.65 lakhs (5.59 percent), Vellore 2.54 lakhs (5.36 percent), Dharmapuri 2.17 lakhs (4.57 percent). The lowest number of beneficiary registered in the scheme was estimated and districts like Thoothukudi, Perambalur, Thiruvavur, Nagapattinam, Nilgiris and Theni has less than 2 percent share in total number of beneficiaries registered for availing the benefit.

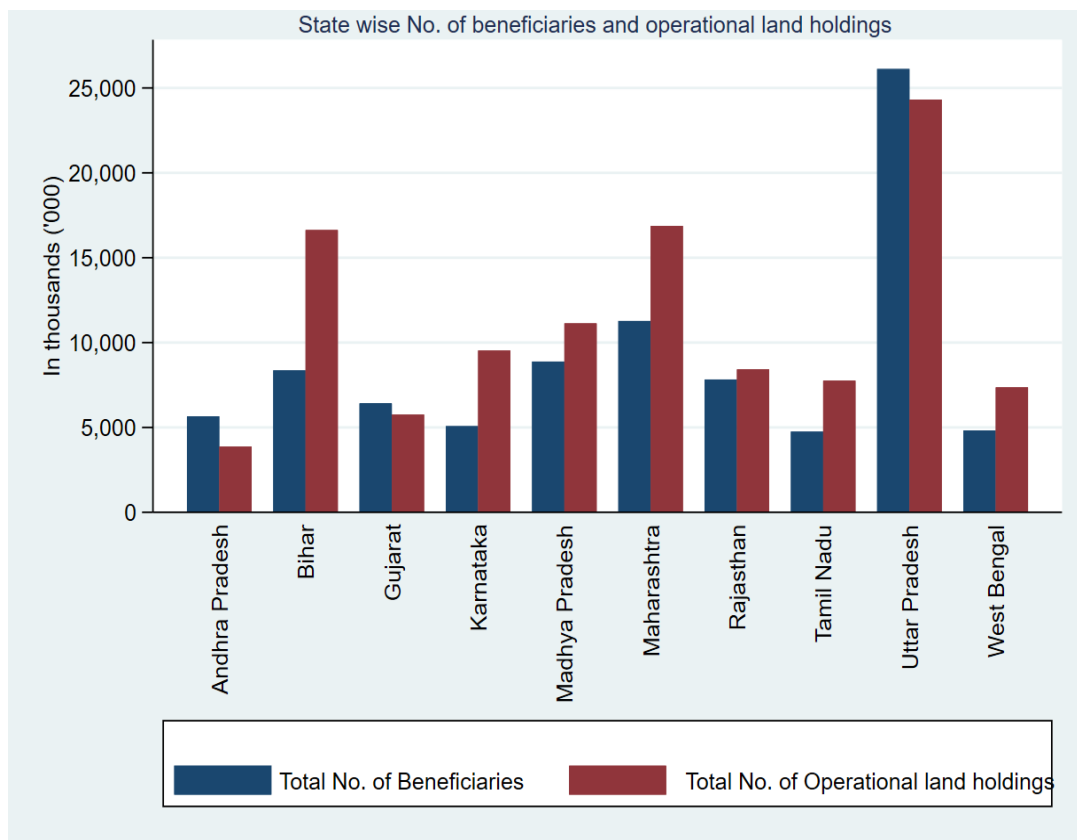


Fig 1. Top 10 states with highest number of beneficiary

Performance of districts in Tamil Nadu with respect to PMKISAN

The district wise performance of PMKISAN scheme in Tamil Nadu was estimated by percentage analysis of registered beneficiary and potential beneficiary and is presented in table 2. The districts like Pudukkottai (99.98 percent), Tiruvallur (97.38 percent), Kancheepuram (95.4 percent), Sivagangai (90.06 percent), Tiruvannamalai (89.79 percent) has more than 85 percent of registered beneficiary when compared to the potential beneficiaries. Some

of the districts like Pudukkottai, Tiruvallur and Kancheepuram has large number of joint holding ownership (Agriculture Census, 2015) which could be the reason for higher beneficiaries since identification itself is a major problem. More than half of the districts in Tamil Nadu fall under the range of 50 to 85 percent indicating that two third of farmers have registered under the scheme. Only two districts Theni (39.68 percent) and Tirunelveli (36.05 percent) has less than 40 percentage of beneficiary registered for the scheme.

