

Original Research Article

Impact of Agricultural Subsidies on Doubling the Farmer's Income Generation Sustainably under NFSM

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ABSTRACT

The study was carried out in Mandla district of Madhya Pradesh with the objective to assess the impact of agricultural subsidies on doubling the farmer's income under National Food Security Mission (NFSM). The Mandla block was selected randomly. The proportionate random sampling was used to make sample size 161. The study reveals that majority of tribal farmers have knowledge about subsidy in irrigation, fertilizer, machinery etc. provided under National Food Security Mission (NFSM). Data revealed that majority of farmers (58.38%) had complete knowledge about NFSM under which government is providing subsidy for tribal farmers, about half (48.44%) of tribal farmers were using demonstration pattern under NFSM, while (42.85%) of farmers were taking subsidy in seed distribution and small proportion of tribal farmers (30.43%) were buying farm machinery through subsidy provided under NFSM. Farmer's age, education, land holding, occupation, annual income, innovativeness, subsidy orientation and knowledge towards subsidy were found to be positively correlated with income generation whereas, social participation, farm power, innovativeness and level of satisfaction were found negatively correlated with income generation.

Keywords

Subsidies, Impact, Income generation of farmer's, NFSM

Introduction

India has been a promising country of the world in its development having a total population of 1,366,417,754 (*census, 2019*) of which approximately 5.6% of the total population of the country was tribal. These tribal people have significant contributions to the local and national economy by being participated in doubling the Income activities such as vegetable production, nursery establishment, livestock and poultry raising, cottage industry and small business etc. Unfortunately, the tribal people community is almost unknown to modern agricultural technology and has been left out from the main stream of economic development.

Considering their socio-economic upliftment, it is reported that the various economic activities that can profitably be carried out by the tribal people include: agricultural production, e.g., vegetables, fruits and field crops; livestock production, e.g., poultry, cattle rearing, beef fattening and pig rearing etc; and non-agricultural, e.g., handicrafts, cottage industry, small business, tailoring and nursery establishment, etc. (Shaha, 2003). An effective agricultural programme might be a tool in order for carrying out Income Generation to train and educate tribal population. Agricultural extension services, KVKs and other agricultural development agencies, therefore, need to develop a

suitable mechanism for imparting knowledge and skills to the tribal people on various aspects of subsidy to increase income generation. As a result, the tribal farmers will favorably be disposed towards adoption of various agricultural subsidies to increase or doubling their income. In fact, any subsidy programme for the tribal farmers should be designed based on their felt needs they are struggling with.

Agricultural subsidies in India have increased tremendously. Agricultural subsidies are benefits given to farmers to support their operations, by which the objective of growth and social justice may be achieved. The subsidy is an important non-price incentive for beneficiaries to adopt new technology to undertake the preferred investment for raising production. There are two motives behind providing the agricultural subsidies to farmers; firstly to encourage the use of new technology among the farmers to double their income and secondly to reduce the cost of production (Anand and Kaur 2019). In India subsidies are provided both by Central and the State Government on fertilizers, irrigation (canal water), electricity and miscellaneous agricultural subsidies and to farmers' cooperative societies in the form of seeds, development of oil seeds, pulses, cotton, rice, maize and crop insurance schemes and price support schemes, etc.

An effective extension programme might be a tool in order for carrying out to double the farmer's Income, Government of India has launched this Centrally Sponsored Scheme, 'National Food Security Mission' (NFSM) in August 2007. The major objective of this scheme is to increase production and productivity of wheat rice and pulses on a sustainable basis so as to ensure food security of the country The approach is to bridge the yield gap in respect of these crops through dissemination of improved technologies and

farm management practices Beneficiary farmers have to contribute 50 per cent of cost of the activities to be taken up at their individual farm holding The beneficiaries can choose to draw loans from the banks, in which subsidy amount presented for a particular component for which the loan is to be availed will be released to the Banks. Through effective training, tribal farmers are more likely to acquire up-to-date knowledge on doubling the farmer's Income Activities and refresh their existing knowledge (Fatema, 2008).

