



# ANNUAL SURVEY OF STATE OF MARGINAL FARMERS IN INDIA



# Foreword

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Small and marginal farmers with less than two hectares of land account for just over 86% of all farmers in India, but own just about 47% of the crop area, according to the 10th agriculture census 2015-16. Overall, the census has shown that while Indian farms became more fragmented between 2010-11 and 2015-16, holdings continued to be inequitably distributed. During this period the proportion of small and marginal farmers grew from 84.9% to 86.2% (a growth of about 9 million), while the total number of operational holdings grew from 138 million to 146 million. Further, these 126 million farmers owned, on average, 0.6 hectares holding each, which is not enough to produce surpluses which can financially sustain their families, explaining the rising distress in Indian agriculture.

“The rise in the number of small and marginal farmers signifies that the rest of the economy is unable to absorb the surplus. India has to live with its small-sized farms in the next two decades and the way out is to provide them access to the best technology and markets, the way China did it,” according to Ashok Gulati, agriculture chair professor at Indian Council for Research in International Economic Relations. Professor Gulati further adds that small farms can be economically viable through diversification into high-value crops and massive capital investments in value chains.

Admittedly, the existence of a large number of small and marginal farmers means it is challenging for the government’s extension arms to reach them with new technology and farm support schemes. However, the Government of India has met this challenge head-on by realigning its interventions from a production-centric approach to farmers’ income-centric initiatives, with a focus on better and new technological solutions. These include the implementation of schemes like,

Pradhan Mantri Krishi Sinchai Yojana (PMKSY), Paramparagat Krishi Vikas Yojana (PKVY), Soil Health Card, Rainfed Area Development under National Mission for Sustainable Agriculture (NMSA), Pradhan Mantri Fasal Bima Yojana (PMFBY), National Agriculture Market scheme (e-NAM), National Food Security Mission (NFSM), Rashtriya Krishi Vikas Yojana (RKVY), National Mission on Agriculture Extension & Technology (NMAET), etc. In addition, farmers are provided information through Kisan Call Centres (KCCs), Agri-Clinics and Agri-Business Centres (ACABC) of entrepreneurs, Agri Fairs and exhibitions, Kisan SMS Portal, etc.

In this backdrop, this Annual Survey of State of Marginal Farmers, 2023, the first in a series of monographs on the topic, is focused on the rapid understanding of the state of marginal farmers in India. The present report focuses on the income and agricultural practices among marginal farmer households owning less than 1 ha based on a comprehensive survey across 20 major states in India. It delves into certain qualitative aspects of marginal farmers over and beyond that were covered in the NSS survey 77th Round. This aims at providing a complementary qualitative picture of their farming practices, coping strategies adopted during natural calamities, and government support received through various flagship programmes to highlight the future of marginal farms and recommend policy interventions.

I would like to congratulate FEED and the Development Intelligence Unit for undertaking such an initiative, such studies are very much necessary for policy advocacy. I would also like to thank FICCI for lending their support towards such an endeavour. I hope the readers find this report as useful and educational as I did.



Dr. Sanjeev Chopra  
Chairperson, FEED



# Acknowledgement

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I would like to acknowledge that Annual Survey Of State Of Marginal Farmers In India is published by the Development Intelligence Unit (DIU), a partnership between Transform Rural India and Sambodhi Research and Communications Ltd. I would like to express my sincere gratitude to Dr Alka Singh, Dr Seema Bathla, and Dr Anjani Kumar for their valuable contributions to this survey. Their extensive knowledge and expertise in the field of agriculture and rural development have been instrumental in shaping the research methodology.

I would like to extend my regards to Dr. Sanjeev Chopra, Chairperson, FEED, for agreeing to write the Foreword for this survey. His support and encouragement have been instrumental in the research journey. Further, I am deeply grateful to Dr Ashok Gulati, for his inputs into the report. His contribution has added exceptional value to our work. Dr Gulati's vast experience and expertise in the field of agriculture have been a source of constant motivation for the team.

Dr Alka Singh, a Senior Scientist at the Indian Agricultural Research Institute, has been a

constant source of support and guidance throughout the research journey. Her insights into the challenges faced by marginal farmers in India have been invaluable. Dr Seema Bathla, a Professor at Jawaharlal Nehru University, has provided us with valuable inputs on the socio-economic factors affecting marginal farmers. Her expertise in the field of rural development has helped us gain a deeper understanding of the issues faced by this vulnerable community thereby helping my team develop an exhaustive questionnaire to gauge the status of marginal farmers in India. Dr Anjani Kumar, a Senior Research Fellow at the International Food Policy Research Institute, has been a source of inspiration for the team. His insights on agriculture and rural development has helped us in developing a questionnaire on the policy aspects.

Finally, I would like to thank my teammates in DIU and Sambodhi Panels, who have been the backbone of this survey. I would also extend my sincere regards to the other team members of TRI & Sambodhi for their inputs in shaping our research.

Sandeep Ghosh  
Project Lead



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# Introduction

The Annual Survey of State of Marginal Farmers, 2023 is focused on rapid understanding of the state of marginal farmers in India. The Survey has been completed in February 2023 for the Agricultural Year 2021-22 through a telephonic interview with a multi-state Panel of 6115 respondents.

We have used “marginal farmers” as defined by the Agriculture Census Division<sup>1</sup>; we understand there is very high heterogeneity and this is different from the NSS Report No. 587: Situation

Assessment of Agricultural Households and Land and Livestock Holdings of Households in Rural India, 2019; we understand “agriculture households” are not same as “farmers” and lot of care needs in interpreting; wherever in our understanding there is a corresponding consistency and it will help in appreciating the Survey findings better we have referred to SAS 2019. We have used the broad thrust of focus of the erstwhile Planning Commission’s Working Group on Disadvantaged Farmers<sup>2</sup> as the purpose is closely aligned.

## 1.1. Background

In India, marginal farmers constitute a significant portion in total farm households. The Ministry of Agriculture & Farmers Welfare, Government of India defines a marginal farmer having operational holding<sup>3</sup> of less than or equal to one hectare (2.5 acres) of agricultural land. (Source: “Categorisation of Farmers (pib.gov.in)” ). According to the All India Report on Agriculture Census 2015-16, while the highest share of cultivators is those of marginal farmers, accounting for 65.45%, their total operational landholding constitutes only 24.03% share in total cultivable land. This makes the average landholding size of marginal farmers to be only 0.38 hectares at the national level. This size has remained almost the same for the last 40 years. Since 1985-86, the share of marginal farmers in total farm households has considerably

increased by 18% whereas their share of land holding in total has gone up by almost 80%. Other than the Agriculture Census which is undertaken every 5 years, the NSSO conducts Situational Assessment of Agricultural Households (SAS) in a gap of 10 years. It is a very extensive survey of cultivators and non-cultivators rural and urban households in each of the Indian state, providing a wide coverage on their socio-economic characteristics. Farmers with different sized landholdings are asked about their income from crop cultivation and other sources, expenditure on farm inputs, crops grown, savings, investment, access to institutional credit, extension services agri-markets, and various other aspects. Broadly, it appraises the performance of farming and the status of farm households for policy imperatives. The most striking feature of Indian farm HHs

1 Chapter 2 Concepts, Definitions, Methodology and Scope of Census Data, All India Report on Agriculture Census 2015-16, DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE MINISTRY OF AGRICULTURE & FARMERS WELFARE NEW DELHI 2020

2 Chaired by Bina Agrawal based on several (often intersecting) criteria : economic disadvantage: landlessness, near-landlessness, or small size of owned or operated holdings; social disadvantage: gender (being a woman), caste or tribe (belonging to scheduled castes (SC) or scheduled tribes(ST)); and ecological and regional disadvantage: located in regions which are arid, semi-arid, rainfed, disaster prone, poorly irrigated, or geographically remote

3 The operational holding is defined as the land which is used wholly or partly for agricultural production and is operated as one technical unit by one person alone or with others without regard to title, legal form, size, or location (Source: All India Report on Agriculture Census 2015-16, GoI).

as per the latest NSS 77th round (2018-19) report is that the farmers' income has increased but it is marked with large inter-state and inter-farm disparities. Between the SAS 2012-13 and SAS 2018-19, the average monthly income of agricultural HHs from all sources – wages, leasing out land, crop production, livestock, and non-farm activities – has increased from Rs. 6426 to Rs. 10218. It suggests an increase in annual income at about 8% in nominal prices and 6% in real price with base 2011-12. However, the most disquieting feature is that out of total income earned by the HHs, only 37.17% is from crop production; 15.48% from livestock; 40% from wage labour and the remaining 6.27% and 1.31% are from non-farm occupations and leasing in land respectively.

The situation is quite vulnerable for the small and marginal farmers (having less than 2 ha of land), depicting hardships in their sustenance solely on agriculture. Moreover, farming is increasingly becoming unremunerative on small land holdings due to high cost of inputs, variability in prices and temperature, and yield risk due to recurrent floods and famines. The small landholders are dominant in low per capita income states viz. Jharkhand, Bihar, Odisha, West Bengal, and Uttar Pradesh, earning a much higher share of income from wages and livestock activities.

In this backdrop, the present report focuses on the income and agricultural practices among marginal farmer households owning less than 1 ha based on a comprehensive survey across 20 major states in India. Upon deliberations with the academia, policy makers and industry experts, it was decided to delve into certain qualitative aspects of marginal farmers over and beyond

that was covered in the NSS survey. This may provide complementary qualitative picture on their farming practices, coping strategies adopted during natural calamities, and government support received through various flagship programmes to highlight the future of marginal farms and recommend policy interventions.

During 2023, the Development Intelligence Unit (a collaborative venture between Transforming Rural India Foundation and Sambodhi) undertook an independent survey of 6115 marginal farmer HHs, covering their important and critical aspects viz. landholding pattern, crop production, irrigation methods, livestock rearing, and other non-farm based economic activities. This is supplemented with information on their access to government grants and subsidies, awareness and utilisation of government facilities, reasons for satisfaction/dissatisfaction of availing government managed crop procurement facilities, impact of natural calamities, and other factors that influence farming and overall wellbeing.

Overall, this survey and the ensuing report has tried to capture the challenges being faced by marginal farmers in major states in India, and policy interventions that support their livelihoods and promote sustainable agriculture. This survey is first of its kind to provide insights into the pertinent policy questions relating to the sustenance of marginal farm HHs, solely on farming and efficacy of government support through input subsidy, procurement of produce, and direct cash transfers. The information is gathered through a well-designed questionnaire and pertains to FY 2021-22.

## 1.2 Purpose of the Study

Indian farming is dominated by “marginal farmer” caught in a web of marginal production system (poor soil, low and unreliable irrigation, low technology, poor access to credit) and marginal support ecosystem (low access to MSP and private off-take market; low access to public support programmes, extension) making for marginal and variable income, erasure of livelihoods and precarity accelerating their movement outside farm economy on less favourable and riskier terms. Absence of differentiated and targeted focus on this segment which is amongst the poorest section of rural society is a public policy concern. This report is an attempt to spotlight and bring focus to “marginal” providing a comprehensive and critical overview of their present state, precarity and unorganised characteristic and spur pathways towards new alternatives,

The survey seeks:

- To assess the current status of agriculture among the marginal farming communities based on land use pattern, land leased in or leased out, access to irrigation and crop diversity.
- To analyse the dependency of marginal farmers on activities allied to agriculture and non-farm occupations to supplement farm income and the extent of engagement in such activities in terms income generation.
- To identify key challenges faced by marginal farmers in terms of access to credit, purchase of inputs, and sale of output through government procurement agencies and other marketing channels.

- To evaluate the effectiveness of the existing government programs and policies aim at supporting the marginal farmers through extension services, subsidies on inputs, and direct cash transfers.
- To understand the outlook of marginal farmers on the future of small farms, amidst changing climatic conditions, challenges in the risk mitigation strategies and sustainable farming practices.

### 1.3 Main Objectives

The survey covers marginal farmers in twenty states across India, namely, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, and West Bengal.

SambodhiPanels, the platform used for conducting this survey has one of India's largest database of rural respondents. Since our focus is only on marginal farmers, they were screened on the basis of

- engagement of marginal farmer households in agricultural activities and their further bifurcation as per the land size
- total land cultivated (owned or leased in) less than 1 hectare (2.5 acres).

The telephonic survey covered a total of 6115 respondents who were asked 43 questions on various socio-economic aspects relating to farming, income, and livelihood during February 2023 covering the Agriculture Year 2021-22. The survey was conducted over telephone, therefore questions were kept limited to ensure that the duration of the survey was short. The methodology constrained and we deliberately didn't not include questions on input use, investment, indebtedness etc., further, the Agriculture Census and the NSS survey.

Descriptive statistics are presented in tabular form.

# Key Findings

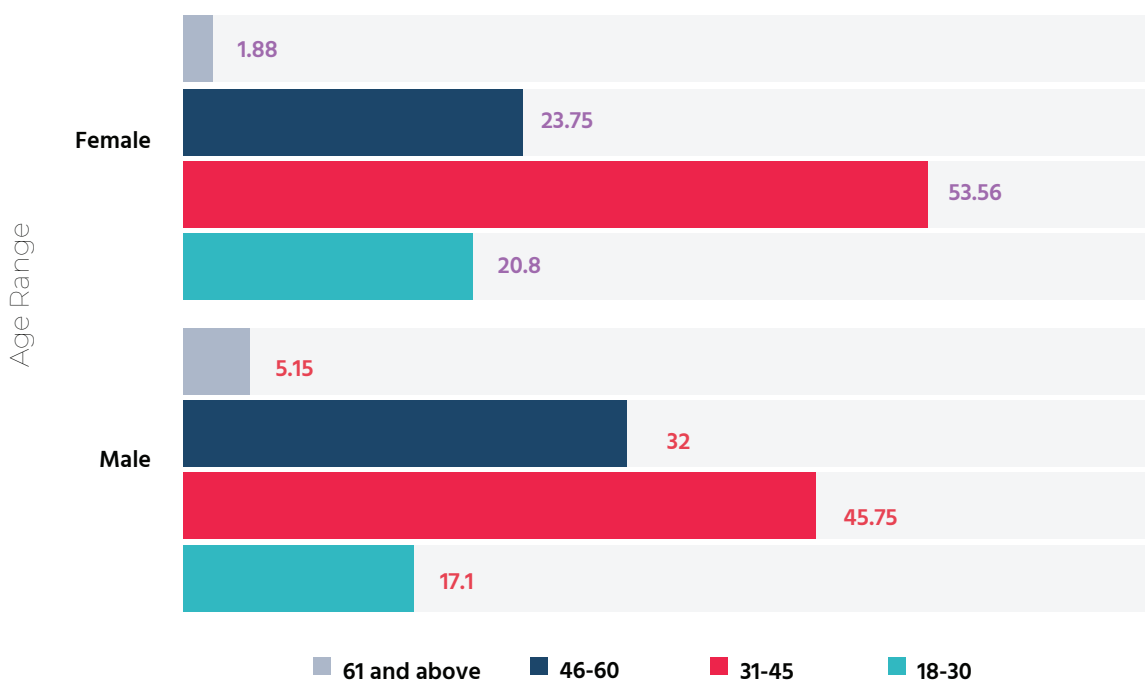


## 2.1 Household Characteristics

The demographic profile of marginal farmer households in the Panel and their socio-economic characteristics are:

- The average age of the respondent farmers was around 40 years. About 47% were in the 31-45 years age group, and another 30% were from the 46-60 years group.
- Close to 20% of the respondents were females and engaged in farming activities themselves.
- Share of female farmers in total was higher in the younger age group, with 53.57% of the female farmers in the 31-45 age group compared to 45.85% for males, whereas in the age group of 18-30, the share of female farmers was 20.78% compared to 17.23% for males (Figure 1). This can be explained by an increasing migration of their male members of the household to non-farm occupation in the rural and urban locations for additional income.