Table 2. District wise Percentage share of total beneficiary in PM-KISAN over land holding in Tamil Nadu (as on 02nd April, 2022)

District	Total No. of Beneficiaries	Percentage to total no. of beneficiary	Total No. of Operational land holdings	Beneficiary over operational holdings (%)
Ariyalur	111892	2.35	175125	63.89
Coimbatore	66975	1.41	128377	52.17
Cuddalore	265905	5.59	347476	76.52
Dharmapuri	217215	4.57	374124	58.06
Dindigul	138943	2.92	300733	46.20
Erode	100178	2.11	194388	51.54
Kancheepuram	190784	4.01	199987	95.40
Kanyakumari	213101	4.48	517678	41.16
Karur	77546	1.63	113797	68.14
Krishnagiri	172337	3.63	368689	46.74
Madurai	140158	2.95	228158	61.43
Nagapattinam	60740	1.28	115160	52.74
Namakkal	92885	1.95	204402	45.44
Perambalur	76908	1.62	173055	44.44
Pudukkottai	139964	2.94	139998	99.98
Ramanathapuram	123323	2.59	277254	44.48
Salem	279533	5.88	344691	81.10
Sivagangai	111208	2.34	123484	90.06
Thanjavur	127147	2.68	267984	47.45
The Nilgiris	50000	1.05	101881	49.08
Theni	48521	1.02	122284	39.68
Thiruvarur	61956	1.30	119831	51.70
Trichy	162671	3.42	309066	52.63
Tirunelveli	108938	2.29	302203	36.05
Tiruppur	96999	2.04	174706	55.52
Tiruvallur	158629	3.34	162895	99.98
Tiruvannamalai	404421	8.51	450413	89.79
Tuticorin	82668	1.74	157277	52.56
Vellore	254530	5.36	363501	70.02
Villupuram	527325	11.10	790519	66.71
Virudhunagar	89265	1.88	159169	56.08

