Research Study No. 155

THE EXTENT OF EROSION INTO FARM PROFITABILITY DUE TO MARKET IMPERFECTIONS

by

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Report Submitted to the
Ministry of Agriculture and Farmers Welfare
Government of India

Agro-Economic Research Centre

For the state of Andhra Pradesh, Telangana and Odisha
(Ministry of Agriculture & Farmers Welfare, Government of India)

Andhra University

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PREFACE

In spite of several development plans were introduced for the development of agricultural marketing system, but still the position of agricultural marketing in India is deplorable. The agricultural marketing department of markets, facilitation for procurement operation under minimum support price(MSP), providing loans for farmers under Rythu Bandhu Padhakam, market intervention management of Rathu Bazars etc.,

The present study attempts to analyze the functioning of output and input markets and their effect on erosion of farm profitability. The total 200 sample household distributed across the four districts viz, Srikakulam, Visakhapatnam, East Godavari and Guntur districts of Andhra Pradesh.

The study finds that per house hold annual income from various sources is Rs. 83,538 constituting 85.44 per cent from cultivation, 4.89 per cent from animal husbandry activities and 9.67 per cent from wage labour. Per acre sale value of crops produce Rs.4585 black pepper to Rs.2, 23,337/- chillies crop. Observing across the groups the farmer households sought technical advice accessed large from extension agents. Labour market is unorganized and witnessed farm labour scarcity in recent past.

In this connection, thank the Ministry of Agriculture & Farmer's Welfare, Government of India, for assigning the study to Agro-Economic Research Centre, Waltair. My sincere tanks also go to the co-ordinated Prof C.S.C Sekhar, Head, AERU, Institute of Economic Growth, Delhi. I also thank all the officials of Agriculture department of Andhra Pradesh state and other officers and the staff for their continuous co-operation and help while conducting the study in the selected districts of Andhra Pradesh. I appreciate the author and research team for taking meticulous care at every stage of field work and analysis of the study. I also thank Smt. P. Malathi for neat typing of the report. I hope that this report will be useful for the policy makers and researchers.

Honorary Director

PROJECT TEAM

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CONTENTS

LIST OF TABLES

Executive Summary

The Problem:

Farming has not been rewarding, for some time now. The profitability of farming has been getting eroded because of climate change, and because of disproportionately high prices of farm inputs and low prices of farm outputs. Because of climate change, monsoon has become erratic with prolonged dry spells interspersed by stormy weather conditions. The unfavourable weather conditions have been causing havoc to standing crops and bringing down farm incomes. When weather is favourable for farming and when there is a bumper crop, farm prices dwindle following a glut in the market (Kannan Kasturi, 2018; Rahul Tongia, 2019) and farm incomes are again low. The production risk and price risk have increased manifold in recent times. Farm profitability is also at stake because of high prices of farm inputs. This is despite the fact that fertilizers are heavily subsidized and electricity nearly free (Rahul Tongia, 2019). The minimum support price policy of the government that seeks to make farming a viable proposition is found wanting and not fulfilling its purpose. Increase in the prices of farm outputs is not keeping pace with the rise in the prices of farm inputs, thus leaving farming as an unrewarding enterprise. Increased productivity of farmers is not getting translated into higher incomes. This is at the root of country-wide protests by farmers.

Market Failure:

Market failure is a situation where markets fail to efficiently organize production and marketing functions to maximize social objectives. For markets to effectively serve the small and marginal farmers it is necessary to strengthen supporting institutions. Collective action by farmers can be an important strategy to strengthen market-supporting institutions in rural areas. Collective action can help reduce transaction costs and increase the share of the consumer price reaching small producers (Gideon Obare et al., 2006).

The collective action can take the shape of contract farming, farmers' markets, producers' cooperatives, rural retailer malls/procurement centers etc (Gummagolmath et al., 2016). Contract farming has the potential to help the small farmer overcome constrains in accessing inputs (including credit), extension and marketing. Contractual arrangements are found taking place in respect of several food and cash crops, fruits and vegetables, medicinal plants, dairy and poultry across the country (Birthal, 2008). The most important aspect of contract farming is the

price agreed upon by the farmer and the agency buying the produce. The APMC act recognizes contract farming system and has provisions to regulate it.

Farmers' markets provide for a direct sale of produce by farmers to consumers at prices fixed every day. *Kisan Bazars, Apna Mandi, Rythu Bazars* are some of the examples of farmers' markets. These markets mostly deal with perishables like vegetables, fruits and flowers.

Producers' cooperatives essentially seek to free farmers from the clutches of usurious money lenders. They also participate in activities such as production, marketing and processing of farm products. These cooperatives aggregate the low marketable surplus of farmers, and provide them with quality inputs, technology and support services at low cost. These cooperatives are particularly successful in small-scale dairy.

Some of the corporate organizations are opening their centers in rural areas to form a network of one stop shops for farmers providing everything from farm inputs to loans and technical know-how. The initiative of ITC in the form of "e-choupal' is among the largest of this kind.

There is the view that one of the reasons for the poor state of affairs within Indian agriculture is too much control of the entire sector and very little private sector participation. The Indian agriculture sector is largely untouched by market reforms initiated in 1991 (Saurabh Karamchandani et al., 2021). One of the major instruments through which the state controls agriculture is Minimum Support Price (MSP), which operates through APMC mandis, MSP and FCI procurement. MSP was introduced as a floor price to incentivize farmers to adopt HYVs. This incentive structure worked well to begin with. However, what started as a floor price eventually became the procurement price and the highest price available in the market. This has caused many market failures. There are at least three MSP induced market failures – concentration of market power, negative externalities and high transaction costs (Saurabh Karamchandani et al., 2021).

APMCs operate through principal markets and sub-market yards. These markets exhibit monopolistic characteristics. This regulated market denies farmers of the choice of selling their produce anywhere in the market. MSP is invariably the highest price available in the market and it has distorted the incentive structure for farmers. Since MSP is backed up by procurement by FCI in respect of only wheat and rice, farmers are incentivized to produce more of the two crops

only, to the neglect of several other nutritious crops (Saurabh Karamchandani et al., 2021; Kannan Kasturi, 2018).

Since wheat and rice are water guzzlers, a major negative externality has been excessive groundwater depletion, especially in the Punjab. Electricity subsidy and other input subsidies exacerbate this problem.

Transaction costs are those incurred by buyers and sellers to search, move goods or bargain in a market to arrive at an optimum price of exchange. Farmers bring their produce to APMC mandis incurring huge transaction costs. With increasing internet facilities, it would have been natural to presume that overtime transaction costs would reduce. But it has not happened so. This is despite the introduction of E-NAM in 2016. Addressing these market failures would be crucial for ensuring that farming becomes rewarding.

Another feature of India's agricultural market is the huge spread between the price realized by farmers and the price paid by consumers. This spread is not warranted by the value added by the middlemen in the agricultural supply chain. Commission agents, traders and wholesale merchants are able to control prices paid to farmers and prices charged to consumers to their advantage. Farmers' incomes fall well short of potential because of the high cost of intermediation. The returns below MSP to the farmer, along with the high intermediation costs, point at market failure (Kannan Kasturi, 2018).

The following statistics are revealing. Between 2013 and 2019, the share of agricultural households that sold their produce in APMC mandis reduced sharply, while those that sold their produce to private traders increased significantly. In 2013, 17 per cent of paddy households sold their crops in mandis. In 2019, the share came down to 2.7 per cent, which is a 14.3 per cent point reduction. In 2013, 29 per cent of wheat households sold their crops in private traders/markets. In 2019, the share increased to 66.1 per cent, which is a 37.1 per cent point increase (Vignesh Radhakrishnan et al., 2021). The reliance on private traders, as also input dealers and private processors is because of the inter-locking of credit-input-output markets. The inter-locking of markets leads to over-pricing of inputs (including credit) and under-pricing of output of farmers and they cannot access other channels even if they offer attractive prices (Sukhpal Singh, 2021).

Is the Market Intervention Necessary?

Farmers have no control over production once they have sown the seeds. The production cycle once set in motion has to be carried through till harvest irrespective of what price their produce will eventually fetch. Decisions on what to produce have to be made based on expectation of future price. If the expectation proves wrong, the farmer is faced with losses. Farmers also do not have the option to stop farming, as they are mostly already in debt, there are no job options available and the income from farming is essential for survival. Also, the lack of access of farmers to storage facilities means that on harvest, they have no other option but to sell even their non-perishable crops at whatever price they get (Kannan Kasturi, 2018).

Therefore, there is the view that the state must intervene. The basic lack of pricing power among farmers does not change when they deal with corporations instead of traders. Also, there is no reason to assume that the margins that corporations make by bringing in greater efficiency in the supply chain will be shared with farmers. The state needs to weigh in on the side of farmers so that they have better pricing power. This requires the extension of MSP to all major crops and active government procurement to ensure these price floors hold (Kannan Kasturi, 2018). This runs counter to the observation made above that Indian agriculture can do with more of private sector participation.

Objectives of the Study:

The overall objective of the present study is to look into the functioning of the input and output markets with a view to examine if it is undermining farm profitability in the context of the agricultural sector of Andhra Pradesh. The study specifically seeks to:

- Analyse the structure and functioning of the product market including the prices obtaining across different marketing channels, and the bottlenecks present there.
- Analyse the structure and functioning of the market for inputs including the prices of seeds, fertilisers and labour and the problems in accessing the same.
- Analyse the government's support structure including access to credit.
- Analyse the coping strategies of farmers during economic hardships and their social networks.

Methodology:

The study employed a multi-stage sampling. The first stage unit was the district. The districts of Srikakulam, Visakhapatnam, East Godavari and Guntur figured in the study. The

districts represented four agro-climatic regions in the state of Andhra Pradesh. The district of Srikakulam falls in the North Coastal Zone, East Godavari in the Godavari Zone, Guntur in the Krishna Zone and Visakhapatnam in the High-Altitude Tribal Zone. Difficulties encountered in the Covid-19 pandemic made us to restrict the study to these four zones. The study did not therefore cover the other two zones of the state – the Southern Zone and the Scarce Rainfall Zone. From each of the four selected districts, two villages were selected with sufficient geographic spread. Thus, a total of 8 villages were selected. We did not take up a complete listing of the village households prior to selecting the sample households. Instead, the sampling frame was developed based on the information on the size-wise distribution of village households obtained through Focus Group Discussions. This sampling frame was employed to select the ultimate sampling units following the probability proportional to size sampling technique. A total of 25 farmers were chosen randomly from each of the 8 villages. Our sample thus comprised a total of 200 farmers, with 75 marginal, 85 small, 24 medium, 14 large and 2 very large farmers.

Findings of the Study:

The following are the salient findings emerged out of the present study:

Average Value of Crops Produced

On an average the highest value per qtls of black pepper is reported to be Rs.17,633/- . This was followed by coffee crop reporting Rs.11,617/- per qtl. The per qtls value of chillies is reported to be Rs. 10,412/- per qtls. The value of cotton and ragi crops are reported to be Rs. 4,393/- and Rs.2,483/- per qtls respectively. No farmers from very large size land holding category is reported to have grown coffee, cotton, black pepper, ragi, sugarcane and turmeric.

Reasonability of Price paid for Reported inputs:

Out of the total no of 200 reported farmers, 42.50 percent are from small farmers, 37.50 percent of marginal, 12.00 percent of medium and 7.00 percent of large, only a negligible percent of farmers of very large categories reported whether the price paid for seeds is reasonable or not . Out of the 200 farmers, 70.50 percent of farmers reported that the price paid for the seeds is reasonable. 29.50 percent of farmers reported that the price paid for the seeds is high.

Expenditure incurred and quality of inputs.

On an average the per acre expenditure incurred for the purchase of inputs by the sample farmers for the purchase of inputs is reported to be Rs.44,922/-. Across the groups the per acre expenditure incurred for the purchase of inputs varied from Rs.38,085/- in case of marginal farmers to Rs.53,504/- in case of very large farmers. A glancing over on an average the per acre expenditure incurred for the purchase of inputs, about 23.60 per cent for human labour followed by 21.82 per cent for fertilizers, 17.09 per cent for plant protection chemicals, 14.33 per cent are hiring machinery, 14.25 per cent are lease rent for land and 4.53 per cent are seeds.

On an average the per household total expenses for the purchase of inputs related to animal husbandry is reported to be Rs.1523/- . Across the groups, the total expenses varied between Rs.350/- in case of vary large farmer and Rs.2739/- in case of medium farmers. The per household expenses incurred for the purchase of cattle seed is reported to Rs.360/- by large farmers. For the purchase of green fodder the expenses varied from Rs. 50/- in case of large farmers to Rs.280/- in case of medium farmers. All the groups of farmers reported to have incurred expenses for the purchase of dry fodder and concentrates. The per household expenses in case of dry fodder is reported to be high in case of medium farmers. Moreover all the groups of farmers incurred similar amounts of expenses for the purchase of concentrates. On an average the per household expenses for the purchase of concentrates is reported to be Rs.279/-. The average expenses incurred for veterinary charges is reported to be Rs.137/-and the veterinary charges ranged between Rs.90/- in case of large farmers and Rs.287/- in case of medium farmers. The per household labour charges ranged between Rs.140/- in case of large farmers and Rs.643/- in case of medium farmers.

Labour Market

The aggregate picture of higher average number of days employed by male family and casual labourers (204.85 and 2.25) is seen in our study. In this case family labour and casual labour have been found to have devoted 179.40 and 3.11 days for employment. The average wage rates paid to male casual labour is Rs. 337.50 per day and Rs. 237.50 per day for female casual labour. The all India@ annual average daily wage rate for field labour (male) during 2018-19 was 330/day, with Andhra Pradesh paying the wage to field labour (male) 362/day, Average daily wage rate for field labour (female) at all India and 262/day and Andhra Pradesh Female wage rate is 256/ day respectively.

Out of the 76 reported Households 38.16% farmers reported that the wages are not paid on time. While 32.89% of Households reported that the work available for a very limited period of time. About 18.42% of farmers reported to have received a very low wage rate. Finally 10.53% reported that due to frequent problems of payment in the bank account. Across the groups, 43.75% of marginal farmers reported the limited period of work time. 30.77% of small farmers reported a very low wage rate. About 42.30% of small farmers reported wages are not paid on time.

Reasons for non-repayment

Out of total number of 76 HHs 31.59% of HHs reported to have postponed the debt repayment. Similarly 31.59% farmers reported that the payment will be made after harvesting. Moreover, 22.36% of HHs reported that due to major medical and other expenses they could not repay the borrowed amount.

Accessed of technical advice

Of the total reported households, 57.84 per cent of households sought technical advice from extension agents. Observing across the groups the farmer households sought technical advice accessed large from extension agents.

Reasons for not insuring the Reported Crops

Out of the total no of 131 reported households, 35.11 per cent reported that they are not aware about the availability of insuring facility. On the other hand 32.60 per cent of farmers reported they are not aware of the insuring facility. About 19.00 19.08 per cent of farmers reported that there is no need for insuring their crop. Finally, 12.21 per cent of farmers reported to be not interested insuring their crops. The two main reasons expressed by the majority of the farmers from marginal, small and medium category are (1) they are not aware of insuring procedure and (2) They are not aware about the availability of facility. A negligible per cent of farmers stated that they are not satisfied terms and conditions as a reason they have not insured their crops.

Reasons for crop losses

Of the total no of 52 reported farmers, 38.46 per cent of farmers reported due to inadequate rainfall/drought they have expressed crop losses. On the other hand 34.62 per cent of

farmers stated due to disease/insect they have crop loss. Moreover 29.62 per cent of farmers reported that the other natural causes for the loss their crops.

Inadequate income from farming

Out of the total 200 farmer households only 35.00 per cent of farmers expressed the adequate of income from farming obviously 65.00 per cent of farmers expressed that they have got inadequate income from farming.

Majority of the farmers of various groups expressed the seasonal un-employment is the major risk among the risks faced by them.

Policy suggestions:

The following are the policy suggestions relating to the study of market imperfections in Andhra Pradesh.

- ✓ The Rythu Bharosa Kendras (RBKs) are an innovative scheme launched by Andhra Pradesh Government on 15th October, 2019 caters to the needs of its farmers. This scheme may be adopted government of India and extended to other parts of the country so as to ensure confidence among farmers. As a part of the scheme, the farmers are being supplied with better quality seeds and fertilizers, technical advice, e-cropping and different marketing channels for the benefit of the farmers by State Government.
- ✓ Input costs reducing mechanism is to be evolved.
- ✓ Keeping in view of the rising labour costs, it shall be linked to MGNREGA scheme so that labour costs may be minimized.
- ✓ Interest free loans for tenant, marginal and small farmers should be provided.
- ✓ Since the heavy weight machinery destroys the fertility of the soil, light weight machines should be provided.
- ✓ PMKISAN scheme provides Rs.6000/- for marginal and small farmers and the same benefit may be extended to tenant farmers and the limit more than Rs.6000/- should be introduced.

- ✓ The present scheme of crop insurance being provided by the private agencies is not suitable and sufficient for the farmers, hence the scheme should be taken up by the public sector for the benefit of the farmers and free crop insurance provide to all marginal, small and medium farmers.
- ✓ The produce of the farmers be purchased by government agencies during the time of harvesting seasons only instead of processing the produce when there is down fall in price of farm produce.

CHAPTER- I

INTRODUCTION

1.1.The Problem:

Farming has not been rewarding, for some time now. The profitability of farming has been getting eroded because of climate change, and because of disproportionately high prices of farm inputs and low prices of farm outputs. Because of climate change, monsoon has become erratic with prolonged dry spells interspersed by stormy weather conditions. The unfavourable weather conditions have been causing havoc to standing crops and bringing down farm incomes. When weather is favourable for farming and when there is a bumper crop, farm prices dwindle following a glut in the market (Kannan Kasturi, 2018; Rahul Tongia, 2019) and farm incomes are again low. The production risk and price risk have increased manifold in recent times. Farm profitability is also at stake because of high prices of farm inputs. This is despite the fact that fertilizers are heavily subsidized and electricity nearly free (Rahul Tongia, 2019). The minimum support price policy of the government that seeks to make farming a viable proposition is found wanting and not fulfilling its purpose. Increase in the prices of farm outputs is not keeping pace with the rise in the prices of farm inputs, thus leaving farming as an unrewarding enterprise. Increased productivity of farmers is not getting translated into higher incomes. This is at the root of country-wide protests by farmers.

1.2.Review of Literature:

1.2.1. *Status of Farm Income:*

It is an acknowledged fact that the growth of farm income has been decelerating in the recent past. The Situation Assessment Surveys (SAS) of the NSSO show that between 2002-03 and 2012-13, the average annual increase in total farm income (at current prices) was 20.38 per cent and this decelerated to 11.90 per cent between 2012-13 and 2018-19. What is more, of the different sources of income (from wages, crop cultivation, farming of animals and non-farm business) of farm households, the growth of income in crop cultivation decelerated sharply from 21.80 per cent between 2002-03 and 2012-13 to just 4.65 per cent between 2012-13 and 2018-19 (Narayanamoorthy, 2021).

The average monthly income from different sources per agricultural household during 2018-19 as per the NSSO (GoI, 2021) stood at Rs. 10,218. Of this only Rs. 3,798 (37.17%) was the net receipt from crop production. As much as Rs. 4,063 (or 39.76%) accrued from wages. This is a clear indicator of the subsistence nature of farming.

As per the Situation Assessment Survey of the NSSO pertaining to 2018-19, agricultural households possessing land less than 1 ha account for 70.4 per cent (GoI, 2021). At a time when crop income is decelerating, it is these farmers who are hurt more. As their endowments are limited, they are slow to adapt to climatic variability; as their asset base is limited, they have little access to formal credit; as their marketed surplus is limited, they indulge in distress sale of their output at the farm gate and do not find it worthwhile to take their produce to regulated markets to take advantage of the remunerative prices offered there. The marginal farmers are also at a disadvantage when it comes to accessing farm inputs and extension services (Mahendra Dev, 2012). While farmers in general face these disabilities that erode farm profitability, the position of the marginal farmers is particularly precarious.

1.2.2. *Market Failure:*

Market failure is a situation where markets fail to efficiently organize production and marketing functions to maximize social objectives. For markets to effectively serve the small and marginal farmers it is necessary to strengthen supporting institutions. Collective action by farmers can be an important strategy to strengthen market-supporting institutions in rural areas. Collective action can help reduce transaction costs and increase the share of the consumer price reaching small producers (Gideon Obare et al., 2006).

The collective action can take the shape of contract farming, farmers' markets, producers' cooperatives, rural retailer malls/procurement centers etc (Gummagolmath et al., 2016). Contract farming has the potential to help the small farmer overcome constrains in accessing inputs (including credit), extension and marketing. Contractual arrangements are found taking place in respect of several food and cash crops, fruits and vegetables, medicinal plants, dairy and poultry across the country (Birthal, 2008). The most important aspect of contract farming is the price agreed upon by the farmer and the agency buying the produce. The APMC act recognizes contract farming system and has provisions to regulate it.

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1.2.3. *Is the Market Intervention Necessary?*

Farmers have no control over production once they have sown the seeds. The production cycle once set in motion has to be carried through till harvest irrespective of what price their produce will eventually fetch. Decisions on what to produce have to be made based on expectation of future price. If the expectation proves wrong, the farmer is faced with losses. Farmers also do not have the option to stop farming, as they are mostly already in debt, there are no job options available and the income from farming is essential for survival. Also, the lack of access of farmers to storage facilities means that on harvest, they have no other option but to sell even their non-perishable crops at whatever price they get (Kannan Kasturi, 2018).

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1.3. Objectives of the Study:

The overall objective of the present study is to look into the functioning of the input and output markets with a view to examine if it is undermining farm profitability in the context of the agricultural sector of Andhra Pradesh. The study specifically seeks to:

- Analyse the structure and functioning of the product market including the prices obtaining across different marketing channels, and the bottlenecks present there.
- Analyse the structure and functioning of the market for inputs including the prices of seeds, fertilisers and labour and the problems in accessing the same.
- Analyse the government's support structure including access to credit.
- Analyse the coping strategies of farmers during economic hardships and their social networks.

1.4. Methodology:

The study employed a multi-stage sampling. The first stage unit was the district. The districts of Srikakulam, Visakhapatnam, East Godavari and Guntur figured in the study. The districts represented four agro-climatic regions in the state of Andhra Pradesh. The district of Srikakulam falls in the North Coastal Zone, East Godavari in the Godavari Zone, Guntur in the Krishna Zone and Visakhapatnam in the High-Altitude Tribal Zone. Difficulties encountered in the Covid-19 pandemic made us to restrict the study to these four zones. The study did not therefore cover the other two zones of the state – the Southern Zone and the Scarce Rainfall Zone. From each of the four selected districts, two villages were selected with sufficient geographic spread. Thus, a total of 8 villages were selected. We did not take up a complete listing of the village households prior to selecting the sample households. Instead, the sampling frame was developed based on the information on the size-wise distribution of village households obtained through Focus Group Discussions. This sampling frame was employed to select the ultimate sampling units following the probability proportional to size sampling technique. A total of 25 farmers were chosen randomly from

each of the 8 villages. Our sample thus comprised a total of 200 farmers, with 75 marginal, 85 small, 24 medium, 14 large and 2 very large farmers.

1.5. Chapter Scheme of the Report:

The report is divided into nine chapters. The Chapter 2 that follows this introductory chapter, presents a background of the study region. Chapter 3 deals with crop output. Chapter 4 presents details on animal products. In Chapter 5 the particulars relating to the labour market are presented, while Chapter 6 highlights conditions in the credit market. Chapter 7 gives the details on the endowments of sample households, government support programmes, and insurance. Chapter 8 brings together the problems faced by farmers, their coping strategies and their social networks. The summary and conclusions of the report are presented in Chapter 9.

CHAPTER II

OVERVIEW OF THE STUDY REGION

2.1. Description of the Study Region:

In this chapter an attempt has been made to provide an overview of the study region. Andhra Pradesh is situated on the country's south-eastern coast. It is the eighth largest state in the country covering an area of 1,60,205 sq.km. The state has the second largest coastline of 972 km among all the states of India, second only to Gujarat. Agriculture is the main occupation of about 62 percent of the people in the state. Rice is the major food crop and staple food contributing about 77 percent of the food grain production. Other important crops are Jowar, Bajra, Maize, Ragi, Small millets, Pulses, Castor, Tobacco, Cotton and Sugarcane.

Based on the amount and distribution of rainfall, the state has been divided into 6 agro-climatic zones. They are: 1. North coastal zone, 2. Godavari Zone, 3. Krishna zone, 4. Southern zone, 5. Scarce rainfall zone and 6. High-Attitude and Tribal Zone.

1. **North Coastal Zone**: This Zone comprises most of Srikakulam, Vizianagaram and Visakhapatnam districts (excluding tribal hill areas and upland areas of East Godavari district. The normal rainfall is 1000 – 1100 mm and the maximum and minimum temperatures during the southwest monsoon range from 33 c to 35 c and 26 c to 27 c respectively. The soils are predominantly red with clay base. There are small patches of acidic laterite soils.
2. **Godavari Zone**: The zone comprises of the West and East Godavari (excluding up lands) districts and receives a normal rainfall of 1000 – 1200 mm. The maximum and minimum temperatures during south west monsoon period range from 32 c to 36 c and 23 c to 24 c respectively.
3. **Krishna Zone**: This zone consists of the districts of Krishna, Guntur and Prakasam. This zone receives an annual rainfall of 800 - 1000mm. The maximum temperature during south-west monsoon period ranges from 32 c to 36 c. The important soil groups are deltaic alluvium, red soils with clay base, black cotton soils, red loamy, coastal sands and salvia soils.
4. **High-Attitude Tribal zone**: This zone comprises areas along the northern borders of the state in the districts of Srikakulam, Vizianagaram, Visakhapatnam and East Godavari. These areas are mainly inhabited by tribals. The annual rainfall is over 1400 mm and large areas at high attitude receive upto 4000 mm rainfall. The important soils are red sandy loams red loamy with clay base with very small patches

of all arial soils. The maximum and minimum temperatures during south-west monsoon range from 29 c to 34 c and 13 c to 27 c respectively.

5. **Southern Zone**: This zone includes the districts of Nellore, Chittor and YSR Kadapa. The average annual rainfall ranges from 600 to 1000 mm with greater share during south-east monsoon. The maximum and minimum temperatures during south-west monsoon ranges from 36 c to 40 c and 23 c to 25 c respectively. The soils are red loamy which are shallow to moderately deep.
6. **Scarce Rainfall Zone**: These zones include the districts of Kurnool and Ananthapuram. The annual normal rainfall ranges from 500 to 670 mm. The maximum and minimum temperatures during south-west monsoon range from 32 c to 36 c and 24 c to 30 c respectively. The important soil groups are red earths with loamy soils and red soils. Black cotton soils are also seen in some pockets.

The districts selected for this study belong to the first four zones. The sample villages of the study are listed below:

Gurugubelli and Pothayyavalasa villages from Srikakulam district.

Vakada and Kongodu villages from East Godavari district.

Ponagapadu and Thallur villages from Guntur district.

Peddalabudu and Chinnalabudu villages from Visakhapatnam district.

The main crops grown in the four zones that figured in the survey are as follows:

1. Srikakulam (North Coastal Zone): Rice, Ragi and Sugarcane crops are grown in the district.

2. East Godavari (Godavari Zone): Rice, Coconut and Sugarcane crops are grown in the district.

3. Guntur (Krishna Zone): Rice, Cotton, Chillies are the predominant crops grown in the district.

4 Visakhapatnam (High-Altitude and Tribal Zone): Coffee, Pepper, Chillies, Rice and Horticultural Crops are grown in the district.

2.2. Distribution of Sample Households by Farm Size:

It is observed that, of the 200 households that figured in the study, 42.50% were small farmers followed by marginal farmers 37.50%, medium 12%, large 14 7% and very large 1%. Thus, the small landholding category occupied predominant place followed by the marginal landholding category (Table 2.1). It is expected that bulk of the small and marginal farmers

face difficulties in effecting the sale of whatever little marketed surplus they have – they are likely to sell their surplus produce to local traders.

Table 2.1
Distribution of households by size-class of landholding

S. No.	Landholding categories	Number of households	Per cent
1	marginal	75	37.50
2	small	85	42.50
3	medium	24	12.00
4	large	14	7.00
5	very large	2	1.00
	total	200	100.00

Source: Field Survey

Table 2.2
Average size of landholding

(In Acres)

S.No	landholding categories	Average size of landholding					
		total landholding	owned land	leased-in land	leased-out land	irrigated land	Un-irrigated land
1	marginal	1.49	1.07	0.43	0.00	1.12	0.37
2	small	3.56	2.46	1.10	0.00	2.03	1.52
3	medium	6.37	4.76	1.61	0.00	4.21	2.17
4	large	13.11	4.68	8.43	0.00	11.39	1.71
5	very large	25.00	15.00	10.00	0.00	25.00	0.00
	total	4.01	2.49	1.51	0.00	2.83	1.17

Source: Field Survey

The field survey revealed that, on an average, the size of operational holding of the farmers was 4.01 acres. This comprised 2.83 acres of irrigated land and 1.17 acres of unirrigated land. The operated area was made up of owned land and leased-in land, accounting for 2.49 acres and 1.51 acres respectively. We did not come across cases where land is leased-out by the sample farmers. It may be seen from the table 2.2 that large and very large farmers were also leasing-in land and almost all of it was irrigated.

2.3. Distribution of Households by Social Group:

In this section, an attempt has been made to show the distribution of households by social group across the size-class of landholding. It can be seen from the table 2.3 that 42.50% of the sample farmers belong to other castes (the General Category, that is castes other than OBC, SC and ST). STs with 25% are the second largest group, followed by OBCs (21.00%) and SCs (11.50%).

Table 2.3
Distribution of households by social group across landholding categories

(Number of households)

S.No	landholding categories	social group				
		Gen	OBC	SC	ST	total
1	marginal	27 (36.00)	21 (28.00)	12 (16.00)	15 (20.00)	75 (37.50)
2	small	34 (40.00)	14 (16.47)	8 (9.41)	29 (34.12)	85 (42.50)
3	medium	10 (41.67)	6 (25.00)	2 (8.33)	6 (25.00)	24 (12.00)
4	large	12 (85.71)	1 (7.14)	1 (7.14)	0 (0.00)	14 (7.00)
5	very large	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (1.00)
	total	85 (42.50)	42 (21.00)	23 (11.50)	50 (25.00)	200 (100.00)

Source: Field Survey
Figures in parenthesis are percentages to total number of farmers in each land holding category.

2.4. Distribution of Households by Principal Occupation:

This section describes the distribution of HHs by principal occupation across LHCs. From table 2.4 we note that the principal occupation of all the sample households, irrespective of their size-class, was cultivation. None of the surveyed farmers had undertaken agricultural labour, dairy, non-agricultural labour, self-employment, salaried employment, forestry, and others as their principal occupation.