Figure 1 Age-Gender Profile of Marginal Farmers

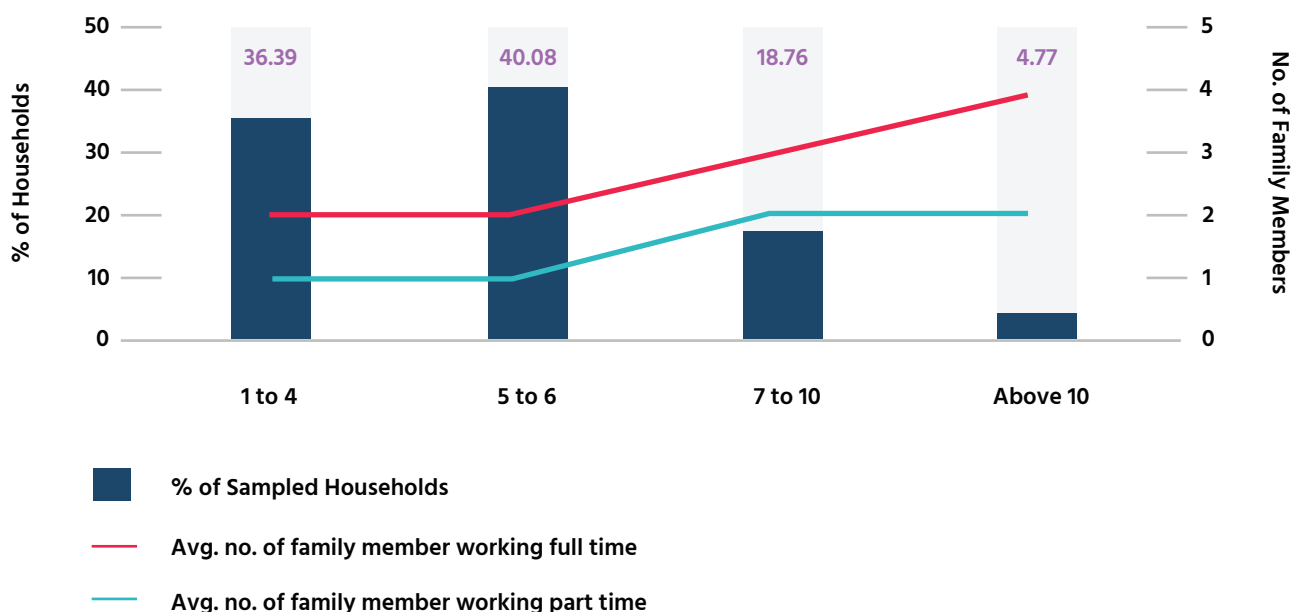


Source: Primary Survey conducted through SambodhiPanels

The household characteristics illustrated in Figure 2 show the following.

- The average number of family members in a household was 5.77.
- Nearly one-fourth of sampled farmers have more than 6 members in their household, with around 40% households having 4 or less than 4 members.
- On average, most households have 2 members working full-time in agriculture and livestock activities while one member works on part time basis.
- For large households, i.e., households with over 10 members, 4 members work full-time and 2 on part-time basis in agriculture related activities.

Figure 2 Characteristics of Marginal Farm Households



Source: Primary Survey conducted through SambodhiPanels

## 2.2 Agriculture Practices

### 2.2.1 Land Holding and Utilisation Pattern

The All India Agriculture Census by DAFW provides a comprehensive picture on the landholding and utilization pattern of marginal farmers, showing an increase in fragmentation and division of land holdings, the area cultivated by marginal farmers and their percentage share in total farmers has considerably increased. While the average landholding size of marginal farmers has remained unchanged, the average landholding size of all farmers has decreased, indicating a decline in the average landholding size of large category of farmers.

The findings from the primary survey, given in Table 1 and 2 are in sync with the landholding and utilization of cultivable land data given in the Census. The following are key observations from

Tables 1 and 2.

- Average size of landholding of marginal farmers is 1.22 acres. The median landholding is 1 acre. The All India Agriculture Survey 2015-16 shows average landholding of marginal farmers to be 0.95 acres (0.38 hectares).
- Only 11.12% of farmers leased in land, whereas only 2.14% of marginal farmers leased out land.
- The average area of land leased is estimated to be 0.83 acres and the average leased in area stands slightly lower at 0.76 acres.

Table 1. Land Cultivation and Extent of Leasing

	Area in acres	
	Mean	Median
Land used for cultivation	1.22	1
Land leased in for cultivation	0.83	0.8
Land leased out for cultivation	0.76	0.5

Table 2. Farmer Statistics on Land Leased In and Leased Out

Response	leased in		leased out	
	Number of respondents	% of respondents	Number of respondents	% of respondents
Yes	680	11.12	131	2.14
No	5435	88.88	5984	97.86
Total	6115	100	6115	100

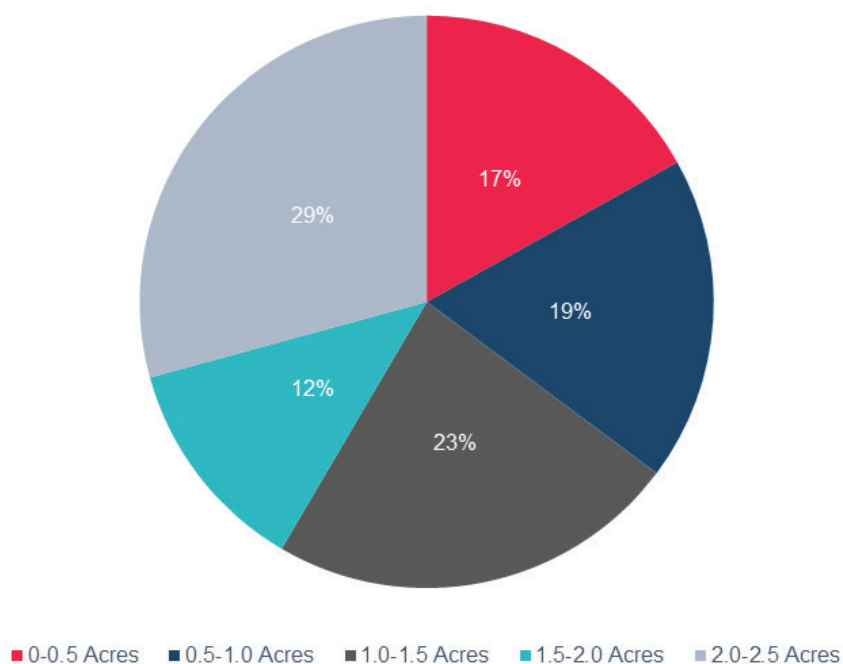
Source: Primary Survey conducted through SambodhiPanels

There is gap in leased-in and leased-out as most of the leased-in happened from larger farmers outside the ambit of this survey.

For the purpose of this study, we checked the distribution of marginal farmers across different landholding sizes as well, namely in categories of 0.5 acres of land. This detailed categorization helps us see the variance of responses in key indicators,

among farmers at the lower end those having up to 0.5 acres of land to those having 2 to 2.5 acres. As seen in Figure 3, almost 30% of marginal farmers hold 2 to 2.5 acres of land, which is also the largest group of land holders in the survey dataset. The smallest group in the dataset are those in the 1.5 to 2 acres range, as there are 12.3% of farmers belonging to that group.

Figure 3. Distribution of Marginal Farmers as per Land Area under Cultivation



Source: Primary Survey conducted through SambodhiPanels

## 2.2.2 Irrigation Usage among Marginal Farmers

From the survey we found the following regarding irrigation usage among marginal farmers:

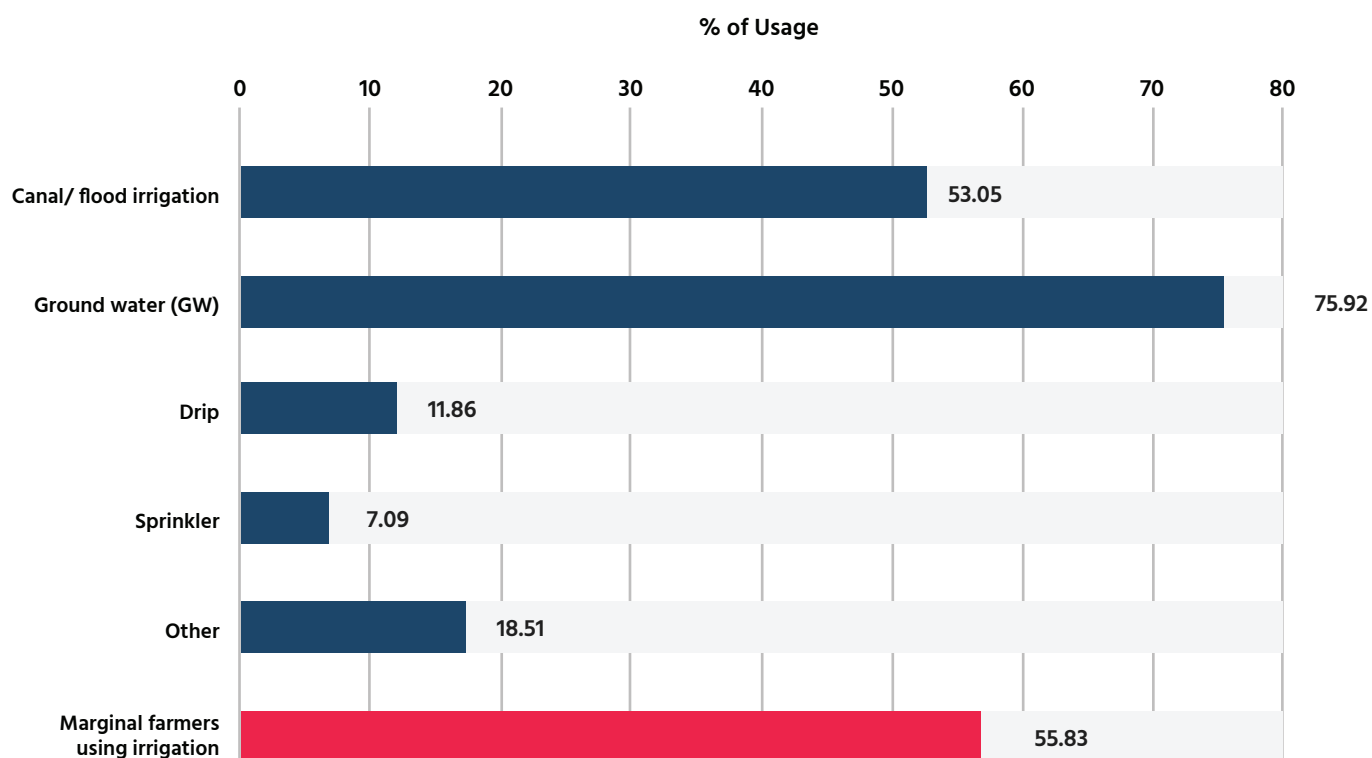
- Among farmer respondents, only 55.83% irrigated their agricultural land using different types of irrigation methods and sources. [broadly correlates to NSS 77th round, around 60% land was irrigated during the Rabi season and in Kharif season it was 52%.
- The average area under irrigation is around 1.01 acres, which is slightly lower than the average area of land under cultivation.
- More than three quarters (75.9%) of marginal farmers use groundwater as a source of

irrigation to irrigate their land.

- Among those using groundwater, over 50% use electric pump sets while 45.64% use diesel pump sets. Only a few, close to 4% farmers have installed solar pump sets to extract water from tubewells.
- The other main source of irrigation is canal or river fed irrigation, which is being used by 53%, i.e. only 53.05% of marginal farmers for irrigation purposes.

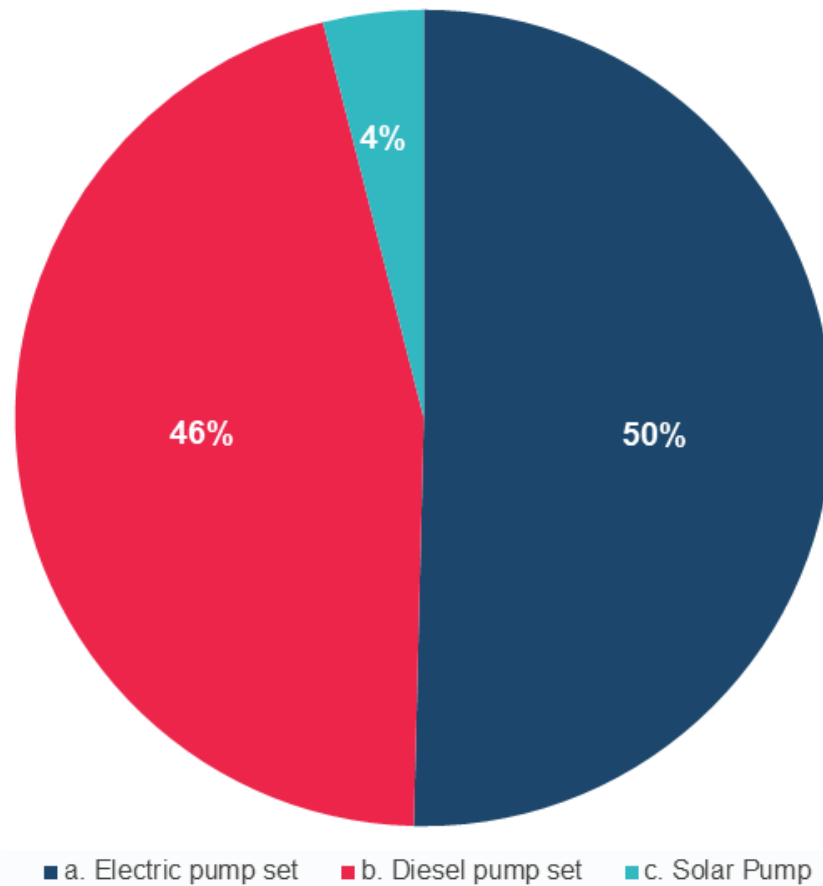
As shown in Figure 4, since farmers use multiple forms of irrigation for their cultivable land, the percentages don't add up to 100%.