Data source: <http://pmkisan.gov.in>; <http://agcensus.dacnet.nic.in/>

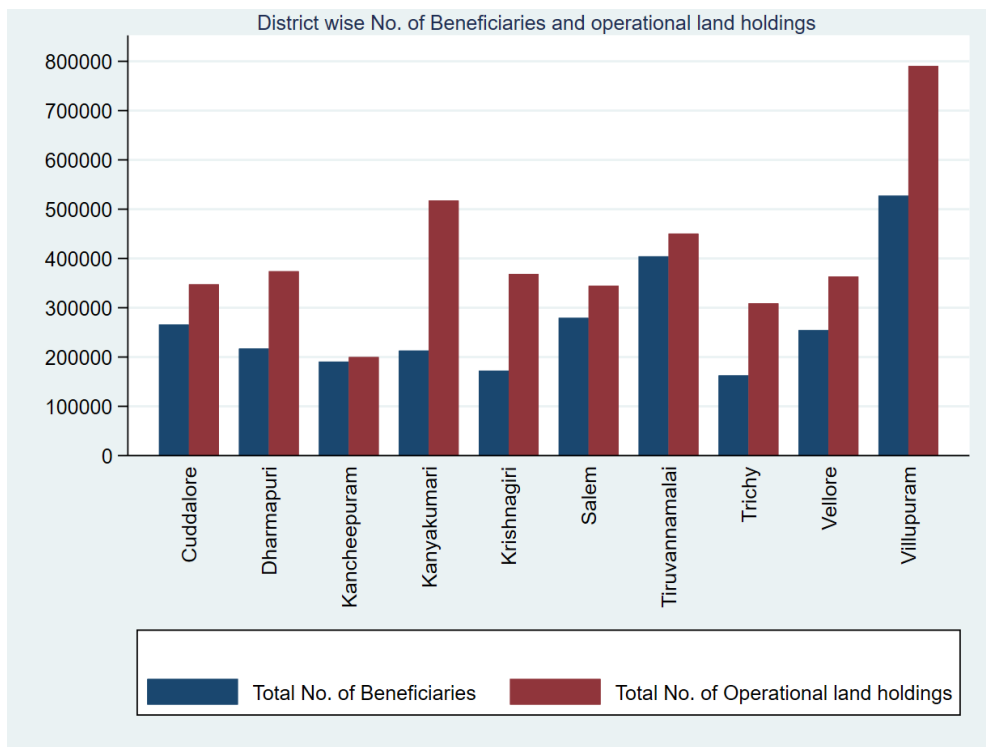


Fig 2. Top 10 district with highest number of beneficiary

Source: authors calculation

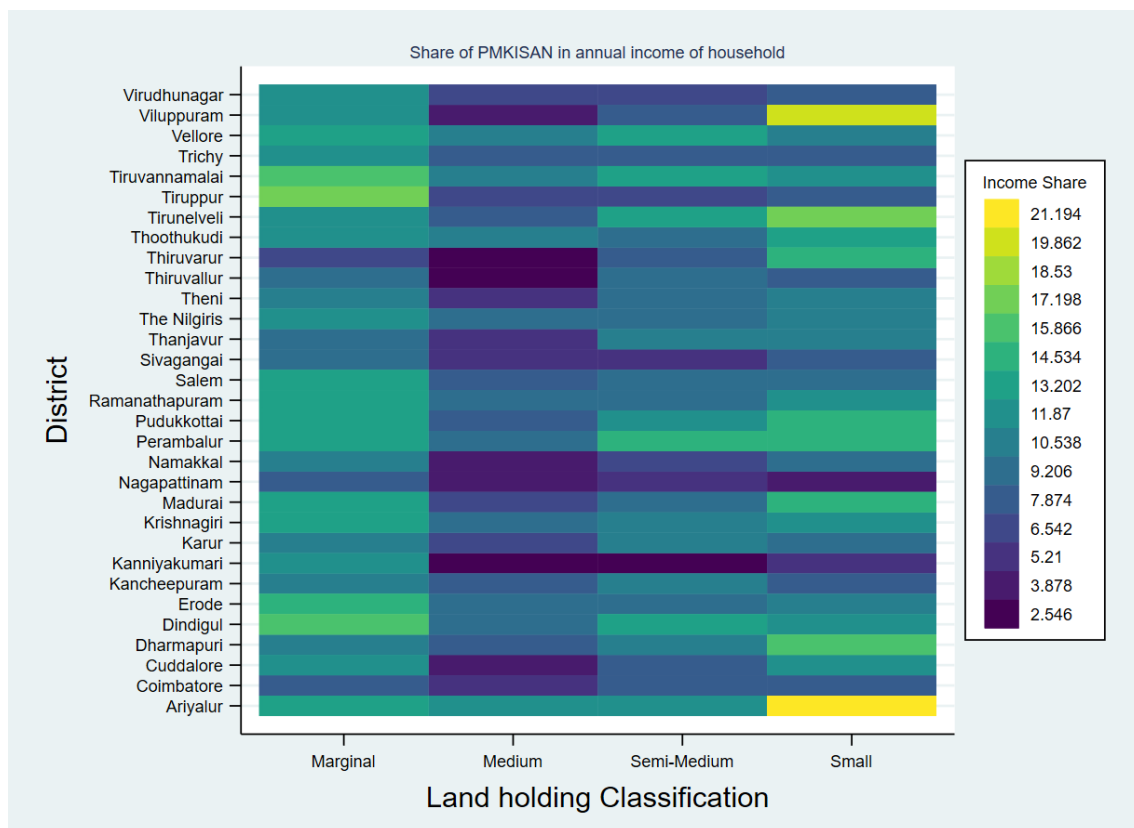


Fig 3. Share of PMKISAN in Annual income of the farm household

Source: authors calculation



The percentage share of cash transfer in total annual income of household was calculated. The data pertaining to average annual income of agricultural households was compiled from the Situation Assessment Survey (2019). District wise annual income was estimated for each landholding category and the percentage share of cash transfer to annual income was presented in table 3. The results indicate that the share of cash transfer to annual income was higher for marginal and small landholding farmer than semi-medium and medium class farmers as shown in fig 2. Similar results were found (Kavitha et al. 2020)

where state wise income share has been estimated. Districts like Tirupur (16.76 percent), Tiruvannamalai (15.44 percent), Dindigul (15.26 percent), Perambalur (14.43 percent) and Vellore (13.74 percent) has the highest percentage share of cash transfer to total annual income indicating that the income level of the household is lesser compared to other districts of Tamil Nadu. Similarly, districts like Thanjavur (9.26 percent), Tiruvallur (8.74 percent), Coimbatore (8.46) and Thiruvavur (6.82 percent) has lesser share to the total income of the households.

Table 3. District wise share of PMKISAN in annual income of household

District	Annual Income of household				% of total income			
	Marginal	Small	Semi-Medium	Medium	Marginal	Small	Semi-Medium	Medium