Table 2.4
Distribution of households by principal occupation across landholding categories

(Number of households)

S.No	landholding categories	principal occupation								
		cultivation	agri. lab	dairy	non-agri.lab	self-emp	salaried emp	forestry	others	total
1	marginal	75 (37.50)	---	---	---	---	---	---	---	75 (37.50)
2	small	85 (42.50)	---	---	---	---	---	---	---	85 (42.50)
3	medium	24 (12.00)	---	---	---	---	---	---	---	24 (12.00)
4	large	14 (7.00)	---	---	---	---	---	---	---	14 (7.00)
5	very large	2 (1.00)	---	---	---	---	---	---	---	2 (1.00)
	total	200 (100.00)	---	---	---	---	---	---	---	200 (100.00)

Source: Field Survey

2.5. Distribution of Households by Livestock Possession:

In this section of the chapter, attempt has been made to outline the distribution of households by livestock possession across LHCs (in number and percentage). The details are presented in the table 2.5

Table 2.5
Distribution of households by livestock possession across landholding categories

(Number of households)

S.No	landholding categories	households owning livestock						
		milch cows	milch buffaloes	Bullocks	goats	sheep	poultry	total
1	marginal	15 (14.42)	14 (13.46)	8 (7.69)	12 (11.54)	15 (14.42)	40 (38.46)	104 (13.40)
2	small	35 (27.34)	24 (18.75)	8 (6.25)	13 (10.16)	37 (28.91)	11 (8.59)	128 (16.49)
3	medium	7 (1.32)	3 (0.56)	4 (0.75)	3 (0.56)	11 (2.07)	503 (94.73)	531 (68.43)
4	large	3 (25.00)	7 (58.33)	2 (16.67)	0 (0.00)	0 (0.00)	0 (0.00)	12 (1.55)
5	very large	0 (0.00)	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.13)
	total	60 (7.73)	49 (6.31)	22 (2.84)	28 (3.61)	63 (8.12)	554 (71.39)	776 (100.00)

Source: Field Survey

Very large farmers were found to have possessed milch buffaloes only. In the case of large farmers, the animals possessed are (58.3%) milch buffaloes, (25.00%) milch cows and (16.67%) bullocks. With respect to medium farmers the percentage of milch animals possessed varied from 2.07 per cent in the case of sheep to 94.73 per cent in case of poultry. With respect to small farmers, the percentage of sheep possessed varied from 28.19 to 6.25 per cent in case of bullocks, whereas milch cows were reported to be 27 per cent.

Medium category farmers were found to have the highest percentage of poultry (94.73%) followed by marginal farmers (38.46%). No farmer from large and very large farmer categories reported to have poultry. Sheep were maintained mainly by small and medium farmers. Households possessing bullocks constituted 7.69% among the marginal farmer category, 6.25% among the small, 0.75% among the medium and 16.67% among the large farmer category.

2.6. Annual Household Income by Source:

A glance at the table 2.6 reveals that, on an average, per household total net income from various sources was Rs. 83,538. Of this, 85.44 per cent was from cultivation, 4.89 per cent from animal husbandry and 9.67 per cent from wage labour. Across the groups, the total net income varied between Rs. 44,027 in case of marginal farmer and Rs. 3,30,275 in case of very large farmer. In fact, it increased with the increase in farm size. In case of marginal farmers, the income from cultivation formed 60.10 per cent of the total and it was followed by net income from wage labour 33.32 per cent and 6.29 per cent from animal husbandry. The income of the small farmers was largely from agriculture, 81.01 per cent, followed by wage labour 13.18 per cent and animal husbandry 5.81 per cent. In case of medium farmers, income from agriculture accounted for 89.02 per cent followed by wage labour 6.28 per cent and animal husbandry 4.71 per cent. Large and very large farmers too obtained much of their income from cultivation, 98.84 per cent and 99.55 per cent respectively. Their earnings from animal husbandry (1.16 percent and 0.45 per cent respectively) were little. The above analysis clearly reveals that marginal farmers' net income from agriculture was just 60.00 per cent as compared to 89 to 99 per cent in case of medium, large and very large farmers. The net income from wage labour was the highest for the marginal farmers (33.62 per cent). It decreases with the increase in farm size.

Table 2.6
Annual household income from various sources across the landholding categories

(Rs. Per Household)

S.No	landholding categories	net income from cultivation	net income from animal husbandry	Income from Wage Labour	Total
1	marginal	26459 (60.10)	2768 (6.29)	14800 (33.62)	44027 (100.00)
2	small	67689 (81.01)	4855 (5.81)	11010 (13.18)	83554 (100.00)
3	medium	126226 (89.02)	6673 (4.71)	8900 (6.28)	141799 (100.00)
4	large	203629 (98.84)	2390 (1.16)	0 (0.00)	206019 (100.00)
5	very large	328775 (99.55)	1500 (0.45)	0 (0.00)	330275 (100.00)
	total	71379 (85.44)	4084 (4.89)	8075 (9.67)	83538 (100.00)

Source: Field Survey

Note: net income can be calculated as a difference between total value of the product and expenses incurred

2.7 Distribution of Households by Possession of Farm Machinery/Equipment:

In table 2.7, an attempt has been made to show the distribution of surveyed farm households by the nature of possession of various items of farm machinery and equipment, viz. Purchased, shared or taken on rent. None of the farmer households in any size group reported to have owned thresher or combine harvester. No farmer from small, medium and very large size groups reported to have bullock cart of their own. Some of the marginal and small farmers reported to have been in the possession of tube well/bore well.

Table 2.7
Distribution of households by farm machinery/equipment possession across landholding categories

(Number of households)

S.No	landholding categories	households having farm mach/equip (purchased/shared/taken on rent)								
		tube wells	bore well	electric pump	diesel pump	bullock cart	tractor	thresher	combine harvester	Total No HHs
1	marginal	20 (26.67)	10 (13.33)	0 (0.00)	5 (6.67)	2 (2.67)	2 (2.67)	0 (0.00)	0 (0.00)	75
2	small	4 (4.71)	24 (28.24)	3 (3.53)	9 (10.59)	0 (0.00)	1 (1.18)	0 (0.00)	0 (0.00)	85
3	medium	3 (12.50)	9 (37.50)	2 (8.33)	0 (0.00)	0 (0.00)	1 (4.17)	0 (0.00)	0 (0.00)	24
4	large	2 (14.29)	5 (35.71)	1 (7.14)	2 (14.29)	1 (7.14)	3 (21.43)	0 (0.00)	0 (0.00)	14
5	very large	0 (0.00)	1 (50.00)	0 (0.00)	1 (50.00)	0 (0.00)	1 (50.00)	0 (0.00)	0 (0.00)	2
	total	29 (14.50)	49 (24.50)	6 (3.00)	17 (8.50)	3 (1.50)	8 (4.00)	0 (0.00)	0 (0.00)	200

Note: Figures in parentheses indicate percentages

Source: Field Survey

CHAPTER III

CROP AND INPUT MARKETS

This chapter deals with the following aspects related to crops and input markets of the selected villages. The study includes information/data in regard to 10 crops. All total 200 sample households have grown various crops (9) namely paddy (kharif), paddy (rabi), maize, chillies, coffee, cotton, black pepper, ragi, sugarcane and turmeric during kharif and rabi seasons.

3.1 Cropping Pattern across Land holding Categories:

Table 3.1 shows the data of the selected households of all the five land holding category sizes, growing five major crops, namely paddy (Kharif), Paddy (Rabi), Maize, Chillies Coffee and Black pepper.

Among landholding size groups, it was found that marginal farm households preferred to grow paddy (kharif and rabi), maize, Coffee and Black pepper. While in the case of small farmers widely grows are paddy (kharif and rabi), chillies, coffee and black pepper. Further medium, large and very large holding groups were found to have more emphasis is growing paddy (Kharif) maize, chillies and cotton. On the whole it is observed that about 53.50 percent of farmers have grown kharif paddy while maize, chillies, coffee, and black pepper was raised by 25 percent of farms.

3.2 Percentage of area under different crops of sample farmers:

Table 3.2 depicts the area under different crops of the sample farmers. On an average per household area varied from 0.58 acres in case of ragi to 4.60 acres in case of cotton. Across the groups, the per household area of kharif paddy varied from 1.05 acres in case of marginal farmers to 25.00 acres in case of very large farmers. On the other hand the per household area of rabi paddy varied from 1.17 acres in case of marginal farmers to 25.00 acres in case of very large farmers. Moreover, none of very large farmers have reported to have grown maize crop. The per household area of maize varied between 1.38 in case of marginal farmers to 9.25 acres in case of large farmers, the per household area of chillies reported as 1.73 acres in case of marginal farmers to 25.00 acres in case of vary large farmers. None of the large and very large farmers have reported to have ragi and sugarcane crops. Among all groups, only small and large farmers reported to have grown turmeric crop.

Table 3.1: Cropping pattern across the landholding categories

(Number of Households)

S.No	landholding categories	Number of households growing different crops										Number
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper)	Crop 8 (Ragi)	Crop 9 (sugar cane)	Crop 10 (turmeric)	
1	marginal	32	21	28	11	15	0	15	6	1	0	75
2	small	57	22	13	21	29	4	29	7	1	15	85
3	medium	13	4	7	7	6	5	6	6	3	0	24
4	large	4	2	2	10	0	9	0	0	0	1	14
5	very large	1	1	0	1	0	0	0	0	0	0	2
	total	107 (53.50)	50 (25.00)	50 (25.00)	50 (25.00)	50 (25.00)	18 (9.00)	50 (25.00)	19 (9.50)	5 (2.50)	16 (8.00)	200 (100.00)

Source: Field Survey

Table 3.2: Area under different crops across the landholding categories

(Per holding area in acres)

S.No	landholding categories	area under the crops										GCA
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper) Intra crop	Crop 8 (Ragi)	Crop 9 (sugar cane)	Crop 10 (turmeric)	
1	marginal	1.05	1.17	1.38	1.73	1.08	0.00	0.00	0.45	0.50	0.00	1.80
2	small	1.92	3.02	2.73	3.04	2.16	1.83	0.00	0.41	1.00	0.81	4.25
3	medium	2.96	5.38	4.46	4.36	4.33	3.00	0.00	0.92	2.33	0.00	7.30
4	large	8.13	14.00	9.25	6.60	0.00	6.72	0.00	0.00	0.00	1.00	14.75
5	very large	25.00	25.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	37.50
	total	2.24	3.31	2.48	4.09	2.10	4.60	0.00	0.58	1.70	0.82	4.77

Source: Field Survey

Note: Black pepper is intra crop in coffee cultivation

3.3 Yield of different crops among the farmer size groups:

Table 3.3 depicts the productivities of various selected crops of the sample farmers. On an average the per acre yields varied from 0.26 Quintals (Qtls) in case of black pepper to 33.14 Quintals in case of rabi paddy. Across the groups, the per acre yield kharif paddy varied from 19.49 Qtls in case of medium farmers to 26.25 Qtls in case of very large farmer category. On the other hand the per acre yield of rabi paddy varied from 31.06 Qtls in case of small farmers to 36 Qtls in case of very large farmers. Moreover, none of very large farmers have reported to have grown maize crop. The per acre yield of maize varied between 27.19 qtls in case of large farmers to 33.92 qtls in case of small farmers, the per acre yield of chillies reported as 18.00 qtls in case of very large farmers to 22.93 qtls in case of small farmers. None of the large and very large farmers have reported to have grown black pepper, ragi and sugarcane crops. Among all groups, only small and large farmers reported to have grown turmeric crop.

3.4 Average Value of Crops Produced:

Table 3.4 gives information on average value of production of all sample crops of the farm households. On an average the highest value per qtls of black pepper is reported to be Rs.17,633/- . This was followed by coffee crop reporting Rs.11,617/- per qtl. The per qtls value of chillies is reported to be Rs. 10,412/- per qtls. The value of cotton and ragi crops are reported to be Rs. 4,393/- and Rs.2,483/- per qtls respectively. No farmers from very large size land holding category is reported to have grown coffee, cotton, black pepper, ragi, sugarcane and turmeric.

3.5 Total sale value of crops produced:

The study estimated per acre sale value of crops produced of the sample HH's. On an average the per acre sale value of crop produce varied from Rs. 4,585/- in case of black pepper to Rs.2,23,337/- in case of chillies crop. Across the groups it can be observed that marginal farmers have received the higher sale value in case of chillies and maize crops compared to other size land holding groups. All the details can be observed from table 3.5.

Table 3.3: Yield of different crops across the landholding categories

(Qtl per acre)

S.No	landholding categories	yield (Qtl per acre)									
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper)	Crop 8 (Ragi)	Crop 9 * (sugar cane) (tonnes) *	Crop 10 (turmeric)
1	marginal	23.06	32.2	31.34	22.16	2.55	0	0.41	5.85	25	0
2	small	20.51	31.06	33.92	22.93	2.53	9.86	0.24	4.97	42	7.39
3	medium	19.49	33.87	28.37	22.52	2.7	10	0.22	5.02	41.29	0
4	large	25.45	35.79	27.19	20.64	0	9.52	0	0	0	15
5	very large	26.25	36	0	18	0	0	0	0	0	0
	total	21.97	33.14	30.71	21.45	2.58	9.64	0.26	5.21	36.1	7.97

Source: Field Survey

Table 3.4: Average value of crops produced

(Rs/quintal)

S.No	landholding categories	Average value of crops produced (Rs)									
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper)	Crop 8 (Ragi)	Crop 9 (sugar cane)* tonne price	Crop 10 (turmeric)
1	marginal	1599	1711	17773	10636	12000	0	17500	2500	2500	0
2	small	1407	1715	1800	10267	11500	4400	18000	2450	2700	7500
3	medium	1454	1867	1814	10357	11350	4100	17400	2500	2567	0
4	large	1529	1733	1750	9500	0	4678	0	0	0	6200
5	very large	1567	1860	0	10500	0	0	0	0	0	0
	total	1511	1779	1784	10412	11617	4393	17633	2483	2672	7000

Source: Field Survey

Table 3.5: Total sale value of crops produced (in Rs)

(Per Acre)

S.No	landholding categories	Total sale value of crops produced (in Rs)									
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper)	Crop 8 (Ragi)	Crop 9 (sugar cane)	Crop 10 (turmeric)
1	marginal	36873	55094	557006	235694	30600	0	7175	14625	62500	0
2	small	28858	53268	61056	235422	29095	43384	4320	12177	113400	55425
3	medium	28338	63235	51463	233240	30645	41000	3828	12550	105991	0
4	large	38913	62024	47583	196080	0	44535	0	0	0	93000
5	very large	41134	66960	0	189000	0	0	0	0	0	0
	total	33197	58956	54787	223337	29972	42349	4585	12936	96459	55790

Source: Field Survey

3.6 Agency through which sold:

Table 3.6. presents the details on agency through which the kharif & rabi paddy crop sold it can be observed that all the reported marginal, large and very large farmers reported to have sold their kharif paddy crop through local private agency. 86.21 percent of small farmers and 85.71 percent medium farmers sold their crops through local private agency. Moreover 3.45 percent of small farmers sold their kharif paddy crop through input dealers. On the other hand 14.29 percent of medium and 10.34 percent of small farmers sold through processers. All the 50 farmers growing rabi paddy reported to have sold through local private agency.

Table 3.6. Agency through which reported Paddy crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative&govt agency	processors	total
		Paddy Kharif					
1	marginal	26 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	26 (38.80)
2	small	25 (86.21)	0 (0.00)	1 (3.45	0 (0.00)	3 (10.34)	29 (43.29)
3	medium	6 (85.71)	0 (0.00)	0 (0.00)	0 (0.00)	1 (14.29)	7 (10.45)
4	large	4 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	4 (5.97)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (1.49)
	total	62 (92.54)	0 (0.00)	1 (1.49)	0 (0.00)	4 (5.97)	67 (100.00)
		Paddy Rabi					
1	marginal	21 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	21 (42.00)
2	small	22 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	22 (44.00)
3	medium	4 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	4 (8.00)
4	large	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (4.00)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (2.00)
	total	50 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the farmers reported maize crop under marginal, medium and large size land holding category reported to have sold their produce local private agency. Only 23.08 percent of small farmers reported through to have input dealers. On an average, among 50 farmers, 94.00 percent of farmers reported to have sold through local private agency. The details are given table 3.6.1.

Table3.6.1: Agency through which reported Maize crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative&govt. agency	processors	total
		Maize					
1	marginal	28 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	28 (56.00)
2	small	10 (76.92)	0 (0.00)	3 (23.08)	0 (0.00)	0 (0.00)	13 (26.00)
3	medium	7 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	7 (14.00)
4	large	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (4.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	47 (94.00)	0 (0.00)	3 (6.00)	0 (0.00)	0 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Among the 50 reported farmers grown chillies crop 86.00 percent of farmers have sold their produce through local private agency and 14.00 percent of farmers through mandi. Across the groups all the reported farmers from marginal and very large category reported to have sold through local private agency. The percentage of farmers who sold through mandi varied from 9.52 percent small farmers' category to 40.00 percent of farmers in case of large farmer category. No farmers from any size group of land reported to have sold through input dealer, co-operative&govt. Agency and processors. The details are given table 3.6.2.

Table3.6.2: Agency through which reported Chillies crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative&govt agency	processors	total
		Chillies					
1	marginal	11 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	11 (22.00)
2	small	19 (90.48)	2 (9.52)	0 (0.00)	0 (0.00)	0 (0.00)	21 (42.00)
3	medium	6 (85.71)	1 (14.29)	0 (0.00)	0 (0.00)	0 (0.00)	7 (14.00)
4	large	6 (60.00)	4 (40.00)	0 (0.00)	0 (0.00)	0 (0.00)	10 (20.00)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (2.00)
	total	43 (86.00)	7 (14.00)	0 (0.00)	0 (0.00)	0 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Table 3.6.3 Among the 50 farmers reported to have grown coffee crop 78.00 percent of farmers sold their produce through processors. 20.00 percent of farmers through co-operative/govt agency and negligible 2.00 percent of farmers sold through input dealers. Across the groups 89.16 percent of small farmers 66.67 percent medium farmers and 60 percent marginal farmers reported to have sold their crop produce through processors.

Table 3.6.3: Agency through which reported Coffee crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative&govt agency	processors	total
		Coffee					
1	marginal	0 (0.00)	0 (0.00)	1 (6.67)	5 (33.33)	9 (60.00)	15 (30.00)
2	small	0 (0.00)	0 (0.00)	0 (0.00)	3 (10.34)	26 (89.66)	29 (58.00)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	2 (33.33)	4 (66.67)	6 (12.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	1 (2.00)	10 (20.00)	39 (78.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Among the 18.00 farmers reported to have grown cotton crop, 61.10 percent of farmers sold their produce through local private agency. 27.78 percent of farmers through co-operative/govt agency and negligible 5.58 percent farmers sold through mandi. Across the groups the percentage of farmers sold through local private agency varied from 50.00 percent from in case of small to 66.67 percent of farmers in case of large land holding category. On the other hand only medium and large land holding category farmers sold through Co-operative/govt agency. The following details are presented in the table 3.6.4.

Table 3.6.4: Agency through which reported Cotton crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative& govt agency	processors	total
		Cotton					
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	2 (50.00)	1 (25.00)	1 (25.00)	0 (0.00)	0 (0.00)	4 (22.22)
3	medium	3 (60.00)	0 (0.00)	0 (0.00)	2 (40.00)	0 (0.00)	5 (27.28)
4	large	6 (66.67)	0 (0.00)	0 (0.00)	3 (33.33)	0 (0.00)	9 (50.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	11 (61.10)	1 (5.56)	1 (5.56)	5 (27.78)	0 (0.00)	18 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 50 reported farmers raised black pepper crops, reported to have sold 76.00 percent of farmers sold through processors. On the other hand 22.00 percent of farmers through co-operative/govt agency. Across the groups the percentage of farmers sold through processors ranged between 53.33 percent in case of marginal farmers 89.67 percent in case of small farmers. Moreover the percentage of farmers varied from 10.34 percent of small farmers to 40.00 percent of farmers in case of medium farmers. No farmers from large and very large category reported to have grown black pepper crop. The following details are presented in the table 3.6.5.

Table 3.6.5: Agency through which reported Black Pepper crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative& govt agency	processors	total
		Black Pepper					
1	marginal	0 (0.00)	0 (0.00)	1 (6.67)	6 (40.00)	8 (53.33)	15 (30.00)
2	small	0 (0.00)	0 (0.00)	0 (0.00)	3 (10.34)	26 (89.65)	29 (58.00)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	2 (33.33)	4 (66.67)	6 (12.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	1 (2.00)	11 (22.00)	38 (76.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total farmers raised ragi crop are reported to have sold through local private agency. All the 6 farmers are from medium land holding category. The following details are presented in the table 3.6.6.

Table 3.6.6: Agency through which reported Ragi crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative& govt agency	processors	total
		Ragi crop					
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
3	medium	6 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (100.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	6 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total 5 reported farmers grown sugarcane crop 80.00 percent of farmers reported to have sold their produce through local private agency and 20.00 percent of farmers through processors. Across the groups all the reported farmers only small and medium category reported to have sold through local private agency. The percentage of farmers who sold through processors only 1 (100 per cent) reported from marginal category. No farmers from any size group of land reported to have sold through input dealer, co-operative& govt. Agency and mandi. The details are given table 3.6.7

Table 3.6.7: Agency through which reported Sugarcane crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative& govt agency	processors	total
		Sugarcane crop					
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.00)	1 (20.00)
2	small	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (40.00)
3	medium	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (40.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	4 (80.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (20.00)	5 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total 16 farmers raised turmeric crop are reported to have sold through local private agency. Out of the total farmers, 15 farmers are from small land holding category and 1 from large land holding category. The following details are presented in the table 3.6.8.

Table 3.6.8: Agency through which reported Turmeric crop sold in first/second/third major disposal

(Number and % of households)

S.No	landholding categories	local pvt	mandi	input dealers	Co-operative& govt agency	processors	total
		Turmeric crop					
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	15 (93.75)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	15 (93.75)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	1 (6.25)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (6.25)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	16 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	16 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.7 Reasons for dissatisfaction regarding Major disposal of Reported Crops:

The reasons for dissatisfaction with regard to major disposal of reported crops are presented in the Table 3.7. Out of 67 farmers reported kharif paddy 40.30 percent of farmers reported the reason for lower price than the market price and 35.82 percent of farmers reported the reason for deduction of loan borrowed. Moreover 14.93 percent of farmers reported the faulty weighing& grading and 8.95 percent of farmers reported the reason for delayed payments. Across the groups out of total 67 farmers 43.28 percent are small farmers 38.80 percent are marginal farmers 10.45 percent of medium farmers, 5.97 percent of large farmers and 1.50 percent of very large farmers reported Paddy crop in kharif. Across the groups the percentage of farmers reported the reasons for lower price than market price varied from 27.59 percent in case of small farmers to 75.00 percent of in case of large farmers. On the other hand the percentages of farmers reported the reason for deduction for loans borrowed ranged between 25.00 percent in case of large farmers and 37.53 percent in case of small farmers.

Table 3.7

Reasons for dissatisfaction regarding first/second/third major disposal of Paddy crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
		Paddy Kharif				
1	marginal	14 (53.85)	1 (3.85)	9 (34.62)	2 (7.69)	29 (38.81)
2	small	8 (27.59)	3 (10.34)	11 (37.93)	7 (24.14)	29 (43.28)
3	medium	2 (28.57)	2 (28.57)	2 (28.57)	1 (14.29)	7 (10.45)
4	large	3 (75.00)	0 (0.00)	1 (25.00)	0 (0.00)	4 (5.97)
5	very large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (1.49)
	total	27 (40.30)	6 (8.96)	24 (35.82)	10 (14.93)	67 (100.00)
		Paddy Rabi				
1	marginal	10 (47.62)	0 (0.00)	9 (42.86)	2 (9.52)	21 (42.00)
2	small	4 (18.18)	0 (0.00)	11 (5.00)	7 (31.82)	22 (44.00)
3	medium	2 (50.00)	0 (0.00)	1 (25.00)	1 (25.00)	4 (8.00)
4	large	1 (50.00)	0 (0.00)	1 (50.00)	0 (0.00)	2 (4.00)
5	very large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (2.00)
	total	17 (34.00)	0 (0.00)	23 (46.00)	10 (20.00)	50 (5.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 50 farmers reported rabi paddy crop 44.0 percent are from small farmers, 42.00 percent are marginal farmers, 8.00 percent are medium farmers, 4.00 percent are large farmers and 2.00 percent are from very large farmers. Across the groups the percentage of farmers reported lower price than the market price varied from 18.81 percent in case of small farmers to 50.00 percent in case of medium and large farmers respectively. On the other hand, the percentage of farmers reported deduction from the loan borrowed ranged between 42.86 percent in case of marginal farmers and 100 percent in case of large farmers.

Out of 50 reported farmers reported maize 56.00 percent of farmers reported the reason for lower price than the market price and 32.00 percent of farmers reported the reason for deduction from the loan borrowed. Moreover 8.00 percent of farmers reported the reason for delayed payments and 4.00 percent of farmers reported for the faulty weighing& grading. Across the groups out of total 50 farmers 56.00 percent are from marginal farmers 26.00 percent are small farmers, 14.00 percent from medium farmers and 2.00 percent from large farmers reported maize crop. Across the groups, the percentage of farmers reported the reasons for lower price than the market price varied from 53.57 percent in case of marginal farmers to 69.23 percent in case of small farmers. On the other hand the percentage of farmers reported the reason for deduction from the loans borrowed ranged between 23.08 percent in case of small farmers and 42.86 percent in case of medium farmers. Details are presented in the table 3.7.1

Table 3.7.1: Reasons for dissatisfaction regarding first/second/third major disposal of Maize crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	15 (53.57)	1 (3.57)	10 (35.71)	2 (7.14)	28 (56.00)
2	small	9 (69.23)	1 (7.69)	3 (23.08)	0 (0.00)	13 (26.00)
3	medium	4 (57.14)	0 (0.00)	3 (42.86)	0 (0.00)	7 (14.00)
4	large	0 (0.00)	2 (100.00)	0 (0.00)	0 (0.00)	2 (4.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	28 (56.00)	4 (8.00)	16 (32.00)	2 (4.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 50 reported farmers chillies of crop, 42.00 percent are from small farmers, 22.00 percent from marginal farmers 20.00 percent from large farmers, 14.00 percent from medium farmers and 2.00 percent merely from very large farmers. Across the groups the percentage of farmers reported price lower than market price varied from 36.36 percent in case of marginal farmers to 60.00 percent in case of large farmers respectively. On the other hand, the percentage of farmers the reported delayed payments ranged between 20.00 percent

in case of large farmers and 33.33 percent in case of small farmers. Moreover the percentage of farmers reported deduction from the loan borrowed ranged between 10.00 percent in case of large farmers and 100 percent in case of very large farmers. Details can be viewed from the table 3.7.2.

Table 3.7.2: Reasons for dissatisfaction regarding first/second/third major disposal of Chillies crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	4 (36.36)	0 (0.00)	5 (45.45)	2 (18.18)	11 (22.00)
2	small	8 (38.10)	7 (33.33)	3 (14.29)	3 (14.29)	21 (42.00)
3	medium	3 (42.86)	2 (28.57)	1 (14.29)	1 (14.29)	7 (14.00)
4	large	6 (60.00)	2 (20.00)	1 (10.00)	1 (10.00)	10 (20.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.00)	1 (2.00)
	total	21 (42.00)	11 (22.00)	10 (20.00)	8 (16.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 50 reported farmers of coffee crop, 58.00 percent are from small farmers, 30.00 percent from marginal farmers and 12.00 percent from medium farmers. Across the groups the percentage of farmers are reported delayed payments varied from 80.00 percent in case of marginal farmers to 100 percent in case of small and medium farmers respectively. Details are presented in the table 3.7.3

Table 3.7.3: Reasons for dissatisfaction regarding first/second/third major disposal of Coffee crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	3 (20.00)	12 (80.00)	0 (0.00)	0 (0.00)	15 (30.00)
2	small	0 (0.00)	29 (100.00)	0 (0.00)	0 (0.00)	29 (58.00)
3	medium	0 (0.00)	6 (100.00)	0 (0.00)	0 (0.00)	6 (12.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	3 (6.00)	47 (94.00)	0 (0.00)	0 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 18 reported farmers of cotton 44.45 percent of farmers reported the reason for lower price than the market price and each 22.22 percent of farmers reported the reason for deduction of the loan borrowed and delayed payments. Moreover, 11.11 percent of farmers reported from faulty weighing& grading. Across the groups out of total 18 farmers 50.00 percent are large farmers 27.28 percent are medium farmers and 22.22 percent from small farmers. Across the groups, the percentage of farmers reported the reasons for lower price than the market price varied from 40.00 percent in case of medium farmers to 50.00 percent of in case of small farmers. Details are can be observed in the table 3.7.4.

Table 3.7.4: Reasons for dissatisfaction regarding first/second/third major disposal of Cotton crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	2 (50.00)	1 (25.00)	1 (25.00)	0 (0.00)	4 (22.22)
3	medium	2 (40.00)	2 (40.00)	1 (20.00)	0 (0.00)	5 (27.28)
4	large	4 (44.45)	1 (11.11)	2 (22.22)	2 (22.22)	9 (50.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	8 (44.45)	4 (22.22)	4 (22.22)	2 (11.11)	18 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 50 reported farmers of black pepper crop, 58.00 percent are from small farmers 30.00 percent from marginal farmers and 12.00 percent from medium farmers. Across the groups, the percentage of farmers are reported delayed payments varied from 66.67 percent in case of marginal farmers to 100 percent in case of small and medium farmers respectively. Details are can be viewed in the table 3.7.5

Table 3.7.5: Reasons for dissatisfaction regarding first/second/third major disposal of Black Pepper crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	5 (33.33)	10 (66.67)	0 (0.00)	0 (0.00)	15 (30.00)
2	small	0 (0.00)	29 (100.00)	0 (0.00)	0 (0.00)	29 (58.00)
3	medium	0 (0.00)	6 (100.00)	0 (0.00)	0 (0.00)	6 (12.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	5 (10.00)	45 (90.00)	0 (0.00)	0 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 6 reported farmers of ragi crop, each 50.00 percent of farmers are reported the reason for deduction of lower price than the market price. 100 percent are from medium farmer category only. Details are can be seen in the table 3.7.6

Table 3.7.6: Reasons for dissatisfaction regarding first/second/third major disposal of Ragi crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
3	medium	2 (50.00)	4 (50.00)	0 (0.00)	0 (0.00)	6 (100.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	2 (50.00)	4 (50.00)	0 (0.00)	0 (0.00)	6 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 5 reported farmers of sugarcane crop, 60.00 percent are from medium farmers and each 20.00 percent are from marginal and small farmers who reported the reasons for dissatisfaction with regard to major disposal of sugarcane crop. Across the groups the percentage of farmers reported 100 percent deduction of the loan borrowed in all cases of marginal, small and medium farmers respectively. Details are can be observed in the table 3.7.7.

Table 3.7.7: Reasons for dissatisfaction regarding first/second/third major disposal of Sugarcane crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	0 (0.00)	0 (0.00)	1 100.00)	0 (0.00)	1 (20.00)
2	small	0 (0.00)	0 (0.00)	1 100.00)	0 (0.00)	1 (20.00)
3	medium	0 (0.00)	0 (0.00)	3 100.00)	0 (0.00)	3 (60.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	5 (100.00)	0 (0.00)	5 100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of 16 reported farmers of turmeric crop, 93.75 percent are from small farmers and 6.25 percent are from large farmers who reported the reasons for dissatisfaction with regard to major disposal of turmeric crop. Across the groups the percentage of farmers reported the delayed payments of 100 percent in case of small and large farmers respectively. Details can be seen in the table 3.7.8.