Figure 4. Percentage of Marginal Farmers having Access to Irrigation and Sources of Irrigation



Source: Primary Survey conducted through SambodhiPanels

Figure 5. Types of Pumps used for Groundwater Extraction



Source: Primary Survey conducted through SambodhiPanels

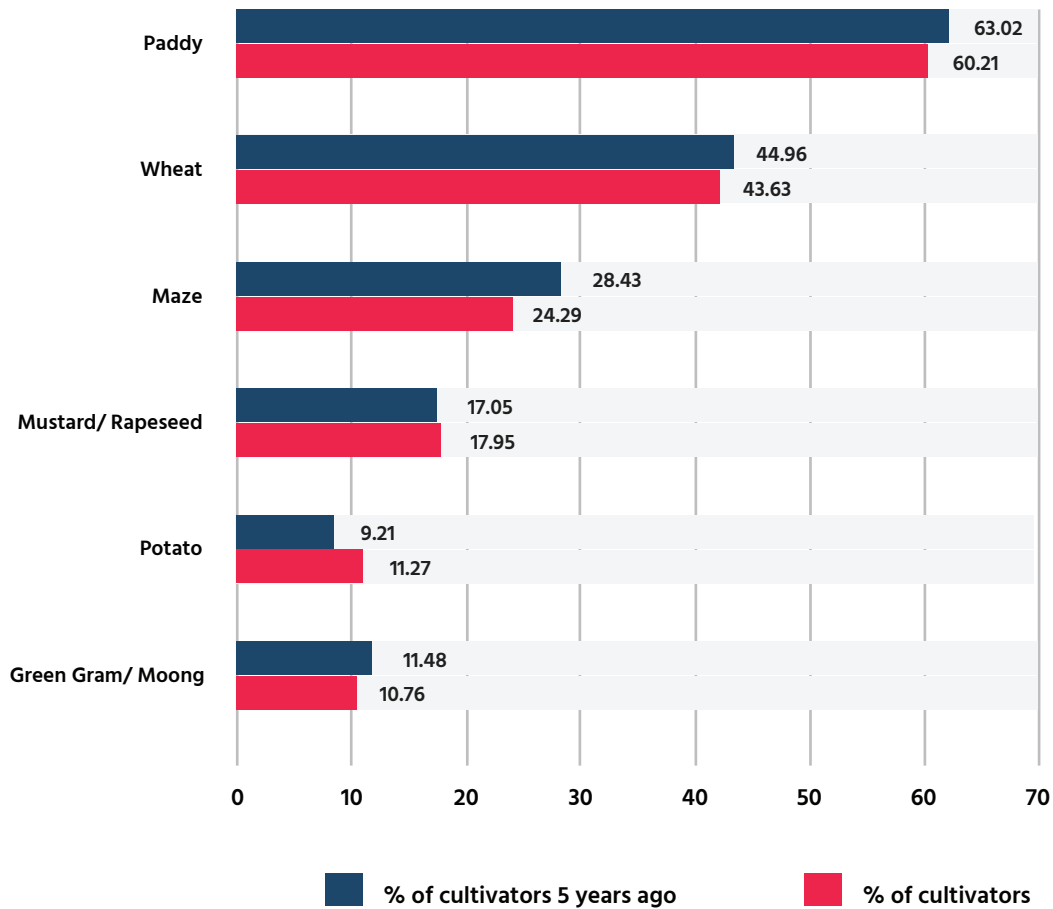
### 2.2.3 Major Crops Grown & Shifts in the Cropping Pattern

The respondents were asked about the major crops grown in a year and if they have made any changes in the cropping pattern during the last five years. Figure 6 highlights their response which clearly shows a shift away from cereals to cash crops.

- Top 4 crops cultivated by marginal farmers in the past 5 years are cereals, mainly paddy, wheat, maize and oilseed like Mustard/Rapeseed/Rai. The only noticeable change in a span of 5 years is cultivation of potato in place of green gram/moong.
- Paddy is the major crop produced across India, by more than 60% of marginal farmers followed by wheat, cultivated by 43% of farmers. The other major crop grown that have remained unchanged is maize, with 24.29% of farmers cultivating it, and pulse, mustard cultivated by 17.95% of farmers.
- The percentage share of farmers cultivating above-mentioned cereals has slightly decreased in the past 5 years from 63.02% to 60.21%. Similarly, the share of wheat cultivators has come down from 44.96% to 43.63%. The maximum drop in acreage is identified in maize from 28.43% to 24.29%.
- Farmers have increasing preference for mustard though its share in total has marginally increased from 17.05% to 17.95%. The acreage share under potato has increased from 9.21% to 11.27% in the past 5 years, making it the 5th major crop cultivated by the marginal farmers. Moong lost its place as the 5th major crop, showing a decline from 11.48% to 10.76% in the past 5 years.



Figure 6. Changes in Acreage under Major Crops by Marginal Farmers



Source: Primary Survey conducted through SambodhiPanels

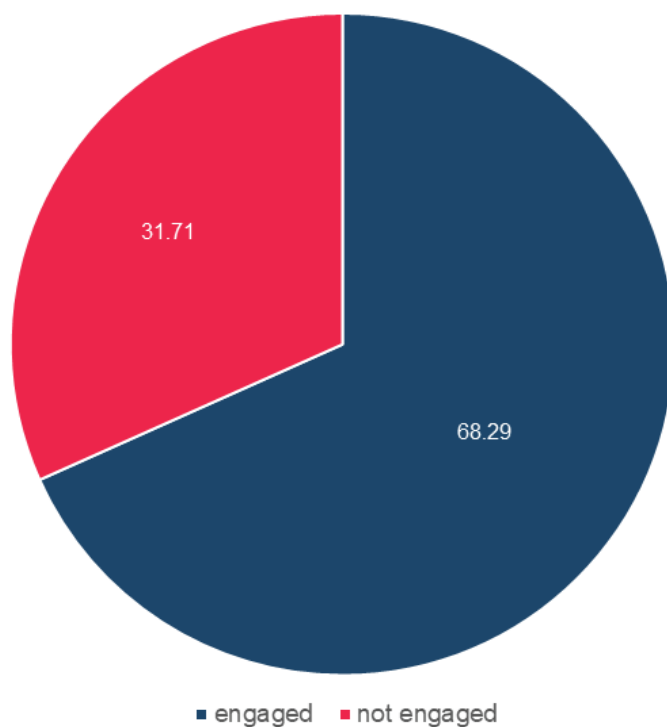
## 2.3 Economic Practices and Credit taking Behaviour

### 2.3.1 Description of Non-Farm Activities

From our panel survey we looked at the engagement of farmers in different non-farm economic activities/occupations. The salient findings are given in Figure 7 and 8, and are explained as follows:

- More than two-thirds (68.29%) of the sampled marginal farmer HHs are engaged in non-farm activities to supplement their income from crop cultivation.
- More than three-fourths of sampled farmers and/or their household members are engaged in daily wage labour activities, especially road construction, house construction, MGNREGS work.
- The 2nd most important source of income is non-agricultural retail/ wholesale businesses with 18.11% of farmers involved in it.
- In all, 16.03% of marginal farmers worked as own-account workers in activities like tailors, masons, carpenters, drivers, electricians, artisans, etc. and other self-employed vocations.
- Salaried employment (11.7%) and animal husbandry (11.8%) activities are less prominent in terms of their engagement. The number of households rearing livestock is found to be higher but their earnings from this activity are considerably low. This may explain why only a 10th of the farmers interviewed mentioned animal husbandry as an additional economic activity to supplement their income.

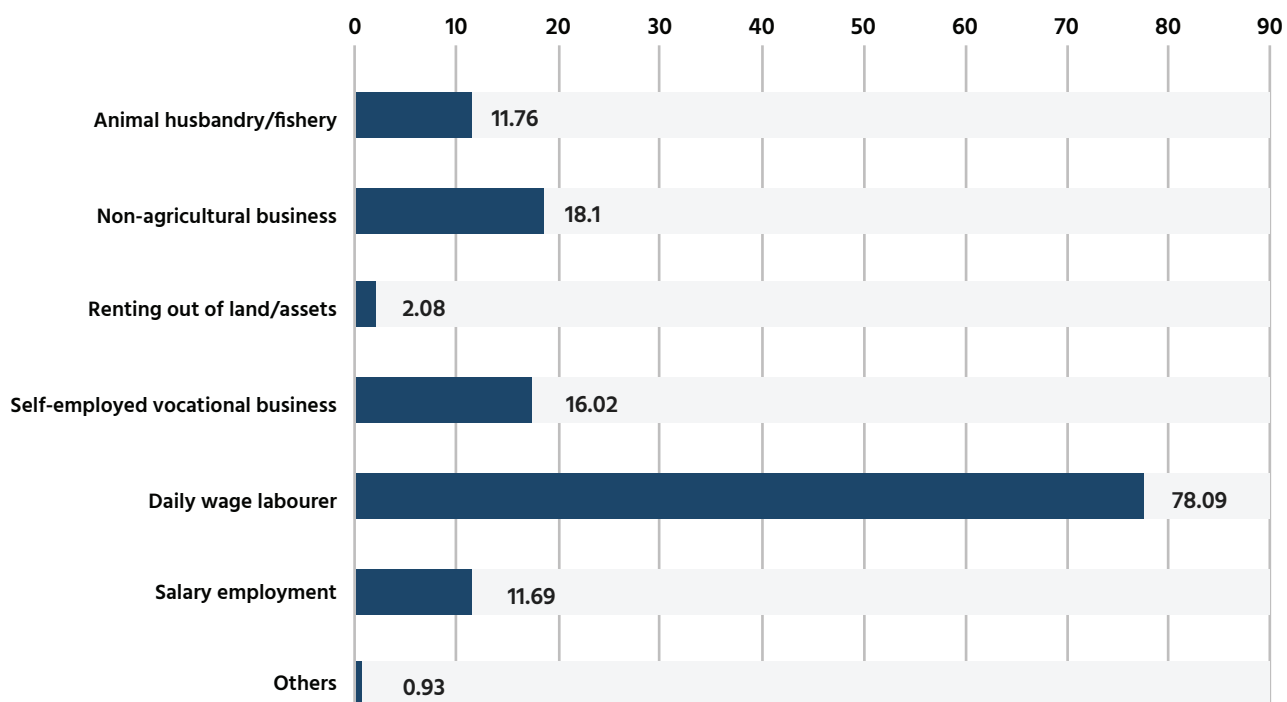
Figure 7. Farmers/Household Members Engaged in Non-Farm Economic Activities



Note: Each Portion denotes percentage share of Marginal Farmer households with at least one household member engaged in non-farm economic activities.

Source: Primary Survey conducted through SambodhiPanels

Figure 8. Types of Non-Farm Activities and %age of HHs involved



Source: Primary Survey conducted through SambodhiPanels

### 2.3.2 Income from Non-Farm Activities (Consolidated):

In the survey, 68.29% of marginal farmer respondents had reported being engaged in different non-farm economic activities and were asked about their income from those activities. On average, the estimated annual non-farm income was Rs. 62,439, with median income at Rs. 50,000.

Key takeaway is at present their main source of income is primarily wage and non-farm, and they have stuck to their marginal holding as an asset. Disruptive technological interventions that allow higher intensity farming, higher diversity into cash crops needs to be explored.

### 2.3.3 Income from Livestock Activities:

In our survey, the respondents were asked questions regarding income/revenue from sale of livestock and livestock produce viz, milk and eggs, sale of meat and sales from animal by-products.

Their combined revenue stream was found to be Rs. 55,511 and Rs. 48,500 respectively. This is somewhat higher than the gross income earned from cultivation i.e., Rs.42107 per annum.

The annual mean and median revenue from

### 2.3.4 Income from Daily Wage Labour:

As we saw from the distribution of marginal farmers in various non-agriculture-based activities, daily wage labour was the single largest non-farm economic activity with 78.09% of the farmers involved in it.

Farmers worked as daily wage labourers in road construction, house construction, well-digging activity, MGNREGS work. Income generated as farm labourer in other farmers land was also considered in this calculation. This shows shifting wage creation in rural economy, one area of further exploration will be wage work as farm hands.

for their living, we first looked at the income generated by those who took up daily wage labour as alternate occupation other than cultivation. Their mean annual income from wage activity was found to be Rs. 50,190. The NSS 77th round reports Rs. 50,669 as the average annual income from daily wage labour activity which is quite close to the average estimates calculated from the survey. The income earned by respondents who took multiple economic activities including above-mentioned daily wage activities were also noted. The moot point which both NSS and our Survey asks is why are the marginal land-holders considered as "farmers".

Since farmers involved in non-farm economic activities took up more than one occupation

### 2.3.5 Challenges Faced by Marginal Farmers in Accessing Credit

In India, farmers mostly depend on borrowings (credit) from institutional sources viz. regional rural and commercial banks and primary agriculture cooperatives societies and non-institutional sources viz. money lenders, input dealers and relatives to manage their farming business. The institutional credit (short and long term) helps them to buy farm inputs, equipment for mechanization and modernization and construction of storage units. The farmers require credit in all stages of agricultural activities. The government provides assistance through a lower rate of interest on institutional credit and quite often it waives their loan outstanding. Nonetheless, farmers show less preference to avail the institutional loan due to multiple factors. Some of the bottlenecks include lengthy processing time, difficulties in repayment of EMI, surety and collateral, interest rate and lengthy documentation/paperwork. Of late, a few startups have come up to provide short term loans to farmers for purchase of inputs.

MicroSave Consulting, over 50% of India's small and marginal farmers are unable to borrow from any source - tech or traditional - leading to a host of issues in production and income. As per the NSS 77th Round the marginal farmers face multiple challenges to access institutional credit.