Hence, to understand the need of the tribal farmers in terms of income generation through subsidy the present investigation was an attempt to assess the impact of agricultural subsidies on income generation of tribal farmers under NFSM is carried out in Mandla district of M.P.

Materials and Methods

The present investigation was carried out in Mandla district. Out of the 9 blocks, 4 blocks were selected randomly. 4 villages from each block were selected based on of maximum tribal population. The farmers were selected by the proportionate random sampling method to make sample size 161.

A presented interview schedule was used for the data collection. The data was collected personally at the residence as well as the farm of the farmers. The collected data were coded, compiled, tabulated, and analyzed in line with the objectives of the study. Qualitative data were converted into quantitative data by means of suitable scoring, wherever necessary. Descriptive statistics such as mean and frequency were used for describing the variables of the study. Pearson's Co-efficient of correlation was used to explore the relationships between dependent and independent variables.

Results and Discussions

The findings revealed from table 1, that higher percentage of the beneficiaries (58.38%) were having complete knowledge about NFSM scheme in which govt. are providing subsidy for tribal farmers (Sekar, 2012), whereas 22.36 per cent of beneficiaries had partial knowledge and 19.25 per cent of beneficiaries had no knowledge about NFSM; the statement was mean scored 3.19 and got I rank. While, high proportion of the beneficiaries (67.70%) were having complete knowledge about NFSM scheme providing subsidy for input implements, plant protection are also provided by government, followed by 17.39 per cent of beneficiaries had partial knowledge and 14.90 per cent of beneficiaries had zero knowledge about NFSM providing subsidy on inputs and plant protection; the statement was mean scored 2.91 and got II rank. About 69.56 per cent, out of total beneficiaries had complete knowledge about NFSM is central sponsored scheme which provide maximum number of subsidies for farmers, whereas 21.73 per cent of beneficiaries had partial knowledge and 08.69 per cent of beneficiaries had no knowledge about NFSM which is central sponsored scheme which provide maximum number of subsidies for farmers; the statement was mean scored 2.74 and got III rank. whereas 10.55 per cent, out of total beneficiaries had complete knowledge about NFSM scheme which provide 50% or money whichever is less for inputs, followed by 08.69 per cent of beneficiaries had partial knowledge and more than half i.e. 82.60 per cent of beneficiaries had no knowledge about NFSM scheme which provide 50% or money whichever is less for inputs; the statement was mean scored 2.53 and got IV rank, 06.83 per cent, out of total beneficiaries had complete knowledge about NFSM scheme about the criteria for taking subsidy, followed

by 08.69 per cent of beneficiaries had partial knowledge and more than half 84.47 per cent of beneficiaries had zero knowledge about NFSM scheme and the criteria for taking subsidy; the statement was mean scored 2.40 and got V(a) rank. About 05.59 per cent, out of total beneficiaries had complete knowledge about NFSM scheme providing Rs. 100/ kg or 50% subsidy for hybrid seed of nutria-cereals, followed by 11.18 per cent of beneficiaries had partial knowledge about subsidy on nutria-cereals and more than half i.e. 83.22 per cent of beneficiaries had no knowledge about NFSM scheme providing subsidy on nutria-cereals; the statement was mean scored 2.40 and got V (b) rank. and 06.21 per cent of beneficiaries had complete knowledge that NFSM scheme also support for branding and marketing of milled pulses and millets by providing @Rs 5 lakh for 1 time support only, followed by 08.69 per cent of beneficiaries had partial knowledge about government support and more than half i.e. 85.09 per cent of beneficiaries do not have knowledge about government support on pulses and millets; the statement was mean scored 2.37 and got VI rank. and very few percentage of beneficiaries (04.96%) had complete knowledge about NFSM scheme in which government provides crop-wise maximum subsidy for village programme under Sub-Mission on Seed and Planting Material (SMSP), whereas 08.07 per cent of beneficiaries had partial knowledge about government support on SMSP and more than half percentage of beneficiaries (86.95%) do not have knowledge about government support on SMSP; the statement was mean scored 2.30 and got VII rank.