Table 3.7.8: Reasons for dissatisfaction regarding first/second/third major disposal of Turmeric crop

(Number and % of households)

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing & grading	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	15 (100.00)	0 (0.00)	0 (0.00)	15 (93.75)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	0 (0.00)	1 (100.00)	0 (0.00)	0 (0.00)	1 (6.25)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	16 (100.00)	0 (0.00)	0 (0.00)	16 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.8 Reasonability of Price received for the reported crops:

Table 3.8 explains the positive and negative opinion about the price received for the reported crops. Majority of farmers reported positive reasons in respect of each group. The percentage of farmers expressed negative reasons are comparatively lower than the percentage farmers reported positive opinion of each crop.

Table 3.8: Whether price received for the reported crops was reasonable

S.No	landholding categories	price received for the crops reasonable																			
		crop1 (Paddy) Kharif		Crop 2 (Paddy) Rabi		Crop3 (Maize)		Crop4 (Chillies)		Crop5 (Coffee)		Crop 6 (cotton)		Coop 7 (Black Pepper)		Crop 8 (Ragi)		Crop 9 (sugar cane)		Crop 10 (turmeric)	
		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
1	marginal	20	6	16	5	24	4	10	1	4	11	0	0	5	10	0	0	1	0	0	0
2	small	19	10	12	10	11	2	14	7	20	9	5	1	22	7	0	0	1	1	11	4
3	medium	5	2	4	0	6	1	5	2	6	0	2	3	6	0	6	0	1	1	0	0
4	large	4	0	2	0	2	0	8	2	0	0	6	1	0	0	0	0	0	0	0	1
5	very large	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	total	**49 (24.50)**	**18 (9.00)**	**35 (17.50)**	**15 (7.50)**	**43 (21.50)**	**7 (3.50)**	**38 (19.00)**	**12 (6.00)**	**30 (15.00)**	**20 (10.00)**	**13 (6.50)**	**5 (2.50)**	**33 (16.50)**	**17 (8.50)**	**6 (3.00)**	**0 (0.00)**	**3 (1.50)**	**2 (1.00)**	**11 (5.50)**	**5 (2.50)**

Source: Field Survey

3.9 Reasons for unreasonable prices received for the reported crops:

All the reported farmers expressed two types of reasons for getting unreasonable price in respect of paddy crop. Out of 18 farmers reported kharif paddy crop 55.55 percent are from small farmers, 33.33 percent from marginal and 11.12 percent from medium farmers. Across the groups, the percentage of farmers reported the reason for collusion of private buyers varied from 50.00 percent in case of medium farmers to 66.67 percent in case of marginal farmers. On the other hand, the percentage of farmers reported the reason for no minimum fixed price ranged between 33.33 percent in case of marginal and 50.00 percent in case of medium farmers. More over, out of 15 total farmers of paddy rabi crop 66.67 percent are from small farmers, 33.33 percent from marginal farmers. The reasons for getting unreasonable price for paddy crop during rabi season are collusion of private buyers while 40.00 percent of small farmers reported the reason for no minimum support fixed price. The details observed in the table 3.9.

Table 3.9.

Table3. 9: Reasons for unreasonable prices received for the Paddy Crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
		Paddy Kharif				
1	marginal	0 (0.00)	0 (0.00)	4 (66.67)	2 (33.33)	2 (33.33)
2	small	0 (0.00)	0 (0.00)	6 (60.00)	4 (40.00)	4 (55.56)
3	medium	0 (0.00)	0 (0.00)	1 (50.00)	1 (50.00)	1 (11.11)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	11 (61.11)	7 (38.89)	7 (100.00)
		Paddy Rabi				
1	marginal	0 (0.00)	0 (0.00)	4 (80.00)	1 (20.00)	5 (33.33)
2	small	0 (0.00)	0 (0.00)	6 (60.00)	4 (40.00)	10 (66.67)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.50)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	10 (66.67)	5 (33.33)	15 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the reported farmers expressed two types of reasons for getting unreasonable price in respect of maize crop. Out of the7 farmers reported maize crop 57.14 percent of marginal farmers, 28.57 percent of small and 14.29 percent of medium farmers. Across the groups, the percentage of farmers' reported of the reason for collusion of private buyers varied from 50.00 percent in case of small farmers to 75.00 percent of marginal farmers. On the other hand, the percentage of farmers reported the reason for no minimum fixed price ranged between 25.00 percent in case of marginal and100.00 percent in case of medium farmers. Details can be observed in the table 3.9.1.

Table3.9.1: Reasons for unreasonable prices received for the Maize crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	0 (0.00)	3 (75.00)	1 (25.00)	4 (57.14)
2	small	0 (0.00)	0 (0.00)	1 (50.00)	1 (50.00)	2 (28.57)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.00)	1 (14.29)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	4 (57.14)	3 (42.86)	7 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 12 farmers reported chillies crop 58.33 percent are from small farmers, each 16.67 percent of medium and large and 8.33 percent of marginal farmers. Across the groups, the percentage of farmers reported of no minimum fixed price ranged between 57.14 percent in case of small and each 100.00 percent in case of medium and large farmers. On the other hand, the percentage of farmers reported the reason for collusion of private buyers varied from 42.86 percent in case of small farmers to 100 percent of marginal farmers. Details can be viewed in the table 3.9.2.

Table 3.9.2: Reasons for unreasonable prices received for the Chillies Crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (8.33)
2	small	0 (0.00)	0 (0.00)	3 (42.86)	4 (57.14)	7 (58.33)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	2 (100.00)	2 (16.67)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	2 (100.00)	2 (16.67)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	4 (33.33)	8 (66.67)	12 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the reported farmers expressed two types of reasons for getting unreasonable price in respect of coffee crop. Out of the 19 reported farmers coffee crop 52.63 percent are from marginal farmers and 47.37 percent of small farmer category. Across the groups, the percentage of farmers reported of the reason for collusion of private buyers varied from 44.44 percent in case of small farmers to 50.00 percent of marginal farmers. On the other hand the percentage of farmers reported the reason for no government purchaser ranged between 50.00 percent in case of marginal and 55.56 percent in case of small farmers. Details can be seen in the table 3.9.3.

Table 3.9.3: Reasons for unreasonable prices received for the Coffee crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	5 (50.00)	5 (50.00)	0 (0.00)	10 (52.63)
2	small	0 (0.00)	5 (55.56)	4 (44.44)	0 (0.00)	9 (47.37)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	10 (52.63)	9 (47.37)	0 (0.00)	19 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 5 reported farmers cotton crop 60.00 percent are from medium farmers and each 20.00 percent of small and large farmers. Across the groups, the percentage of farmers reported for collusion of private buyers varied from 66.67 percent in case of medium farmers to 100 percent of small farmers. On the other hand, the percentage of farmers reported the reason for no minimum fixed price ranged between 33.33 percent in case of medium and 100.00 percent in case of large farmers. Details can be viewed in the table 3.9.4.

Table 3.9.4: Reasons for unreasonable prices received for the Cotton Crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (20.00)
3	medium	0 (0.00)	0 (0.00)	2 (66.67)	1 (33.33)	3 (60.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.00)	1 (20.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	3 (60.00)	2 (40.00)	5 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the reported farmers expressed two types of reasons for getting unreasonable price in respect of black pepper crop. Out of 16 farmers reported black pepper crop 56.25 percent are from marginal farmers and 43.75 percent of small farmer category. Across the groups the percentage of farmers reported of the reason for collusion of private buyers varied from 44.44 percent in case of marginal farmers to 57.14 percent of small farmers. On the other hand, the percentage of farmers reported the reason for no government purchaser ranged between 42.86 percent in case of small and 55.56 percent in case of marginal farmers. Details can be observed in the table 3.9.5.

Table3. 9.5: Reasons for unreasonable prices received for the Black Pepper crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	5 (55.56)	4 (44.44)	0 (0.00)	9 (56.25)
2	small	0 (0.00)	3 (42.86)	4 (57.14)	0 (0.00)	7 (43.75)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	8 (50.00)	8 (50.00)	0 (0.00)	16 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 3 reported farmers chillies crop 66.67 percent are from small farmers and 33.33 percent of medium farmers. Across the groups, the percentage of farmers reported for no minimum fixed price ranged between 50.00 percent in case of small and 100.00 percent in case of medium farmers. Details can be seen in the table 3.9.6.

Table 3.9.6: Reasons for unreasonable prices received for the Sugarcane crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	0 (0.00)	1 (50.00)	1 (50.00)	2 (66.67)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	1 (100.00)	1 (33.33)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	1 (33.33)	2 (66.67)	3 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 8 reported farmers cotton crop 87.50 percent are from small farmers and 12.50 percent of large farmers. Across the groups, the percentage of farmers reported for collusion of private buyers varied from 57.14 percent in case of small farmers to 100 percent of large farmers. Details can be viewed in the table 3.9.4.

Table 3.9.7: Reasons for unreasonable prices received for the Turmeric Crop

(Number and % of households)

S.No	landholding categories	very few buyers	no government purchase	private buyers collude	no minimum fixed price	Total
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
2	small	0 (0.00)	0 (0.00)	4 (57.14)	3 (42.86)	7 (87.50)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (12.50)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	5 (62.50)	3 (37.50)	8 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.10 Procurement of inputs for crop production:

Out of the total no of 200 reported households, 42.50 percent of farmers are from small farmers category, 37.50 per cent of marginal, 12.00 per cent of medium farmers, 7.00 per cent of large farmers and a mere 1.00 from very large category reported to have purchased seed. Out of the 200 reported farmers, 80.50 percent of farmers reported the procurement of seed through seed seller. On the other hand, 19.50 percent of farmers procured of seed form own farm saved. The details are presented in table 3.10.

Table 3.10: Procurement of seed for crop production

(Number and % of Hhs)

S.No	landholding categories	farm saved	exchange	purchase	borrowed	Total
1	marginal	13 (17.33)	0 (0.00)	62 (82.67)	0 (0.00)	75 (37.50)
2	small	22 (25.88)	0 (0.00)	63 (74.12)	0 (0.00)	85 (42.50)
3	medium	4 (16.67)	0 (0.00)	20 (83.33)	0 (0.00)	24 (12.00)
4	large	0 (0.00)	0 (0.00)	14 (100.00)	0 (0.00)	14 (7.00)
5	very large	0 (0.00)	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.00)
	total	39 (19.50)	0 (0.00)	161 (80.50)	0 (0.00)	200 (100.00)

Source: Field Survey

Out of the total no of 191 reported households, 44.50 percent of farmers are from small farmers category, 35.08 per cent of marginal, 12.04 per cent of medium farmers, 7.33 per cent of large farmers and 1.05 of from very large category reported to have purchased fertilizers. Out of the 191 farmers reported, the total 100.00 percent of farmers reported, the procurement of fertilizers through fertilizer seller. The details are observed in table 3.10.1

Table 3.10.1: Procurement of fertilizer for crop production

(Number and % of Hhs)

S.No	landholding categories	farm saved	exchange	purchase	borrowed	Total
1	marginal	0 (0.00)	0 (0.00)	67 (100.00)	0 (0.00)	67 (35.08)
2	small	0 (0.00)	0 (0.00)	85 (100.00)	0 (0.00)	85 (44.50)
3	medium	0 (0.00)	0 (0.00)	23 (100.00)	0 (0.00)	23 (12.04)
4	large	0 (0.00)	0 (0.00)	14 (100.00)	0 (0.00)	14 (7.33)
5	very large	0 (0.00)	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.05)
	total	0 (0.00)	0 (0.00)	191 (100.00)	0 (0.00)	191 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 78 reported households, 52.56 percent of farmers are from small farmers category, 28.21 per cent of from marginal, 10.26 per cent of medium farmers, 7.69 per cent of large farmers and a mere 1.28 of farmers of very large category reported to have purchased of manure. Out of 78 farmers reported, 64.10 percent of farmers reported the

procurement of manure through own farm saved. On the other hand, 35.90 percent of farmers procured manure form local farmers. The details are presented in table 3.10.2.

Table 3.10.2: Procurement of Manure for crop production

(Number and % of Hhs)

S.No	landholding categories	farm saved	exchange	purchase	borrowed	Total
1	marginal	15 (68.18)	0 (0.00)	7 (31.82)	0 (0.00)	22 (28.21)
2	small	29 (70.73)	0 (0.00)	12 (29.27)	0 (0.00)	41 (52.56)
3	medium	6 (75.00)	0 (0.00)	2 (25.00)	0 (0.00)	8 (10.26)
4	large	0 (0.00)	0 (0.00)	6 (100.00)	0 (0.00)	6 (7.69)
5	very large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (1.28)
	total	50 (64.10)	0 (0.00)	28 (35.90)	0 (0.00)	78 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 150 reported households, 40.00 percent of farmers are from marginal farmers category, 37.33 per cent of from small, 12.00 per cent of medium farmers, 9.33 per cent of large farmers and a mere 1.33 of farmers of very large category farmers reported to have purchase of protection chemicals . Out of 150 farmers reported, 100.00 percent of farmers reported the procurement of protection chemicals through fertilizer seller. The details are observed in table 3.10.3

Table 3.10.3: Procurement of plant protection chemicals for crop production

(Number and % of Hhs)

S.No	landholding categories	farm saved	exchange	purchase	borrowed	Total
1	marginal	0 (0.00)	0 (0.00)	60 (100.00)	0 (0.00)	60 (40.00)
2	small	0 (0.00)	0 (0.00)	56 (100.00)	0 (0.00)	56 (37.33)
3	medium	0 (0.00)	0 (0.00)	18 (100.00)	0 (0.00)	18 (12.00)
4	large	0 (0.00)	0 (0.00)	14 (100.00)	0 (0.00)	14 (9.33)
5	very large	0 (0.00)	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.33)
	total	0 (0.00)	0 (0.00)	150 (100.00)	0 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.11. Agency through which inputs procured:

All the reported farmers seed procured from four types of agencies. Out of the 200 farmers reported, 42.50 percent are from small farmers 37.50 percent of marginal, 12.00 percent of medium, 7.00 percent of large and a bare1.00 percent of very large farmers. Across the groups, the percentage of farmers reported to have procured seed through local traders varied from 25.00 percent in case of medium farmers to 50.00 percent in case of vary large farmers. On the other hand, the percentage of farmers procured seed through input dealer ranged between 26.67 percent in case of marginal and 71.43 percent in case of large farmers. Moreover, the percentage of farmers reported the seed procured through cooperative & govt. agencies ranged between 15.29 percent in case of small and 33.33 percent in case of medium farmers. Details can be observed in the table 3.11.

Table 3.11: Agency through seed procured

(Number and % of Hhs)

S.No	landholding categories	own farm	local trader	input dealer	cooperative &govt.agency	Total
1	marginal	13 (17.33)	26 (34.67)	20 (26.67)	16 (21.33)	75 (37.50)
2	small	0 (0.00)	41 (48.24)	31 (36.47)	13 (15.29)	85 (42.50)
3	medium	2 (8.33)	6 (25.00)	8 (33.33)	8 (33.33)	24 (12.00)
4	large	0 (0.00)	4 (28.57)	10 (71.43)	0 (0.00)	14 (7.00)
5	very large	0 (0.00)	1 (50.00)	1 (50.00)	0 (0.00)	2 (1.00)
	total	15 (7.50)	78 (39.00)	70 (35.00)	37 (18.50)	200 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the reported farmers procured fertilizers from three types of agencies. Out of the 191 farmers reported, 44.50 percent are from small farmers 35.08 percent of marginal, 12.04 percent of medium, 7.33 percent of large and a bare 1.05 percent of very large farmers. Across the groups, the percentage of farmers reported that the fertilizers are procured through input dealers trader varied from 29.85 percent in case of marginal farmers to 100.00 percent of very large farmers. On the other hand, the percentage of farmers reported to have procured the fertilizers through local traders ranged between 7.14 percent in case of large and 48.24 percent in case of small farmers. Moreover, the percentage of farmers procured the fertilizers

through cooperative & govt.agencies ranged between 14.29 percent in case of large and 41.79 percent in case of marginal farmers. Details are presented in the table 3.11.1.

Table 3.11.1: Agency through Fertilizers procured

(Number and % of Hhs)

S.No	landholding categories	own farm	local trader	input dealer	cooperative &govt.agency	Total
1	marginal	0 (0.00)	19 (28.36)	20 (29.85)	28 (41.79)	67 (35.08)
2	small	0 (0.00)	41 (48.24)	31 (36.47)	13 (15.29)	85 (44.50)
3	medium	0 (0.00)	9 (39.13)	7 (30.43)	7 (30.43)	23 (12.04)
4	large	0 (0.00)	1 (7.14)	11 (78.57)	2 (14.29)	14 (7.33)
5	very large	0 (0.00)	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.05)
	total	0 (0.00)	70 (36.65)	71 (37.17)	50 (26.18)	191 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 78 farmers reported, 52.56 percent are from small farmers, 28.21 percent of marginal, 10.26 percent of medium, 7.69 percent of large and a mere1.28 percent of very large farmers. Across the groups, the percentages of farmers reported to have procured the manure from own farm varied from 68.18 percent in case of marginal farmers to 75.00 percent of medium farmers. On the other hand, the percentage of farmers who procured the manure through local farmers ranged between 0.50 percent in case of very large and 31.82 percent in case of marginal farmers. Details can be viewed in the table 3.11.2.

Table 3.11.2: Agency through manure procured

(Number and % of Hhs)

S.No	landholding categories	own farm	local trader	input dealer	cooperative &govt.agency	Others (Fellow Farmers)	Total
1	marginal	15 (68.18)	0 (0.00)	0 (0.00)	0 (0.00)	7 (31.82)	22 (28.21)
2	small	29 (70.73)	0 (0.00)	0 (0.00)	0 (0.00)	12 (29.27)	41 (52.56)
3	medium	6 (75.00)	0 (0.00)	0 (0.00)	0 (0.00)	2 (25.00)	8 (10.26)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (3.00)	6 (7.69)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (0.50)	1 (1.28)
	total	50 (64.10)	0 (0.00)	0 (0.00)	0 (0.00)	28 (35.90)	78 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 150 farmers reported, 40.00 percent are from marginal farmers, 37.33 percent of small, 12.00 percent of medium, 9.33 percent of large and a mere 1.33 percent of very large farmers. Across the groups, the percentage of farmers reported to have procured the plant protection chemicals from local traders varied from 35.71 percent in case of marginal farmers to 66.67 percent of marginal farmers. On the other hand, the percentage of farmers reported to have procured the plant protection chemicals through input dealers ranged between 33.33 percent in case of marginal and 64.29 percent in case of large farmers. Details can be seen in the table 3.11.3.

Table 3.11.3: Agency through plant protection chemicals procured

(Number and % of Hhs)

S.No	landholding categories	own farm	local trader	input dealer	cooperative &govt.agency	Total
1	marginal	0 (0.00)	40 (66.67)	20 (33.33)	0 (0.00)	60 (40.00)
2	small	0 (0.00)	25 (44.64)	31 (55.36)	0 (0.00)	56 (37.33)
3	medium	0 (0.00)	10 (55.56)	8 (44.44)	0 (0.00)	18 (12.00)
4	large	0 (0.00)	5 (35.71)	9 (64.29)	0 (0.00)	14 (9.33)
5	very large	0 (0.00)	1 (50.00)	1 (50.00)	0 (0.00)	2 (1.33)
	total	0 (0.00)	81 (54.00)	69 (46.00)	0 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.12. Expenses Incurred for the Purchase of Inputs:

It can be seen from table 3.12, an attempt has been made to compensate the expenses incurred on the purchase of inputs across households and also estimates have been made in Rupee terms per acre. Inputs on which calculations have been made include seed, fertilizers, manures, plant protection chemicals, human labour, irrigation, repairing of machines and lease rent for land. On an average, per acre expenditure incurred for the purchase of inputs by the sample farmers for the purchase of inputs is reported to be Rs.44,922/-. Across the groups, the per acre expenditure incurred for the purchase of inputs varied from Rs.38,085/- in case of marginal farmers to Rs.53,504/- in case of very large farmers. Glancing over the average per acre expenditure incurred on the purchase of inputs, about 23.60 per cent for human labour followed by 21.82 per cent for fertilizers, 17.09 per cent for plant protection

chemicals, 14.33 per cent for hiring machinery, 14.25 per cent for lease rent land and 4.53 per cent for seeds respectively. Across the groups the per acre expenditure on seeds varied from Rs.1,716/- in case of small farmers to Rs.2,481/- in case of large farmers, while in case of fertilizers ranged between Rs.8,551/- in case of small farmer and Rs.12,133/- in case of very large farmers. With regards to expenditure on manure varied from Rs. 243/- in case of medium to Rs.1813/- in case of very large. Expenditure on plant protection chemicals ranged between Rs.5350/- in case of marginal farmer and Rs.11,568/- in case of large farmer category. On the other hand, the expenditure on human labour ranged between Rs.8496/- in case of marginal and Rs.11,879/- in case of large farmers. Moreover, the expenditure on hiring machinery varied from Rs.5796/- in case of small farmers to Rs.9867/- in case of very large and lease rent land ranged between Rs.5161/- in case of marginal and Rs.9748/- in case of large farmers category respectively.

Table 3.12: Expenses incurred for the purchase of inputs (in Rs/acre)

S.No	landholding categories	seeds	fertilizers	manures	plant protection chemicals	diesel	Electricity	Human Labour	animal labour	irrigation	repair of mach.	Cost of hiring of machinery	lease rent for land	Total
1	marginal	1752	8979	707	5350	629	106	8496	104	337	0	6463	5161	38085
2	small	1716	8551	453	6404	748	25	9265	146	326	17	5796	5746	39192
3	medium	1926	9172	243	7412	846	19	10570	41	550	0	5535	4692	41004
4	large	2481	10169	755	11568	993	5	11879	0	579	53	7061	9748	55291
5	very large	2150	12133	1813	7900	1667	3	10972	0	333	0	9867	6667	53504
	total	1959 (4.36)	9801 (21.82)	623 (1.39)	7676 (17.09)	875 (1.95)	29 (0.07)	10600 (23.60)	78 (0.17)	424 (0.94)	18 (0.04)	6437 (14.33)	6403 (14.25)	44922 (100.00)

Source: Field Survey

3.13 Quality of inputs:

All the reported farmers expressed two types of reasons for quality of seeds. Out of the 200 reported farmers with regard to quality seed, 42.50 percent are from small farmers, 37.50 percent of marginal farmers category, 12.00 percent of medium farmers, 7.00 percent of large farmers and a mere 1.00 percent of very large farmers. Across the groups, the percentage of farmers reported the reasons for quality of seeds is good varied from 50.00 percent in case of very large farmers to 74.12 percent of small farmers. On the other hand, the percentage of farmers reported the reasons for quality of seeds is satisfactory ranged between 25.88 percent in case of small and 50.00 percent in case of very large farmers. Details can be observed in the table 3.13.

Table 3.13: Quality of seeds

(Number and % of Hhs)

S.No	landholding categories	good	satisfactory	poor	don't know	Total
1	marginal	41 (54.67)	34 (45.33)	0 (0.00)	0 (0.00)	75 (37.50)
2	small	63 (74.12)	22 (25.88)	0 (0.00)	0 (0.00)	85 (42.50)
3	medium	15 (62.50)	9 (37.50)	0 (0.00)	0 (0.00)	24 (12.00)
4	large	8 (57.14)	6 (42.86)	0 (0.00)	0 (0.00)	14 (7.00)
5	very large	1 (50.00)	1 (50.00)	0 (0.00)	0 (0.00)	2 (1.00)
	total	128 (64.00)	72 (36.00)	0 (0.00)	0 (0.00)	200 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 191 farmers, 76.44 percent of farmers reported the quality of fertilizers is good and 23.56 percent of farmers expressed that the quality of fertilizers is satisfactory. Across the groups, the percentage of farmers reported the reasons for quality of fertilizers is good varied from 50.00 percent in case of very large farmers to 83.33 percent of marginal farmers. On the other hand, the percentage of farmers reported the reasons for quality of fertilizers is satisfactory ranged between 16.67 percent in case of marginal and 50.00 percent in case of very large farmers. Details can be viewed in the table 3.13.1.

Table 3.13.1: Quality of fertilizers

(Number and % of Hhs)

S.No	landholding categories	good	satisfactory	poor	don't know	Total
1	marginal	55 (83.33)	11 (16.67)	0 (0.00)	0 (0.00)	67 (35.08)
2	small	63 (74.12)	22 (25.88)	0 (0.00)	0 (0.00)	85 (44.50)
3	medium	18 (75.00)	6 (25.00)	0 (0.00)	0 (0.00)	23 (12.04)
4	large	9 (64.29)	5 (35.71)	0 (0.00)	0 (0.00)	14 (7.33)
5	very large	1 (50.00)	1 (50.00)	0 (0.00)	0 (0.00)	2 (1.05)
	total	146 (76.44)	45 (23.56)	0 (0.00)	0 (0.00)	191 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 78 farmers reported about the quality of manure, 52.56 percent are from small farmers, 28.21 percent of marginal farmers, 10.26 percent of medium farmers, 7.69 percent of large farmers and 1.28 percent of very large farmers expressed about the quality of manure. Out of the 78 farmers, 100 percent of farmers reported the quality of manures is good. Details can be seen in the table 3.13.2.

Table 3.13.2: Quality of Manure

(Number and % of Hhs)

S.No	landholding categories	good	satisfactory	poor	don't know	Total
1	marginal	22 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	22 (28.21)
2	small	41 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	41 (52.56)
3	medium	8 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	8 (10.26)
4	large	6 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	6 (7.69)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (1.28)
	total	78 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	78 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 150 farmers, 78.00 percent of farmers reported the quality of plant protection chemicals is satisfactory and 22.00 percent of farmers reported that the quality of plant protection chemicals is poor. Across the groups the percentage of farmers reported the reasons for quality of plant protection chemicals is satisfactory varied from 50.56 percent in

case of medium farmers to 100 percent of very large farmers. On the other hand the percentage of farmers reported the reasons for quality of plant protection chemicals is poor ranged between 13.33 percent in case of marginal and 44.44 percent in case of medium farmers. Details can be viewed in the table 3.13.3.

Table 3.13.3: Quality of plant protection chemicals

(Number and % of Hhs)

S.No	landholding categories	good	satisfactory	poor	don't know	Total
1	marginal	0 (0.00)	52 (86.67)	8 (13.33)	0 (0.00)	60 (40.00)
2	small	0 (0.00)	44 (78.57)	12 (21.43)	0 (0.00)	56 (37.33)
3	medium	0 (0.00)	10 (55.56)	8 (44.44)	0 (0.00)	18 (12.00)
4	large	0 (0.00)	9 (64.29)	5 (35.71)	0 (0.00)	14 (9.33)
5	very large	0 (0.00)	2 (100.00)	0 (0.00)	0 (0.00)	2 (1.33)
	total	0 (0.00)	117 (78.00)	33 (22.00)	0 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.14. Reasonability of Price paid for Reported inputs:

Out of the total no of 200 reported farmers, 42.50 percent are from small farmers, 37.50 percent of marginal, 12.00 percent of medium and 7.00 percent of large, only a negligible percent of farmers of very large categories reported whether the price paid for seeds is reasonable or not . Out of the 200 farmers, 70.50 percent of farmers reported that the price paid for the seeds is reasonable. 29.50 percent of farmers reported that the price paid for the seeds is high. The details can be viewed from the table 3.14.

Table 3.14: Whether price paid for the seeds are reasonable

(Number and % of Hhs)

S.No	landholding categories	reasonable	high	very high	Total
1	marginal	55 (73.33)	20 (26.67)	0 (0.00)	75 (37.50)
2	small	62 (72.94)	23 (27.06)	0 (0.00)	85 (42.50)
3	medium	17 (70.83)	7 (29.17)	0 (0.00)	24 (12.00)
4	large	6 (42.86)	8 (57.14)	0 (0.00)	14 (7.00)
5	very large	1 (50.00)	1 (50.00)	0 (0.00)	2 (1.00)
	total	141 (70.50)	59 (29.50)	0 (0.00)	200 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 191 reported farmers, 44.50 percent are from small farmers, 35.08 percent of marginal, 12.04 percent of medium and 7.33 percent of large, only a negligible percent of farmers from very large categories reported whether the price paid for fertilizers is reasonable or not . Out of the 191 farmers, 59.16 percent of farmers reported that the price paid for the fertilizer is reasonable. 40.84 percent of farmers reported that the price paid for the fertilizer is high. The details can be seen from the table 3.14.1.

Table 3.14.1: Whether price paid for the fertilizers are reasonable

(Number and % of Hhs)

S.No	landholding categories	reasonable	high	very high	Total
1	marginal	45 (68.18)	21 (31.82)	0 (0.00)	67 (35.08)
2	small	52 (61.18)	33 (38.82)	0 (0.00)	85 (44.50)
3	medium	14 (58.33)	10 (41.67)	0 (0.00)	23 (12.04)
4	large	2 (14.29)	12 (85.71)	0 (0.00)	14 (7.33)
5	very large	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.05)
	total	113 (59.16)	78 (40.84)	0 (0.00)	191 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the 78 farmers, 93.59 percent of farmers reported the price paid for the manure is reasonable. Only 6.41 percent of farmers reported that the price paid for the manure is high. Across the groups, the percentage of farmers report the price paid for the manure is reasonable varied from 92.68 percent in case of small farmers to each 100 percent of large and very large farmers. On the other hand, the percentage of farmers reported the price paid for the manure is high ranged between 4.55 percent in case of marginal and 12.50 percent in case of medium category. The details can be viewed from the table 3.14.2.

Table 3.14.2: Whether price paid for the manure are reasonable

(Number and % of Hhs)

S.No	landholding categories	reasonable	high	very high	Total
1	marginal	21 (95.45)	1 (4.55)	0 (0.00)	22 (28.21)
2	small	38 (92.68)	3 (7.32)	0 (0.00)	41 (52.56)
3	medium	7 (87.50)	1 (12.50)	0 (0.00)	8 (10.26)
4	large	6 (100.00)	0 (0.00)	0 (0.00)	6 (7.69)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	1 (1.28)
	total	73 (93.59)	5 (6.41)	0 (0.00)	78 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 150 reported farmers, 40.00 percent are from marginal farmers, 37.33 percent of small and 12.00 percent of medium and 9.33 percent of large, only a negligible percent of farmers are from very large farmers categories reported whether the price paid for plant protection chemicals is reasonable or not . Out of the 150 farmers, 53.33 percent of farmers reported the price paid for the plant protection chemicals is reasonable. On the other hand, 39.33 percent of farmers reported the price paid for the plant protection chemicals is high. Only 7.33 percent of farmers reported that the price paid for the plant protection chemicals is very high. The details can be observed from the table 3.14.3

Table 3.14.3: Whether price paid for the plant protection chemicals are reasonable

(Number and % of Hhs)

S.No	landholding categories	reasonable	high	very high	Total
1	marginal	43 (71.67)	17 (28.33)	0 (0.00)	60 (40.00)
2	small	21 (37.50)	26 (46.43)	9 (16.07)	56 (37.33)
3	medium	6 (33.33)	12 (66.67)	0 (0.00)	18 (12.00)
4	large	8 (57.14)	4 (28.57)	2 (14.29)	14 (9.33)
5	very large	2 (100.00)	0 (0.00)	0 (0.00)	2 (1.33)
	total	80 (53.33)	59 (39.33)	11 (7.33)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

3.15. Reasons for unreasonable prices paid for inputs:

Out of the total no of 59 reported farmers, 38.98 percent are from small farmers, 33.90 percent of marginal, 13.56 percent of large, 11.86 percent of medium and only 1.69 percent of very large group farmers expressed the reasons for unreasonable price paid for seeds. Among the total farmers, 42.37 percent of farmers reported that there are no government sellers for seeds, 38.98 percent of farmers reported that there are no subsidised seeds, 18.64 percent of farmers reported that there is no price control on seeds. The details can be observed from the table 3.15.