- We note from Table 3 that in India while 53% of marginal farmers take loans from formal channels, 33% from money lenders and 14% from other informal sources viz. relatives, and friends
- More than two-thirds (68%) of marginal farmers avail loan for personal use like housing, marriage ceremonies, medical and, education. Only 32% of loans are taken for productive purposes like purchase of implements, expenditure on inputs and other non-farm business.
- Currently 39% of marginal farmers have outstanding debt, with average debt amount standing at Rs. 26,883.

According to 'The Role of Tech-Enabled Formal Financing in Agriculture in India' report by Rabo Foundation in partnership with ThinkAg and

Table 3. Nature of Loans taken by Marginal Farmers

% of loan for productive purposes	% of loan for personal use	% of loan taken from money lenders	% of loan taken from other informal sources	Total % of loan from informal sources	Avg amt. of outstanding loans	% of indebted farmers
32	68	33	14	47	26883	39

Source: NSS 77<sup>th</sup> round

Information on debt was not asked in this survey and the analysis is only based on the 77th Round of NSSO Report.

## 2.4 Sale of Agricultural Produce and Use of Government Procurement Centres

### 2.4.1 Selling Agricultural Produce vs. Self-Consumption

- We find from the survey that 68.65% of marginal farmers had sold crops or by-products with an average annual sale at Rs. 60,510. The median annual sales is estimated at Rs. 40,000.
- Looking into the channels used by the marginal farmers to sell their crops, only 31.9% sold at government procurement agencies whereas 68.1% sold their produce through informal sources viz. village traders, government run APMC mandis/markets and other traders.

Table 4. Crop Sales and Earnings

Marginal farmers selling crops/by-products of crops	No. of farmers	% of farmers	Annual sales of produce in past year (in Rs.)	Rs.
Sold crops	4198	68.65	Mean	60510
Did not sell crops	1917	31.35	Median	40000
Total	6115	100		

Source: Primary Survey conducted through SambodhiPanels

### 2.4.2 Selling Output to Government Agencies at Pre-announced Prices

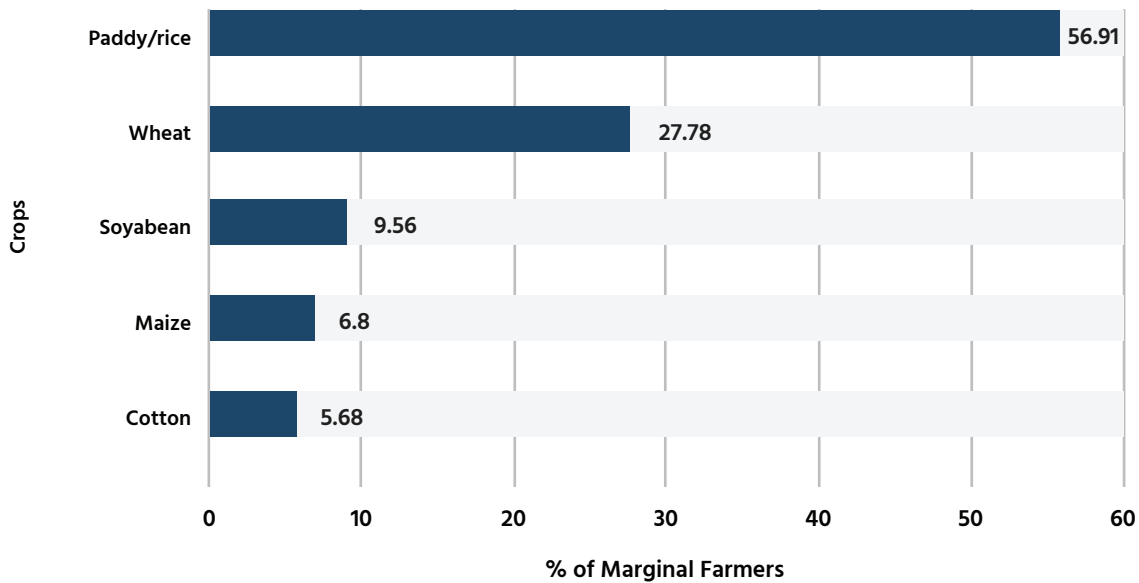
Table 5. Crop Output Sales through Government Channels

	Number of farmers	% of farmers
Marginal farmers selling through govt. procurement centres	1339	31.9
Marginal farmers not selling through government channels	2859	68.1
Total	4198	100

Source: Primary Survey conducted through SambodhiPanels

- Among those who sold crop output through government procurement agencies, we found that the major crops sold were paddy, wheat, soyabean, maize and cotton.
- In all, 56.91% of marginal farmers who sold their crops via government procurement agencies sold paddy, while 27.78% sold wheat. Only 9.56% of farmers sold soya bean whereas 6.8% and 5.68% sold maize and cotton, respectively via government channels.

Figure 9. Major Crops Sold by Marginal Farmers through Government Procurement Agencies

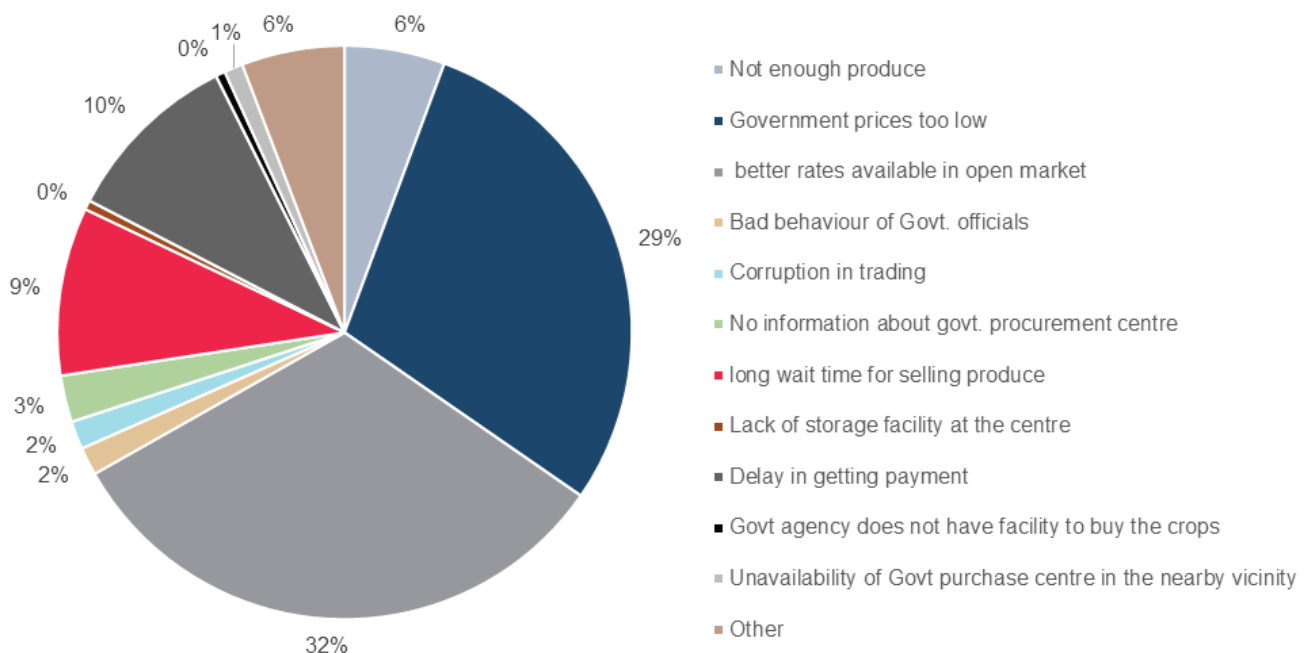


Source: Primary Survey conducted through SambodhiPanels

### 2.4.3 Reasons for Not Selling to Government Agency

- On being asked the reasons for not availing government procurement channels, 31.79% of the respondents answered that they could avail better rates in open markets compared to government preannounced rates/prices for the crops. Only 29.23% of the respondents replied that the government prices were too low for them to sell. This is at variance with the SAS findings, indicates continued importance of MSP procurements, needs further exploration.
- Figure 10 elicits other reasons given by farmers for not selling produce to government procurement agencies. A tenth of marginal farmers who did not sell to government channels opined long waiting time as one of the reasons. Only a few reported corruption, bad behaviour and delay in getting payments behind not preferring to sell produce through this channel.

Figure 10. Reasons for Not Selling Produce to Government Procurement Agencies



Source: Primary Survey conducted through SambodhiPanels

## 2.4.4 Satisfaction Levels of Selling at MSP & Selling to Government Procurement Agencies

- Among the marginal farmers who sold their produce via government procurement agencies at Minimum Support Price (MSP), 85.88% opined their satisfaction with the price they had received.

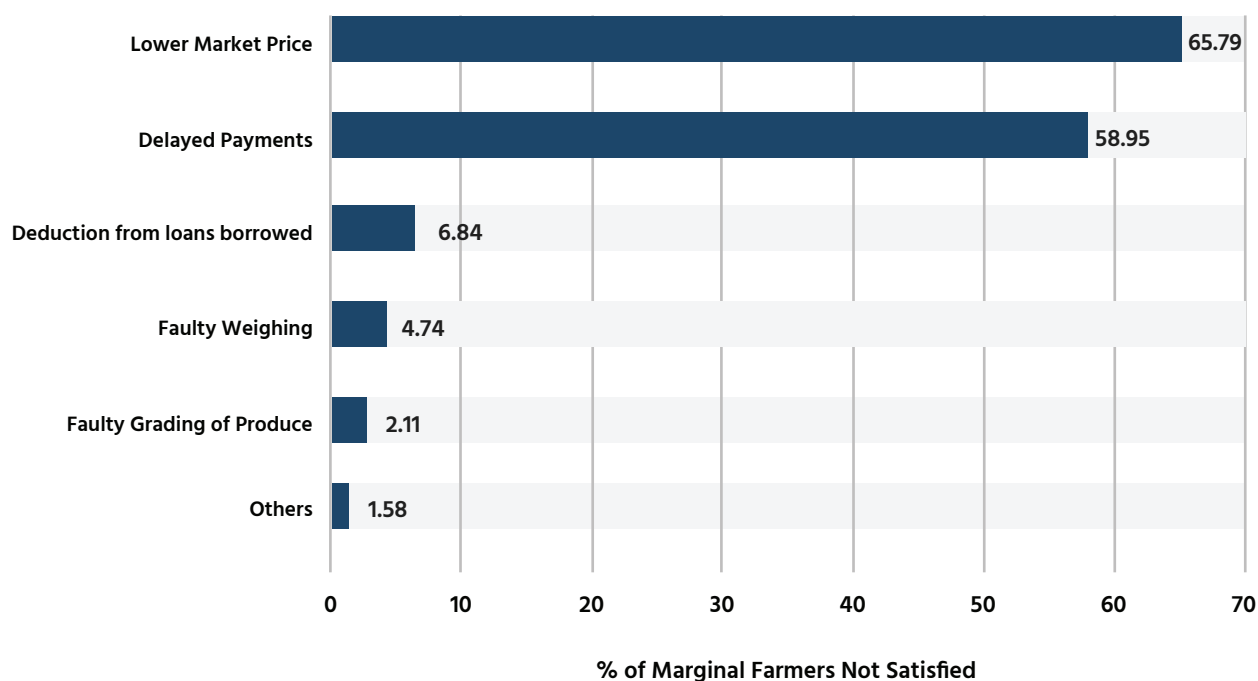
Table 6. Crop Sales and Earnings

	Number of respondents	% of respondents
Satisfied	1150	85.88
Not Satisfied	189	14.12
Total	1339	100

Source: Primary Survey conducted through SambodhiPanels

- About 65.79% of the farmers dissatisfied with government channels mentioned receiving lower than the market price as one of the main reasons, whereas 58.95% were dissatisfied due to delay in receiving payments.
- Other reasons for dissatisfaction as presented in Figure 11 are faulty weighing and grading.

Figure 11. Reasons for Dissatisfaction with Government Procurement



Note: Figures over 100% due to multiple responses.

Source: Primary Survey conducted through SambodhiPanels

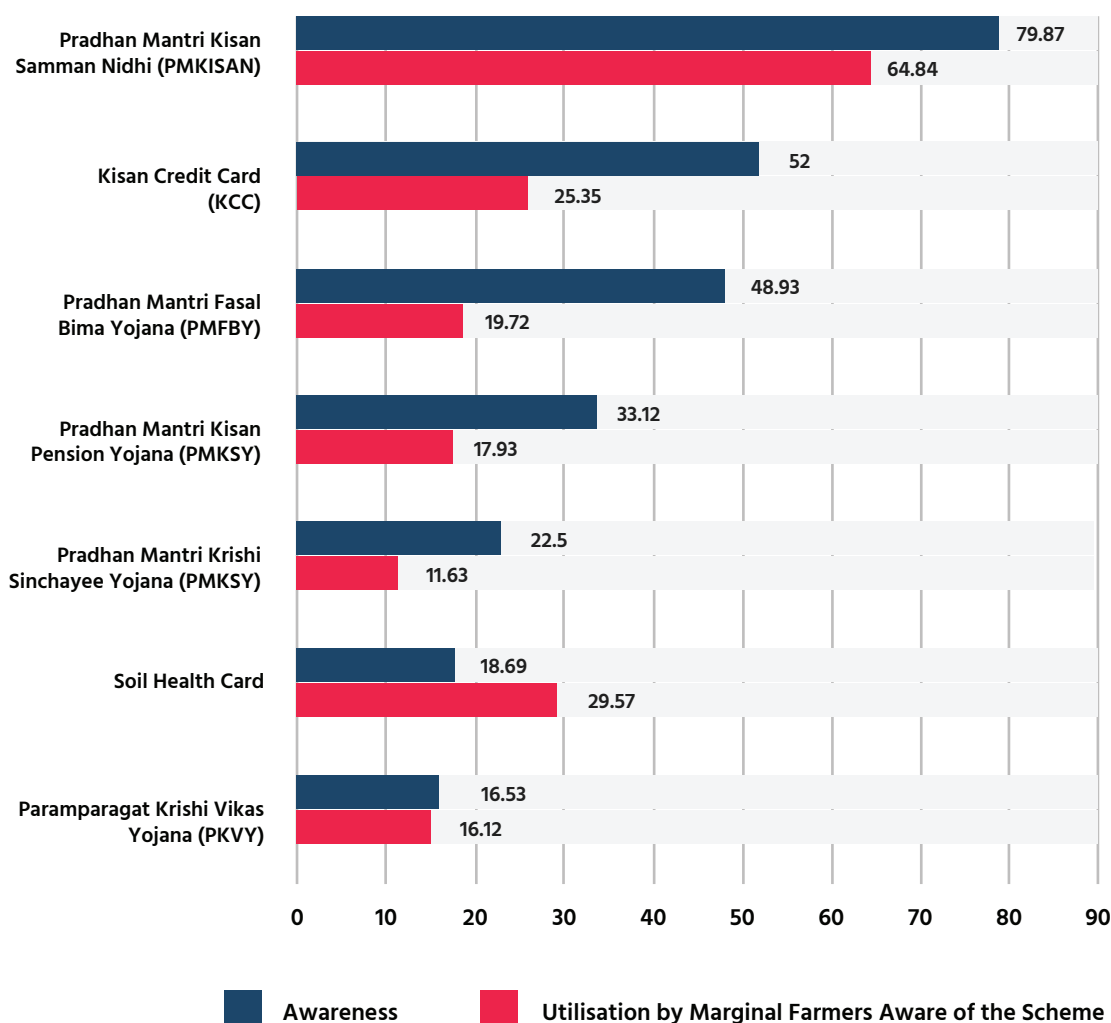
## 2.5 Awareness and Utilisation of Government Support

### 2.5.1 Awareness and Utilization of Government Schemes

The survey also asked questions regarding their awareness and utilization of support extending under various schemes/programs and found the following:

- 79.87% of marginal farmers were aware of Pradhan Mantri Kisan Samman Nidhi (PMKISAN) scheme and among them 64.84% availed benefits.
- 52% of farmers were aware of Kisan Credit Card (KCC) and among them 25.35% utilized it.
- 48.93% of the marginal farmers were aware of Pradhan Mantri Fasal Bima Yojana (PMFBY) of whom only 19.72% had utilized it.
- 33.12% of the farmers were aware of Pradhan Mantri Kisan Pension Yojana (PMKPY) and among them, only 17.93% had availed it.
- 22.5% of farmers knew about Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and among them 11.63% had availed it.
- 18.69% of farmers were aware of Soil Health Card and among them 29.57% had availed it.
- Only 16.53% of farmers knew about Paramparagat Krishi Vikas Yojana (PKVY) and among them only 16.12% availed it.