Thiruvallur	68624	72289	61763	320000	8.74	8.3	9.71	1.88
Kancheepuram	60233	70929	56539	73456	9.96	8.46	10.61	8.17
Vellore	43674	55049	46933	59325	13.74	10.9	12.78	10.11
Tiruvannamalai	38870	50359	45120	53658	15.44	11.91	13.3	11.18
Viluppuram	49290	30030	76827	142778	12.17	19.98	7.81	4.2
Salem	47171	66762	67562	70321	12.72	8.99	8.88	8.53
Namakkal	55953	65280	98499	158335	10.72	9.19	6.09	3.79
Perambalur	41594	56938	65660	68520	14.43	10.54	9.14	8.76
The Nilgiris	49218	57550	63723	65675	12.19	10.43	9.42	9.14
Dindigul	39313	52844	44216	68000	15.26	11.35	13.57	8.82
Karur	55832	69607	57509	94160	10.75	8.62	10.43	6.37
Trichy	52517	76029	70876	77830	11.42	7.89	8.47	7.71
Erode	44643	40717	42084	69750	13.44	14.74	14.26	8.6
Ariyalur	45479	27450	48288	51100	13.19	21.86	12.43	11.74
Cuddalore	50488	53179	74899	156889	11.88	11.28	8.01	3.82
Nagapattinam	73910	139532	114457	145980	8.12	4.3	5.24	4.11
Thiruvarur	88022	40800	82200	189833	6.82	14.71	7.3	3.16
Thanjavur	64803	56491	57198	105710	9.26	10.62	10.49	5.68
Pudukkottai	47786	42936	50806	74245	12.56	13.97	11.81	8.28
Sivagangai	62686	76673	102646	118057	9.57	7.83	5.85	5.08
Madurai	43680	41408	68044	96688	13.74	14.49	8.82	6.21
Theni	54973	59780	62154	114250	10.91	10.04	9.65	5.25
Virudhunagar	51230	75078	93671	93758	11.71	7.99	6.41	6.4
Ramanathapuram	45939	48122	62104	63630	13.06	12.47	9.66	9.73
Thoothukudi	48701	46386	68000	59300	12.32	12.93	8.82	10.12
Tirunelveli	48280	34204	45031	70500	12.43	17.54	13.32	8.51
Kanniyakumari	51283	126000	237333	198000	11.7	4.76	2.53	3.03
Dharmapuri	55348	37622	55833	76961	10.84	15.95	10.75	7.8
Krishnagiri	45875	49318	56853	68835	13.08	12.17	10.55	8.72
Coimbatore	70912	77825	82456	120120	8.46	7.71	7.28	5
Tiruppur	35791	79288	86685	92215	16.76	7.57	6.92	6.51