Table 3.15: Reasons for unreasonable prices paid for the seeds

(Number and % of Hhs)

S.NO	landholding categories	not subsidised	very few sellers	no govt. sellers	pvt. sellers collude	no price control	All of the above	Others	Total
1	marginal	6 (30.00)	0 (0.00)	5 (25.00)	0 (0.00)	9 (45.00)	0 (0.00)	0 (0.00)	20 (33.90)
2	small	9 (39.13)	0 (0.00)	12 (52.17)	0 (0.00)	2 (8.70)	0 (0.00)	0 (0.00)	23 (38.98)
3	medium	1 (14.29)	0 (0.00)	6 (85.71)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	7 (11.86)
4	large	6 (75.00)	0 (0.00)	2 (25.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	8 (13.56)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (1.69)
	total	23 (38.98)	0 (0.00)	25 (42.37)	0 (0.00)	11 (18.64)	0 (0.00)	0 (0.00)	59 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 79 reported farmers, 41.77 percent are from small farmers, 27.85 percent of marginal, 15.19 percent of large, 12.66 percent of medium and only 2.53 percent of very large farmers reported the reasons for unreasonable price paid for fertilizers. Among the total farmers, 39.24 percent of farmers reported that there is no price control on fertilizers, 29.11 percent of farmers reported that there are government sellers for fertilizers, 25.32 percent of farmers reported that there is no subsidised fertilizers and 6.33 percent of farmers reported that there are only few sellers who deals with fertilizers. The details can be viewed from the table 3.15.1.

Table 3.15.1: Reasons for unreasonable prices paid for the fertilizers

(Number and % of Hhs)

S.NO	landholding categories	not subsidised	very few sellers	no govt. sellers	pvt. sellers collude	no price control	All of the above	Others	Total
1	marginal	6 (27.77)	2 (9.09)	8 (36.36)	0 (0.00)	6 (27.27)	0 (0.00)	0 (0.00)	22 (27.85)
2	small	6 (18.18)	2 (6.06)	10 (30.30)	0 (0.00)	15 (45.45)	0 (0.00)	0 (0.00)	33 (41.77)
3	medium	6 (60.00)	1 (10.00)	2 (20.00)	0 (0.00)	1 (10.00)	0 (0.00)	0 (0.00)	10 (12.66)
4	large	2 (16.67)	0 (0.00)	2 (16.67)	0 (0.00)	8 (66.67)	0 (0.00)	0 (0.00)	12 (15.19)
5	very large	0 (0.00)	0 (0.00)	1 (50.00)	0 (0.00)	1 (50.00)	0 (0.00)	0 (0.00)	2 (2.53)
	total	20 (25.32)	5 (6.33)	23 (29.11)	0 (0.00)	31 (39.24)	0 (0.00)	0 (0.00)	79 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 5 reported farmers 60.00 percent are from small farmers and each 20.00 percent of marginal and medium reported the reasons for unreasonable price paid for manure. Moreover, no. of households from marginal, small and medium categories of farmers reported that there is no subsidized manure. The details are presented in table 3.15.2.

Table 3.15.2: Reasons for unreasonable prices paid for the manure

(Number and % of Hhs)

S.NO	landholding categories	not subsidised	very few sellers	no govt. sellers	pvt. sellers collude	no price control	All of the above	Others	Total
1	marginal	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (20.00)
2	small	3 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3 (60.00)
3	medium	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (20.00)
4	large	0 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
5	very large	0 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	5 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	5 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 70 reported farmers, 50.00 percent are from small farmers, 24.29 percent of marginal, 17.14 percent of medium and 8.57 percent of large reported the reasons for unreasonable price paid for plant protection chemicals. Among the total farmers, 60.00 percent of farmers reported that there are no government sellers who deals with plant

protection chemicals, 24.29 percent of farmers reported that there are no subsidised plant protection chemicals and 15.71 percent of farmers reported that there is no price control on plant protection chemicals. The details can be seen from the table 3.15.3.

Table 3.15.3: Reasons for unreasonable prices paid for the plant protection chemicals

(Number and % of Hhs)

S.NO	landholding categories	not subsidised	very few sellers	no govt. sellers	pvt. sellers collude	no price control	All of the above	Others	Total
1	marginal	7 (41.18)	0 (0.00)	10 (58.82)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	17 (24.29)
2	small	9 (25.71)	0 (0.00)	23 (65.71)	0 (0.00)	3 (8.57)	0 (0.00)	0 (0.00)	35 (50.00)
3	medium	1 (8.33)	0 (0.00)	6 (50.00)	0 (0.00)	5 (41.67)	0 (0.00)	0 (0.00)	12 (17.14)
4	large	0 (0.00)	0 (0.00)	3 (50.00)	0 (0.00)	3 (50.00)	0 (0.00)	0 (0.00)	6 (8.57)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	17 (24.29)	0 (0.00)	42 (60.00)	0 (0.00)	11 (15.71)	0 (0.00)	0 (0.00)	70 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

CHAPTER 4

ANIMAL PRODUCTS AND INPUT MARKETS

Introduction:

The chapter deals with animal products and input markets analysed in the selected villages.

4.1 Sale on various Products (eggs, milk and live animals) and the marketing channels.

The sample households usually sell their animal products to various agencies like directly sale to other households, local traders, commission agents, co-operative & govt. agencies and processors. However no sample farmer is reported to have sold their animal produce to commission agents and processors. Out of the total 51 reported households, 37.25 percent sample households are reported to have sold to local traders. About 31.37 percent of households sold their produce directly to other households and same percentage of households are reported to have sold to co-operative & govt. agencies. Across the groups, the direct sale to other households is reported by the medium, large and very large farmers' category. On the other hand, the sale through co-operative & govt. agencies ranged between 25.00 percent in case of small farmers to 47.06 percent in case of large farmers. The local trader occupies highest percentage of sale ranged between 12.50 percent in case of medium farmers to 50.00 percent in case of small farmers. All the above details are presented in Table 4.1.

Table 4.1: Agency through which the reported produce from animal husbandry was sold in first/second major disposal

(Number of households)

S.No	landholding categories	directly to other household	local trader	commission agent	Co-operative&govt agency	processor	Total no of reported farmers
1	marginal	3 (17.65)	6 (35.29)	0 (0.00)	8 (47.06)	0 (0.00)	17 (33.33)
2	small	5 (25.00)	10 (50.00)	0 (0.00)	5 (25.00)	0 (0.00)	20 (39.22)
3	medium	4 (50.00)	1 (12.50)	0 (0.00)	3 (37.50)	0 (0.00)	8 (15.69)
4	large	3 (60.00)	2 (40.00)	0 (0.00)	0 (0.00)	0 (0.00)	5 (9.80)
5	very large	1 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1 (1.96)
	total	16 (31.37)	19 (37.25)	0 (0.00)	16 (31.37)	0 (0.00)	51 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

On an average the per household total value of the animal produce is reported to be Rs.4084/-. Across the groups, the per household sale value of the produce varied from Rs.1500/- in case of very large farmers to Rs.6673/- in case of medium farmers. On the other hand, the per household sale value of milk ranged from Rs.1500/- to Rs.3652/-. Only medium farmers are reported households eggs the sale value of eggs is Rs.2000/- per household. Moreover the sale of live animals is reported by marginal, small and medium farmers only. The per household sale value of live animal is reported to be Rs.1021/- in case of medium farmers to Rs.1765/-in case of small farmers. No single farmer from large and very large size categories are reported to have sold live animals. All the above details can be observed from table 4.2.

Table 4.2: Produce wise total sale value (in Rs)

(Per Household)

S.No	landholding categories	milk	egg	live animals	wool	other produce	Total
1	marginal	1663	0.00	1105	0.00	0.00	2768
2	small	3091	0.00	1765	0.00	0.00	4855
3	medium	3652	2000	1021	0.00	0.00	6673
4	large	2390	0.00	0.00	0.00	0.00	2390
5	very large	1500	0.00	0.00	0.00	0.00	1500
	total	2558	240	1287	0.00	0.00	4084

Source: Field Data

4.2. Usefulness of these channels and reasons for dissatisfaction, if any

All the reported households expressed the same opinion of deductions for the loan borrowed is the major cause at the time of disposal of their produce from animal households. Observing across the groups, majority of the farmers are reported from the category of marginal land holdings. The details can be viewed form table 4.3.

Table 4.3: Reasons for dissatisfaction regarding first/second major disposal of reported produce from animal husbandry

S.No	landholding categories	lower than market price	delayed payments	deductions for loans borrowed	faulty weighing and grading	Total no of reported farmers
1	marginal	0 (0.00)	0 (0.00)	2 (100.00)	0 (0.00)	2 (50.00)
2	small	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (25.00)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
4	large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (25.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	4 (100.00)	0 (0.00)	4 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

4.3. Details of all the inputs used and their procurement channels (farm saved, purchased etc.,)

Out of the total no of 8 reported households, 62.50 percent of farmers are from small farmer's category who reported to have purchased animal seed. Moreover, similar no of households from marginal, medium and large category are reported to have purchased animal seeds. The details are presented in table 4.4.

Table 4.4. Procurement of animal seed related to animal husbandry

(Number of households)

S.No	landholding categories	Animal seed				Total no of reported farmers
		farm saved	exchanged	purchased	borrowed	
1	marginal	0 (0.00)	0 (0.00)	1.00 (100.00)	0 (0.00)	1.00 (12.50)
2	small	0 (0.00)	0 (0.00)	5.00 (100.00)	0 (0.00)	5.00 (62.50)
3	medium	0 (0.00)	0 (0.00)	1.00 (100.00)	0 (0.00)	1.00 (12.50)
4	large	0 (0.00)	0 (0.00)	1.00 (100.00)	0 (0.00)	1.00 (12.50)
5	very large	0 (0.00)	0 (0.00)	0.00 (0.00)	0 (0.00)	0.00 (0.00)
	total	0 (0.00)	0 (0.00)	8.00 (100.00)	0 (0.00)	8.00 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total 51 reported households, 82.35 percent of sample households are reported to have green fodder procured from farm saved and about 17.65 percent of households have purchased. Across the groups the percentages of farmers reported the procurement of green fodder through farm saved .All the above details are presented in Table 4.4.1.

Table 4.4.1: Procurement of Green Fodder related to animal husbandry

(Number of households)

S.No	landholding categories	Green Fodder				Total no of reported farmers
		farm saved	exchanged	purchased	borrowed	
1	marginal	12.00 (70.59)	0 (0.00)	5.00 (29.41)	0 (0.00)	17 (33.33)
2	small	17.00 (85.00)	0 (0.00)	3.00 (15.00)	0 (0.00)	20 (39.22)
3	medium	8.00 (100.00)	0 (0.00)	0.00 (0.00)	0 (0.00)	8 (15.69)
4	large	4.00 (80.00)	0 (0.00)	1.00 (20.00)	0 (0.00)	5 (9.80)
5	very large	1.00 (100.00)	0 (0.00)	0.00 (0.00)	0 (0.00)	1 (1.96)
	total	42.00 (82.35)	0 (0.00)	9.00 (17.65)	0 (0.00)	51 (100.00)

Source: Field Data
Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total 47 reported households, 87.23 per cent of sample households reported to have dry fodder procured through purchased from others and about 12.77 per cent of households reported to have dry fodder procured from farm saved. Across the groups, the percentage of farmers reported the procurement of dry fodder through purchased from others. All the above details are presented in Table 4.4.2.

Table 4.4.2: Procurement of Dry Fodder related to animal husbandry

(Number of households)

S.No	landholding categories	Dry Fodder				Total no of reported farmers
		farm saved	exchanged	purchased	borrowed	
1	marginal	2.00 (11.76)	0 (0.00)	15.00 (88.24)	0 (0.00)	17 (36.17)
2	small	1.00 (5.88)	0 (0.00)	16.00 (94.12)	0 (0.00)	17 (36.17)
3	medium	2.00 (28.57)	0 (0.00)	5.00 (71.43)	0 (0.00)	7 (14.89)
4	large	1.00 (20.00)	0 (0.00)	4.00 (80.00)	0 (0.00)	5 (10.64)
5	very large	0.00 (0.00)	0 (0.00)	1.00 (100.00)	0 (0.00)	1 (1.96)
	total	6.00 (12.77)	0 (0.00)	41.00 (87.23)	0 (0.00)	47 (100.00)

Source: Field Data
Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

All the reported households expressed the same opinion of the Procurement of Concentrates through purchased are the major source. Observing across the groups majority

of the farmers reported from the category of marginal land holdings only. The details can be viewed form table 4.4.3.

Table 4.4.3: Procurement of Concentrates related to animal husbandry

(Number of households)

S.No	landholding categories	Concentrates				Total no of reported farmers
		farm saved	exchanged	purchased	borrowed	
1	marginal	0 (0.00)	0 (0.00)	17 (100.00)	0 (0.00)	17 (36.17)
2	small	0 (0.00)	0 (0.00)	16 (100.00)	0 (0.00)	16 (34.04)
3	medium	0 (0.00)	0 (0.00)	8 (100.00)	0 (0.00)	8 (17.02)
4	large	0 (0.00)	0 (0.00)	5 (100.00)	0 (0.00)	5 (10.64)
5	very large	0 (0.00)	0 (0.00)	1 (100.00)	0 (0.00)	1 (2.13)
	total	0 (0.00)	0 (0.00)	47 (100.00)	0 (0.00)	47 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 25 reported households, 48.00 percent of farmers are from marginal farmer's category who reported to have purchased veterinary related items. Moreover, similar no of households from medium and large categories are reported to have purchased veterinary related items. The details are presented in table 4.4.4.

Table 4.4.4: Procurement of Veterinary related to animal husbandry

(Number of households)

S.No	landholding categories	Veterinary				Total no of reported farmers
		farm saved	exchanged	purchased	borrowed	
1	marginal	0 (0.00)	0 (0.00)	12 (100.00)	0 (0.00)	12 (48.00)
2	small	0 (0.00)	0 (0.00)	7 (100.00)	0 (0.00)	7 (28.00)
3	medium	0 (0.00)	0 (0.00)	3 (100.00)	0 (0.00)	3 (12.00)
4	large	0 (0.00)	0 (0.00)	3 (100.00)	0 (0.00)	3 (12.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
	total	0 (0.00)	0 (0.00)	25 (100.00)	0 (0.00)	25 (100.00

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 8 farmers, 62.50 percent are from small farmer category and similar no of households from marginal, medium and large category of farmers who reported to have procured animal seeds through different agencies. Out of the total no of farmers, 62.50 percent of farmers are reported to have procured from local farmers and 37.50 percent of farmers are procured animal seeds through local traders. All the details can be viewed from table 4.5

Table 4.5: Agency through which reported Animal Seeds related to animal husbandry were procured

(Number of households)

S.No	landholding categories	Animal Seeds					Total no of reported farmers
		own farm	local trader	input dealer	cooperative &govt.agency	Others (farmers)	
1	marginal	0 (0.00)	0.00 (0.00)	0 (0.00)	0 (0.00)	1.00 (0.50)	1 (12.50)
2	small	0 (0.00)	2.00 (40.00)	0 (0.00)	0 (0.00)	3.00 (60.00)	5 (62.50)
3	medium	0 (0.00)	0.00 (0.00)	0 (0.00)	0 (0.00)	1.00 (100.00)	1 (12.50)
4	large	0 (0.00)	1.00 (100.00)	0 (0.00)	0 (0.00)	0.00 (0.00)	1 (12.50)
5	very large	0 (0.00)	0.00 (0.00)	0 (0.00)	0 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0 (0.00)	3.00 (37.50)	0 (0.00)	0 (0.00)	5.00 (62.50)	8 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total no of 51 farmers, 39.22 percent are from small farmer category, 33.33 percent from marginal category, 15.69 per cent from medium category, 9.80 per cent from large farmer category and the negligible 1.96 per cent from very large farmers who procured green fodder through different agencies. Out of the total no of farmers, 82.35 percent of farmers are reported to have procured from own farm and 17.65 per cent of farmers procured green fodder through local farmers. All the details can be viewed from table 4.5.1.

Table 4.5.1: Agency through which reported Green Fodder related to animal husbandry were procured

(Number of households)

S.No	landholding categories	Green Fodder					Total no of reported farmers
		own farm	local trader	input dealer	cooperative &govt.agency	Others (farmers)	
1	marginal	12.00 (70.59)	0 (0.00)	0 (0.00)	0 (0.00)	5.00 (29.41)	17 (33.33)
2	small	17.00 (85.00)	0 (0.00)	0 (0.00)	0 (0.00)	3.00 (15.00)	20 (39.22)
3	Medium	8.00 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0.00 (0.00)	8 (15.69)
4	Large	4.00 (80.00)	0 (0.00)	0 (0.00)	0 (0.00)	1.00 (20.00)	5 (9.80)
5	very large	1.00 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0.00 (0.00)	1 (1.96)
	Total	42.00 (82.35)	0 (0.00)	0 (0.00)	0 (0.00)	9.00 (17.65)	51 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 41 farmers, 37.50 per cent are from small farmer category, 35.42 per cent from marginal category, 14.58 per cent from medium category, 10.42 per cent from large farmer category and a mere 2.08 per cent from very large farmers who procured dry fodder through different agencies. Out of the total no of farmers, 85.42 per cent of farmers are reported to have procured through local farmers and 14.58 per cent of farmers procured dry fodder through from own farm. All the details can be viewed from table 4.5.2.

Table 4.5.2: Agency through which reported Dry fodder related to animal husbandry were procured

(Number of households)

S.No	landholding categories	Dry fodder					Total no of reported farmers
		own farm	local trader	input dealer	cooperative &govt.agency	Others (farmers)	
1	marginal	2.00 (11.76)	0 (0.00)	0 (0.00)	0 (0.00)	15.00 (88.24)	17 (35.42)
2	small	2.00 (11.11)	0 (0.00)	0 (0.00)	0 (0.00)	16.00 (88.89)	18 (37.50)
3	medium	2.00 (28.57)	0 (0.00)	0 (0.00)	0 (0.00)	5.00 (71.43)	7 (14.58)
4	large	1.00 (20.00)	0 (0.00)	0 (0.00)	0 (0.00)	4.00 (80.00)	5 (10.42)
5	very large	0.00 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	1.00 (100.00)	1 (2.08)
	total	7.00 (14.58)	0 (0.00)	0 (0.00)	0 (0.00)	41.00 (85.42)	41 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 45 farmers, 57.78 percent of farmers procured concentrates through local traders, 37.78 percent of farmers procured concentrates through cooperative & govt. agency and 4.44 percent of farmers prepared concentrates from their own. Out of the no of farmers who reported to have procured from local trader, 42.31 percent are from small farmer's category. Out of total no of farmers who reported to have procured from cooperative & govt. agency, 47.06 percent are from marginal farmers category. All the details can be viewed from table 4.5.3.

Table 4.5.3: Agency through which reported Concentrates related to animal husbandry were procured

(Number of households)

S.No	landholding categories	Concentrates					Total no of reported farmers
		own farm	local trader	input dealer	cooperative &govt.agency	others	
1	marginal	2.00 (11.76)	7.00 (41.18)	0 (0.00)	8.00 (47.06)	0 (0.00)	17 (37.78)
2	small	0.00 (0.00)	11.00 (68.75)	0 (0.00)	5.00 (31.25)	0 (0.00)	16 (35.56)
3	medium	0.00 (0.00)	3.00 (42.86)	0 (0.00)	4.00 (57.14)	0 (0.00)	7 (15.56)
4	large	0.00 (0.00)	4.00 (100.00)	0 (0.00)	0.00 (0.00)	0 (0.00)	4 (8.89)
5	very large	0.00 (0.00)	1.00 (100.00)	0 (0.00)	0.00 (0.00)	0 (0.00)	1 (2.22)
	total	2.00 (4.44)	26.00 (57.78)	0 (0.00)	17.00 (37.78)	0 (0.00)	45 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 25 reported households, 48.00 percent of farmers are from marginal farmer's category who reported to have procured veterinary related items through veterinary doctor. Moreover, similar no of households from medium and large category are reported to have purchased veterinary related items. The details are presented in table 4.5.4.

Table 4.5.4: Agency through which reported Veterinary related to animal husbandry were procured

(Number of households)

S.No	landholding categories	Veterinary					Total no of reported farmers
		own farm	local trader	input dealer	cooperative &govt.agency	Others (Veterinary Doctor)	
1	marginal	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	12.00 (100.00)	12.00 (48.00)
2	small	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	7.00 (100.00)	7.00 (28.00)
3	medium	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3.00 (100.00)	3.00 (12.00)
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	3.00 (100.00)	3.00 (12.00)
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	25.00 (100.00)	25.00 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

4.4. Expenditure incurred and quality of inputs.

On an average the per household total expenses for the purchase of inputs related to animal husbandry is reported to be Rs.1523/- . Across the groups, the total expenses varied between Rs.350/- in case of vary large farmer and Rs.2739/- in case of medium farmers. The per household expenses incurred for the purchase of cattle seed is reported to Rs.360/- by large farmers. For the purchase of green fodder the expenses varied from Rs. 50/- in case of large farmers to Rs.280/- in case of medium farmers. All the groups of farmers reported to have incurred expenses for the purchase of dry fodder and concentrates. The per household expenses in case of dry fodder is reported to be high in case of medium farmers. Moreover all the groups of farmers incurred similar amounts of expenses for the purchase of concentrates. On an average the per household expenses for the purchase of concentrates is reported to be Rs.279/-. The average expenses incurred for veterinary charges is reported to be Rs.137/-and the veterinary charges ranged between Rs.90/- in case of large farmers and Rs.287/- in case of medium farmers. The per household labour charges ranged between Rs. 140/- in case of large farmers and Rs.643/- in case of medium farmers. All the above details can be viewed from table 4.6

Table 4.6: Expenses incurred for the purchase of inputs related to animal husbandry (in Rs)

(Per Household Rs)

S.No	landholding categories	Animal seed			animal feed			veterinary charges	interest	lease rent for land	labour charges	total expenses (Rs)
		cattle/buffalo	sheep/ goat/piggery	poultry&duckery	green fodder	dry fodder	concentrates					
1	marginal	102	0.00	0.00	103	175	236	130	0.00	0.00	458	1204
2	small	101	0.00	0.00	120	450	289	180	0.00	0.00	577	1717
3	medium	0	0.00	0.00	280	1250	280	287	0.00	0.00	643	2739
4	large	360	0.00	0.00	50	380	342	90	244	0.00	140	1606
5	very large	0	0.00	0.00	0	100	250	0	0	0.00	0	350
	total	113	0	0	111	471	279	137	49	0.00	363	1523

Source: Field Data

4.5. Whether price paid for inputs is reasonable and reasons if not.

Out of the total no of 8 reported farmers, 62.50 percent are from small and each 12.50 percent from marginal, medium and large categories reported that whether the price paid for animal seed is reasonable or not . Out of the 8 farmers, each 50.00 percent of farmers reported the price paid for the animal seed is reasonable and high. The details can be observed from the table 4.7.3.

Table 4.7: Whether price paid for the reported Animal Seed related to animal husbandry reasonable

(Number of households)

S.No	landholding categories	Animal Seed			Total no of reported farmers
		reasonable	high	very high	
1	marginal	1.00 (100.00)	0.00 (0.00)	0 (0.00)	1 (12.50)
2	small	2.00 (40.00)	3.00 (60.00)	0 (0.00)	5 (62.50)
3	medium	0.00 (0.00)	1.00 (100.00)	0 (0.00)	1 (12.50)
4	large	1.00 (100.00)	0.00 (0.00)	0 (0.00)	1 (12.50)
5	very large	0.00 (0.00)	0.00 (0.00)	0 (0.00)	0 (0.00)
	total	4.00 (50.00)	4.00 (50.00)	0 (0.00)	8 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total number of 51 reported farmers, 39.22 percent are from small farmers, 33.33 percent from marginal, 15.69 percent from medium and 9.80 percent from large, only a negligible percent of farmers from large and very large categories expressed that whether the price paid for green fodder is reasonable or not . Out of the 51 farmers, 88.24 percent majority of farmers reported the price paid for the green fodder is reasonable. Only 11.76 percent of farmers reported that the price paid for the green fodder is high. Among the categories of farmers, highest percentage of very large, large, medium, small and marginal category of farmers is reported that the price paid for the green fodder is reasonable. The details are presented in the table 4.7.1.

Table 4.7.1: Whether price paid for the reported Green Fodder related to animal husbandry reasonable.

(Number of households)

S.No	landholding categories	Green Fodder			Total no of reported farmers
		reasonable	high	very high	
1	marginal	15.00 (88.24)	2.00 (11.76)	0.00 (0.00)	17 (33.33)
2	small	16.00 (80.00)	4.00 (20.00)	0.00 (0.00)	20 (39.22)
3	medium	8.00 (100.00)	0.00 (0.00)	0.00 (0.00)	8 (15.69)
4	large	5.00 (100.00)	0.00 (0.00)	0.00 (0.00)	5 (9.80)
5	very large	1.00 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (1.96)
	total	45.00 (88.24)	6.00 (11.76)	0.00 (0.00)	51 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 48 reported farmers 37.50 percent are from small farmers, 35.42 percent from marginal, 14.58 percent are from medium and 10.42 percent from large, only a negligible percent of farmers from large and very large categories reported that whether price paid for dry fodder is reasonable or not . Out of the 48 farmers, 68.75 percent of farmers reported the price paid for the dry fodder is reasonable. 31.25 percent of farmers reported that the price paid for the dry fodder is high. Among the categories of farmers, highest percentage of very large, large, medium, small and marginal category of farmers reported that the price paid for the dry fodder is reasonable. The details can be viewed from the table 4.7.2.

Table 4.7.2: Whether price paid for the reported Dry Fodder related to animal husbandry reasonable

(Number of households)

S.No	landholding categories	Dry Fodder			Total no of reported farmers
		reasonable	high	very high	
1	marginal	14.00 (82.35)	3.00 (17.65)	0.00 (0.00)	17 (35.42)
2	small	10.00 (55.56)	8.00 (44.44)	0.00 (0.00)	18 (37.50)
3	medium	4.00 (57.14)	3.00 (42.86)	0.00 (0.00)	7 (14.58)
4	large	4.00 (80.00)	1.00 (20.00)	0.00 (0.00)	5 (10.42)
5	very large	1.00 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (2.08)
	total	33.00 (68.75)	15.00 (31.25)	0.00 (0.00)	48 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 45 reported farmers 37.88 percent are from marginal, 35.56 percent from small and 15.56 percent from medium, only a negligible percent of farmers from large and very large categories reported that whether the price paid for concentrates is reasonable or not . Out of the 45 farmers, 73.33 percent of farmers reported that the price paid for the concentrates is reasonable. Only 22.67 percent of farmers reported that the price paid for the concentrates is high. Among the categories of farmers, the highest percentage of large, medium and small categories of farmers reported that the price paid for the concentrates is high. The details can be observed from the table 4.7.3.

Table 4.7.3: Whether price paid for the reported concentrates related to animal husbandry reasonable

(Number of households)

S.No	landholding categories	Concentrates			Total no of reported farmers
		reasonable	high	very high	
1	marginal	15.00 (88.24)	2.00 (11.76)	0.00 (0.00)	17 (37.78)
2	small	11.00 (68.75)	5.00 (31.25)	0.00 (0.00)	16 (35.56)
3	medium	4.00 (57.14)	3.00 (42.86)	0.00 (0.00)	7 (15.56)
4	large	2.00 (50.00)	2.00 (50.00)	0.00 (0.00)	4 (8.89)
5	very large	1.00 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (2.22)
	total	33.00 (73.33)	12.00 (22.67)	0.00 (0.00)	45 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total no of 25 reported farmers, 48.00 percent are from marginal farmers 28.00 percent from small and each 3.00 percent from medium and large categories reported that whether price paid for veterinary services is reasonable or not. The entire reported households expressed the same opinion as reasonable for the price paid for veterinary related animal husbandry product. The details can be observed from the table 4.7.4.

Table 4.7.4: Whether price paid for the reported Veterinary related to animal husbandry reasonable

(Number of households)

S.No	landholding categories	Veterinary			Total no of reported farmers
		reasonable	high	very high	
1	marginal	12.00 (100.00)	0.00 (0.00)	0.00 (0.00)	12 (48.00)
2	small	7.00 (100.00)	0.00 (0.00)	0.00 (0.00)	7 (28.00)
3	medium	3.00 (100.00)	0.00 (0.00)	0.00 (0.00)	3 (12.00)
4	large	3.00 (100.00)	0.00 (0.00)	0.00 (0.00)	3 (12.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0 (0.00)
	total	25.00 (100.00)	0.00 (0.00)	0.00 (0.00)	25 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total no of 4 reported farmers, 75.00 percent are from small farmers' category and 25.00 percent are from medium group of farmers category reported to have the reasons for unreasonable price paid for animal seed. Among the total farmers, 66.67 percent of farmers from small group, 33.33 percent of from medium group reported that the animal seed is not subsidized. On the other hand only farmers from small category reported that there are no government sellers. The details can be seen from the table 4.8.

Table 4.8: Reasons for unreasonable prices paid for Animal Seed related to animal husbandry

(Number of households)

S.No	landholding categories	Animal Seed					Total no of reported farmers
		not subsidized	very few sellers	no govt. sellers	pvt. sellers collude	no price control	
1	marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	small	2.00 (66.67)	0.00 (0.00)	1.00 (33.33)	0.00 (0.00)	0.00 (0.00)	3 (75.00)
3	medium	1.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (25.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	3.00 (75.00)	0.00 (0.00)	1.00 (25.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 6 reported farmers, 66.67 percent are from small farmer's category and 33.33 percent are from marginal group of farmers category reported the reasons for unreasonable price paid for green fodder. Among the total farmers, 66.67 percent of farmers from small group, 33.33 percent from marginal group reported that there are very few sellers for green fodder. The details can be viewed from the table 4.8.1.

Table 4.8.1: Reasons for unreasonable prices paid for Green Fodder related to animal husbandry

(Number of households)

S.No	landholding categories	Green Fodder					Total no of reported farmers
		not subsidized	very few sellers	no govt. sellers	pvt. sellers collude	no price control	
1	marginal	0.00 (0.00)	2.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2.00 (33.33)
2	small	0.00 (0.00)	4.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4.00 (66.67)
3	medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0.00 (0.00)	6.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6.00 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 15 reported farmers, 53.33 percent are from small farmers category and each 20.00 percent are from marginal and medium group of farmers category

reported the reasons for unreasonable price paid for dry fodder. Among the total farmers, 50.00 percent of farmers are from small group, 30.00 percent from medium group, and 20.00 percent farmers from marginal group reported that the dry fodder is not subsidized. On the other hand 60.00 percent of farmers from small farmer category and each 20.00 percent of farmers from marginal and large group category farmers reported that there are no government sellers. The details can be observed from the table 4.8.2.