Figure 12. Awareness and Utilisation of Government Schemes (in %)



Source: Primary Survey conducted through SambodhiPanels

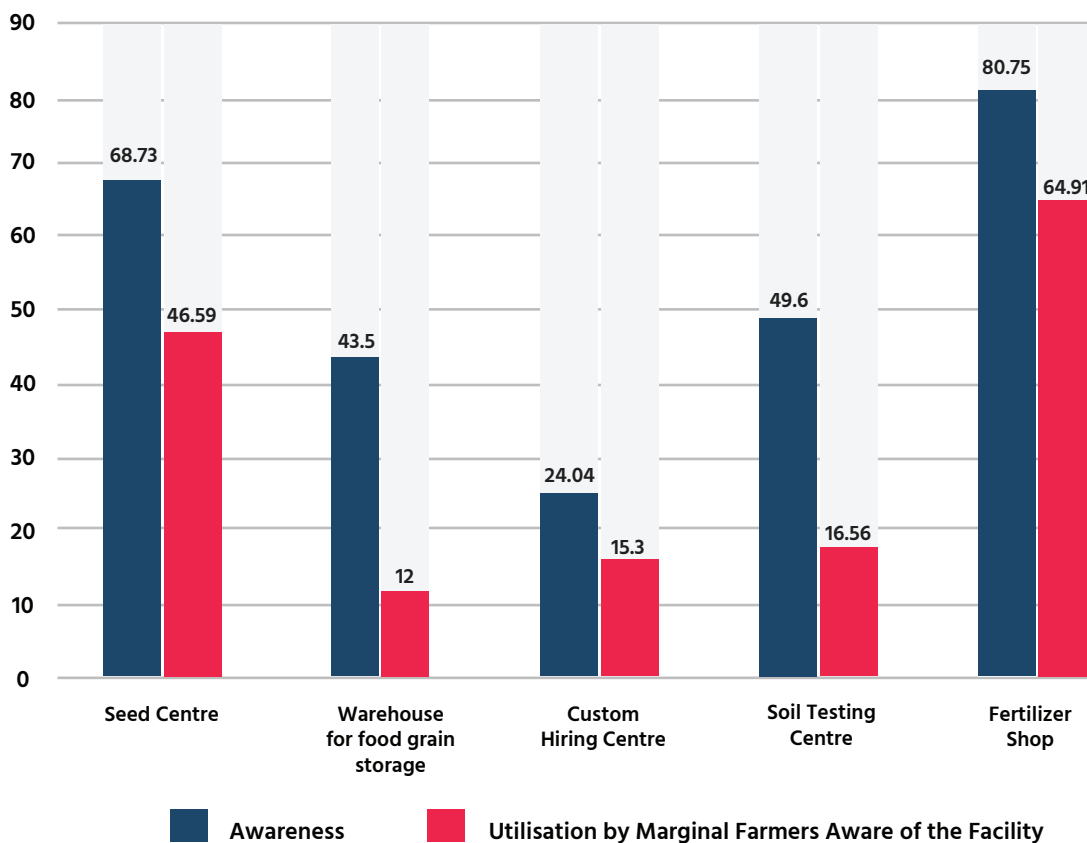
- Looking at their awareness about government schemes and utilization, we explored the same as per different land sizes. We find that among the smallest land holders (those between 0 to 0.5 acres) 82.09% were aware of PMKISAN but its utilisation is the lowest at 49.65%. Meanwhile, among the largest landholding group, i.e., between 2 to 2.5 acres, 80.44% are aware of PMKISAN and 74.5% of those aware avail it. In general, we see that the higher the land holding size, higher is the utilization of PMKISAN, implying less inclusivity.
- For PMKPY, both awareness and utilization are the highest among the smallest landholding group. In all 36.69% belong to 0 to 0.5 acres land holding group were aware of scheme and among them 19.26% utilized it. Both awareness and access keep decreasing with higher landholding groups
- For PMFBY, higher utilization is among higher landholding group with utilization at 31.34% and 26.4% for 1.5-to-2-acre landholding group and 2 to 2.5 acre landholding groups

- respectively. The smallest landholding group has the least utilization at only 10.98%
  - For PMKSY, the smallest landholding group (up to 0.5 acres), utilization is also the lowest at only 6.83%.
  - For PMKVY, we see a decline in both awareness and utilization with increasing land holding size. Among the lowest group, 22.17% are aware of the scheme while 20.52% of those aware avail it. On the other hand, among the 2-to-2.5-acre landholding group only 13.02% and only 10.73% of them utilise it.
  - Utilisation of KCC increases with increasing landholding size. Only 9.66% of the smallest landholding group aware of the scheme had availed the benefits, whereas among the 2-2.5 acres landholding group, only 34.52% of the respondents aware of the scheme availed it.
  - Awareness of SHC increases with increasing landholding size. 13.26% of the lowest landholder group were aware of SHC while 25.32% of 2 to 2.5 acres landholding farmers were aware of it.
- The Survey couldn't follow-up on the reasons for low adoption, this is intended to be included next year with follow-on round with the same respondent set.

### 2.5.2 Awareness and Utilization of Government Facilities for Inputs and Other Services

- The survey findings in Figure 13 show that 80.75% of the respondents were aware of fertilizer shops of whom 64.91% availed them. At the same time, 68.73% of the marginal farmers were aware of seed centers of whom 46.59% accessed them.
- 49.6% of the farmers were aware of soil testing centres but only 16.56% utilized them.
- 43.5% of farmers were aware of warehouses made for foodgrain storage but only 12% of those aware availed them. Only 24.04% of respondents knew about custom hiring centers and barely 15.3% of them took advantage.

Figure 13. Awareness and Utilisation of Government Provided Facilities



Source: Primary Survey conducted through SambodhiPanels



- Looking at the awareness and access of facilities as per different land sizes, we see higher level of awareness and utilization of foodgrain warehouses. Among the smallest landholding group only 33.3% were aware of it while among them only 9.88% utilized it. Further 52.93% of farmers with 1.5 to 2 acres of land were aware of warehouses and 37.94% of them used them to store their food grains.
- Regarding Seed Centers, the smallest landholding farmers also knew but accessed them the least, with 58.86% being aware of their existence and 62.34% utilizing them. On the other hand, 74.07% of 1.5-to-2-acre land holding farmers knew about seed centers and among them 74.69% accessed them.
- 75.02% of the smallest landholding group were aware about fertilizer shops while 66.06% of them accessed them. In contrast 85.9% of 1.5-to-2-acre landholding farmers knew about fertilizer shops and 88.24% of them utilized them.

Table 7. Awareness and Accessibility of Government Facilities as per Land size

Infrastructure	Seed Centre		Warehouse for food grain storage		Custom Hiring Centre		Soil Testing Centre		Fertilizer shop	
	% aware	% accessed	% aware	% accessed	% aware	% accessed	% aware	% accessed	% aware	% accessed
0-0.5	58.86	62.34	33.3	9.88	15.59	55.9	44.34	23.14	75.02	66.06
0.5-1.0	67.26	67.24	42.28	16.24	24.35	73.26	49.87	23.79	81.89	74.18
1.0-1.5	73.24	66.83	45.77	28.92	23.66	70.54	47.32	29.76	82.61	80.65
1.5-2.0	74.07	74.69	52.93	37.94	31.91	67.92	53.06	46.62	85.9	88.24
2.0-2.5	72.44	69.6	47.96	34.15	29.01	56.84	51.37	44.18	77.86	86.58
All Land Sizes	69.58	68.13	44.55	27.28	25	64.42	49.17	34.29	80.21	79.82

Source: Primary Survey conducted through SambodhiPanels

### 2.5.3 Prospects of Farmers' Collectives in Realizing Better Prices

One of the initiatives that seeks to re-engineer the agri-landscape in the country is an ambitious target of creating 10,000 farmer collectives, popularly known as Farmer Producer Organisations (FPOs) or Companies by 2027-28. A total budgetary outlay of Rs.6865 crore is earmarked for the purpose. Under the scheme, the formation and promotion of FPOs is based on Produce Cluster Area approach and specialized commodity-based approach. While adopting cluster-based approach, formation of FPOs will be focussed on "One District One Product" for development of product specialization.

Among the organisations, NABARD, NAFED, Small Farmer Agribusiness Consortium (SFAC), National Cooperative Development Corporation (NCDC), are actively involved in promotion of FPOs. The basic objective underpinning the effort is to provide economic depth to small and marginal farmers and make agriculture a viable livelihood

option for them. It will enable such collectives to establish value chains associated with identified agri-commodities by leveraging available government schemes, enhance bargaining power, promote disengagement with the intermediaries through direct access to markets/market players and facilitate creation of effective pressure groups in the agrarian sector. It is expected that farmers will get a due share in sale of his produce through this channel and may also benefit due to greater aggregation of produce and its processing.

We tried to explore farmers interest in joining the FPOs, crops sold, and prices received. As shown in Table 8, while 17.32% of marginal farmers were members of some farmers' co-operatives, only 5.66% were members of Farmer Producer Organisations (FPO). An overwhelming majority of the marginal farmers were not involved in any kind of Farmer collective or co-operative organization during the survey year.

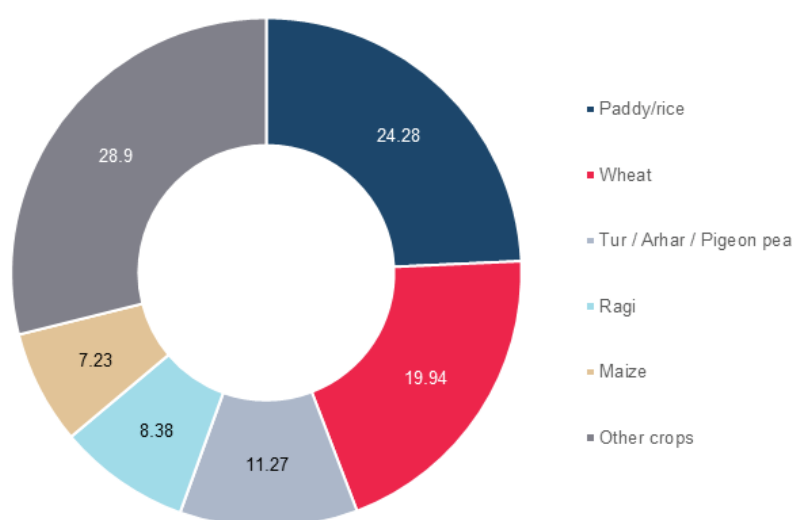
Table 8. Membership in Farmer Co-operative & Farmer Produce Organisation (FPO)

Membership status	Farmer co-operative		FPO	
	No. of farmers	% of farmers	No. of farmers	% of farmers
Member	1059	17.32	346	5.66
Not Member	5056	82.68	5769	94.34
Total	6115	100	6115	100

Source: Primary Survey conducted through SambodhiPanels

- Among 5.66% marginal farmers who were part of FPOs, and sold crops, we find that all member farmers sold at least one crop through their respective FPOs. These crops are Paddy, Wheat, Tur/Arhar, Ragi and Maize.
- 24.28% of marginal farmers who are members of FPOs sold paddy, while 19.94% members sold Wheat. 11.27% of the members sold Arhar, and 8.38% and 7.23% of members sold Ragi and Maize respectively through their respective FPOs. In all, 28.9% of member farmers sold other crops through their respective FPOs.

Figure 14. Crops Sold through Farmer Collectives/FPO (in %)



Note: Each portion denotes % share of marginal farmer members of FPO selling the mentioned crop.

Source: Primary Survey conducted through SambodhiPanels

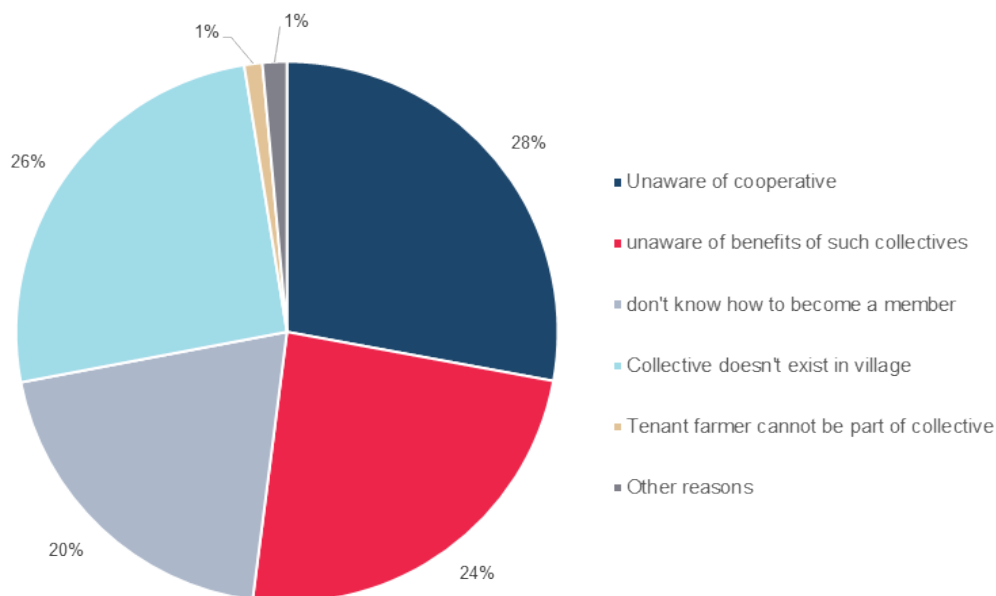
The survey also investigated the reasons behind not joining farmers co-operatives or FPOs, which is the case with most of the marginal farmers (Figure 15).

