

## INSIGHTS FROM THE FIELD

# The Impact of Pradhan Mantri Krishi Samman Nidhi Yojna on Food Security and the Healthcare-Seeking Practices of Agricultural Households in Bihar: A Note from the Field

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### 1. INTRODUCTION

Pradhan Mantri Krishi Samman Nidhi Yojna (PM-KISAN) is a Government of India (GoI) initiative to provide financial assistance to farmers. Its objective is to stabilize farmers' income and support their financial requirements to invest in productive activities, including agricultural inputs. Each year, the government gives ₹6,000 to eligible farmers in three equal instalments of ₹2,000 each; the amount is transferred directly into farmers' bank accounts.

The literature suggests that cash transfer (CT) programmes have a positive impact on households' welfare (Fiszbein and Schady 2009; Gertler 2004). As PM-KISAN has been promoted as a general CT programme, and farmers are free to spend the amount on various needs, the scheme may have broader household welfare implications. Therefore, this study looks at the role of PM-KISAN on household welfare based on food security and healthcare utilization.

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Published by Indian Society for Ecological Economics (INSEE), c/o Institute of Economic Growth, University Enclave, North Campus, Delhi 110007.

ISSN: 2581–6152 (print); 2581–6101 (web).

DOI: <https://doi.org/10.37773/eec.v5i2.687>

## 2. PRIMARY SURVEY

Bihar is one of the poorest states in India and has a predominately agricultural population. In recent times, Bihar has witnessed several climate change-related weather shocks (Jha and Haripriya 2019). Farming households in Bihar are at risk of climate change vagaries that may adversely affect their agricultural production and income stability. Given this vulnerability, we chose two of its districts, Rohtas and Nawada, for a pilot study. We conducted a survey from 20 October to 29 October 2021.

Rohtas is a fertile district, whereas Nawada is drought-prone. As these two districts are exposed to different climatic shocks, selecting them provided us variations in the sample so we could capture farmers' awareness of PM-KISAN and the extent to which they benefit from it. Further, we selected two blocks from each district. From Nawada, we chose Nawada rural block and Akbarpur block. These are drought-prone areas near the district town. From Rohtas, we chose Sasaram rural block and Shivsagar block, which are primarily irrigated areas near the district town. From each block, we selected five villages based on discussions with block staff and local NGOs. On average, we chose 20 households from each village for face-to-face interviews; this added up to a sample of 400 households. We used a detailed questionnaire to capture household demographics, awareness about several agricultural programmes (including PM-KISAN), and whether the households had benefited from PM-KISAN in the last 365 days. Out of the 400 households, 373 were aware of PM-KISAN, 224 had benefitted from it, and 149 were non-beneficiaries.<sup>1</sup> The survey also collected data on the food security of the households, the health-seeking practices of pregnant women in the age group of 15–49 years, and healthcare use, immunization, and breastfeeding practices for children up to five years of age.

## 3. RELEVANT FINDINGS

Most of the farming households in the sample are marginal farmers (85% of beneficiaries and 75% of non-beneficiaries) who hold less than 2.5 acres of land. Nearly 9% of beneficiary and 5% of non-beneficiary households are small, with landholdings of less than five acres; and 6% of beneficiary and 20% of non-beneficiary households are medium-sized, with more than five acres of land. Close to 33% of beneficiary households experienced crop loss during the last cropping season, while for non-beneficiaries, this figure

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<sup>1</sup> We asked the respondents whether or not they benefitted from PM-KISAN in the last one year, and they provided yes/no answers. Henceforth, we will refer to the 224 households who reported that they availed of the scheme and the remaining 149 households—who reported that they did not avail of the scheme—as non-beneficiaries.

stood at 45%. For crop insurance, these numbers stood at 11% and 6%, respectively.

Nearly 68% (Table 1) of PM-KISAN beneficiary households reported having adequate meals (at least three meals per day). Only 9% of adults had to reduce their food consumption or skip meals during the last 365 days. In non-beneficiary families, these numbers stood at 63% and 12%, respectively. Almost 28% of beneficiary households reported that they had enough food to eat in terms of quantity and variety compared to only 23% of non-beneficiary households. PM-KISAN beneficiary households also reported seeking more healthcare (nearly 83% sought care) and immediate care (47%) as compared to non-beneficiary households (76% and 41%, respectively).

Nearly 37% of women in PM-KISAN beneficiary families received treatment for health complications during their pregnancies compared to only 35% of their counterparts in non-beneficiary families. Among the beneficiary households, 55% of women availed of government maternity benefits, like the Janani Suraksha Yojna (JSY). Almost 90% of pregnant women in beneficiary households sought antenatal care (ANC) under JSY, compared to 85% in non-beneficiary households. More women in beneficiary households (54%) sought ANC during the first trimesters of their pregnancies than their non-beneficiary counterparts (45%). A higher percentage of pregnant women from beneficiary households received at least two tetanus toxoid shots (11%) than pregnant women from non-beneficiary households (9%). A slightly higher number of pregnant women in beneficiary households (21%) received at least 100 iron and folic acid tablets during their pregnancy than those in non-beneficiary households (20%).

Although an equal percentage (92%) of women from both samples delivered in an institutional setup, more women in the beneficiary sample (55%) delivered in public health facilities than women in the non-beneficiary sample (49%). Surprisingly, women in beneficiary households received lesser postnatal care (42%) than their counterparts in non-beneficiary households (48%).