Table 4. 8.2: Reasons for unreasonable prices paid for Dry Fodder related to animal husbandry

(Number of households)

S.No	landholding categories	Dry Fodder					Total no of reported farmers
		not subsidized	very few sellers	no govt. sellers	pvt. sellers collude	no price control	
1	marginal	2.00 (66.67)	0.00 (0.00)	1.00 (33.33)	0.00 (0.00)	0.00 (0.00)	3 (20.00)
2	small	5.00 (62.50)	0.00 (0.00)	3.00 (37.50)	0.00 (0.00)	0.00 (0.00)	8 (53.33)
3	medium	3.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (20.00)
4	large	0.00 (0.00)	0.00 (0.00)	1.00 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (6.67)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0 (0.00)
	total	10.00 (66.67)	0.00 (0.00)	5.00 (33.33)	0.00 (0.00)	0.00 (0.00)	15 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of reported farmers 41.67 percent are from small farmers' category, 25.00 percent from medium group of farmers and each 16.67 percent are from marginal and large group of farmers category reported the reasons for unreasonable price paid for concentrates. Among the total farmers, 42.86 percent of farmers are from medium group and each 28.57 percent from small and large group of farmers reported that there are very few sellers for concentrates. On the other hand, only farmer from marginal and small farmer category reported that there are no government sellers. The details can be seen from the table 4.8.3.

Table 4. 8.3: Reasons for unreasonable prices paid for Concentrates related to animal husbandry

(Number of households)

S.No	landholding categories	Concentrates					Total no of reported farmers
		not subsidized	very few sellers	no govt. Sellers	pvt. sellers collude	no price control	
1	marginal	0.00 (0.00)	0.00 (0.00)	2.00 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (16.67)
2	small	0.00 (0.00)	2.00 (40.00)	3.00 (60.00)	0.00 (0.00)	0.00 (0.00)	5 (41.67)
3	medium	0.00 (0.00)	3.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (25.00)
4	large	0.00 (0.00)	2.00 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (16.67)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0 (0.00)
	total	0.00 (0.00)	7.00 (58.33)	5.00 (41.67)	0.00 (0.00)	0.00 (0.00)	12 (100.00)

Source: Field Data

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

CHAPTER V

MARKET IMPERFECTIONS AND FARM PROFITABILITY
LABOUR MARKET

5.0. Introduction:

Adopting new agricultural technologies has been a challenge influencing the farmers' decisions due to scarcity of labour. There is always labour scarcity during weeding operations, sowing and harvesting times which are the constraint in crop cultivation and livestock operations. The present chapter discusses the imperfections of labour market.

5.1 Details of Labour use:

The Table 5.1(i) reveals the average number of labour employed for farming and livestock operations was 53.10. Of which, the number of family labour was 1.89 (1.11 male, 0.78 female). The number of casual labour employed was more from very large category as compared to other categories of farmers.

Table 5.1(i)
Average number of labour employed for farming and livestock operations

S.No	landholding categories	family labour			farm servants		casual labour	
		male	female	children	male	female	male	female
1	marginal	1.09	0.64	0.00	0.00	0.00	1.84	15.33
2	small	1.11	0.88	0.00	0.00	0.00	8.04	32.35
3	medium	1.17	0.83	0.00	0.00	0.00	18.08	50.33
4	large	1.14	0.79	0.00	0.00	0.00	52.14	143.14
5	very large	1.00	0.50	0.00	0.00	0.00	222.50	350.00
	total	1.11	0.78	0.00	0.00	0.00	12.15	39.06

Source: Field Survey

The status of average hours per day for labourers employed to get farming and livestock operations is presented in the following Table 5.1(ii). The average number of hours employed for farming and livestock operations were higher in case of male family labour, and male casual labour. No farm servant was reported to have been employed for these operations.

Table 5.1(ii)
Average hours per day of labour employed for farming and livestock operations

S.No	landholding categories	family labour			farm servants		casual labour	
		male	female	children	male	female	male	female
1	marginal	8.99	4.13	0.00	0.00	0.00	5.65	5.65
2	small	8.96	5.74	0.00	0.00	0.00	4.69	4.75
3	medium	9.50	5.04	0.00	0.00	0.00	5.50	5.04
4	large	10.50	5.71	0.00	0.00	0.00	7.43	7.21
5	very large	10.00	3.00	0.00	0.00	0.00	8.00	7.00
	total	9.16	5.03	0.00	0.00	0.00	5.38	5.32

Source: Field Survey

Table 5.1(iii)
Average number of days employed for farming and livestock operations

S.No	landholding categories	family labour			farm servants		casual labour	
		male	female	children	male	female	male	female
1	marginal	201.60	164.80	0.00	0.00	0.00	1.83	3.00
2	small	200.12	184.35	0.00	0.00	0.00	2.09	2.74
3	medium	204.17	184.17	0.00	0.00	0.00	2.63	3.42
4	large	242.14	223.57	0.00	0.00	0.00	4.64	5.14
5	very large	275.00	150.00	0.00	0.00	0.00	3.50	4.50
	total	204.85	179.40	0.00	0.00	0.00	2.25	3.11

Source: Field Survey

The above table Table5.1 (iii) indicates the aggregate picture of higher average number of days employed by male family and casual labourers. On the other hand, the female family and casual labour found to have been reported to be 179.40 and 3.11 days respectively.

5.2 Wage Rate:

Table 5.2(i)
Average wage rate paid to labour engaged in farming and livestock operations

(inRs)

S.No	landholding categories	farm servants		casual labour	
		male	female	male	female
1	marginal	0.00	0.00	344.00	231.33
2	small	0.00	0.00	306.47	220.00
3	medium	0.00	0.00	331.25	233.33
4	large	0.00	0.00	478.57	364.29
5	very large	0.00	0.00	500.00	375.00
	total	0.00	0.00	337.50	237.50

Source: Field Survey

Efforts have been made to compare the average wage rates paid to male and female casual labour. The following table 5.2(i) provides the details on average wage rates across the groups of land holding categories. The average rate of male casual labour was competitively higher than female casual labour. Glancing across the groups, the wage rates of male casual labour varied from Rs.306.47 in case of small farmers to Rs.500/- in case of very large farmer category. Moreover, the wage rates of female casual labour ranged between Rs.220 in case of small farmers and Rs.375 in case of very large farmer category.

Table 5.2(ii)
Whether wage rate paid to labour for farming and livestock operations is reasonable

(Number of households)

S.No	landholding categories	reasonable	high	very high	total
1	marginal	34 (45.33))	34 (45.33)	7 (9.34)	75 (37.50)
2	small	33 (38.82)	39 (45.88)	13 (15.30)	85 (42.50)
3	medium	7 (29.17)	16 (66.66)	1 (4.17)	24 (12.00)
4	large	0 (0.00)	9 (64.28)	5 (35.72)	14 (7.00)
5	very large	0 (0.00)	2 (100.00)	0 (0.00)	2 (1.00)
	total	74 (37.00)	100 (50.00)	26 (13.00)	200 (100.00)

Source: Field Survey

Note: Figures in brackets are the percentages of farmers in total number of farmers in the respective size groups

The details of reasonability of wage rates paid to labourers by different size groups of farmers are presented in the table 5.2(ii). On an average out of 200 farmers 50% of the farmers reported to have paid high wage rates while 37% of farmers reported to have paid reasonable wage rates to labourers. A negligible 13% of farmers reported to have paid very high wage rates paid to labour for farming and livestock operations. Across the groups the percentage of households paid reasonable wage rates varied from 29.17 in case of medium to 45.33% in case of marginal farmers. The reason for paying very high wage rate may be attributed to scarcity of labour during the season.

5.3 Details of labour supply:

The following table 5.3(i) reveals the unreasonability of wage rate paid to labour for farming and livestock operations. Out of 126 reported farmers, 57.14% were engaged in MGNREGA works and while 39.89 % farmers reported the reason of limited labour supply. Across the groups, the major unreason ability for paying wage rates is reported by all groups of farmers is the works of MGNREGA.

Table 5.3(i)
Reasons for wage rate paid to labour for farming and livestock operations not being reasonable

(Number of households)

S.No	landholding categories	limited labour supply	working in MNREGA	labour contractors' control	Others (farmers is not interested to Agri. activities)	Total
1	marginal	13 (31.70)	28 (68.30)	0.00 (0.00)	0.00 (0.00)	41 (32.54)
2	small	21 (40.38)	29 (55.77)	0.00 (0.00)	2 (3.85)	52 (41.26)
3	medium	6 (35.29)	10 (58.83)	0.00 (0.00)	1 (5.88)	17 (13.49)
4	large	9 (64.28)	4 (28.57)	0.00 (0.00)	1 (7.15)	14 (11.12)
5	very large	1 (50.00)	1 (50.00)	0.00 (0.00)	0.00 (0.00)	2 (1.59)
	total	50 (39.69)	72 (57.14)	0.00 (0.00)	4 (3.17)	126 (100.00)

Source: Field Survey

Table 5.3(ii)
Engagement as wage labour

(Number of households)

S.No	landholding categories	number of households engaged in wage labour	duration of engagement(in months)		wage rate (Rs per day)	
			others' farm	MNREGS	others' farm	MNREGS
1	marginal	54 (64.28)	2.5	1.8	367	179
2	small	27 (32.14)	2.3	1.67	356	182
3	medium	3 (3.58)	1.8	1	400	200
4	large	0	0	0	0	0
5	very large	0	0	0	0	0
	total	84	1	1	225	112

Source: Field Survey

The table 5.3(ii) explains the engagement of farmers as wage labour. Out of the total 84 reported farmers reported that 64.28% of farmers from marginal farmers group engaged as wage labour and a negligible part of 3.58% medium farmers is reported to have engaged in wage labour. On an average, the wage rate per day reported on other farm is Rs.225/- whereas Rs.112/- as

being engaged in MGNREA works. Across the groups the wage rate per day ranged between Rs.356/- in case of small farmers and Rs.400/- in case of medium farmers. On the other hand, the wage rate received to have been charged in MGNREGA works varied from Rs.179/- in case of marginal farmers Rs.200/- in case of medium farmers.

Table 5.3 (iii)
Constraints related to wage labour

(Number of households)

S.No	landholding categories	work available for a very limited period of time	wage is very low	poor health	only few able bodied members in the family	very hard work	wage not paid on time	frequent problems with payment into bank account	Total No. of HHs
1	marginal	21 (43.75)	4 (8.34)	0 (0.00)	0 (0.00)	0 (0.00)	18 (37.49)	5 (10.42)	48
2	small	4 (15.38)	8 (30.77)	0 (0.00)	0 (0.00)	0 (0.00)	11 (42.30)	3 (11.53)	26
3	medium	0 (0.00)	2 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	2
4	large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	--
5	very large	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	--
	total	25 (32.89)	14 (18.42)	0 (0.00)	0 (0.00)	0 (0.00)	29 (38.16)	8 (10.53)	76

Source: Field Survey

The details of constraints related to wage labour are presented in Table 5.3(iii). Out of the 76 reported Households 38.16% farmers reported that the wages are not paid on time. While 32.89% of Households reported that the work available for a very limited period of time. About 18.42% of farmers reported to have received a very low wage rate. Finally 10.53% reported that due to frequent problems of payment in the bank account. Across the groups, 43.75% of marginal farmers reported the limited period of work time. 30.77% of small farmers reported a very low wage rate. About 42.30% of small farmers reported wages are not paid ontime. Details can be observed from the above table.

Chapter VI

CREDIT MARKET

6.0. Introduction

As discussed in the introductory chapter, due to lack of acceptable collateral, generally a large majority of farmers have very little access to the formal sector and are not only able to finance their variable expenses out of past savings. Government has made several attempts to provide low-cost production loans to small farmers, only a small percentage of them have actually benefited from such measures. The informal credit market continues to pay a dominant role in meeting the credit needs of small farmers and agricultural labourers, for production as well as consumption. In many cases, loans are provided by the local moneylenders at very high rates of interest on the basis of a longstanding patron-client relationship, directly or indirectly. So in the study area it is important to have an access with credit sources to meet the expenses in accordance with the situation of crop production.

6.1Households borrowing Money during last two years

Thedetails money borrowed during the last two years by the sample households are analysed in the present section. Out of the total surveyed farm Households, The details of money borrowed in accordance with the size of land holding are presented in the following Table 6.1.

Table 6.1
Whether households borrowed money during the last two years

S.No	landholding categories	number of households	percent
1	marginal	36	18.00
2	small	53	26.50
3	medium	17	8.50
4	large	13	6.50
5	very large	2	1.00
	total	121	60.50

Source: Field Survey

It can be observed from the above table that out of total sample of 200 households, only 60.5% of households have borrowed money during the last 2 years. Across the groups the percentage of households varied between 1.00% in case of very large farmers to 26.50% in case of small farmers. So it can be concluded that the inevitable need is observed only in the case of marginal and small farmers.

6.2 Sources of Money Borrowed

Out of the total number of 121 households, 41.32% of HHs borrowed money from government banks. On the other hand, 14.05% of farmers borrowed from cooperative society and money lenders. About 13.23% of HHs borrowed money from micro finance groups. Across the group, s the highest percentage of farmers borrowed money from government banks was found in case of large and very large category of farmers. Moreover the highest percentage of HHs borrowed money from money lenders is found with in the case of marginal farmers group. All the above details can be seen from the Table 6.2

Table 6.2
Source of money borrowed by the landholding categories

S. No	landholding categories	govt. bank	cooperative society	micro finance /comm group/ NGOs	SHGs	fellow farmer/neighbours	input dealers/commission agents	money lenders	employer	relatives	total
1	marginal	10 (27.78)	8 (22.23)	4 (11.12)	0	2 (5.56)	2 (5.56)	8 (22.22)	0	2 (5.56)	36 (100.00)
2	small	21 (39.62)	7 (13.20)	8 (15.09)	5 (9.43)	0	8 (15.09)	4 (7.55)	0	0	53 (100.00)
3	medium	7 (41.17)	2 (11.76)	4 (23.53)	0	0	1 (5.88)	3 (17.65)	0	0	17 (100.00)
4	large	10 (76.93)	0	0	0	1 (7.69)	0	2 (15.39)	0	0	13 (100.00)
5	very large	2 (100.00)	0	0	0	0	0	0	0	0	2
	total	50 (41.32)	17 (14.05)	16 (13.23)	5 (4.13)	3 (2.48)	11 (9.09)	17 (14.05)	0	2 (1.66)	121

Source: Field Survey
Figures in brackets are percentages to the total number of HHs in respective size groups.

6.3 Total amount Borrowed from the sources

The details of amount borrowed from different sources by the sample farmers are presented in the following Table 6.3

Table 6.3
Total Amount borrowed from the sources

(Rs/Per Household)

S.No	landholding categories	govt. bank	cooperative society	micro finance/comm group/ NGOs	SHGs	fellow farmer/ neighbours	input dealers/ commission agents	money lenders	Employ-er	Rela-tives	Total
1	marginal	9733	5800	907	0	0	800	5667	0	933	23840
2	small	29729	6471	2353	3000	0	6765	11176	0	0	59494
3	medium	68542	14583	10000	0	0	1250	13750	0	0	108125
4	large	150714	0	0	0	14286	0	21429	0	0	186429
5	very large	100000	0	0	0	0	0	0	0	0	100000
	total	36060 (58.87)	6675 (10.90)	2540 (4.15)	1275 (2.08)	1000 (1.63)	3325 (5.43)	10025 (16.37)	0 (0.00)	350 (0.57)	61250 (100.00)

Source: Field Survey

On an average the per household amount borrowed is reported to be Rs.61250/-. Across the groups, it is observed that the per household borrowed amount varied between Rs.23840/- in case of marginal farmers and Rs.186429/- in case of large farmers. Among the groups the highest amount borrowed from cooperative society is found in the case of medium farmers. Moreover the amount borrowed from micro finance groups is reported to be high only in case of medium farmers.

6.4 Rates of Interest charged by the Reported sources

The different rates of interest charged by the different sources of money are presented in Table 6.4. Glancing over the agencies of lending money, it is observed the highest rates of interest were charged by money lenders and input dealers and commission agents. While the cooperative society is disbursing money at a low rate of interests compared to other sources of lending money.

Table6.4
Median rate of interest charged by the reported source from whom money was borrowed (in %)

S.No	landholding categories	govt. bank	cooperative society	micro finance/comm group/ NGOs	SHGs	fellow farmer/neighbours	input dealers/commission agents	money lenders	employer	relatives
1	marginal	8	4	8	0	0	24	36	0	18
2	small	8	4	8	4	0	24	36	0	0
3	medium	8	4	0	0	0	24	24	0	0
4	large	8	0	0	0	24	0	24	0	0
5	very large	8	0	0	0	0	0	0	0	0

Source: Field Survey

6.5 Purpose of Borrowing form the Reported Sources

Out of the total number of 121 reported HHs, 85.95% of farmers borrowed for the purpose of current expenses in farm business. Moreover, 8.26% of HHs reported to have borrowed for the purpose of consumption expenditure. Negligible percentage of farmers reported to have borrowed education and medical expenses. Across groups, it is found that majority farmers in respective size groups reported to have borrowed for the purpose of current expenses in farm business. All the details are presented in the Table 6.5

Table 6.5
Purpose of borrowing from the reported source

S.No	landholding categories	capital exp in farm business	current exp in farm business	non-farm business	consump. Exp	marriages & ceremonies	education	medical	for migrating outside the village	total
1	marginal	0	29 (80.56)	0	6 (16.67)	0	1 (2.77)	0	0	36 (29.75)
2	small	0	48 (90.56)	1 (1.89)	2 (3.77)		1 (1.89)	1 (1.89)	0	53 (43.80)
3	medium	1 (5.88)	12 (70.59)	0	2 (11.77)	0	1 (5.88)	1 (5.88)	0	17 (14.05)
4	large	0	13 (100.00)	0	0	0	0	0	0	13 (10.74)
5	very large	0	2 (100.00)	0	0	0	0	0	0	2 (1.65)
	total	1 (0.83)	104 (85.95)	1 (0.83)	10 (8.26)	0 (0.00)	3 (2.48)	2 (1.65)	0 (0.00)	121 (100.0)

Source: Field Survey
Figures in brackets are percentages to the total number of HHs in respective size groups.

6.6 Number of households that repaid the loan the amount

On an average the per HH amount repaid to the sources of loan is reported to be Rs.22520/-. Across the groups, the per HH repaid amount of loan varied from Rs.11440 in case of marginal farmers to Rs.56143/- in case of large farmers. Among the sources the highest amount repaid to the source of government banks compared to other loan lending agencies. Out of the total number of 66 HHs who repaid the loan amount 50% of the HHs reported to have repaid to government banks. 15.16% of HHs reported to have repaid to money lenders. This inferences that inspite of introduction of various financing agencies, the private money lenders still plays a crucial role by lending amounts to high rate of interest to take the farmers into their grip. All the details are presented in Table 6.6.

Table 6.6
Total amount repaid to each source and number of households repaying loan (Rs)

S.N No	Landholding categories	Total amount repaid									
		govt. bank	cooperative society	micro finance/ comm group/ NGOs	SHGs	fellow farmer /neighbours	input dealers/commission agents	money lenders	employer	relatives	total
1	marginal	6866	667	707	0	0	400	2667	0	133	11440
2	small	14706	0	765	1059	0	3705	765	0	0	21000
3	medium	33125	2500	2500	0	0	1250	3333	0	2	42708
4	large	56143	0	0	0	0	0	0	0	0	56143
5	very large	25000	0	0	0	0	0	0	0	0	25000
	total	16980	550	890	450	0	1875	1725	0	50	22520
		Number of households which repaid									
1	marginal	7 (31.81)	1 (4.55)	4 (18.18)	0	0	1 (4.55)	7 (31.81)	0	1 (4.55	21
2	small	14 (48.27)	0	4 (13.79)	3 (10.34)	0	6 (20.69)	2 (6.89)	0	0	29
3	medium	4 (50.00)	1 (12.5)	1 (12.5)	0	0	1 (12.5)	1 (12.5)	0	0	8
4	large	7 (100.00)	0	0	0	0	0	0	0	0	7
5	very large	1 (100.00)	0	0	0	0	0	0	0	0	1
	total	33 (50.00)	2 (3.03)	9 (13.63)	3 (4.55)	0	8 (12.12)	10 (15.16)	0	1 (1.52)	66

Source: Field Survey
Figures in brackets are percentages to the total number of HHs in respective size groups.

6.7 Reasons for non-repayment

The following Table 6.7 explains the reasons for non-repayment of the borrowed money. Out of total number of 76 HHs 31.59% of HHs reported to have postponed the debt repayment. Similarly 31.59% farmers reported that the payment will be made after harvesting. Moreover, 22.36% of HHs reported that due to major medical and other expenses they could not repay the borrowed amount.

Table 6.7
Reasons for non-repayment of the borrowed money

(Number of households)

S.No	landholding categories	income always less than expenditure	crop loss	debt has been waived	expecting debt waiver	debt repayment postponed	payment will be made after harvesting	major medical or other expenses	total
1	marginal	6 (28.57)	0	0	0	5 (23.80)	4 (19.04)	6 (28.57)	21
2	small	2 (5.71)	1 (2.85)	0	0	13 (37.14)	11 (31.42)	8 (22.85)	35
3	medium	0	0	0	0	5 (50.00)	3 (30.00)	2 (20.00)	10
4	large	0	2 (25.00)	0	0	1 (12.50)	5 (62.50)	0	8
5	very large	0	0	0	0	0	1 (50.00)	1 (50.00)	2
	total	8 (10.52)	3 (3.94)	0	0	24 (31.59)	24 (31.59)	17 (22.36)	76

Source: Field Survey

Figures in brackets are percentages to the total number of HHs in respective size groups.

CHAPTER -7

ASSET ENDOWMENTS OF THE HOUSEHOLDS, GOVERNMENT SUPPORT PROGRAMS AND INSURANCE

This chapter comprises the analysis of field data to display the asset endowments if any of the households, government support programmes and insurance.

7.1. Assets: Number of households possessing various types of farm and non-farm assets; types of assets possessed

Out of the total no of 3 reported households, 33.33 percent of each size group has reported to have purchased land during the year 2018-19. On the other hand of the total no of 6 households 66.67 per cent of small farmers and 33.33 per cent of marginal farmers have purchased livestock during the reference year. Moreover, one farmer household from small farmer category reported to have purchased sickle/chaff-cutter etc and only one farmer from marginal category reported to have purchased power tiller. The details can be viewed from table 7.1.

Table 7.1
Number of households reporting purchase of various productive assets

(in numbers)

S.No	landholding categories	Assets for farm business									Assets for non-farm business		Residential building including land
		land	building for farm business	fish tank	livestock	poultry/duckery	sickle/chaff-cutter/axe/spade/plough	power tiller/tractor	thresher	pump	land &building	machinery/equipment	
1	Marginal	1 (33.33)	0	0	2 (33.33)	0	0	1 (100.0)	0	0	0	0	0
2	Small	1 (33.33)	0	0	4 (67.33)	0	1 (100.0)	0	0	0	0	0	0
3	Medium	1 (33.33)	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0
5	Very large	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3 (1.50)	0	0	6 (3.00)	0	1 (0.50)	1 (0.50)	0	0	0	0	0

Source: Field Survey

Note:1. Figures in brackets for total column are the percentages to total number of 200 sample households.

2. Figures in brackets for each size group indicate the percentages to total number of reported households purchased respective assets.

7.1.1. Expenditure incurred purchase and maintenance of various assets; receipts from sale of these assets; net expenditure on productive assets

It can be seen from table 7.2, out of the total no of 9 reported households, 55.56 per cent are from small farmers, 33.33 per cent from marginal farmers and 11.11 per cent from medium farmers have incurred expenditure for the purchase of product assets. On an average, the per household expenditure incurred by the sample farmers for the purchase of product assets is reported to be RS.3,41,556/-. Across the groups the per household expenditure varied from Rs.2,50,000/- in case of medium farmers to Rs.4,91,667/- in case of marginal farmers. The reasons for incurred excess amount by the marginal farmers compared to other size groups may be attributed to have not having purchased product farm assets earlier. As a result, they have incurred high expenses for the purchase of product assets. In table 7.3 explains total Expenditure incurred on the purchase of different farm business assets. All farm group farmers incurred expenditure on land Rs.16,10,000/- followed by tractor Rs.12,00,000/-, livestock Rs. 2,39,000/- and plough RS. 25,000/- respectively.

Table 7.2
Total Expenditure incurred on the purchase of productive assets (in Rs)

(Per households)

S.No	landholding categories	Per household expenditure (Rs)	Number of households reporting
1	Marginal	491667	3 (33.33)
2	Small	269800	5 (55.56)
3	Medium	250000	1 (11.11)
4	Large	0	0
5	Very large	0	0
	Total	341556	9 (100.00)

Source: Field Survey

Table 7.3
Total Expenditure incurred on the purchase of productive assets (in Rs)

S.No	landholding categories	Assets for farm business									Assets for non-farm business		Residential building including land
		land	building for farm business	fish tank	livestock	poultry/ duckery	sickle/chaff-cutter/axe/ spade/plough	power tiller/tractor	thresher	pump	land &building	machinery/equipment	
1	Marginal	160000	0	0	115000	0	0	1200000	0	0	0	0	0
2	Small	1200000	0	0	124000	0	25000	0	0	0	0	0	0
3	Medium	250000	0	0	0	0	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0
5	Very large	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1610000	0	0	239000	0	25000	1200000	0	0	0	0	0

Source: Field Survey

Out of the total no of 4 reported households, 50.00 per cent of small farmer group and 25.00 per cent each from marginal and medium size group has reported the sale land during the year 2018-19. On the other hand of the total no of 30 households 60.00 per cent of small farmers, 30.00 per cent of marginal and 10.00 per cent of medium farmers have sale livestock during the reference year. Moreover 43.75 per cent each marginal and small farmers have sale poultry/duckery and only one farmer from small category reported to have sale sickle/chaff-cutter. The details can be viewed from table 7.4.

Table 7.4
Number of households reporting sale of productive assets

(in numbers)

S.No	landholding categories	Assets for farm business									Assets for non-farm business		Residential building including land
		land	building for farm business	fish tank	livestock	poultry/duckery	sickle/chaff-cutter/axe/spade/plough	power tiller/tractor	thresher	pump	land &building	machinery/equipment	
1	Marginal	1 (25.00)	0	0	9 (30.00)	7 (43.75)	0	0	0	0	0	0	0
2	Small	2 (50.00)	0	0	18 (60.00)	7 (43.75)	1 (100.00)	0	0	0	0	0	0
3	Medium	1 (25.00)	0	0	3 (10.00)	2 (12.50)	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0
5	Very large	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4 (2.00)	0	0	30 (15.00)	16 (8.00)	1 (0.50)	0	0	0	0	0	0

Source: Field Survey

Note:1. Figures in brackets for total column are the percentages to total number of 200 sample households.

2. Figures in brackets for each size group indicate the percentages to total number of reported households purchased respective assets.

On an average the per household receipts from the sale of productive assets is reported to be Rs.1, 72,361/-. Across the groups, the receipts obtained from the sale varied from Rs.1,08,285 in case of marginal farmers to Rs. 3,37,417/- in case of medium farmers. Details can be seen from the table 7.5.

Table 7.5
Total receipt obtained from the sale of productive assets (in Rs)

(Per Household)

S.No	landholding categories	Per household receipts from sales (Rs)	Number of households reporting
1	Marginal	108285	10 (27.03)
2	Small	155714	21 (56.76)
3	Medium	337417	6 (16.21)
4	Large	0	0
5	Very large	0	0
	Total	172361	37 (100.00)

Source: Field Survey

In table 7.6 explains that total receipts from sale of different farm business assets. All farm group farmers have incurred expenditure on land 6,10,0000/- followed by livestock 2,53,450/-, poultry 15,900/- and chaff cutter 8,000/- respectively. No such repairs and maintenance of productive assets were found to have been made during the period.

Table 7.6
Total receipts from sale of productive assets (in Rs)

S.No	landholding categories	Assets for farm business									Assets for non-farm business		Residential building including land
		land	building for farm business	fish tank	livestock	poultry/duckery	sickle/chaff-cutter/axe/spade/plough	power tiller/tractor	thresher	pump	land& building	machinery/equipment	
1	Marginal	1000000	0	0	74950	7900	0	0	0	0	0	0	0
2	Small	3100000	0	0	155500	6500	8000	0	0	0	0	0	0
3	Medium	2000000	0	0	23000	1500	0	0	0	0	0	0	0
4	Large	0	0	0	0	0	0	0	0	0	0	0	0
5	Very large	0	0	0	0	0	0	0	0	0	0	0	0
	Total	6100000	0	0	253450	15900	8000	0	0	0	0	0	0

Source: Field Survey

7.1.2. Government supporting programmes for farming in Andhra Pradesh

Government of Andhra Pradesh has established 10778 nos. of Dr.YSR Rythu Bharosa Kendralu (Dr.YSR RBKs) &154 Hubs, with an integration of Agri Input Shop and Farmer Knowledge Centre in coterminous with Village Secretariats /Gram Panchayats for rendering all services of Agriculture and Allied sectors at village itself.

Agri Input Shop ensures the availability of Certified & quality multi-branded Agri inputs to farmers at their village. Farmer Knowledge Centre provides scientific Advisories pertaining to Agriculture & Allied sectors to the farmers timely.

e-Crop booking is done to create farmer's database through e-Crop Application. This data base is made mandatory for usage in implementation of Crop Insurance, providing Input subsidy, Sunna Vaddi Panta Runalu and Procurement of Agriculture produce.

Encouraging the farmers to go for market driven cropping system based on market intelligence system by establishing the Agri. Advisory Boards right from RBK level to Mandal, District and finally at State level duly placing farmers taking decisions.

Organization of Dr.YSR Polambadi (Farmer Field Schools) to empower the farmers to take economically viable decisions by adopting ecofriendly practices of Integrated Crop Management in a scientific manner and also to reduce the cost of cultivation and enhance the productivity

Dr.YSR Agri Testing Labs are being established to test the Agri inputs like Seed, Fertilizer & Pesticides to ensure the availability of quality agricultural inputs to the Farmers at RBK level at their villages.

7.2. Technical Advice: Sources of technical advice (KVKs, extension officials etc); frequency of such advice; reasons for not availing advice

Out of the total no of 200 sample households, 92.50 per cent of households reported to have received technical advice from the source of 1. Extension agents 2. Agri.university/college 3. Radio/tv/newspaper/internet 4. Veterinary dept and 5. NGOs. Of the total 185 reported households 39.46 per cent of small farmers, 34.14 per cent of marginal farmers, 12.43 per cent of medium farmers, 11.89 per cent of large farmers and 1.08 per cent of very large farmers reported to have sought technical advice from the mentioned sources. Of the total reported households, 57.84 per cent of households sought technical advice from

extension agents, 21.08 per cent of households from Radio/tv/newspaper/internet etc, 15.14 per cent of households from Veterinary dept and 3.78 per cent of households from NGOs, a negligible percentage of 2.16 per cent have sought advice from Agri.university/college. Observing across the groups the farmer households sought technical advice accessed large from extension agents. Details can be observed from the table 7.7.