- Lack of awareness regarding presence of co-operatives or FPOs and likely benefits of joining them was the main reason.
- 27.91% of the respondents were not aware about a co-operative or FPO, while 24.12% did not

know the benefits of joining a co-operative or FPO.

- The survey also finds that 25.46% respondents reported that they couldn't become a member as no such co-operative or collective exists in their village, while 19.98% of the respondents mentioned that they didn't know how to become a member of such organizations.

Figure 15. Reasons for Not Joining Cooperative/FPO



Note: Each portion denotes % share of non-participating marginal farmers' reason for not joining Cooperative/FPO

Source: Primary Survey conducted through SambodhiPanels

## 2.5.4 Utilisation of Government Subsidy on Inputs and Output

Both central and state governments extend subsidy to farmers – be it on inputs viz. fertilisers, irrigation and power at rates lower than the market rate, purchase of output at minimum support price (MSP), and direct income support (grant) through centre's or the respective state government's scheme. From the survey, we

find that only 51.46% of the marginal farmers received some form of subsidy or grant from the government. Table 9 shows that on an average the marginal farmers received Rs. 6374 as subsidy from either of the governments.

Table 9. Access to Central/State Government Subsidy/Grant

	No. of respondents	% of respondents	Avg amount of subsidy/grant received in the past year (in Rs.)	
Received subsidy	3147	51.46	mean	6374
Didn't receive subsidy	2968	48.54	median	6000
Total	6115	100		

Source: Primary Survey conducted through SambodhiPanels

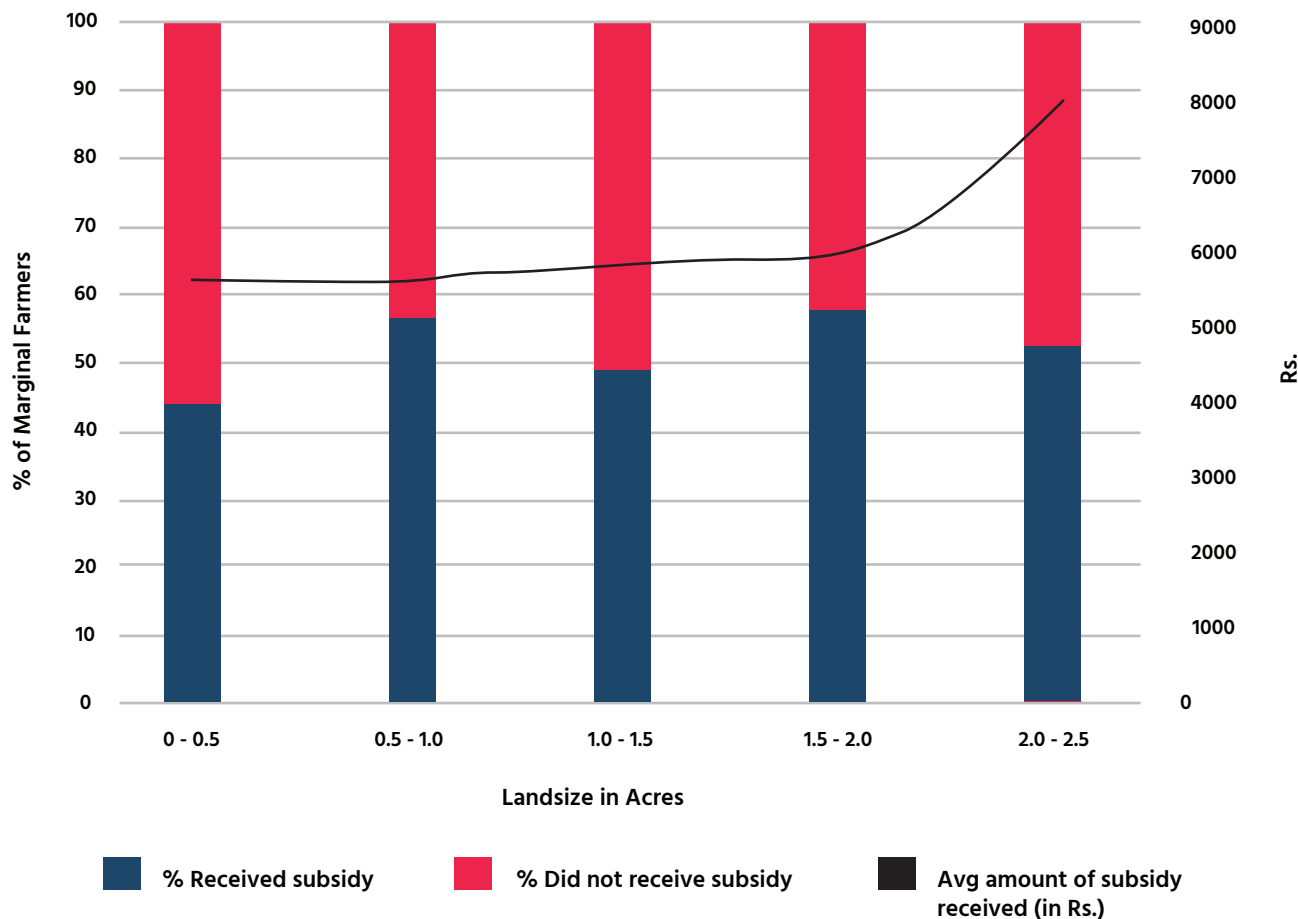
We also looked at the subsidy availed, and average subsidy received by marginal farmers across different land size holdings and found out the following:

- The marginal farmers with highest landholdings i.e., between the 2-2.5 acres range received the highest amount of subsidy averaged Rs. 7878.
- The least subsidy receiving group were the farmers having 0.5 to 1 acres of land, receiving on average Rs. 5,546 which is 12% lower than the average subsidy received by all marginal farmers.
- Among all landholding groups, the highest proportion of marginal farmers availing subsidy were those holding 1.5 to 2 acres of land.

- They are followed by the group of marginal farmers holding 0.5 to 1 acres of land at 57% who received the least subsidy amount on an average.
- At 43.76%, the farmers with 0 to 0.5 acres of land holding availed subsidy the least, compared to other marginal farmer groups.

The above points are illustrated in Figure 16.

Figure 16. Access to Central/State Government Subsidy/Grant by Different Land-size Categories



Source: Primary Survey conducted through SambodhiPanels

## 2.6 Impact of Natural Calamities and Coping Strategy Adopted

### 2.6.1 Impact of Natural Calamities on Marginal Farmers

Table 10 shows that more than half (54.3%) of farmers in our survey were affected by natural calamities in the past 5 years. Figure 18 shows the extent of crop damages faced by the marginal farmers.

Table 10. Impact of Natural Calamity in the Past Five Years

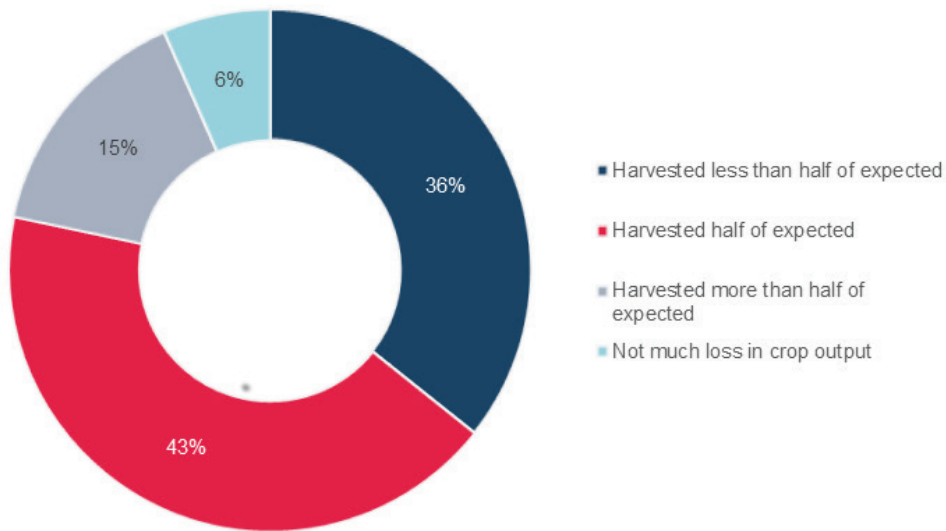
	Number of farmers	% of total respondents
People Impacted by calamity	3318	54.26
People safe from calamity	2797	45.74

Source: Primary Survey conducted through SambodhiPanels

- Looking at the damages incurred we find that 35.71% of the marginal farmers were severely affected, harvesting less than half of what they usually do in a normal year.
- 42.62% of farmers harvested half of what they

had expected, while only 6.6% had reported that they didn't experience much loss in crop produce due to natural calamity in the past 5 years.

Figure 17. Extent of Crop Damage Due to Natural Disasters



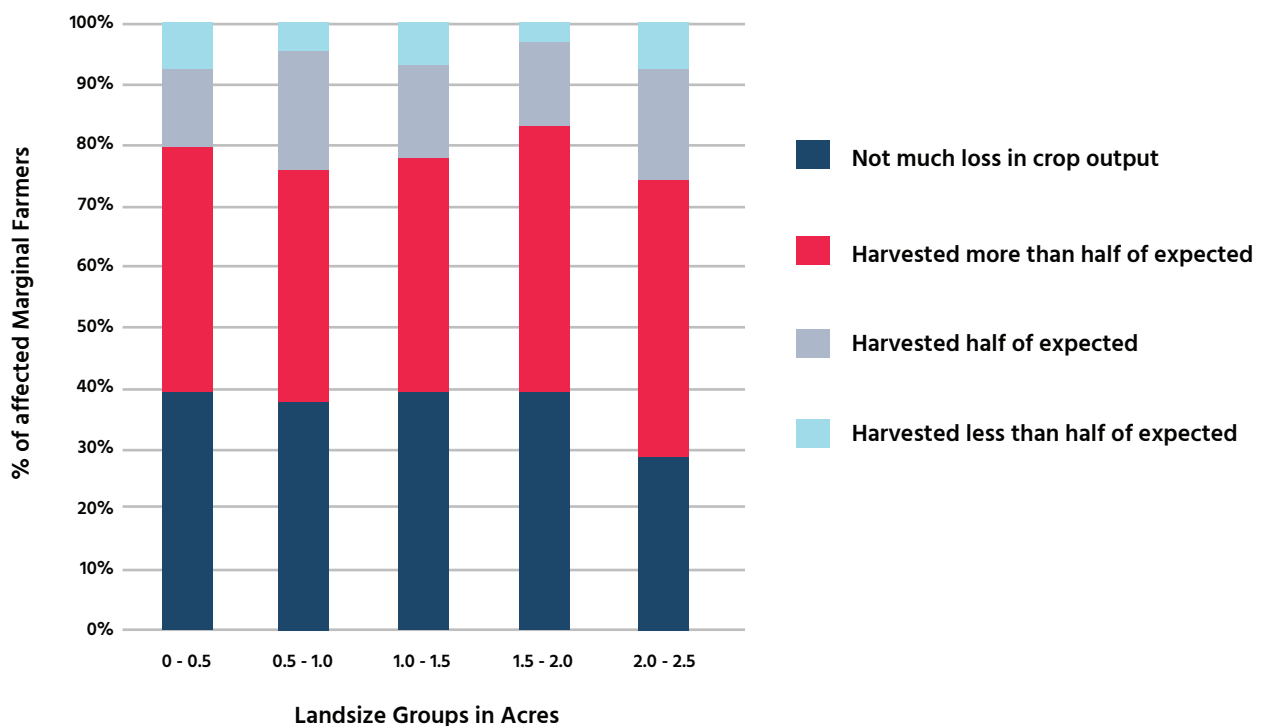
Note: Each Portion shows % share of marginal farmers affected to mentioned extent

Source: Primary Survey conducted through SambodhiPanels

Looking at the distribution of damage due to natural calamities over different land size holding in Figure 18, we find that, farmers with the least landholding, i.e., between 0 to 0.5 acres of land, experienced the highest loss in crops compared

to other categories, with 39.12% reporting harvesting less than half of the crop they had expected. Farmers with the largest landholding fared relatively better with only 29.09% reporting loss of more than half of expected harvest.

Figure 18. Extent of Crop Damage Due to Natural Disaster as Land Size



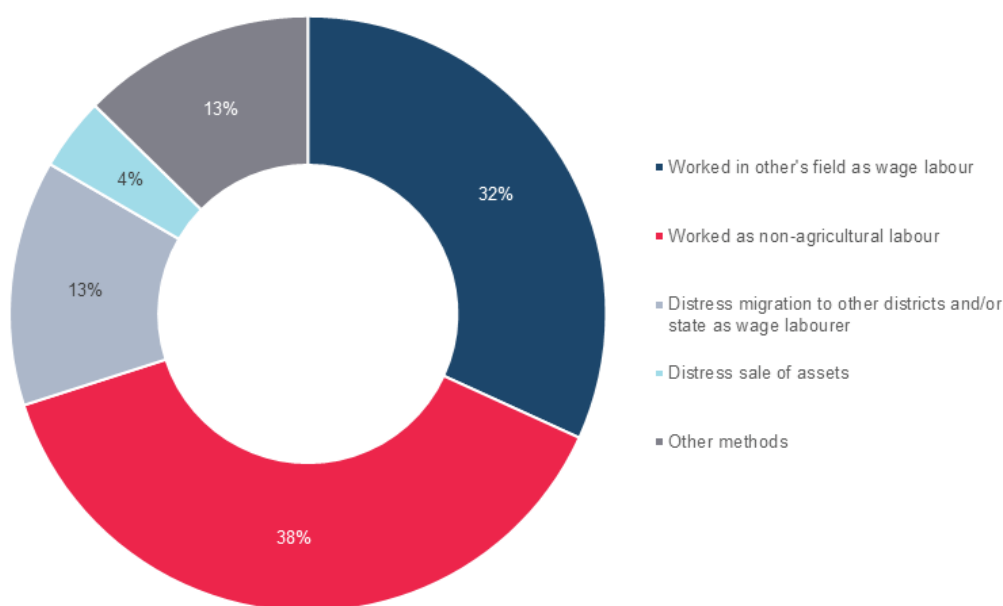
Source: Primary Survey conducted through SambodhiPanels

## 2.6.2 Coping Strategy/Mitigation of Loss Due to Natural Disasters

Given such large losses in harvest due to natural calamities the survey explored risk mitigation approaches and alternative income methods that the marginal farmers resorted to overcome their losses.