To determine the degree and nature of the relationship and direction of association among independent and dependent variables a correlation coefficient was worked out and presented in the table 2. Out of total independent variables taken in the study, only

nine variables i.e. age (X_1), education level (X_2), type of family (X_3), size of land holding (X_4), occupation (X_5), annual income (X_6), This might be due to their literacy level and maturity of mind might have made the farmers to possess a better living standard (Kiran, 2011). Innovativeness (X_9), subsidy orientation (X_{10}), knowledge towards subsidy (X_{11}), was highly and positively significantly correlated in terms of income generation (y_1) at 0.05 level of probability.

On the other hand social participation (X^7), farm power (X_8) and level of satisfaction (X_{12}) showed statistically non-significantly correlated in terms of income generation of tribal beneficiaries. Hence, null hypothesis was rejected and empirical hypothesis was accepted. This might be due their less involvement in social activities and less income to buy materials.

Table.1 Knowledge of tribal farmers towards subsidy

Statement	Response			Mean	Rank
	Complete	Partial	Nil		
Do you know, under NFSM govt. are providing subsidy for tribal farmers?	94 (58.38)	36 (22.36)	31 (19.25)	3.19	I
Do you know, under NFSM subsidies for input implements, plant protection are also provided by government?	109 (67.70)	28 (17.39)	24 (14.90)	2.91	II
Do you know NFSM is central sponsored scheme which provide maximum number of subsidies for farmers?	112 (69.56)	35 (21.73)	14 (08.69)	2.74	III
Do you know, about the criteria for taking subsidies?	11 (06.83)	14 (08.69)	136 (84.47)	2.40	V(a)
NFSM provides 50% or money whichever is less for inputs?	17 (10.55)	11 (08.69)	133 (82.60)	2.53	IV
Do you know under this scheme, Govt. provides Crop-wise maximum subsidy for seed village programme under sub-mission on seed and planting material (SMSP)?	08 (04.96)	13 (08.07)	140 (86.95)	2.30	VII
Do you know Govt. providing Rs 100/kg or 50% subsidy for hybrid seed of nutri-cereals, i.e., Kodo, Kutki, Ragi, Foxtail, and Barnyard?	09 (05.59)	18 (11.18)	134 (83.22)	2.40	V(b)
Do you know Govt. also support for branding and marketing of milled pulses and millets @ Rs 5.00 lakh, for 1 time support only?	10 (06.21)	14 (08.69)	137 (85.09)	2.37	VI

Table.2 Correlation between independent variables with income generation of tribal beneficiaries

Independent Variables		r value	t value
X ₁	Age	0.331*	4.421
X ₂	Education level	0.254*	3.311
X ₃	Type of family	0.687*	11.921
X ₄	Size of land holding	0.538*	8.047
X ₅	Occupation	0.397*	5.454
X ₆	Annual Income	0.425*	5.920
X ₇	Social Participation	0.141 ^{NS}	1.795
X ₈	Farm power	-0.063 ^{NS}	-0.795
X ₉	Innovativeness	0.221*	2.857
X ₁₀	Subsidy orientation	-0.328*	-4.378
X ₁₁	Knowledge toward subsidies	0.313*	4.155
X ₁₂	Level of satisfaction	0.108 ^{NS}	1.369

* Significant at 0.05 level of probability, NS= Non-Significant

In conclusion, the tribal farmers are a special interest group of the population of Mandla. Accordingly to various programmes designed for improving their socio-economic condition to uplift the income generation as well as doubling the tribal farmer's income. They need proper information specially on plantation, seeds and power supply and other important aspects of subsidy for desired output. Complete knowledge and proper utilization of subsidy provided under NFSM is also a potential aspect for the tribal farmers to maximize family income leading to better livelihood. Unfortunately they do not have proper knowledge and skills to understand the benefit of subsidy provided by government. In addition, they need proper information on subsidy. It is also imperative for respective authorities to offer implementation opportunities on subsidy for the tribal farmers to augment their income levels. It might also be said that if arrangements are made for proper information about subsidy for the tribal people, it would have a salutary impact on the doubling the farmer's income.

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