Table 7.7
Sources of technical advice accessed for crops grown

S.No	landholding categories	extension agents	krishivigy ankendra	agri.university/college	pvt.commercial agents	progressive farmer	radio/tv/newspaper/internet	veterinary dept.	NGO	total
1	Marginal	35 (53.85)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (21.54)	12 (18.46)	4 (6.15)	65 (35.14)
2	Small	47 (64.38)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (20.55)	10 (13.70)	1 (1.37)	73 (39.46)
3	Medium	15 (65.22)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (17.39)	2 (8.70)	2 (8.70)	23 (12.43)
4	Large	9 (40.91)	0.00 (0.00)	4 (18.18)	0.00 (0.00)	0.00 (0.00)	5 (22.73)	4 (18.18)	0.00 (0.00)	22 (11.89)
5	Very large	1 (50.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (50.00)	0.00 (0.00)	0.00 (0.00)	2 (1.08)
	Total	107 (57.84)	0.00 (0.00)	4 (2.16)	0.00 (0.00)	0.00 (0.00)	39 (21.08)	28 (15.14)	7 (3.78)	185 (100.00)

Source: Field Survey

7.2.1. Reasons for not accessing different sources of technical advice

Out of the total no of 93 reported sample households, 43.01 per cent of marginal, 40.86 per cent of small, 9.68 per cent of medium, 5.38 per cent of large and 1.08 per cent of very large farmer category reported to have not accessed the source of extension agents. Among the total reported households, majority percentages of farmers in each size group is reported the reason for not accessing source of extension agents is due to no requirement to seek advice from the source of extension agent. Details are visualized from the table from 7.8.

Table7.8
Reasons for not accessing the sources of extension agent's technical advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	10 (25.00)	30 (75.00)	0.00 (0.00)	40 (43.01)
2	Small	0.00 (0.00)	13 (34.21)	25 (65.79)	0.00 (0.00)	38 (40.86)
3	Medium	0.00 (0.00)	1 (11.11)	8 (88.89)	0.00 (0.00)	9 (9.68)
4	Large	0.00 (0.00)	1 (20.00)	4 (80.00)	0.00 (0.00)	5 (5.38)
5	Very large	0.00 (0.00)	1 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (1.08)
	Total	0.00 (0.00)	26 (27.96)	67 (72.04)	0.00 (0.00)	93 (100.00)

Source: Field Survey

Out of the total no of 200 reported sample households, 42.50 per cent of small, 37.50 per cent of marginal, 12.00 per cent of medium, 7.00 per cent of large and 1.00 per cent of very large farmer category reported to have not accessed the source of krishi vigyan Kendra. Among the total reported households, majority percentages of all the farmers are reported the reason for not accessing source of krishi vigyan Kendra is due to not available to seek advice from the source of krishi vigyan Kendra advice. Details are visualized from the table from 7.8.1.

Table 7.8.1

Reasons for not accessing the sources of krishi vigyan Kendra technical advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	66 (88.00)	9 (12.00)	0.00 (0.00)	75 (37.50)
2	Small	2 (2.35)	65 (76.47)	18 (21.18)	0.00 (0.00)	85 (42.50)
3	Medium	0.00 (0.00)	17 (70.83)	7 (29.17)	0.00 (0.00)	24 (12.00)
4	Large	4 (28.57)	5 (35.71)	5 (35.17)	0.00 (0.00)	14 (7.00)
5	Very large	0.00 (0.00)	1 (50.00)	1 (50.00)	0.00 (0.00)	2 (1.00)
	Total	6 (3.00)	154 (77.00)	40 (20.00)	0.00 (0.00)	200 (100.00)

Source: Field Survey

Out of the total no of 196 reported sample households, 43.37 per cent of small, 38.27 per cent of marginal, 12.24 per cent of medium, 5.10 per cent of large and 1.02 per cent of very large farmer category reported to have not accessed the source of agri.university/college. Among the total reported households, majority percentages of all the farmers are reported the reason for not accessing source of agri.university/college is due to not available to seek advice from the source of agri.university/college. Details are can be seen from the table 7.8.2.

Table 7.8.2

Reasons for not accessing the sources of agri.university/college technical advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	66 (88.00)	9 (12.00)	0.00 (0.00)	75 (38.27)
2	Small	2 (2.35)	65 (76.47)	18 (21.18)	0.00 (0.00)	85 (43.37)
3	Medium	0.00 (0.00)	17 (70.83)	7 (29.17)	0.00 (0.00)	24 (12.24)
4	Large	0.00 (0.00)	5 (50.00)	5 (50.00)	0.00 (0.00)	10 (5.10)
5	Very large	0.00 (0.00)	1 (50.00)	1 (50.00)	0.00 (0.00)	2 (1.02)
	Total	2 (1.02)	154 (78.57)	40 (20.41)	0.00 (0.00)	196 (100.00)

Source: Field Survey

Out of the total no of 200 reported sample households, 42.50 per cent of small, 37.50 per cent of marginal, 12.00 per cent of medium, 7.00 per cent of large and 1.00 per cent of very large farmer category reported to have not accessed the source of pvt.commercial agents. Among the total reported households, majority percentages of all the farmers are reported the reason for not accessing source of private commercial agents is due to not available to seek advice from the source of private commercial agents. Details are can be observed from the table 7.8.3.

Table 7.8.3
Reasons for not accessing the sources of pvt.commercial agents technical advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	75 (100.00)	0.00 (0.00)	0.00 (0.00)	75 (37.50)
2	Small	0.00 (0.00)	85 (100.00)	0.00 (0.00)	0.00 (0.00)	85 (42.50)
3	Medium	0.00 (0.00)	24 (100.00)	0.00 (0.00)	0.00 (0.00)	24 (12.00)
4	Large	0.00 (0.00)	14 (100.00)	0.00 (0.00)	0.00 (0.00)	14 (7.00)
5	Very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (1.00)
	Total	0.00 (0.00)	200 (100.00)	0.00 (0.00)	0.00 (0.00)	200 (100.00)

Source: Field Survey

Out of the total no of 200 reported sample households, 42.50 per cent of small, 37.50 per cent of marginal, 12.00 per cent of medium, 7.00 per cent of large and 1.00 per cent of very large farmer category reported to have not accessed the source of progressive farmer. Among the total reported households majority percentages of all the farmers are reported the reason for not accessing source of progressive farmer is due to not available to seek advice from the source of progressive farmer. Details are can be observed from the table 7.8.4.

Table 7.8.4
Reasons for not accessing the sources of progressive farmer advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	75 (100.00)	0.00 (0.00)	0.00 (0.00)	75 (37.50)
2	Small	0.00 (0.00)	85 (100.00)	0.00 (0.00)	0.00 (0.00)	85 (42.50)
3	Medium	0.00 (0.00)	24 (100.00)	0.00 (0.00)	0.00 (0.00)	24 (12.00)
4	Large	0.00 (0.00)	14 (100.00)	0.00 (0.00)	0.00 (0.00)	14 (7.00)
5	Very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (1.00)
	Total	0.00 (0.00)	200 (100.00)	0.00 (0.00)	0.00 (0.00)	200 (100.00)

Source: Field Survey

Out of the total no of 161 reported sample households, 46.58 per cent of small, 34.78 per cent of marginal, 12.42 per cent of medium, 5.59 per cent of large and 0.62 per cent of very large farmer category reported to have not accessed the source of radio/tv/newspaper/internet. Among the total reported households, majority percentages of farmers in each size group is reported the reason for not accessing source of radio/tv/newspaper/internet is due to no requirement to seek advice from the source of radio/tv/newspaper/internet. Details are observed from the table from 7.8.5.

Table 7.8.5
Reasons for not accessing the sources of radio/tv/newspaper/internet advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	11 (19.64)	14 (25.00)	31 (55.36)	0.00 (0.00)	56 (34.78)
2	Small	12 (16.00)	14 (18.67)	49 (65.33)	0.00 (0.00)	75 (46.58)
3	Medium	0.00 (0.00)	4 (20.00)	16 (80.00)	0.00 (0.00)	20 (12.42)
4	Large	0.00 (0.00)	1 (11.11)	8 (88.89)	0.00 (0.00)	9 (5.59)
5	Very large	0.00 (0.00)	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (0.62)
	Total	23 (14.29)	33 (20.50)	105 (65.22)	0.00 (0.00)	161 (100.00)

Source: Field Survey

Out of the total no of 172 reported sample households, 43.60 per cent of small, 36.33 per cent of marginal, 12.79 per cent of medium, 5.81 per cent of large and 1.16 per cent of

very large farmer category reported to have not accessed the source of veterinary department. Among the total reported households, majority percentage of all the farmers are reported the reason for not accessing source of veterinary department is due to no requirement to seek advice from the source of veterinary department. Details are can be viewed from the table from 7.8.6.

Table 7.8.6
Reasons for not accessing the sources of veterinary dept. advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	63 (100.00)	0.00 (0.00)	63 (36.33)
2	Small	0.00 (0.00)	0.00 (0.00)	75 (100.00)	0.00 (0.00)	75 (43.60)
3	Medium	0.00 (0.00)	0.00 (0.00)	22 (100.00)	0.00 (0.00)	22 (12.79)
4	Large	0.00 (0.00)	0.00 (0.00)	10 (100.00)	0.00 (0.00)	10 (5.81)
5	Very large	0.00 (0.00)	0.00 (0.00)	2 (100.00)	0.00 (0.00)	2 (1.16)
	Total	0.00 (0.00)	0.00 (0.00)	172 (100.00)	0.00 (0.00)	172 (100.00)

Source: Field Survey

Out of the total no of 193 reported sample households, 43.52 per cent of small, 36.79 per cent of marginal, 11.40 per cent of medium, 7.25 per cent of large and 1.04 per cent of very large farmer category reported to have not accessed the source of NGOs. Among the total reported households, majority percentages of all the farmers are reported the reason for not accessing source of NGOs is due to not available to seek advice from the source of NGOs. Details are can be observed from the table 7.8.3.

Table 7.8.7
Reasons for not accessing the sources of NGO advice

S.No	landholding categories	not aware	not available	not required	others	total
1	Marginal	0.00 (0.00)	71 (100.00)	0.00 (0.00)	0.00 (0.00)	71 (36.79)
2	Small	0.00 (0.00)	84 (100.00)	0.00 (0.00)	0.00 (0.00)	84 (43.52)
3	Medium	0.00 (0.00)	22 (100.00)	0.00 (0.00)	0.00 (0.00)	22 (11.40)
4	Large	0.00 (0.00)	14 (100.00)	0.00 (0.00)	0.00 (0.00)	14 (7.25)
5	Very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (1.04)
	Total	0.00 (0.00)	193 (100.00)	0.00 (0.00)	0.00 (0.00)	193 (100.00)

Source: Field Survey

7.2.2. Frequency of Contact with the Sources

Out of the 107 farmers reported that the frequency of contact with extension agents, 43.93 per cent are from small farmers, 32.71 per cent are marginal farmer category, 14.05 per cent of medium farmer category, 8.41 per cent of large farmer category and only 0.93 per cent of very large category. Across the groups the percentage of farmers report of the frequency of contact with extension agents need based varied from 33.33 per cent in case of large farmers to 100 per cent in case of very large farmers. On the other hand, the percentage of farmers reported the reason for the frequency of contact with extension agents seasonally ranged between 29.79 percent in case of small and 33.33 each per cent in case of medium and large farmers. Details can be observed in the table 7.9.

Table 7.9
Frequency of contact with extension agents

S.No	landholding categories	daily	weekly	monthly	seasonally	need based	casual contact	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	11 (31.43)	24 (68.57)	0.00 (0.00)	35 (32.71)
2	Small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (29.79)	33 (70.21)	0.00 (0.00)	47 (43.93)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	5 (33.33)	10 (66.67)	0.00 (0.00)	15 (14.02)
4	Large	0.00 (0.00)	0.00 (0.00)	3 (33.34)	3 (33.33)	3 (33.33)	0.00 (0.00)	9 (8.41)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (0.93)
	Total	0.00 (0.00)	0.00 (0.00)	3 (2.80)	33 (30.84)	71 (66.36)	0.00 (0.00)	107 (100.00)

Source: Field Survey

Out of the 4 reported farmers that the frequencies of contact with agri.university/college, 100 per cent are large farmer category only. Across the groups, the percentage of all farmers report of the frequency of contact with agri.university/college seasonally. Details can be viewed in the table 7.9.1.

Table 7.9.1
Frequency of contact with agri.university/college

S.No	landholding categories	Daily	weekly	monthly	seasonally	need based	casual contact	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	Small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)

Source: Field Survey

Out of 39 reported farmers that the frequency of contact with Radio/TV/Newspaper/Internet, 38.46 per cent are from small farmers, 35.90 per cent of marginal farmer category, 12.82 per cent of large farmer category, 10.26 per cent of medium

farmer category and only 2.56 per cent of very large category. Across the groups, the percentage of farmers report of the frequency of contact with radio/tv/newspaper/internet seasonally varied from 20.00 per cent in case of large farmers to 100 per cent in case of very large farmers. On the other hand, the percentage of farmers reported the reason of the frequency of contact with radio/tv/newspaper/internet need based ranged between 6.67 percent in case of small and 25.00 per cent in case of medium farmers. Details can be visualized in the table 7.9.2.

Table 7.9.2
Frequency of contact with radio/tv/newspaper/internet

S.No	landholding categories	Daily	weekly	monthly	seasonally	need based	casual contact	total
1	Marginal	3 (21.43)	0.00 (0.00)	0.00 (0.00)	9 (64.29)	2 (14.29)	0.00 (0.00)	14 (35.90)
2	Small	9 (60.00)	0.00 (0.00)	0.00 (0.00)	5 (33.33)	1 (6.67)	0.00 (0.00)	15 (38.46)
3	Medium	2 (50.00)	0.00 (0.00)	0.00 (0.00)	1 (25.00)	1 (25.00)	0.00 (0.00)	4 (10.26)
4	Large	4 (80.00)	0.00 (0.00)	0.00 (0.00)	1 (20.00)	0.00 (0.00)	0.00 (0.00)	5 (12.82)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (2.56)
	Total	18 (46.15)	0.00 (0.00)	0.00 (0.00)	17 (43.59)	4 (10.26)	0.00 (0.00)	39 (100.00)

Source: Field Survey

Out of the 28 farmers reported that the frequency of contact with veterinary department, 42.86 per cent are from marginal farmers, 35.71 per cent of small farmer category, 14.29 per cent of large farmer category and 7.14 per cent of medium farmer category. Across the groups, the percentage of farmers reported that the frequency of contact with veterinary department seasonally varied from 30.00 per cent in case of small farmers to 100 per cent in case of marginal farmers. On the other hand, the percentage of farmers reported the reason for the frequency of contact with veterinary department need based ranged between 50.00 per cent in case of large and 100.00 per cent in case of medium farmers. Details can be observed in the table 7.9.3.

Table 7.9.3
Frequency of contact with veterinary dept

S.No	landholding categories	Daily	weekly	monthly	seasonally	need based	casual contact	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	12 (100.00)	0.00 (0.00)	0.00 (0.00)	12 (42.86)
2	Small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (30.00)	7 (70.00)	0.00 (0.00)	10 (35.71)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (100.00)	0.00 (0.00)	2 (7.14)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (50.00)	2 (50.00)	0.00 (0.00)	4 (14.29)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	17 (60.71)	11 (39.29)	0.00 (0.00)	28 (100.00)

Source: Field Survey

Out of the 7 reported farmers that the frequencies of contact with NGOs, 57.14 per cent are marginal farmer category, 28.57 per cent of medium farmer category and 14.29 per cent of small farmer category. Across the groups the percentage of all farmers report of the frequency of contact with NGOs only need based. Details can be seen in the table 7.9.1.

Table 7.9.4
Frequency of contact with NGO

S.No	landholding categories	daily	weekly	monthly	seasonally	need based	casual contact	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)	0.00 (0.00)	4 (57.14)
2	Small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (14.29)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (100.00)	0.00 (0.00)	2 (28.57)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (100.00)	0.00 (0.00)	7 (100.00)

Source: Field Survey

7.2.3. Number of Households Adopted Advice from Reported Sources

Out of the total no of 200 sample households, 86.00 per cent of households reported to have adopted technical advice from the source of 1. Extension agents 2. Agri.university/college 3. Radio/tv/newspaper/internet 4. Veterinary dept and 5. NGOs. Of the total 1172 reported households 41.28 per cent of small farmers, 32.56 per cent of marginal farmers, 12.79 per cent of large farmers, 12.21 per cent of medium farmers and 1.16 per cent of very large farmers reported to have adopted technical advice from the mentioned

sources. Of the total reported households, 59.88 per cent of households adopted technical advice from extension agents, 20.35 per cent of households from Radio/TV/Newspaper/Internet etc,. 13.95 per cent of households from Veterinary dept and 3.49 per cent of households from NGOs, a negligible percentage of 2.33 per cent have sought advice from Agri.university/college. Observing across the groups the farmer households adopted technical advice accessed large from extension agents. Details can be visualized from the table 7.10.

Table 7.10
Number of households which adopted the advice from the reported source

(Number of households)

S.No	landholding categories	extension agents	krishivigyankendra	agri.university/college	pvt.commercial agents	Progressive farmer	radio/tv/newspaper/internet	veterinary dept.	NGO	total
1	Marginal	31 (55.36)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	11 (19.64)	10 (17.86)	4 (7.14)	56 (32.56)
2	Small	47 (66.20)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (21.13)	8 (11.27)	1 (1.41)	71 (41.28)
3	Medium	15 (71.43)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (14.29)	2 (9.52)	1 (4.76)	21 (12.21)
4	Large	9 (40.91)	0.00 (0.00)	4 (18.18)	0.00 (0.00)	0.00 (0.00)	5 (22.73)	4 (18.18)	0.00 (0.00)	22 (12.79)
5	Very large	1 (50.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (50.00)	0.00 (0.00)	0.00 (0.00)	2 (1.16)
	Total	107 (59.88)	0.00 (0.00)	4 (2.33)	0.00 (0.00)	0.00 (0.00)	35 (20.35)	24 (13.95)	6 (3.49)	172 (100.00)

Source: Field Survey

7.2.4. Usefulness of the Adopted Advice

Out of the total no of 200 sample households, 86.00 per cent of the households reported about the usefulness of the adopted advice from different agencies. Of the total no of 172 reported households, 59.88 per cent of household reported to have benefited by the adopted advice given by extension agents. About 20.35 per cent of households reported the usefulness of advice to Radio/TV/Newspaper/Internet. Moreover, 13.95 per cent of household reported to have benefited from the advice of veterinary department and 3.49 per cent of household reported to have benefited by the advice of NGOs. Observing across the groups majority of the farmers from all categories reported to have benefited by the advice of extension agents. A negligible 2.33 per cent of farmers respond to have benefited by the advice of Agriculture University. All the details are presented in the table 7.11.

Table 7.11

Whether the adopted advice was useful

(Number of households)

S. No	landholding categories	Useful					not useful					don't know					total
		extension agents	agri.university/college	Radio/TV/ news paper	veterinary dept.	NGO	extension agents	agri.university/ college	Radio/TV/ news paper	veterinary dept.	NGO	extension agents	agri.university/ college	Radio/TV/ news paper	veterinary dept.	NGO	
1	Marginal	31 (55.36)	0.00 (0.00)	11 (19.64)	10 (17.86)	4 (7.14)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	56 (32.56)
2	Small	47 (66.20)	0.00 (0.00)	15 (21.13)	8 (11.27)	1 (1.41)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	71 (41.28)
3	Medium	15 (71.43)	0.00 (0.00)	3 (14.29)	2 (9.52)	1 (4.76)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	21 (12.21)
4	Large	9 (40.91)	4 (18.18)	5 (22.73)	4 (18.18)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	22 (12.79)
5	Very large	1 (50.00)	0.00 (0.00)	1 (50.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.16)
	Total	103 (59.88)	4 (2.33)	35 (20.35)	24 (13.95)	6 (3.49)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	172 (100.00)

Source: Field Survey

7.2.5. Impact of Adoption of Advice from the Reported Source

Out of the total no of 103 reported households, who reported the impact of the adoption of advice from source extension agency. 45.63 per cent are small farmers 30.10 per cent are marginal farmer, 14.56 per cent are from medium farmer category, 8.74 are large farmer category and a negligible 0.97 per cent of farmer form very large group of farmers. Out of the total no of 103 reported farmers 86.11 per cent reported to have benefited by the adoption of above from source extension agents. On the other hand, 13.89 per cent of farmers reported to have moderate benefit by the adoption of the advice given by source extension agents. Glancing across the groups majority percentage of the farmers from all size groups rerouted to have benefited by the adoption of advice given by the source extension agents. The details presented from the following table 7.12.

Table 7.12
Impact of the adoption of advice from the reported source extension agents

(Number of households)

S.No	landholding categories	beneficial	moderately beneficial	no effect	harmful	don't know	total
1	Marginal	28 (90.32)	3 (9.68)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	31 (30.10)
2	Small	41 (87.23)	6 (12.77)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	47 (45.63)
3	Medium	13 (86.67)	2 (13.33)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (14.56)
4	Large	5 (55.56)	4 (44.44)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	9 (8.74)
5	Very large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (0.97)
	Total	93 (86.11)	15 (13.89)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	103 (100.00)

Source: Field Survey

Out of the total no of 4 reported households, who reported the impact of the adoption of advice from source of agri.university/college, 100 per cent are large farmers category only. Out of the total no of 4 reported farmers 100 per cent reported to have benefited by the adoption of above from source agri.university/college. The details can be seen from the following table 7.12.1.

Table 7.12.1
Impact of the adoption of advice from the reported source agri.university/college

(Number of households)

S.No	landholding categories	beneficial	moderately beneficial	no effect	harmful	don't know	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	Small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4	Large	4 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	4 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (100.00)

Source: Field Survey

Out of the total no of 35 reported households, who reported the impact of the adoption of advice from source Radio/TV/Newspaper/Internet. 42.86 per cent are small farmers 31.43 percent of marginal farmer, 14.29 per cent of large farmer category, 8.57 of medium farmer category and a negligible 2.86 per cent of farmer form very large group of farmers. Out of the total no of 35 reported farmers 94.29 per cent reported to have benefited by the adoption of above from source radio/tv/newspaper/internet. On the other hand, 5.71 per cent of farmers reported to have moderate benefited by the adoption of the advice given by source radio/tv/newspaper/internet. Glancing across the groups, majority percentage of the farmers from all size groups reported to have benefited by the adoption of advice given by the source radio/tv/newspaper/internet. The details can be visualized from the following table 7.12.2.

Table 7.12.2
Impact of the adoption of advice from the reported source radio/tv/newspaper/internet
(Number of households)

S.No	landholding categories	beneficial	moderately beneficial	no effect	harmful	don't know	total
1	Marginal	10 (90.91)	1 (9.09)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	11 (31.43)
2	Small	14 (93.33)	1 (6.67)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (42.86)
3	Medium	3 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (8.57)
4	Large	5 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	5 (14.29)
5	Very large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (2.86)
	Total	33 (94.29)	2 (5.71)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	35 (100.00)

Source: Field Survey

Out of the total no of 24 reported households, who reported the impact of the adoption of advice from source of veterinary department, 41.67 per cent are marginal farmers 33.33 per cent of small farmer, 16.67 per cent of large farmer category and 8.33 of medium farmer category. Out of the total no of 24 reported farmers 45.83 per cent reported to have moderate benefit by the adoption of above from source veterinary department. On the other hand 37.50 per cent of farmers reported to have benefited by the adoption of the advice given by source veterinary department. Moreover 16.67 per cent of farmers reported to have no effect by the adoption of the advice given by source veterinary department. Glancing across the groups majority percentage of the farmers from all size groups reported to have moderate benefited by the adoption of advice given by the source veterinary department. The details can be viewed from the following table 7.12.3

Table 7.12.3
Impact of the adoption of advice from the reported source veterinary dept.

(Number of households)

S.No	landholding categories	beneficial	moderately beneficial	no effect	harmful	don't know	total
1	Marginal	3 (30.00)	5 (50.00)	2 (20.00)	0.00 (0.00)	0.00 (0.00)	10 (41.67)
2	Small	3 (37.50)	3 (37.50)	2 (25.00)	0.00 (0.00)	0.00 (0.00)	8 (33.33)
3	Medium	0.00 (0.00)	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (8.33)
4	Large	3 (75.00)	1 (25.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (16.67)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	9 (37.50)	11 (45.83)	4 (16.67)	0.00 (0.00)	0.00 (0.00)	24 (100.00)

Source: Field Survey

Out of the total no of 6 reported households, who reported the impact of the adoption of advice from source of NGOs, 66.67 per cent are from marginal farmers and 16.67 each per cent from small and medium farmer category. Out of the total no of 6 reported farmers, 66.67 per cent reported to have moderate benefit by the adoption of above from source NGOs. On the other hand, 33.33 per cent of farmers reported to have benefited by the adoption of the advice given by source NGOs. Glancing across the groups, majority percentage of the farmers from all size groups reported to have moderate benefited by the adoption of advice given by the source NGOs. The details can be observed from the following table 7.12.4.

Table 7.12.4
Impact of the adoption of advice from the reported source NGO

(Number of households)

S.No	landholding categories	beneficial	moderately beneficial	no effect	harmful	don't know	total
1	Marginal	1 (25.00)	3 (75.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (66.66)
2	Small	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (16.67)
3	Medium	0.00 (0.00)	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (16.67)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	2 (33.33)	4 (66.67)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6 (100.00)

Source: Field Survey

7.3. MSP: Awareness about MSP and the agencies available in the study region for crop procurement

Awareness of MSP related to Reported Crops

While enquiring about the awareness of MSP prices of the reported crops the sample farmers expressed to have awareness of MSP with respect to paddy kharif, rabi, maize, chilies and cotton crops. Of the total no of 54 reported farmers, 46.30 percent of marginal, 40.74 per cent of small, 7.41 per cent of medium, 3.70 percent of large and 1.85 per cent of very large farmers have reported the awareness of MSP price with respected to kharif paddy crop. On the other hand, 25.00 of the total no of farmers reported the awareness of MSP towards rabi paddy crop. Across the groups, majority percentages of farmers reported awareness of MSP price towards paddy kharif crop are from small and marginal categories. Moreover, out of total no 36 farmers, 50 per cent of farmers from marginal, 25.00 per cent of from small, 19.44 per cent of medium and 5.56 per cent of large farmer category reported the awareness about the MSP with respect of maize crop. The percentages of farmers reported the awareness about the MSP towards chilies crop varied between 2.56 per cent from very large category and 43.29 per cent from small farmer category. Across the groups the farmers from small, medium and large farmer category reported the awareness about the MSP towards cotton crop. The percentages of reported the awareness of the MSP with respect to the cotton crop from medium farmer category and 42.11 per cent from small farmer category. The details are presented in the following table 7.13.

Table 7.13

Whether aware of MSP related to the reported crops

(Number of households)

S.No	landholding categories	Aware of MSP								
		crop1 (Paddy) Kharif	Crop 2 (Paddy) Rabi	Crop3 (Maize)	Crop4 (Chillies)	Crop5 (Coffee)	Crop 6 (cotton)	Coop 7 (Black Pepper)	Crop 8 (Ragi)	Crop 9 (sugar cane)
1	Marginal	25 (46.30)	21 (42.00)	18 (50.00)	7 (17.95)	0.00	00.00	0.00	0.00	0.00
2	Small	22 (40.74)	22 (44.00)	9 (25.00)	17 (43.29)	0.00	8 (42.11)	0.00	0.00	0.00
3	Medium	4 (7.41)	4 (8.00)	7 (19.44)	5 (12.82)	0.00	4 (21.05)	0.00	0.00	0.00
4	Large	2 (3.70)	2 (4.00)	2 (5.56)	9 (23.08)	0.00	7 (36.84)	0.00	0.00	0.00
5	Very large	1 (1.85)	1 (2.00)	0.00	1 (2.56)	0.00	0.00	0.00	0.00	0.00
	Total	54 (27.00)	50 (25.00)	36 (13.00)	39 (19.50)	0.00	19 (9.50)	0.00	0.00	0.00

Source: Field Survey

7.3.1. Public procurement agencies to which the crops have been sold; quantity, price, total value

Agencies available for Procuring Crops Reported at MSP

While elating information with regards to available of agencies for procuring the MSP crops reported. All the farmers from all groups have expressed that the cotton co-operation of India is available agency for procuring the crops. The details presented in the table 7.14. Moreover all the farmers from small, medium and lare size category reported to have sold their crops to cotton co-operation India only. The details can be seen from table 7.15.

Table 7.14
Agencies available for procuring the crops reported at MSP

(Number of households)

S.No	landholding categories	FCI	JCI	CCI	NAFED	State Food Corporation	State Civil Supplies	
1	Marginal	0	0	0	0	0	0	0
2	Small	0	0	5 (100.00)	0	0	0	5 (41.67)
3	Medium	0	0	4 (100.00)	0	0	0	4 (33.33)
4	Large	0	0	3 (100.00)	0	0	0	3 (25.00)
5	Very large	0	0	0	0	0	0	0
	Total	0	0	12 (100.00)	0	0	0	12 (100.00)

Source: Field Survey

Table 7.15
Agencies to which the reported crops were sold

(Number of Households)

S.No	landholding categories	FCI	JCI	CCI	NAFED	State Food Corporation	State Civil Supplies	
1	Marginal	0	0	0.00 (0.00)	0	0	0	0.00 (0.00)
2	Small	0	0	3 (100.00)	0	0	0	3 (37.50)
3	Medium	0	0	3 (100.00)	0	0	0	3 (37.50)
4	Large	0	0	2 (100.00)	0	0	0	2 (25.00)
5	Very large	0	0	0.00 (0.00)	0	0	0	0.00 (0.00)
	Total	0	0	8 (100.00)	0	0	0	8 (100.00)

Source: Field Survey

Out of the total no of 8 reported households sold the crop to agencies at MSP prices, 37.50 each per cent are from small and medium famer group, 25.00 per cent from large category. Moreover, on an average the per household value of the crop is reported to be RS.1, 92,703/-. Across the groups, the per household value of the crop ranged between Rs. 67,200/- in case of small farmer and Rs.5,95,00/- in case of large farmers. The details are presented in table 7.16.