- We find that majority of the farmers engaged themselves as daily wage labourers to recuperate from losses due to natural calamities with 38.22% of respondents engaging themselves as non-agricultural labour and 31.83% farmers working as agricultural labour in other farmer's fields (Figure 19).

Figure 19. Coping Strategies Adopted to Mitigate Lost Income/Crop due to Natural Disaster



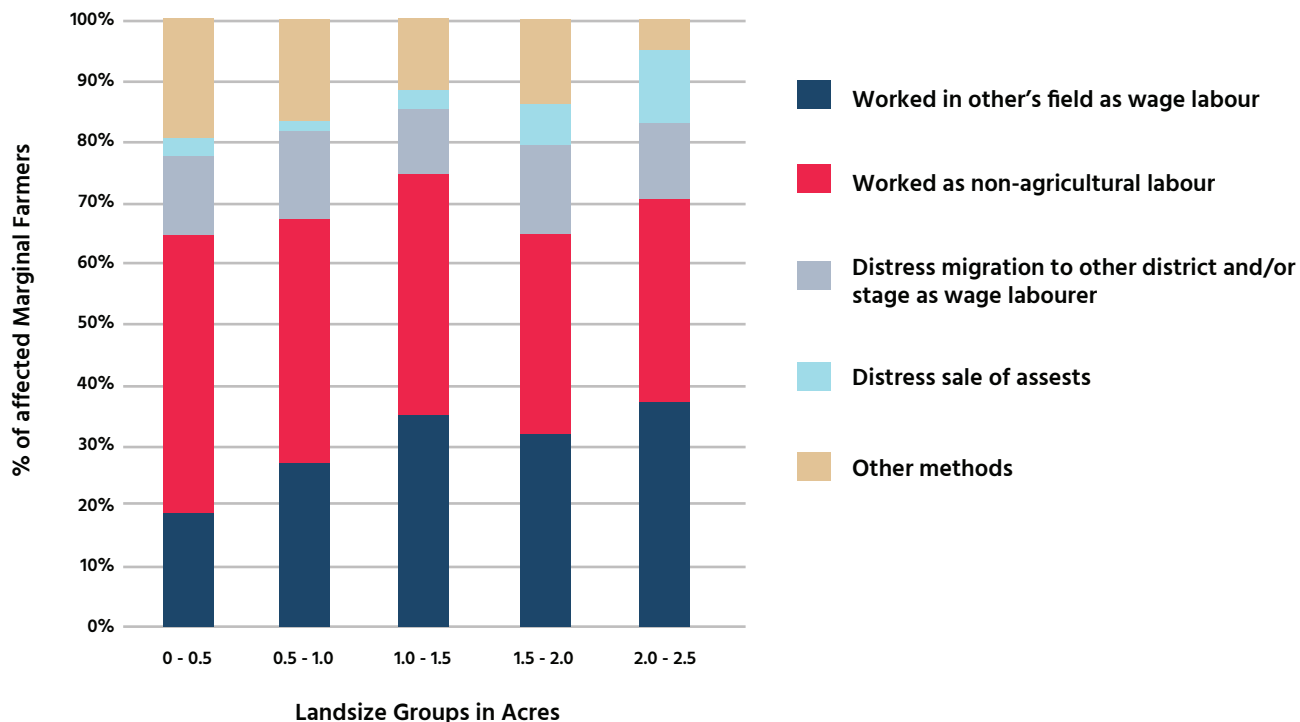
Note: Each portion shows % share of affected marginal farmers using the mentioned coping strategy.

Source: Primary Survey conducted through Sambodhi Panels

As per land size within the marginal farmers category, Figure 20 presents some interesting variances.

- The lowest land-holding group i.e., those holding between 0 to 0.5 acres preferred to engage themselves in non-agricultural labour with 46.8% of respondents in the said activity. They are also the group to engage the least as agricultural labour in other's fields with 18.46% reporting so and are also the smallest group to sell distressed assets for recuperating from losses due to natural calamity (only 0.91%).
- In all 38.12% of marginal farmers with the largest land holdings, i.e., between 2 to 2.5 acres reported to have worked in other's field as wage labour to mitigate their losses. They are the largest group to do so and the ones who opted to sell assets to mitigate their losses. In all 8.46% of the respondents belonging to that group reported to have done so.

Figure 20. Coping Strategy Adopted to Mitigate Loss in Income/Crop due to Natural Disaster as per Land Size



Source: Primary Survey conducted through SambodhiPanels

Crop insurance which has emerged as a significant risk mitigation support both from public and other development actors, was not included in

the Survey and to that extent the Survey findings are skewed.

## 2.7 Perceptions of Marginal Farmers about Farming and their Economic Condition

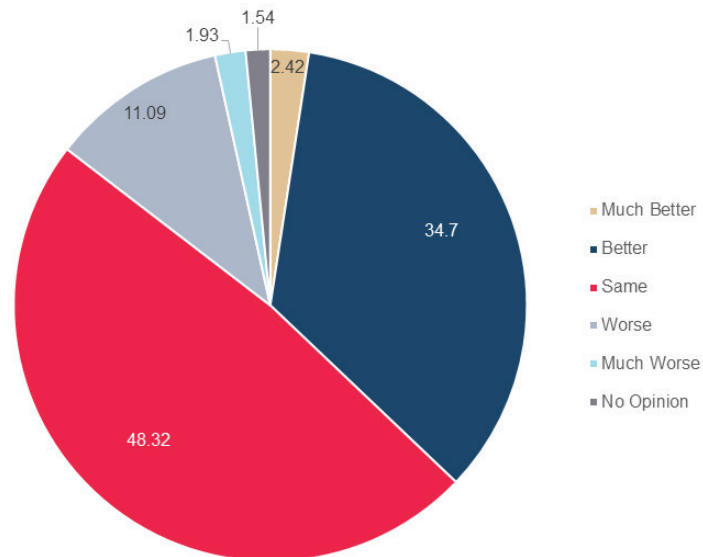
### 2.7.1 Changes in Economic Condition

The survey also explored changes in economic condition of marginal farmers over the past three years and found the responses, illustrated in Figure 21.

- Only 34.7% reported that their condition has improved in the past 3 years and only 2.42% opined a significant improvement.

- The condition of marginal farmers hasn't been bad with only 11.09% reporting worse and only 1.93% reporting much worse than what it was 3 years ago.

Figure 21. Current Economic Condition in Comparison to Condition 3 Years Ago

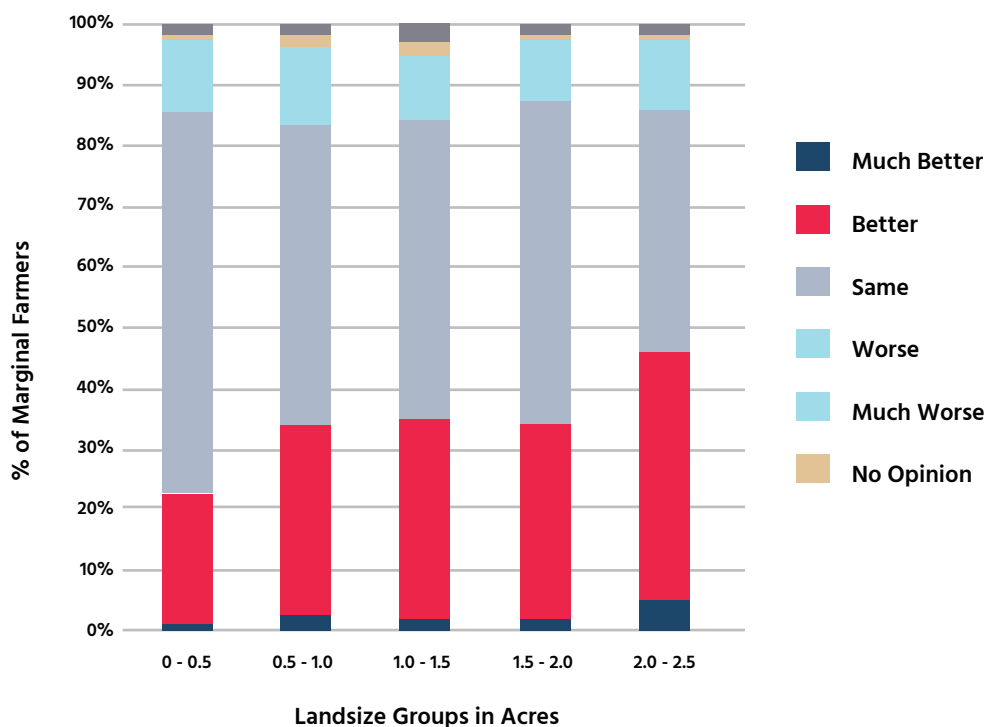


Note: Each portion denotes % share of Marginal Farmers mentioning said economic condition

Source: Primary Survey conducted through SambodhiPanels

- Looking at change in economic condition as per different land sizes, we find that the bigger land holders among marginal farmers have experienced better living conditions compared to what it was 3 years ago.
- In all, 42.82% of 2 to 2.5 acre land holding farmers reported that their lives have become better compared to 3 years ago, with 4.64% reporting significant improvement in their lives. Only 8.94% of them had reported that their lives have become worse.
- While 61.47% of the farmers holding 0 to 0.5 acres of land reported no change in their status, only 22.56% reported better living conditions whereas a negligible 0.77% reported much better conditions. On the other hand, 13.07% of them reported worse living conditions which is at par with the 0.5 to 1 acre landholding farmers. 13.74% of the 0.5 to 1 acre land holding farmers reported having worse conditions compared to 3 years ago.

Figure 22. Current Economic Condition in Comparison to Condition 3 Years Ago as per Land Size



Source: Primary Survey conducted through SambodhiPanels



- As shown in Figure 24, most respondents The period covered by Survey; Agriculture Year 2021-22 had Covid over-hang and the non-agriculture component of the household was

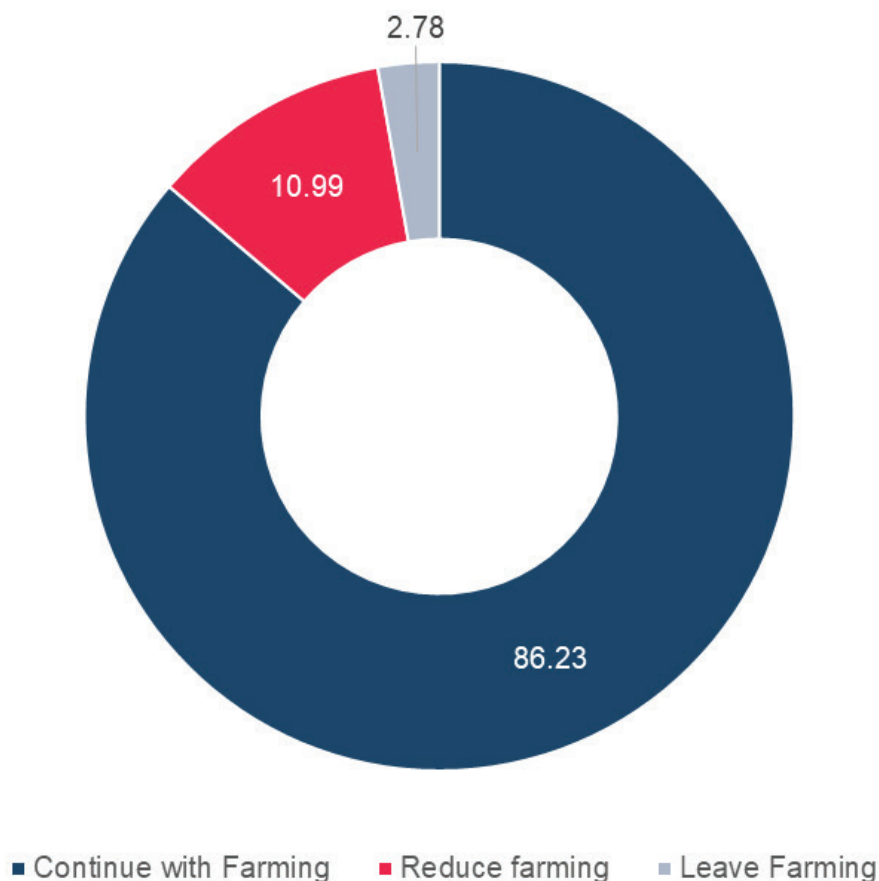
severely hit, the findings needs to be looked within this context, particularly as significant income source is non-agriculture.

### 2.7.2 Prospects and Challenges of Continuing with Farming

- As shown in Figure 23, most respondents (86.23%) prefer to continue with farming with 10.99% choosing to reduce it in due course. Only 2.77% wanted to leave farming altogether.
- Looking at the distribution of responses of farmers with respect to landholding size, the tendency to reduce farming increases with higher land holding while those with the lowest land holding wish to continue with farming.
- 93.9% of the farmers with 0 to 0.5 acres of land and 81.39% with 2 to 2.5 acres prefer to continue farming.
- In contrast, only 5.32% of the smallest landholding farmers and 14.76% of the largest land holding farmers want to reduce this activity.

The responses are both contrarian and absence of pathway shows the vulnerability of the marginal-farmer livelihood portfolio, particularly when hit by pandemic like shocks.