Finally, nearly 75% of children in PM-KISAN beneficiary households received immediate postnatal care (within 24 hours of birth) as opposed to only 66% from non-beneficiary households. A marginally higher percentage of children from beneficiary households (99%) received some form of immunization compared to children from non-beneficiary families (98%). However, the percentage of full immunization in both samples remains the same (83%). Furthermore, a higher percentage of children in PM-KISAN

beneficiary households (83%) were breastfed immediately after their birth—within two hours of delivery—than children in non-beneficiary families (77%).

#### **4. CONCLUSION**

Cash transfer programmes, such as the recently launched PM-KISAN, can protect farmers by providing income support and influencing the households' health and nutritional outcomes. Our survey revealed that a majority of the families were aware of the policy. However, only two-thirds of the survey respondents availed or benefitted from it. Further, those who benefitted from the programme exhibited higher food security and practised better health-seeking behaviours. Therefore, it is evident that PM-KISAN can play an important role in helping farmers by providing them with income security.

Our preliminary findings based on the survey data and a two-sample t-test reveal that there is a statistical difference between PM-KISAN beneficiaries and non-beneficiaries in terms of the means of the healthcare use and nutrition variables. It shows that PM-KISAN beneficiary households are better off than non-beneficiary households in terms of these indicators.

However, our interactions with farmers during field conversations revealed that many surveyed farmers are still not receiving the intended benefits because they are either unaware of the benefits or put off by lengthy bureaucratic processes—which range from filing applications to the prolonged and tiring claim settlement process, which often discourages farmers from utilizing government schemes.

Further interaction also revealed that farmers often grapple with availing of these benefits due to a lack of identity proof or the required bank documents. Identity proof, such as an Aadhar number, is needed to access these benefits. However, these households often do not possess an Aadhar card. Even if they hold one, there may have been errors while recording their names, and, hence, they may face issues when confirming their identity. Moreover, these households are hardly aware of their bank account details, which are needed to encash the amount received through the scheme. Therefore, improvement in financial inclusion and financial literacy is another aspect that we emphasize to improve the welfare of farmers.

If the government can ensure better promotion and implementation of these schemes, and make the bureaucratic process less restrictive and tedious, then the penetration of these schemes may be more profound.

**Table 1:** Food Security and Health-Seeking Behaviour among PM-KISAN Beneficiary and Non-Beneficiary Households: A Two-Sample Mean Difference t-Test

Variables	PM-KISAN=0	PM-KISAN=1	Mean Difference
Adequate meals (at least 3 or more complete meals per day)	0.627	0.677	-0.05** (0.011)
Enough quantity and variety of food in the last year	0.234	0.276	-0.042*** (0.005)
An adult was required to reduce food consumption or skip meals	0.115	0.085	0.030** (0.014)
Members sought treatment for health problems, like fever, cough, diarrhoea, allergy, asthma, etc., in the last 12 months	0.76	0.829	-0.07*** (0.000)
Members sought immediate healthcare (within 24 hours) for health problems	0.413	0.468	-0.054*** (0.008)
Members sought care in private healthcare facilities	0.545	0.625	-0.079 (0.109)
Pregnant women sought treatment for health problems during their pregnancy	0.354	0.371	-0.016 (0.743)
Pregnant women sought any ANC	0.846	0.902	-0.057* (0.089)
Pregnant women sought ANC during their first trimester of pregnancy	0.451	0.543	-0.092* (0.078)
Pregnant women received at least two TT injections	0.098	0.112	-0.014 (0.517)
Pregnant women received at least 100 IRF tablets	0.201	0.211	-0.01 (0.807)
Women delivered in an institutional setup	0.919	0.916	0.003 (0.921)
Women delivered in a public institution	0.486	0.553	-0.068 (0.184)
Women delivered in a private institution	0.434	0.363	0.071 (0.157)
Women received immediate postnatal care (within 24 hours of birth)	0.483	0.421	0.061* (0.087)
Children received immediate postnatal care (within 24 hours of birth)	0.664	0.753	-0.089** (0.022)
Children received any immunization/vaccination	0.984	0.99	-0.006 (0.543)
Children received full immunization/vaccination	0.834	0.833	0.001 (0.970)
Children were breastfed immediately after birth (within 2 hours of birth)	0.775	0.829	-0.055 (0.107)

**Source:** Authors' calculations; \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.10$ . Figures in parentheses indicate p-values.

## ACKNOWLEDGMENTS

First, we would like to thank Professor Mahendra Dev, Dr. A Ganesh Kumar, and Dr. Vijaylaxmi Pandey for selecting us for the SPANDAN grant and giving us this excellent opportunity to work on an exciting research topic. We are also thankful to Prof. Manoj Panda for his invaluable suggestions on our paper. His recommendations have tremendously helped us refine our work. We appreciate the comments and directions given by Professor Brinda Viswanathan during the interim presentation to improve our work. We are incredibly grateful to all the participants of the SPANDAN workshop held on February 14, 2020, and June 25, 2022, for their insights. We would like to sincerely extend our gratitude towards Prof. Alakh Sharma and the entire team of IHD, without whose guidance and help the primary survey would not have been possible. We also acknowledge the support provided by Dr. Ashwini Kumar and Mr. BKN Singh for their tremendous support during the field work. We would also like to thank Anurag Banerjee, Riham Goel, Tanisha Kouli, and Hashika Sharma for their research support.

## GRANTS

This study has been funded by Indira Gandhi Institute of Development Research (IGIDR), Mumbai, and the System of Promoting Appropriate National Dynamism for Agriculture and Nutrition (SPANDAN) India

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