Table 7.16
Total Value of crops sold to agencies at MSP (in Rs)

S.No	landholding categories	No of reported households	quantity sold (Qtl)	Sale price (per qtl.)	Per household value of the crop (Rs)
1	Marginal	0	0	0	0
2	Small	3 (37.50)	48	4200	67200
3	Medium	3 (37.50)	100	4167	138889
4	Large	3 (25.00)	198	5000	495000
5	Very large	0	0	0	0
	Total	8 (100.00)	346	4456	192703

Source: Field Survey

7.3.2. Reasons if not sold to any agency and quantity sold at below MSP

Reasons for not selling to Agencies at MSP

All the reported 103 farmers expressed the reason for not selling to procuring agencies for paddy crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17

Table 7.17
Reasons for not selling to agencies procuring paddy Kharif crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	31 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	31 (30.10)
2	Small	47 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	47 (45.63)
3	Medium	15 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (14.56)
4	Large	9 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	9 (8.74)
5	Very large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (0.97)
	Total	107 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	103 (100.00)

Source: Field Survey

All the reported 50 farmers expressed the reason for not selling to procuring agencies for rabi paddy crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.1

Table 7.17.1
Reasons for not selling to agencies procuring paddy rabi crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	21 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	21 (42.00)
2	Small	22 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	22 (44.00)
3	Medium	4 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	4 (8.00)
4	Large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (4.00)
5	Very large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (2.00)
	Total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

All the reported 50 farmers expressed the reason for not selling to procuring agencies for maize crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.2.

Table 7.17.2
Reasons for not selling to agencies procuring Maize crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	28 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	28 (56.00)
2	Small	13 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	13 (26.00)
3	Medium	7 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (14.00)
4	Large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (4.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

All the reported 50 farmers expressed the reason for not selling to procuring agencies for Chilies crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.3.

Table 7.17.3
Reasons for not selling to agencies procuring Chilies crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	11 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	11 (22.00)
2	Small	21 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	21 (42.00)
3	Medium	7 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (14.00)
4	Large	10 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	10 (20.00)
5	Very large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (2.00)
	Total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

All the reported 50 farmers expressed the reason for not selling to procuring agencies for coffee crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.4.

Table 7.17.4
Reasons for not selling to agencies procuring coffee crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	15 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	Small	29 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	Medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

All the reported 10 farmers expressed the reason for not selling to procuring agencies for maize crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.5.

Table 7.17.5
Reasons for not selling to agencies procuring cotton crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	Small	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (10.00)
3	Medium	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (20.00)
4	Large	7 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (70.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	10 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	10 (100.00)

Source: Field Survey

All the reported 50 farmers expressed the reason for not selling to procuring agencies for black pepper crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.6.

Table 7.17.6

Reasons for not selling to agencies procuring Black pepper crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	15 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	Small	29 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	Medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

All the reported 19 farmers expressed the reason for not selling to procuring agencies for ragi crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.7.

Table 7.17.7

Reasons for not selling to agencies procuring ragi crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	6 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6 (31.58)
2	Small	7 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (36.84)
3	Medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	6 (31.58)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	19 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	19 (100.00)

Source: Field Survey

All the reported 5 farmers expressed the reason for not selling to procuring agencies for sugarcane crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.8.

Table 7.17.8

Reasons for not selling to agencies procuring Sugarcane crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (20.00)
2	Small	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (20.00)
3	Medium	3 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (60.00)
4	Large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	5 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	5 (100.00)

Source: Field Survey

All the reported 16 farmers expressed the reason for not selling to procuring agencies for turmeric crop at MSP is due to non availability of procurement of agency. The details are presented in the table 7.17.9.

Table 7.17.9

Reasons for not selling to agencies procuring turmeric crop at MSP

(Number of Households)

S.No	Landholding categories	procurement agency not available	no local purchaser	poor quality of crop	crop already pre-pledged	received better price over MSP	Total
1	Marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	Small	15 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	15 (93.75)
3	Medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4	Large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (6.25)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	16 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	16 (100.00)

Source: Field Survey

7.5. PM-KISAN: Assistance under PM-KISAN, if any; number of households; payment received and time taken

YSR Rythu Bharosa-PM-KISAN

YSR Rythu Bharosa scheme is one of the prestigious Government Flagship programmes and also a key promise among the 9 assurances of the Navaratnalu designed for farmer's welfare by providing financial assistance to farmers and making farming a remunerative profession. The scheme was launched on 15thOctober, 2019.

The Government initially had promised an amount of Rs. 50,000/- in four annual installments of Rs. 12,500/-each, but extending installment amount up to Rs. 13,500/- per year to be paid for five years, thereby bringing the total up to Rs. 67,500/. Under the scheme, financial assistance is being provided to land owning farmer families @ of Rs. 13,500/- per year per family duly including Rs. 6000/-from the GOI under PM KISAN. Financial assistance is also being provided to SC, ST, BC, Minority category landless tenant farmers & ROFR cultivators @ of Rs. 13,500/- per year per family from the State budget. The benefit of Rs. 13,500/- will be extended to the eligible land owner farmers in 3 installments as detailed below;

1.) 1st installment @ Rs. 7500/- in the month of May (including Rs. 2000/- from PM-KISAN)
2.) 2nd installment @ Rs. 4000/- during the October (including Rs. 2000/- from PM-KISAN)
3.) 3rd Installment @ Rs. 2000/- during the Jan. month (Exclusively of PM-KISAN scheme).

During 2019-20 an amount of Rs. 6173 Cr. was credited directly through Aadhar linked payments to 46.69 Lakh farm families. During 2020-21, 51.59 lakh farmer families including 1.54 lakh landless SC, ST, BC and Minority farmer families including ROFR cultivators were provided with a benefit of Rs. 6928 Cr. including Rs. 2966 Cr. through PM KISAN.

7.5.1. Total Payment Received under PM-KISAN

The details of per household total payment received under PM-KISAN are presented in the following table 7.18. On an average the payment received per household is reported to be RS.3938/-. Across the groups, the per household payments received varied between 3932 in case of marginal and Rs.3943/- in case of small farmers.

Table 7.18

Total payment received under PM-KISAN and number of households (in Rs)

(Per household)

S.No	landholding categories	Number of households	payment received (Rs)	Per household payment recived	time taken (months)
1	Marginal	59 (45.74)	232000	3932	8
2	Small	70 (54.26)	276000	3943	8
3	Medium	0.00 (0.00)	0	0	0
4	Large	0.00 (0.00)	0	0	0
5	Very large	0.00 (0.00)	0	0	0
	Total	129 (100.00)	508000	3938	8

Source: Field Survey

7.6. Insurance:

7.6.1 Crops insured and reasons if not insured

7.6.1. a. Insurance of Reported Crops Grown

Out of total no of 200 households, 65.50 per cent of farmers reported that they have not insured the crops grown. On the other hand, 34.00 per cent of farmers stated that they have insured their crops only when received loan. A negligible percentage of farmers reported to have insured additionally. Across the groups, majority of percentage of farmers are from marginal, small and medium category of farmers. The details can be glance over table 7.19.

Table 7.19

Whether the reported crops grown are insured

(Number of households)

S.No	landholding categories	insured only when received loan	insured additionally	not insured	Total
1	Marginal	20 (26.67)	0.00 (0.00)	55 (73.33)	75 (37.50)
2	Small	26 (30.59)	1.00 (1.18)	58 (68.24)	85 (42.50)
3	Medium	10 (41.67)	0.00 (0.00)	14 (58.33)	24 (12.00)
4	Large	11 (78.57)	0.00 (0.00)	3 (21.43)	14 (7.00)
5	Very large	1 (50.00)	0.00 (0.00)	1 (50.00)	2 (1.00)
	Total	68 (34.00)	1 (0.50)	131 (65.50)	200 (100.00)

Source: Field Survey

7.6.1. b. Reasons for not insuring the Reported Crops

Out of the total no of 131 reported households, 35.11 per cent reported that they are not aware about the availability of insuring facility. On the other hand 32.60 per cent of farmers reported they are not aware of the insuring facility. About 19.00 19.08 per cent of farmers reported that there is no need for insuring their crop. Finally, 12.21 per cent of farmers reported to be not interested insuring their crops. The two main reasons expressed by the majority of the farmers from marginal, small and medium category are (1) they are not aware of insuring procedure and (2) They are not aware about the availability of facility. A negligible per cent of farmers stated that they are not satisfied terms and conditions as a reason they have not insured their crops. The details are presented in the table 7.20.

Table 7.20

Reasons for not insuring the reported crop

(Number of households)

S.No	landholding categories	not aware	not aware about the availability of facility	not interested	no need	insurance facility not available	lack of resources for premium payment	not satisfied with terms & conditions	nearest bank at a long distance	complex procedures	delay in claim payment	Total
1	Marginal	17 (30.91)	15 (27.27)	11 (20.00)	12 (21.82)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	55 (41.98)
2	Small	19 (32.76)	24 (41.38)	3 (5.17)	11 (18.97)	0.00 (0.00)	0.00 (0.00)	1 (1.72)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	58 (44.27)
3	Medium	6 (42.86)	4 (28.57)	2 (14.29)	1 (7.14)	0.00 (0.00)	0.00 (0.00)	1 (7.14)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (10.69)
4	Large	0.00 (0.00)	2 (66.67)	0.00 (0.00)	1 (33.33)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	3 (2.29)
5	Very large	0.00 (0.00)	1 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (0.76)
	Total	42 (32.06)	46 (35.11)	16 (12.21)	25 (19.08)	0.00 (0.00)	0.00 (0.00)	2 (1.53)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	131 (100.00)

Source: Field Survey

7.6.2. Whether experienced crop loss and reasons for the loss

Out of the total no of 52 reported farmers, 38.46 per cent of farmers reported due to inadequate rainfall/drought they have expressed crop losses. On the other hand, 34.62 per cent of farmers stated due to disease/insect they have crop loss. Moreover, 29.62 per cent of farmers reported that the other natural causes for the loss of their crops. Across the groups, majority of farmers from marginal, small farmer category reported the causes for the crop losses. The details can be viewed table 7.21.

Table 7.21
Causes for the crop loss

(Number of households)

S.No	landholding categories	inadequate rainfall/drought	disease/insect/animal	other natural causes	total
1	Marginal	12 (48.00)	7 (28.00)	6 (24.00)	25 (48.08)
2	Small	7 (31.82)	8 (36.36)	7 (31.82)	22 (42.31)
3	Medium	1 (25.00)	2 (50.00)	1 (25.00)	4 (7.69)
4	Large	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (1.92)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	20 (38.46)	18 (34.62)	14 (26.92)	52 (100.00)

Source: Field Survey

7.6.3. Estimated crop loss, total premium paid and the claim amount received; delay in receipt of payment

The details of per household total crop losses are presented in the following table 7.22. On an average the crop loss per household is reported to be RS.3262/-. Across the groups, the per household crop losses varied between Rs.1271/- in case of marginal and Rs.6217/- in case of medium farmers.

Table 7.22
Whether experienced crop loss by the landholding categories

S.No	landholding categories	number of households facing crop loss	Total amount of loss(Rs)	Average loss per household
1	Marginal	25 (48.08)	95300	1271
2	Small	22 (42.31)	357900	4211
3	Medium	4 (7.69)	149200	6217
4	Large	1 (1.92)	50000	3571
5	Very large	0.00 (0.00)	0	0
	Total	52 (100.00)	652400	3262

Source: Field Survey

Table 7.23
Total Premium paid (Rs)

S.No	landholding categories	premimum paid (Rs)	Number of households	Average premium per household
1	Marginal	-	-	-
2	Small	4500	1	
3	Medium	-	-	-
4	Large	-	-	-
5	Very large	-	-	-
	Total	4500	1	

Source: Field Survey

All the reported 52 farmers expressed the reason for not receiving in time for the insured claim of their insured crops. The details are presented in the table 7.24.

Table 7.24
Whether claim amount was received in time for the insured crops
(Number of households)

S.No	landholding categories	received in time	received but delayed	not received	total
1	Marginal	0.00 (0.00)	0.00 (0.00)	25 (100.00)	25 (48.08)
2	Small	0.00 (0.00)	0.00 (0.00)	22 (100.00)	22 (42.31)
3	Medium	0.00 (0.00)	0.00 (0.00)	4 (100.00)	4 (7.69)
4	Large	0.00 (0.00)	0.00 (0.00)	1 (100.00)	1 (1.92)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	0.00 (0.00)	0.00 (0.00)	52 (100.00)	52 (100.00)

Source: Field Survey

7.6.4. Reasons for not receiving the claim amount

All the reported 52 farmers expressed the reason for not receiving claim amount due to cause was outside coverage. The details are presented in the table 7.25.

Table 7.25
Reasons for not receiving the claim amount
(Number of households)

S.No	landholding categories	cause was outside coverage	documents lost	others	total
1	Marginal	25 (100.00)	0.00 (0.00)	0.00 (0.00)	25 (48.08)
2	Small	22 (100.00)	0.00 (0.00)	0.00 (0.00)	22 (42.31)
3	Medium	4 (100.00)	0.00 (0.00)	0.00 (0.00)	4 (7.69)
4	Large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (1.92)
5	Very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	52 (100.00)	0.00 (0.00)	0.00 (0.00)	52 (100.00)

Source: Field Survey

CHAPTER -VIII

PROBLEMS IN FARMING, ECONOMIC RISKS FACED, COPING STRATEGIES AND SOCIAL NETWORKS

8.0 Introduction:

The problems of the sample farmers, economic risks faced, coping strategies and social net works are presented in this chapter.

8.1 Adequacy of Income from Farming.

Glancing over the data it can be observed that out of the total 200 farmer households, only 35.00 per cent of farmers expressed the adequate income from farming obviously 65.00 per cent of farmers expressed that they have got inadequate income from farming. These details are presented in the table 8.1.

Table 8.1
Whether income from farming is adequate

S.No	landholding categories	number of households		percentage of households	
		yes	no	yes	no
1	marginal	17	58	22.67	77.33
2	small	39	46	45.88	54.12
3	medium	8	16	33.33	66.67
4	large	5	9	35.71	64.29
5	very large	1	1	50.00	50.00
	total	70	130	35.00	65.00

Source: Field Survey

8.2 Reasons for Inadequacy of Income from Farming.

Among the reasons, 10 major reasons are expressed by the farmers for getting inadequate income from framing. About 64.50 per cent of farmers expressed that the price they got is not remunerative. Secondly 51.00 per cent of farmers expresses that lack of storage facility were getting in adequate income from farming. 48.50 per cent of farmers stated that there are poor market facilities. Nearly 37.50 per cent of farmers suffered from insufficient irrigation. Moreover, 36.00 per cent of farmers revealed that due to going down of the yield are the reason for getting inadequate income. Due to payment of high rates of interest to money lenders nearly 34.50 per cent of farmers got inadequate income from farming. Due to high temperature, 31.50 per cent of farmers could not get inadequate income from farming. Due to problem of pest diseases 31.00 per cent of farmers derived inadequate income from farming. A negligible percentage of farmers expressed the other reasons for the getting inadequate income. The details are show in the table 8.2.

Table 8.2
Reasons for inadequate income from farming

(No. of Households)

S.No	landholding categories	marginal	small	medium	large	very large	total
1	yield going down	21	27	16	6	2	72 (36.00)
2	yield fluctuating a lot	2	4	2	3	2	13 (6.50)
3	small land size	46	11	0	2	2	61 (30.50)
4	absence of irrigation	15	7	0	2	2	26 (13.00)
5	insufficient irrigation	43	16	10	4	2	75 (37.50)
6	price not remunerative	57	46	18	7	1	129 (64.50)
7	price fluctuating a lot	0	3	0	4	2	9 (4.50)
8	temp is too high	28	18	10	5	2	63 (31.50)
9	temp is too low	0	3	0	0	2	5 (2.50)
10	temp fluctuating a lot	4	3	0	3	2	12 (6.00)
11	rainfall too high	11	4	0	1	2	18 (9.00)
12	rainfall too low	17	13	4	3	2	39 (19.50)
13	rainfall fluctuating a lot	4	4	0	3	2	13 (6.50)
14	pest problem/crop dieases	20	28	6	6	2	62 (31.00)
15	unavailability/inadequate supply of pesticides	16	8	5	1	2	32 (16.00)
16	unavailability/inadequate supply of fertilisers	0	2	0	0	2	4 (2.00)
17	absence of storage facility	41	38	17	4	2	102 (51.00)
18	absence of mkt facilities	48	28	16	5	0	97 (48.50)
19	poor mkt facilities	47	25	16	5	0	93 (46.50)
20	poor road connectivity	21	13	2	2	2	40 (20.00)
21	govt.support not available	17	8	4	3	2	34 (17.00)
22	uncertain govt support	7	16	1	3	1	28 (14.00)
23	limited sources of credit	24	20	4	2	1	51 (25.50)
24	bank credit not available	15	21	7	3	2	48 (24.00)
25	inadequate bank credit	12	17	3	3	1	36 (18.00)
26	high interest rate of money lenders	15	40	8	5	1	69 (34.50)
27	rodent problem	0	6	0	2	2	10 (5.00)
28	other animal problem	12	32	7	7	1	59 (29.50)
29	lab shortage	0	2	0	1	2	5 (2.50)

Source: Field Survey

8.3 Severity of Problems Faced in Farming

Out of the total 200 sample households, only 130 (65.00 per cent) farmers from different groups expressed the severity of problem in farming. Across the groups, the low rate of severity realized varied from 36.96 per cent in case of small farmers to 44.44 per cent in case of large farmers. On the other hand, 60.87 per cent of small farmers expressed that they faced moderate severity of problem in farming. Among the groups, the high rate of severity expressed is ranged between 2.17 per cent in case of small farmers and 12.50 per cent of in case medium farmers. These details can be viewed from table 8.3.

Table 8.3
Severity of the reported problem faced in farming
(Number of households)

S.No	landholding categories	low	moderate	high	total
1	marginal	22 (37.93)	34 (58.62)	2 (3.45)	58 (44.62)
2	small	17 (36.96)	28 (60.87)	1 (2.17)	46 (35.38)
3	medium	6 (37.50)	8 (50.00)	2 (12.50)	16 (12.31)
4	large	4 (44.44)	5 (55.56)	0	9 (6.92)
5	very large	1 (100.00)	0	0	1 (0.77)
	total	50 (38.46)	75 (57.69)	5 (3.85)	130 (100.00)

Source: Field Survey

8.4 Economic Risks Faced by the Households during Last 2 Years:

Out of the total no of 200 farmer households, 42.50 per cent of small farmers, 37.50 per cent of marginal farmers, 12.00 per cent of medium farmers, 7.00 per cent of large farmers and 1.00 per cent of very large farmers expressed the various economic risks faced from farming in the last two years. Majority of the farmers of various groups expressed the seasonal un-employment is the major risk among the risks faced by them. The risk of lack of finance is mostly observed in case of marginal and small farmers. The details can be observed from the table 8.4.

Table 8.4
Types Economic risks faced in the last two years (Rank 1-8) (N= 200 Hhs)

	Marginal								Small								Medium								Large								Very large							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
lack of finance/capital	23	7	17	5	12	3	8	0	20	3	14	14	14	7	13	0	8	2	1	3	6	0	4	0	3	0	4	3	3	0	1	0	0	0	0	0	0	0	0	0
lack of access to inputs	0	6	6	2	8	37	16	0	0	10	5	10	16	33	11	0	0	2	3	2	5	10	2	0	0	8	2	0	0	2	2	0	0	1	0	0	0	1	0	0
sharp fluctuations in input prices	1	16	9	5	19	17	8	0	1	19	12	6	17	27	3	0	2	7	7	1	3	1	3	0	3	2	1	0	2	6	0	0	1	1	0	0	0	0	0	0
sharp fluctuations in output prices	8	18	2	24	15	7	1	0	14	15	0	18	18	8	12	0	0	4	4	8	6	2	0	0	4	1	1	4	4	0	0	0	0	0	0	2	0	0	0	0
lack of demand or inability to sell agricultural products	2	11	28	16	2	7	9	0	3	12	37	10	0	8	15	0	0	3	7	4	0	6	4	0	0	2	1	1	0	2	8	0	0	0	1	0	0	0	1	0
lack of demand or inability to sell non-agricultural products	4	0	1	16	19	4	31	0	1	10	6	16	20	1	31	0	0	2	0	3	4	4	11	0	0	0	0	2	5	4	3	0	0	0	0	0	0	1	1	0
Seasonal unemployment	37	17	12	7	0	0	2	0	45	17	9	14	0	0	0	0	14	4	3	3	0	0	0	0	4	1	5	4	0	0	0	0	1	0	1	0	0	0	0	0
Other economic shocks (specify)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: Field Survey

8.5 Coping Strategies Undertaken by the Households

Among the copping strategies, 10 major copping strategies are expressed by the farmers for facing the economic risks from framing. About 84.00 per cent of farmers expressed that worked as wage labour in the village for faced economic risks from farming. Secondly 75.00 per cent of farmers expresses that borrowed money from money lender were faced with economic risks from farming. 73.00 per cent of farmers stated that they have

Table 8.5
Coping strategies undertaken by the households with respect to the economic risks faced

(No. of Households)

S.No	landholding categories	marginal	small	medium	large	very large	total
1	stored crops for better price	36	41	16	9	1	103 (51.50)
2	carried out primary processing	42	48	14	4	0	108 (54.00)
3	reduced household consumption exp	59	56	18	11	2	146 (73.00)
4	reduced health exp	13	28	9	6	1	57 (28.50)
5	took children out of school	19	22	2	3	1	47 (23.50)
6	deferred social & family functions	36	37	10	5	0	88 (44.00)
7	sold land	16	22	4	4	1	47 (23.50)
8	sold livestock	21	24	8	6	0	59 (29.50)
9	mortgaged/leased out land	46	46	17	9	1	119 (59.50)
10	borrowed money from bank	59	58	19	13	1	150 (75.00)
11	borrowed money from moneylenders	47	64	15	11	2	139 (69.50)
12	borrowed from friends/relatives	50	61	18	11	2	142 (71.00)
13	worked as wage labour in the village	67	70	20	9	2	168 (84.00)
14	started petty business/shops	19	21	8	2	0	50 (25.00)

Source: Field Survey

reduced household consumption expenditure. Nearly 71.00 per cent of farmers expressed borrowed from friends/relatives were faced economic risks from farming. Moreover, 69.50 per cent of farmers revealed that mortgaged/leased out lands were faced with economic risks from farming. Due to carried out primary processing nearly 54.00 per cent of farmers they

reduce the economic risks from farming. Due to stored crop for better price, 51.50 per cent of farmers reduced the economic risks from farming. Due to deferred social & family functions 44.00 per cent of farmers derived reduce the economic risks from farming. A negligible percentage of farmers expressed the other reasons for the reduce of the economic risks from farming. The details are show in the table 8.5.

8.6 Membership of Households in Gram Panchayat and other Organizations

Out of the total no of 200 farmers, 93.00 per cent of farmers are members in the self help groups, 25.00 per cent of farmers are members in development group or NGO, similarly 25.00 per cent of farmers in credit cooperative society and 25.0 per cent are members in caste associations. Moreover, 21.00 per cent of sample households in agriculture co-operative society and 19.50 per cent are members in political part i.e a negligible percent of farmers from dairy/milk cooperatives. The details can be viewed from table 8.6.

Table 8.6
Membership of households in different organizations during last 3 years

S.No	landholding categories	Gram Panchayat		Agriculture co-operative society		Dairy/milk cooperative societies		Mahila mandal		Self-Help Group		Farmers Activities Group		Political Party		Caste Association		Development Group or NGO		Credit cooperative society	
		number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%	number of Hhs	%
1	Marginal	7	3.50	23	11.50	12	6.00	0	0.00	75	37.50	0	0.00	17	8.50	15	7.50	15	7.50	15	7.50
2	Small	7	3.50	11	5.50	5	2.50	0	0.00	85	42.50	0	0.00	14	7.00	29	14.50	29	14.50	29	14.50
3	Medium	2	1.00	7	3.50	7	3.50	0	0.00	24	12.00	0	0.00	5	2.50	6	3.00	6	3.00	6	3.00
4	Large	1	0.50	1	0.50	2	1.00	0	0.00	0	0.00	0	0.00	1	0.50	0	0.00	0	0.00	0	0.00
5	Very large	2	1.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	1.00	0	0.00	0	0.00	0	0.00
	Total	19	9.50	42	21.00	26	13.0	0	0.00	186	93.00	0	0.00	39	19.50	50	25.00	50	25.00	50	25.00

Source: Field Survey

8.7 Reasons for not being Member of Gram Panchayat and/Other Organizations

Out of the total sample of 200 households, only 90.50 per cent of farmers expressed that they are not members in gram panchayat. Among the reasons, they have expressed 49.72 per cent of farmers reported the reason of availability but no opportunity to a member of gram panchayat. On the other hand, 35.36 per cent of farmers expressed there is no benefit of being a member of gram panchayat. Across the groups, 69.23 per cent of large farmer category expressed the gram panchayat is available but no opportunity to be a member. On the other hand, 45.59 per cent of marginal farmers expressed no benefit of being a member of gram panchayat. Nearly 27.27 per cent of medium farmers expressed their reason is a time consuming process. These details are presented in the table 8.7.

Table 8.7
Reasons for not being a member of gram panchayat

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	0.00 (0.00)	30 (44.12)	31 (45.59)	7 (10.29)	68 (37.57)
2	small	0.00 (0.00)	38 (48.72)	27 (34.62)	13 (16.67)	78 (43.09)
3	medium	0.00 (0.00)	13 (59.09)	3 (13.64)	6 (27.27)	22 (12.15)
4	large	0.00 (0.00)	9 (69.23)	3 (23.08)	1 (7.69)	13 (7.18)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	Total	0.00 (0.00)	90 (49.72)	64 (35.36)	27 (14.92)	181 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total sample of 200 households, only 82.00 per cent of farmers expressed that they are not members in agriculture co-operative society. Among the reasons, they have expressed 90.24 per cent of farmers reported the reason for due to not available agriculture co-operative society; they are not getting a membership in agriculture co-operative society. On the other hand, 9.76 per cent of farmers expressed agriculture co-operative society is available but no opportunity to be a member. Across the groups, 100 per cent of very large farmer category expressed due not available agriculture co-operative society; they are not getting a member in agriculture co-operative society. These details are presented in the table 8.7.1.

Table 8.7.1
Reasons for not being a member of Agriculture co-operative society

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	47 (90.38)	5 (9.62)	0.00 (0.00)	0.00 (0.00)	52 (31.71)
2	small	72 (90.00)	8 (10.00)	0.00 (0.00)	0.00 (0.00)	80 (48.78)
3	medium	16 (94.12)	1 (5.88)	0.00 (0.00)	0.00 (0.00)	17 (10.37)
4	large	11 (84.62)	2 (15.38)	0.00 (0.00)	0.00 (0.00)	13 (7.93)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.22)
	total	148 (90.24	16 (9.76)	0.00 (0.00)	0.00 (0.00)	164 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total sample of 200 households, only 87.00 per cent of farmers expressed that they are not member in dairy/milk co-operative society. Among the reasons, they have expressed 84.48 per cent of farmers reported the reason for due to not available dairy/milk co-operative society; they are not getting a membership in dairy/milk co-operative society. On the other hand, 13.00 per cent of farmers expressed dairy/milk co-operative society is available but no opportunity to be a member. Across the groups, 100 per cent of very large farmer category expressed that due to non-availability of dairy/milk co-operative society; they are not getting a membership in dairy/milk co-operative society. These details are presented in the table 8.7.2.

Table 8.7.2
Reasons for not being a member of Dairy/milk cooperative societies

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Not Interested	Total No of reported farmers
1	marginal	46 (73.02)	17 (26.98)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	63 (36.21)
2	small	72 (90.00)	8 (10.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	80 (45.98)
3	medium	15 (88.24)	1 (5.88)	0.00 (0.00)	0.00 (0.00)	1 (5.88)	17 (9.77)
4	large	12 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	12 (6.90)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.15)
	total	147 (84.48)	26 (13.00)	0.00 (0.00)	0.00 (0.00)	1 (0.57)	174 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 200 reported farmers 42.50 per cent farmers are from small category, 37.50 per cent from marginal category, 12.00 per cent from medium category, 7.00 per cent from large category and 1.00 per cent from very large category of farmers reported the reason for due to not available of Mahila mandal, they are not getting a membership in Mahila mandal. The details are can be viewed in the table 8.7.3.

Table 8.7.3
Reasons for not being a member of Mahila mandal

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	75 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	75 (37.50)
2	small	85 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	85 (42.50)
3	medium	24 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	24 (12.00)
4	large	14 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (7.00)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.00)
	total	200 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	200 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 12 reported farmers, 83.33 per cent of farmers from large category and 16.67 per cent from very large category of farmers reported the reason that self-help groups

is available but no opportunity to be a member in self-help groups. The details are can be viewed in the table 8.7.4.

Table 8.7.4
Reasons for not being a member of Self-Help Group

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2	small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
3	medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4	large	0.00 (0.00)	10 (100.00)	0.00 (0.00)	0.00 (0.00)	10 (83.33)
5	very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (16.67)
	total	0.00 (0.00)	12 (100.00)	0.00 (0.00)	0.00 (0.00)	12 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 200 reported farmers, 42.50 per cent of farmers from small category, 37.50 per cent from marginal category, 12.00 per cent from medium category, 7.00 per cent from large category and 1.00 per cent from very large category of farmers reported the reason for due to not available of farmers activities group; they are not getting a membership in farmers activities group. The details are can be viewed in the table 8.7.5.

Table 8.7.5
Reasons for not being a member of Farmers Activities Group

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	75 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	75 (37.50)
2	small	85 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	85 (42.50)
3	medium	24 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	24 (12.00)
4	large	14 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (7.00)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.00)
	total	200 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	200 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 161 reported farmers, 40.37 per cent of farmers expressed no benefit to be a member of political party, 34.16 per cent of farmers reported political party is available but no opportunity to be a member, 18.01 per cent of farmers stated that it is a time consuming and 7.45 per cent of farmers expressed not interested to join member in a political party. Across the groups, 69.23 per cent of large farmers, 51.72 per cent of marginal farmers and 36.84 per cent of medium farmers have reported that political party is available but of no opportunity, no benefit and time consuming reasons they are not being a member of political party. Details can be presented in the table 8.7.6.

Table 8.7.6
Reasons for not being a member of Political Party

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Not Interested	Total No of reported farmers
1	marginal	0.00 (0.00)	13 (22.41)	30 (51.72)	8 (13.79)	7 (12.07)	58 (36.02)
2	small	0.00 (0.00)	29 (40.85)	28 (39.44)	13 (18.31)	1 (1.41)	71 (44.10)
3	medium	0.00 (0.00)	4 (21.05)	4 (21.05)	7 (36.84)	4 (21.05)	19 (11.80)
4	large	0.00 (0.00)	9 (69.23)	3 (23.08)	1 (7.69)	0.00 (0.00)	13 (8.07)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0.00 (0.00)	55 (34.16)	65 (40.37)	29 (18.01)	12 (7.45)	161 (100.00)

Source: Field Survey
Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 150 reported farmers 40.00 per cent of farmers from marginal category, 37.33 per cent of from small category, 12.00 per cent of medium category, 9.33 per cent of from large category and 1.33 per cent from very large category of farmers reported the reason for due to not available caste association; they are not getting a membership in caste association. The details are can be viewed in the table 8.7.7.

Table 8.7.7
Reasons for not being a member of Caste Association

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	60 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	60 (40.00)
2	small	56 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	56 (37.33)
3	medium	18 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	18 (12.00)
4	large	14 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (9.33)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.33)
	total	150 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 150 reported farmers, 40.00 per cent of farmers are from marginal category, 37.33 per cent of from small category, 12.00 per cent of medium category, 9.33 per cent of large category and 1.33 per cent of very large category of farmers reported the reason for due to not available development Group or NGO; they are not getting a membership in development Group or NGO. The details are can be observed in the table 8.7.8.