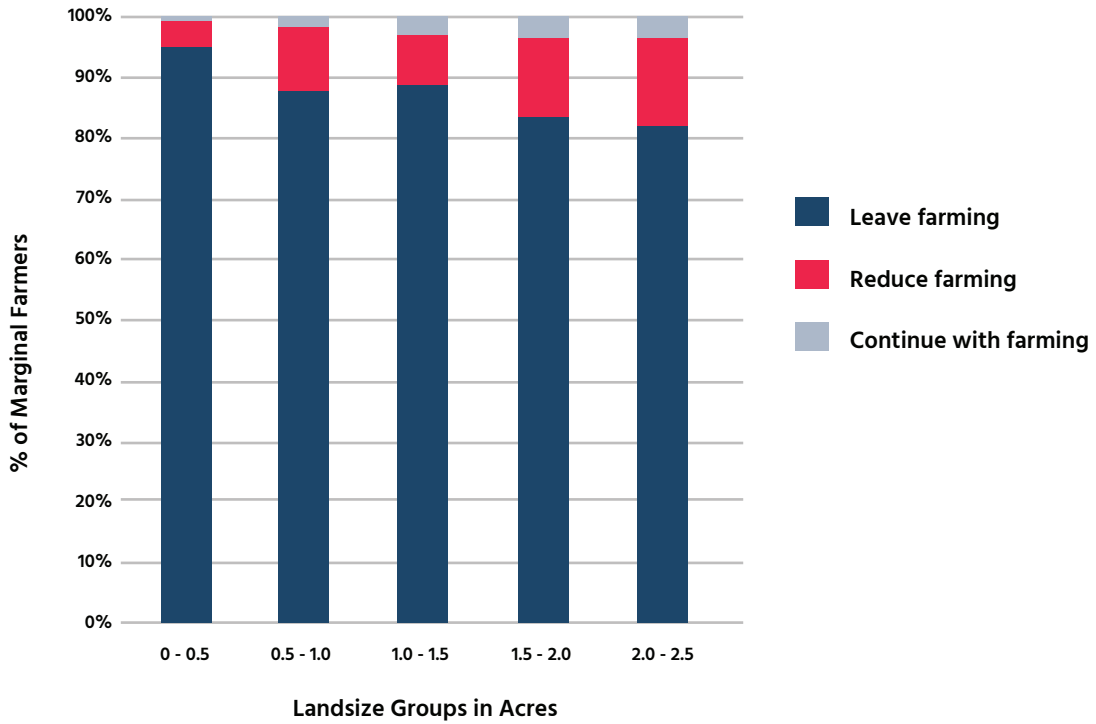
Figure 23. Prospects of Continuing Farming (in %)



Note: Each portion denotes % share of Marginal Farmers' response.

Source: Primary Survey conducted through SambodhiPanels

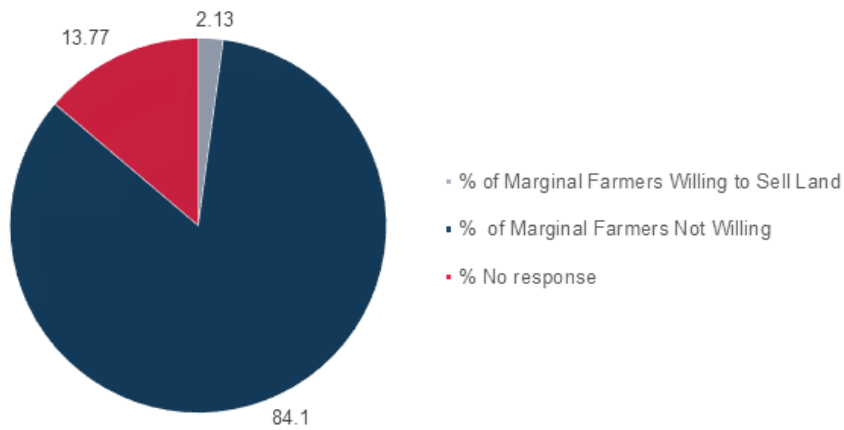
Figure 24. Prospects of Continuing Farming as per Landsize



Source: Primary Survey conducted through SambodhiPanels

Upon asking about their wish to sell the land, an overwhelming (84.1%) marginal farmers totally negated it. Only 2.13% of respondents responded a desire to dispose off their land (Figure 25).

Figure 25. Willingness to Sell Land

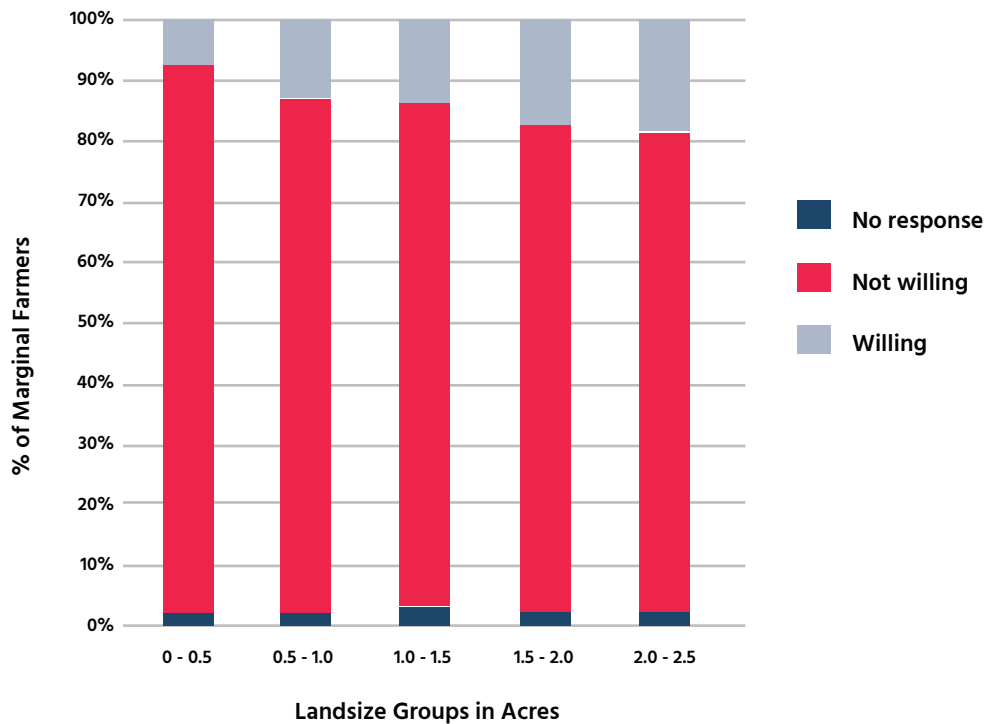


Source: Primary Survey conducted through SambodhiPanels

As per landholding size, the maximum response of unwillingness to sell land is from the smallest land holders, with 92.16% of them responding so. As the land holding size increases, we see a

gradual decline in such response, with 79.15% of the 2 to 2.5 acres land holding farmers showing unwillingness to sell their land.

Figure 26. Willingness to Sell Land as per Land Size



Source: Primary Survey conducted through SambodhiPanels

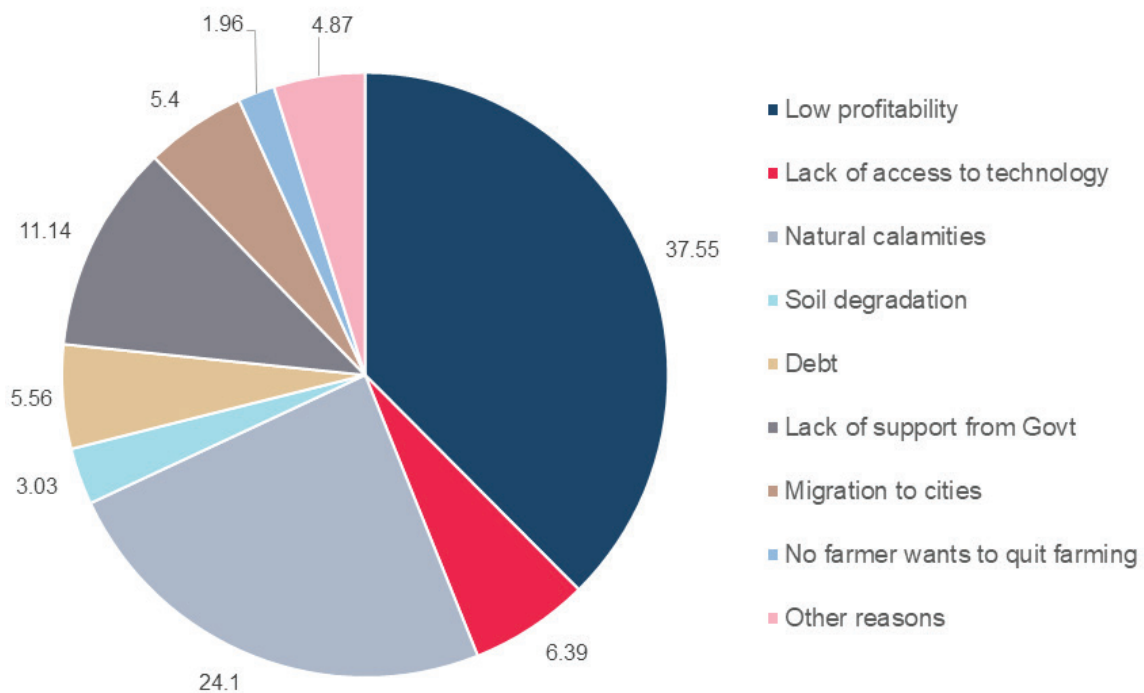
It is interesting to find that small landholders are not willing to sell their land but think of leaving cultivation as an occupation. We seek their response regarding this and present in Figure 27.

- 37.55% of the respondents reported low profitability in agriculture as the main cause followed by 24.1% opining impact of natural

calamity and hence resultant distress and hardships.

- 11.14% of respondents said lack of government support might be a big reason for leaving farming. A few cited migration and less technological interventions as the factors behind their leaving farming.

Figure 27. Reasons for Leaving Cultivation



Source: Primary Survey conducted through SambodhiPanels



# Future of Small Farms and Way Forward

In India, the average income of agricultural households from farming has been growing, albeit at a slow pace. This may be explained by a much higher increase in the input cost that barely corresponds with increase in the price of output. Natural calamities, erratic rainfall and temperature further add to farmers' woes. Farmers have no other option but to resort to other sources viz. livestock, wage labour and non-farm business for their sustenance and risk mitigation. The situation is quite vulnerable for the marginal (less <1 hectare) and small farmers (1-2 hectare of land) as their income is way behind that of the medium and large farmers. Nearly 86% of the land holdings in India are about two hectares, of which a sizeable number constitutes less than one hectare.

The Development Intelligence Unit (a collaborative venture between Transforming Rural India and Sambodhi) undertook an independent telephonic survey of 6115 marginal farmers across 20 major Indian states during 2022. The survey seeks to provide important insights into the socio-economic aspects of marginal farm households, government support through input subsidies and cash transfers and their perceptions about the future of small farms. To further gauge the equity and inclusivity of government programmes in agriculture, the survey bifurcates the sampled marginal farmers into five categories as per the land size. This primary survey-based report is first of its kind to bring forth the state of marginal farmers in India and may act as a pointer for targeted policy interventions.

Nearly 70% of sampled marginal farmers and/or their family members are engaged in non-farm activities, mainly in wage labour and livestock to supplement farm income. The share of income from wages is relatively higher (Rs.50,190 per annum), which act as a risk mitigation strategy. Fewer HHs are engaged in lease in or lease out

land. Among various land size categories of marginal farmers, the situation is deplorable for the lowest ones. The survey clearly indicates a direct relationship between farm size and income. The possibility of land consolidation is remote given their attachment with land, diverse socio-cultural settings, and agriculture practices in each state.

In all, 84% of marginal farmers not willing to quit farming, in spite of low profits and natural calamities. However, around 14% are either wants to reduce farming or leave farming. 84% also not interested to sell off their land to pursue other economic activities. There is lack of pathway out of farming at present. Measure disruption in present farming with higher intensity, diversification to high value crops particularly live-stock and commercial crops like spices, flowers holds key. As mentioned above, poor farmers cannot remain dependent only on farming as a source of livelihood to meet their consumption and other expenditures. Livestock appears to be the preferred activity, perhaps at the cost of farming. Extending credit, livestock insurance and extension services can help farmers and, also their women to take advantage of the growing opportunities in the dairy sector. Higher public investment is required in research on productivity enhancing technology with due consideration of mitigating greenhouse gas emissions, opening of veterinary clinics/hospitals, vaccination set-up centres and the automation systems.

Continued efforts are needed to train the rural youth to increase employment intensity in rural manufacturing and tertiary sectors, especially in the agro and food processing. Strengthening small scale rural industries with adequate financial incentive structure can also be helpful to absorb labour.

The marginal farmers may not be efficient in the use of inputs and hence require considerable hand holding of the government. Though some of the sampled marginal farmers are aware of government facilities for purchase of inputs, sale of produce to procurement centres/agencies and scheme of direct cash transfers, the level of utilization of these facilities/programmes by them is very low. It is important to increase awareness about the flagship programmes.

Government may initiate a differential income support scheme for marginal farmers that provides them higher support. Such a targeting is possible using the database of PM Kisan and JAM trinity. A faster updation of land records by each state can be useful in better targeting of direct support. Government should issue a farmer card to women farmers and labourers to enable them to avail the benefits under various schemes.

The pace of public investment in canal irrigation, research, extension, and rural infrastructure should be continued to incentivize farmers to make investments. Due to increasing migration of male members in the family, women tend to look after farming. Investment support for machinery/farm implements and opening of app-based

custom hiring centres can improve mechanization and enable them to grow diverse crops, augment yield and generate surplus.

Of late, a few startups have come up to provide short term loans to farmers for purchase of inputs, which must be incentivized for greater outreach and penetration. It is equally important to scale up investments in app-driven weather advisories, strengthen extension services and crop insurance to mitigate risks arising from changing climatic conditions.

The precarity of marginal farmers and few opportunities show need for a household-centric view look at the resource endowments in totality with concomitant policy support for covering downside risks of high-value agriculture, diversification outside of cultivation particularly livestock, creation of job opportunities in rural areas and social security for wage earning in informal sectors.

Farmers have shown willingness to continue with farming, but the future of small farms is contingent upon adequate interventions by the government.



# About the Development Intelligence Unit (DIU)

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The Development Intelligence Unit (DIU) brings data and expert analysis to the intersection of opportunity and deprivation in rural India. The DIU supports stakeholders who navigate the increasingly opaque, complex and uncertain world of data to analyse social and economic developments, forecast trends and better understand development programmes and practices. Doing so provides actionable insight to improve the efficacy and effectiveness of development initiatives.

The DIU platform is a clearing-house of rural information presented in a user-friendly format, addressing the needs of diverse stakeholders in public, private and civil society. It brings rural India

into focus and furthers the field of rural analytics for understanding, positioning and informing stakeholders and decision makers.

DIU specialises in evidence-based insights that will create an impact for governments and non-profits. It has expertise to develop data-driven solutions to public policy challenges based on robust evidence, expert insights and data analysis. It is providing data, research and tools to amplify issues in order to help rural India gain a voice, spark deeper conversation and help shape the future of India.