Source: authors calculation



CONCLUSION

PM-KISAN direct cash transfers scheme implemented by the Government of India to provide income support to the farmers at the time of crop production in three intervals to ease the liquidity constraints in procuring the agricultural inputs. The scheme is provided invariably to all the farmers. The total registered beneficiary under this scheme has been increasing largely over the years. The states like Uttar Pradesh, Maharashtra, Madhya Pradesh, Bihar, Tamil Nadu has the highest share of beneficiary where the agriculture has been carried out performantly. Whereas in Tamil Nadu, districts like Villupuram, Tiruvannamalai, Salem, Cuddalore has highest beneficiary rather than agriculture based districts like Thanjavur, Thiruvarur etc., The state wise performance indicate that states like Manipur, Mizoram has more beneficiary than potential beneficiary which may be due to community based, joint ownership based landholding which is difficult to assess the quantum of land holding. The another important aspects contributing to lowest number of beneficiaries is farmers' problems with their land documents. In Tamil Nadu, about two third of farmers have registered and availed at least one instalment expect in districts like Theni and Tirunelveli where the total beneficiary is less than 40 percent to total registered beneficiary. The scheme has important impact on redistribution of income to small and marginal farmers where the income share to the their annual income is higher in all the districts. It is therefore suggested that states with less beneficiary can be concentrated to increase the beneficiary through digitization of land records and other related documents. This would reduce the mismatching of documents and also help in easy identification of beneficiaries in many states.

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REFERENCES

- Aizer, A., Eli, S., Ferrie, J., & Lleras-Muney, A. 2016. The long-run impact of cash transfers to poor families. *The American Economic Review*, **106(4)**: 935-971. <http://doi: 10.1257/aer.20140529>.
- Chioda, L., DeMello, J. M., & Soares, R. R. (2016). Spillovers from conditional cash transfer programs: Bolsa Família and crime in urban Brazil. *Economics of Education Review*, **54**: 306-320. <https://doi.org/10.1016/j.econedurev.2015.04.005>
- Gol (2019), Agricultural Census 2015-16: All India Report on Number and Area of Operational Holdings, Agricultural Census Division, Ministry of Agriculture and Farmers Welfare, Government of India.
- Kavitha H N, Pramod Kumar, Anbukkani P, Burman R R, Venkatesh P, G.K. Jha and Prakash, P. 2020. Performance of universal basic income programme in India: A case of PM-KISAN Scheme. *Indian Journal of Extension Education* **56(3)**:1-8. doi: [10.5958/2454-552X.2020.00001.8](https://doi.org/10.5958/2454-552X.2020.00001.8)
- Kusuma, D., McConnell, M., Berman, P., & Cohen, J. 2017. The impact of household and community cash transfers on children's food consumption in Indonesia. *Preventive Medicine*, **100**: 152-158. <https://doi.org/10.1016/j.ypmed.2017.04.020>
- NSO (2021), "Situation Assessment of Agricultural Households and Landholdings of Households in Rural India," NSS 77th Round, Ministry of Statistics and Programme Implementation, Government of India.
- Taaffe, Jessica E., Andrew F. Longosz, and David Wilson. 2017. "The impact of cash transfers on livelihoods, education, health and HIV—what's the evidence?." *Development Policy Review*, **00**:1-19. <https://doi.org/10.1111/dpr.12253>
- Tiwari, Rajesh, Khem Chand, and Bimal Anjum. 2020. Crop Insurance in India: A Review of Pradhan Mantri Fasal Bima Yojana (PMFBY). *FII/B Business Review*, **9**: 249-55. <https://doi.org/10.1177/2319714520966084>