Table 8.7.8
Reasons for not being a member of Development Group or NGO

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	60 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	60 (40.00)
2	small	56 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	56 (37.33)
3	medium	18 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	18 (12.00)
4	large	14 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (9.33)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.33)
	total	150 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 150 reported farmers 40.00 per cent of farmers are from marginal category, 37.33 per cent of small category, 12.00 per cent of medium category, 9.33 per cent of large category and 1.33 per cent of very large category of farmers reported the reason for due to

not available credit co-operative society; they are not getting a membership in credit co-operative societies. The details are can be viewed in the table 8.7.9.

Table 8.7.9
Reasons for not being a member of Credit cooperative society

(No. of Households)

S.No	landholding categories	not available	available but no opportunity	no benefit	time consuming	Total No of reported farmers
1	marginal	60 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	60 (40.00)
2	small	56 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	56 (37.33)
3	medium	18 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	18 (12.00)
4	large	14 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (9.33)
5	very large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (1.33)
	total	150 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	150 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

8.8 Post Held as Member of Gram Panchayat and Other Organizations

Out of the total no of 19 reported farmers, 52.63 per cent are ordinary members and 47.37 per cent active members. Across the groups, 85.71 per cent of small farmers and 100 per cent each from large and very large category households are ordinary and active members respectively. These details are presented in the table 8.8.

Table 8.8
Post held as a member of gram panchayat

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	3 (42.86)	4 (57.14)	0.00 (0.00)	7 (36.84)
2	small	6 (85.71)	1 (14.29)	0.00 (0.00)	7 (36.84)
3	medium	1 (50.00)	1 (50.00)	0.00 (0.00)	2 (10.53)
4	large	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (5.26)
5	very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	2 (10.53)
	total	10 (52.63)	9 (47.37)	0.00 (0.00)	19 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 42 reported farmers, 54.76 per cent of farmers are from marginal category, 26.19 per cent of small category, 16.67 per cent of medium category and 2.38 per cent of large category of farmers are having the post of ordinary members in the agriculture co-operative society. The details can be viewed in the table 8.8.1.

Table 8.8.1
Post held as a member of Agriculture co-operative society

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	23 (100.00)	0.00 (0.00)	0.00 (0.00)	23 (54.76)
2	small	11 (100.00)	0.00 (0.00)	0.00 (0.00)	11 (26.19)
3	medium	7 (100.00)	0.00 (0.00)	0.00 (0.00)	7 (16.67)
4	large	1 (100.00)	0.00 (0.00)	0.00 (0.00)	1 (2.38)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	42 (100.00)	0.00 (0.00)	0.00 (0.00)	42 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 26 reported farmers, 88.46 per cent are ordinary members and 11.54 per cent active members. Across the group, 100 per cent each from small, medium and large and 25.00 per cent of marginal farmers category households are ordinary and active members respectively. These details are presented in the table 8.8.2.

Table 8.8.2
Post held as a member of Dairy/milk cooperative societies

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	9 (75.00)	3 (25.00)	0.00 (0.00)	12 (46.15)
2	small	5 (100.00)	0.00 (0.00)	0.00 (0.00)	5 (19.23)
3	medium	7 (100.00)	0.00 (0.00)	0.00 (0.00)	7 (26.92)
4	large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	2 (7.69)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	23 (88.46)	3 (11.54)	0.00 (0.00)	26 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 188 reported farmers, 96.28 per cent are ordinary members, 2.66 per cent active members and 1.06 per cent office bearers. Across the groups, 100 per cent each from small and large, 5.33 per cent of marginal and 2.67 per cent of marginal farmers category household are ordinary, active and office bearers respectively. These details are presented in the table 8.8.3.

Table 8.8.3
Post held as a member of Self-Help Group

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	69 (92.00)	4 (5.33)	2 (2.67)	75 (39.89)
2	small	85 (100.00)	0.00 (0.00)	0.00 (0.00)	85 (45.21)
3	medium	23 (95.83)	1 (4.17)	0.00 (0.00)	24 (12.77)
4	large	4 (100.00)	0.00 (0.00)	0.00 (0.00)	4 (2.13)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	181 (96.28)	5 (2.66)	2 (1.06)	188 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 39 reported farmers, 76.92 per cent are ordinary members and 23.08 per cent active members. Across the groups, 92.86 per cent of small farmer category and each 100.00 per cent of large and very large farmers category household are ordinary and active members respectively. These details are can be viewed in the table 8.8.4.

Table 8.8.4
Post held as a member of Political Party

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	13 (76.47)	4 (23.53)	0.00 (0.00)	17 (43.59)
2	small	13 (92.86)	1 (7.14)	0.00 (0.00)	14 (35.90)
3	medium	4 (80.00)	1 (20.00)	0.00 (0.00)	5 (12.82)
4	large	0.00 (0.00)	1 (100.00)	0.00 (0.00)	1 (2.56)
5	very large	0.00 (0.00)	2 (100.00)	0.00 (0.00)	2 (5.13)
	total	30 (76.92)	9 (23.08)	0.00 (0.00)	39 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total no of 50 reported farmers 58.00 per cent of farmers from small category, 30.00 per cent of from marginal category and 12.00 per cent from medium category of farmers the post of ordinary member in cast association. The details are can be observed in the table 8.8.5.

Table 8.8.5
Post held as a member of Caste Association

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	15 (100.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	small	29 (100.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 50 reported farmers, 58.00 per cent of farmers are from small category, 30.00 per cent of marginal category and 12.00 per cent of medium category of farmers having the post of ordinary members in development group or NGO. The details can be observed in the table 8.8.6.

Table 8.8.6
Post held as a member of Development Group or NGO

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	15 (100.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	small	29 (100.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 50 reported farmers, 58.00 per cent of farmers are from small category, 30.00 per cent of marginal category and 12.00 per cent of medium category of farmers

are having the post of ordinary members in credit co-operative society. The details can be observed in the table 8.8.7.

Table 8.8.7
Post held as a member of Credit cooperative society

(No. of Households)

S.No	landholding categories	ordinary member	active member	office bearer	Total No of reported farmers
1	marginal	15 (100.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	small	29 (100.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	medium	6 (100.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	50 (100.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

8.9 Benefits of Membership of Gram Panchayat and other Organizations

Out of the total no of 19 reported farmers, 94.74 per cent of farmers expressed that they have benefited of enjoying government schemes by being a member of gram panchayat. Nearly 5.26 per cent of farmers reported the benefits of getting credit sources by being a member of gram panchayat. Details can be viewed from the table 8.9.

Table 8.9
Benefits of being a member of gram panchayat

(No. of Households)

S.No	landholding categories	**sharing information on**					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	0.00 (0.00)	0.00 (0.00)	1 (14.29)	0.00 (0.00)	6 (85.71)	7 (36.84)
2	small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (100.00)	7 (36.84)
3	medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (100.00)	2 (10.53)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (100.00)	1 (5.26)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (100.00)	2 (10.53)
	total	0.00 (0.00)	0.00 (0.00)	1 (5.26)	0.00 (0.00)	18 (94.74)	19 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 84 reported farmers, each 50.00 per cent of farmers expressed that they have benefited of enjoying input usage and credit sources by being a member of agriculture co-operative societies. Details can be observed from the table 8.9.1

Table 8.9.1
Benefits of being a member of Agriculture co-operative society

(No. of Households)

S.No	landholding categories	sharing information on					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	0.00 (0.00)	23 (50.00)	23 (50.00)	0.00 (0.00)	0.00 (0.00)	46 (54.76)
2	small	0.00 (0.00)	11 (50.00)	11 (50.00)	0.00 (0.00)	0.00 (0.00)	22 (26.19)
3	medium	0.00 (0.00)	7 (50.00)	7 (50.00)	0.00 (0.00)	0.00 (0.00)	14 (16.67)
4	large	0.00 (0.00)	1 (50.00)	1 (50.00)	0.00 (0.00)	0.00 (0.00)	2 (2.38)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0.00 (0.00)	42 (50.00)	42 (50.00)	0.00 (0.00)	0.00 (0.00)	84 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 26 reported farmers 46.15 per cent of farmers from marginal category, 26.92 per cent of medium category, 19.23 per cent of farmers from small category and 7.69 per cent of large farmers' category enjoyed the benefits of agricultural practices & livestock management by being a member of dairy/milk cooperative societies. The details can be observed in the table 8.9.2.

Table 8.9.2
Benefits of being a member of Dairy/milk cooperative societies

(No. of Households)

S.No	landholding categories	sharing information on					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	12 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	12 (46.15)
2	small	5 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	5 (19.23)
3	medium	7 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	7 (26.92)
4	large	2 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (7.69)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	26 (100.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	26 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 188 reported farmers, 45.21 per cent of farmers from small category, 39.89 per cent of from marginal category, 12.77 per cent of medium category and 2.13 per cent of large category of farmers derived credit source benefits by being a member of Self-Help Groups. The details can be presented in the table 8.9.3.

Table 8.9.3
Benefits of being a member of Self-Help Group

(No. of Households)

S.No	landholding categories	**sharing information on**					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	0.00 (0.00)	0.00 (0.00)	75 (100.00)	0.00 (0.00)	0.00 (0.00)	75 (39.89)
2	small	0.00 (0.00)	0.00 (0.00)	85 (100.00)	0.00 (0.00)	0.00 (0.00)	85 (45.21)
3	medium	0.00 (0.00)	0.00 (0.00)	24 (100.00)	0.00 (0.00)	0.00 (0.00)	24 (12.77)
4	large	0.00 (0.00)	0.00 (0.00)	4 (100.00)	0.00 (0.00)	0.00 (0.00)	4 (2.13)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0.00 (0.00)	0.00 (0.00)	188 (100.00)	0.00 (0.00)	0.00 (0.00)	188 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 39 reported farmers, 43.59 per cent of farmers are from marginal category, 35.90 per cent of small category, 12.82 percent of medium category, 5.13 per cent of farmers from very large category and 2.56 per cent of large category of farmers enjoyed the benefits of government schemes by being a member of political parties. The details can be viewed in the table 8.9.4.

Table 8.9.4
Benefits of being a member of Political Party

(No. of Households)

S.No	landholding categories	**sharing information on**					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	17 (100.00)	17 (43.59)
2	small	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	14 (100.00)	14 (35.90)
3	medium	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	5 (100.00)	5 (12.82)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	1 (100.00)	1 (2.56)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	2 (100.00)	2 (5.13)
	total	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	39 (100.00)	39 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of the total no of 50 reported farmers, 44.00 per cent of farmers enjoyed the benefits of agricultural practices & livestock management, 30.00 per cent of farmers derived benefited of credit sources and 26.00 per cent of farmers explains their benefit from price & markets. Across the groups, 46.66 per cent of marginal farmers, 44.83 per cent of small farmers and 33.34 per cent of medium farmers have got benefited out of agricultural practices & livestock management by being a member of development groups or NGOs. Details can be presented in the table 8.9.5.

Table 8.9.5
Benefits of being a member of Development Group or NGO

(No. of Households)

S.No	landholding categories	sharing information on					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	7 (46.66)	0.00 (0.00)	4 (26.67)	4 (26.67)	0.00 (0.00)	15 (30.00)
2	small	13 (44.83)	0.00 (0.00)	9 (31.03)	7 (24.14)	0.00 (0.00)	29 (58.00)
3	medium	2 (33.34)	0.00 (0.00)	2 (33.33)	2 (33.33)	0.00 (0.00)	6 (12.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	22 (44.00)	0.00 (0.00)	15 (30.00)	13 (26.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

Out of total no of 50 reported farmers 58.00 per cent of farmers from small category, 30.00 per cent of from marginal category and 12.00 per cent from medium category of farmers reported to have derived credit source benefits as being a member of credit co-operative society. The details are can be observed in the table 8.9.6.

Table 8.9.6
Benefits of being a member of Credit cooperative society

(No. of Households)

S.No	landholding categories	sharing information on					
		agricultural practices & livestock management	input usage	credit sources	price & markets	govt. schemes	Total No of reported farmers
1	marginal	0.00 (0.00)	0.00 (0.00)	15 (100.00)	0.00 (0.00)	0.00 (0.00)	15 (30.00)
2	small	0.00 (0.00)	0.00 (0.00)	29 (100.00)	0.00 (0.00)	0.00 (0.00)	29 (58.00)
3	medium	0.00 (0.00)	0.00 (0.00)	6 (100.00)	0.00 (0.00)	0.00 (0.00)	6 (12.00)
4	large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5	very large	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
	total	0.00 (0.00)	0.00 (0.00)	50 (100.00)	0.00 (0.00)	0.00 (0.00)	50 (100.00)

Source: Field Survey

Note: Figures in brackets indicate the percentage of farmers to total number of farmers in each size group.

CHAPTER-IX

SUMMARY AND CONCLUSIONS

9.1. The Problem:

Farming has not been rewarding, for some time now. The profitability of farming has been getting eroded because of climate change, and because of disproportionately high prices of farm inputs and low prices of farm outputs. Because of climate change, monsoon has become erratic with prolonged dry spells interspersed by stormy weather conditions. The unfavourable weather conditions have been causing havoc to standing crops and bringing down farm incomes. When weather is favourable for farming and when there is a bumper crop, farm prices dwindle following a glut in the market (Kannan Kasturi, 2018; Rahul Tongia, 2019) and farm incomes are again low. The production risk and price risk have increased manifold in recent times. Farm profitability is also at stake because of high prices of farm inputs. This is despite the fact that fertilizers are heavily subsidized and electricity nearly free (Rahul Tongia, 2019). The minimum support price policy of the government that seeks to make farming a viable proposition is found wanting and not fulfilling its purpose. Increase in the prices of farm outputs is not keeping pace with the rise in the prices of farm inputs, thus leaving farming as an unrewarding enterprise. Increased productivity of farmers is not getting translated into higher incomes. This is at the root of country-wide protests by farmers.

9.2. Status of Farm Income:

It is an acknowledged fact that the growth of farm income has been decelerating in the recent past. The Situation Assessment Surveys (SAS) of the NSSO show that between 2002-03 and 2012-13, the average annual increase in total farm income (at current prices) was 20.38 per cent and this decelerated to 11.90 per cent between 2012-13 and 2018-19. What is more, of the different sources of income (from wages, crop cultivation, farming of animals and non-farm business) of farm households, the growth of income in crop cultivation decelerated sharply from 21.80 per cent between 2002-03 and 2012-13 to just 4.65 per cent between 2012-13 and 2018-19 (Narayanamoorthy, 2021).

The average monthly income from different sources per agricultural household during 2018-19 as per the NSSO (GoI, 2021) stood at Rs. 10,218. Of this only Rs. 3,798 (37.17%) was the net receipt from crop production. As much as Rs. 4,063 (or 39.76%) accrued from wages. This is a clear indicator of the subsistence nature of farming.

As per the Situation Assessment Survey of the NSSO pertaining to 2018-19, agricultural households possessing land less than 1 ha account for 70.4 per cent (GoI, 2021). At a time when crop income is decelerating, it is these farmers who are hurt more. As their endowments are limited, they are slow to adapt to climatic variability; as their asset base is limited, they have little access to formal credit; as their marketed surplus is limited, they indulge in distress sale of their output at the farm gate and do not find it worthwhile to take their produce to regulated markets to take advantage of the remunerative prices offered there. The marginal farmers are also at a disadvantage when it comes to accessing farm inputs and extension services (Mahendra Dev, 2012). While farmers in general face these disabilities that erode farm profitability, the position of the marginal farmers is particularly precarious.

9.3. Market Failure:

Market failure is a situation where markets fail to efficiently organize production and marketing functions to maximize social objectives. For markets to effectively serve the small and marginal farmers it is necessary to strengthen supporting institutions. Collective action by farmers can be an important strategy to strengthen market-supporting institutions in rural areas. Collective action can help reduce transaction costs and increase the share of the consumer price reaching small producers (Gideon Obare et al., 2006).

The collective action can take the shape of contract farming, farmers' markets, producers' cooperatives, rural retailer malls/procurement centers etc (Gummagolmath et al., 2016). Contract farming has the potential to help the small farmer overcome constrains in accessing inputs (including credit), extension and marketing. Contractual arrangements are found taking place in respect of several food and cash crops, fruits and vegetables, medicinal plants, dairy and poultry across the country (Birthal, 2008). The most important aspect of contract farming is the price agreed upon by the farmer and the agency buying the produce. The APMC act recognizes contract farming system and has provisions to regulate it.

Farmers' markets provide for a direct sale of produce by farmers to consumers at prices fixed every day. *Kisan Bazars, Apna Mandi, Rythu Bazars* are some of the examples of farmers' markets. These markets mostly deal with perishables like vegetables, fruits and flowers.

Producers' cooperatives essentially seek to free farmers from the clutches of usurious money lenders. They also participate in activities such as production, marketing and processing of farm products. These cooperatives aggregate the low marketable surplus of farmers, and

provide them with quality inputs, technology and support services at low cost. These cooperatives are particularly successful in small-scale dairy.

Some of the corporate organizations are opening their centers in rural areas to form a network of one stop shops for farmers providing everything from farm inputs to loans and technical know-how. The initiative of ITC in the form of "e-choupal' is among the largest of this kind.

There is the view that one of the reasons for the poor state of affairs within Indian agriculture is too much control of the entire sector and very little private sector participation. The Indian agriculture sector is largely untouched by market reforms initiated in 1991 (Saurabh Karamchandani et al., 2021). One of the major instruments through which the state controls agriculture is Minimum Support Price (MSP), which operates through APMC mandis, MSP and FCI procurement. MSP was introduced as a floor price to incentivize farmers to adopt HYVs. This incentive structure worked well to begin with. However, what started as a floor price eventually became the procurement price and the highest price available in the market. This has caused many market failures. There are at least three MSP induced market failures – concentration of market power, negative externalities and high transaction costs (Saurabh Karamchandani et al., 2021).

APMCs operate through principal markets and sub-market yards. These markets exhibit monopolistic characteristics. This regulated market denies farmers of the choice of selling their produce anywhere in the market. MSP is invariably the highest price available in the market and it has distorted the incentive structure for farmers. Since MSP is backed up by procurement by FCI in respect of only wheat and rice, farmers are incentivized to produce more of the two crops only, to the neglect of several other nutritious crops (Saurabh Karamchandani et al., 2021; Kannan Kasturi, 2018).

Since wheat and rice are water guzzlers, a major negative externality has been excessive groundwater depletion, especially in the Punjab. Electricity subsidy and other input subsidies exacerbate this problem.

Transaction costs are those incurred by buyers and sellers to search, move goods or bargain in a market to arrive at an optimum price of exchange. Farmers bring their produce to APMC mandis incurring huge transaction costs. With increasing internet facilities, it would have been natural to presume that overtime transaction costs would reduce. But it has not

happened so. This is despite the introduction of E-NAM in 2016. Addressing these market failures would be crucial for ensuring that farming becomes rewarding.

Another feature of India's agricultural market is the huge spread between the price realized by farmers and the price paid by consumers. This spread is not warranted by the value added by the middlemen in the agricultural supply chain. Commission agents, traders and wholesale merchants are able to control prices paid to farmers and prices charged to consumers to their advantage. Farmers' incomes fall well short of potential because of the high cost of intermediation. The returns below MSP to the farmer, along with the high intermediation costs, point at market failure (Kannan Kasturi, 2018).

The following statistics are revealing. Between 2013 and 2019, the share of agricultural households that sold their produce in APMC mandis reduced sharply, while those that sold their produce to private traders increased significantly. In 2013, 17 per cent of paddy households sold their crops in mandis. In 2019, the share came down to 2.7 per cent, which is a 14.3 per cent point reduction. In 2013, 29 per cent of wheat households sold their crops in private traders/markets. In 2019, the share increased to 66.1 per cent, which is a 37.1 per cent point increase (Vignesh Radhakrishnan et al., 2021). The reliance on private traders, as also input dealers and private processors is because of the inter-locking of credit-input-output markets. The inter-locking of markets leads to over-pricing of inputs (including credit) and under-pricing of output of farmers and they cannot access other channels even if they offer attractive prices (Sukhpal Singh, 2021).

9.4. Is the Market Intervention Necessary?

Farmers have no control over production once they have sown the seeds. The production cycle once set in motion has to be carried through till harvest irrespective of what price their produce will eventually fetch. Decisions on what to produce have to be made based on expectation of future price. If the expectation proves wrong, the farmer is faced with losses. Farmers also do not have the option to stop farming, as they are mostly already in debt, there are no job options available and the income from farming is essential for survival. Also, the lack of access of farmers to storage facilities means that on harvest, they have no other option but to sell even their non-perishable crops at whatever price they get (Kannan Kasturi, 2018).

Therefore, there is the view that the state must intervene. The basic lack of pricing power among farmers does not change when they deal with corporations instead of traders. Also, there

is no reason to assume that the margins that corporations make by bringing in greater efficiency in the supply chain will be shared with farmers. The state needs to weigh in on the side of farmers so that they have better pricing power. This requires the extension of MSP to all major crops and active government procurement to ensure these price floors hold (Kannan Kasturi, 2018). This runs counter to the observation made above that Indian agriculture can do with more of private sector participation.

9.5 Objectives of the Study:

The overall objective of the present study is to look into the functioning of the input and output markets with a view to examine if it is undermining farm profitability in the context of the agricultural sector of Andhra Pradesh. The study specifically seeks to:

- Analyse the structure and functioning of the product market including the prices obtaining across different marketing channels, and the bottlenecks present there.
- Analyse the structure and functioning of the market for inputs including the prices of seeds, fertilisers and labour and the problems in accessing the same.
- Analyse the government's support structure including access to credit.
- Analyse the coping strategies of farmers during economic hardships and their social networks.

9.6. Methodology:

The study employed a multi-stage sampling. The first stage unit was the district. The districts of Srikakulam, Visakhapatnam, East Godavari and Guntur figured in the study. The districts represented four agro-climatic regions in the state of Andhra Pradesh. The district of Srikakulam falls in the North Coastal Zone, East Godavari in the Godavari Zone, Guntur in the Krishna Zone and Visakhapatnam in the High-Altitude Tribal Zone. Difficulties encountered in the Covid-19 pandemic made us to restrict the study to these four zones. The study did not therefore cover the other two zones of the state – the Southern Zone and the Scarce Rainfall Zone. From each of the four selected districts, two villages were selected with sufficient geographic spread. Thus, a total of 8 villages were selected. We did not take up a complete listing of the village households prior to selecting the sample households. Instead, the sampling frame was developed based on the information on the size-wise distribution of village households obtained through Focus Group Discussions. This sampling frame was employed to select the ultimate sampling units following the probability proportional to size sampling

technique. A total of 25 farmers were chosen randomly from each of the 8 villages. Our sample thus comprised a total of 200 farmers, with 75 marginal, 85 small, 24 medium, 14 large and 2 very large farmers.

9.7. Chapter Scheme of the Report:

The report is divided into nine chapters. The Chapter 2 that follows this introductory chapter, presents a background of the study region. Chapter 3 deals with crop output. Chapter 4 presents details on animal products. In Chapter 5 the particulars relating to the labour market are presented, while Chapter 6 highlights conditions in the credit market. Chapter 7 gives the details on the endowments of sample households, government support programmes, and insurance. Chapter 8 brings together the problems faced by farmers, their coping strategies and their social networks. The summary and conclusions of the report are presented in Chapter 9.

9.8. MAJOR FINDINGS OF THE STUDY:

The following are the salient findings emerged out of the present study:

9.8.1. Overview of the Study Region

of the 200 households that figured in the study, 42.50% were small farmers followed by marginal farmers 37.50%, medium 12%, large 14 7% and very large 1%. Thus, the small landholding category occupied predominant place followed by the marginal landholding category. It is expected that bulk of the small and marginal farmers face difficulties in effecting the sale of whatever little marketed surplus they have – they are likely to sell their surplus produce to local traders.

On an average, the size of operational holding of the farmers was 4.01 acres. This comprised 2.83 acres of irrigated land and 1.17 acres of unirrigated land. The operated area was made up of owned land and leased-in land, accounting for 2.49 acres and 1.51 acres respectively.

About 42.50% of the sample farmers belong to other castes (the General Category, that is castes other than OBC, SC and ST). STs with 25% are the second largest group, followed by OBCs (21.00%) and SCs (11.50%).

Per household total net income from various sources was Rs. 83,538. Of this, 85.44 per cent was from cultivation, 4.89 per cent from animal husbandry and 9.67 per cent from wage labour. Across the groups, the total net income varied between Rs. 44,027 in case of marginal farmer and Rs. 3,30,275 in case of very large farmer.

Finally the efforts have been made to reckon distribution of surveyed farm households about their possession/owing of various farm machineries and equipment in any form, viz. Purchased shared or taken on rent. Ultimately the data depicts that on overall level, none of the household farmers owns neither thresher nor combine harvester in the surveyed farmers. In the case of marginal farmers 27 percent of households were having owns 13 percent tube well connections and owns or shared bullock carts and thresher at the rate of more than 2 percent respectively and no electric pump, tractor, thresher and combine harvester was reported among the surveyed farmers.

9.8.2. Crop and Input Markets:

The study selected 200 sample households, have grown various crops (9) namely paddy (kharif), paddy (rabi), maize, chillies, coffee, cotton, black pepper, ragi, sugarcane and turmeric during kharif and rabi seasons. All the sample farm household categorized into five land holding categories, did under take growing five major crops, namely paddy (kharif), paddy (rabi), maize, chillies, coffee and black pepper respectively. On the whole it is observed that about 53.50 per cent of farmers have grown paddy kharif while maize, chillies, coffee and black pepper was raised by 25.00 per cent of each crop.

The average per household grown area varied from 0.58 acres in case of ragi to 4.60 acres in case of cotton and the productivity of various selected crops per acre yield varied from 0.26 Qtls in case of black pepper to 33.14 Qtls. In case of paddy rabi. The overall data would help to found that highest average value per quintal black pepper is reported to be Rs.17,633/- followed by coffee crop reporting Rs.11,617/- per Qtls, chillies Rs.10,412/-, cotton Rs.4393/- and ragi crop Rs.2483/- respectively. The study estimated per acre sale value of crops produce varied from Rs.4585 in case of black pepper to Rs.2,23,337/- in case of chillies crop and across the groups it can be observed that marginal farmers have received the higher sale value Rs. 2,35,694/- per acre in case of chillies.

The study observed that the 100 per cent of sample farmers of paddy rabi produce reported to have sold through local private agency followed by paddy karif 92.54 per cent of farmers reported to have sold through local private agency, maize 94.00 per cent of farmers, chillies crop 86.00 per cent, cotton 61.00 per cent, ragi 100 per cent, sugarcane 50.00 per cent

and turmeric 100 per cent. The crops of coffee and black pepper producers reported to have sold 78.00 per cent and 76.00 per cent of farmers through processors respectively.

The study found the reasons for dissatisfaction regarding to major disposal of reported crops. Out of 200 sample farmers 67 farmers belonging to all categories of paddy kharif crop reported that lower than market price and deduction for loans borrowed as reasons for dissatisfaction (40.30 per cent and 35.82 per cent of farmers) followed by deposal of paddy rabi from all farm category expressed again the same reasons (34.00 per cent and 46.00 per cent of households), maize and cotton farm households expressed dissatisfaction mainly the above two reasons for sale of their produce. In case of dissatisfaction felt while disposing chillies two reasons as citied lower than market price and delayed payments (42.00 and 22.00 per cent of farmers). The coffee crop, 94.00 per cent of sample farmers expressed the main reason for dissatisfaction is delayed payments at the time of sale. In the case of cotton crop their main reason were held responsible for dissatisfaction at the disposal 1) lower than the market price, delayed payments and deduction for loan borrowed (44.45 percent, 22.22 per cent and 22.22 per cent of farmers). The crop of black pepper and turmeric crops (90.00 per cent and 100 per cent) expressed delayed payments is the only reason for dissatisfaction and the sugarcane crop (100 per cent) of farmers expressed for dissatisfaction during disposal is deduction for loan borrowed.

The study collected data about positive and negative opinion for the reported crops. Majority of farmers reported positive reasons is respect of each group. Out of 18 farmers kharif paddy crop and 15 farmers in rabi paddy crop reported private buyers collude is prominent reason for price received from the paddy crop to un reasonable and out of 7 farmers reported two types of reasons for getting un reasonable price is respect of maize crop. 1) Private buyers collude (57.14 per cent) 2) no minimum fixed price (48.86 per cent) of farmers. 12 number of farmers viewed that same reason are responsible for price of chillies not being un reasonable (33.33 per cent) and 66.67 per cent of farmers). Two reasons were quoted 1) no government purchaser (52.63 per cent farmers) and 2) private buyers collude (47.37 per cent farmers) to be the reasons for the price of coffee crop being unreasonable. Out of 5 farmers felt reasons private buyers collude (60.00 per cent farmers and no minimum fixed price 40.00 per cent of farmers) responsible for cotton crop price not being reasonable. Reasons no government purchaser and private buyers collude were held responsible for price of black pepper (50.00 per cent each)

being un reasonable as felt by 16 farmers. Out of 3 farmers reported sugarcane crop mentioned two reasons 1) no minimum fixed price (66.67 per cent) and 2) private buyer collude (33.33 per cent farmers) and finally out of 8 farmers under turmeric crop who mentioned again the same reasons price being un reasonable (33.67 per cent and 33.33 per cent farmers) respectively.

In context with procurement of inputs for crop production, firstly seed was procured by all 200 sample farmers and highest 80.50 per cent farmers purchased. 191 sample farmers told to have procured fertilizer by purchasing. In regard to procurement of manure responded 78 farmers farm saved and purchased (64.10 per cent and 35.90 per cent farmers). Finally plant protection chemicals were procured through purchased by 150 farmers (100 per cent) respectively.

All the reported farmers expressed of their inputs procurement agencies. All 200 sample farmers expressed seed procurement agencies were obtained mainly local traders (39.00 per cent), followed by input dealer (35.00 per cent), co-operative & government agency (18.50 per cent) and own farm (7.50 per cent). In the case of fertilizers 191 farmers reported input dealer was the main agency and expressed by (37.17 per cent) farmers, local traders (36.65 per cent) and cooperative and government agency (26.18 per cent) respectively. Manure was found have been procured through agencies namely own farm and other local farmers by 64.10 per cent and 35.90 per cent of farmers. In the case of plant protection chemicals agencies through which procured were local traders and input dealers availed by 54.00 per cent and 46.00 per cent of farmers.

On an average the per acre expenditure incurred for the purchase of inputs by the sample farmers for the purchase of inputs is reported to be Rs.44,922/-. Across the groups the per acre expenditure incurred for the purchase of inputs varied from Rs.38,085/- in case of marginal farmers to Rs.53,504/- in case of very large farmers. A glancing over on an average the per acre expenditure incurred for the purchase of inputs, about 23.60 per cent for human labour followed by 21.82 per cent for fertilizers, 17.09 per cent for plant protection chemicals, 14.33 per cent are hiring machinery, 14.25 per cent are lease rent for land and 4.53 per cent are seeds respectively.

Total 200 farmers reported quality of seed to be good and satisfactory. The reported 64.00 percentages of farmers reported the reason of quality of seed is good and 36.00 per cent of farmers told satisfactory. In regard to quality of fertilizer, 191 farmers responded about the

fertilizers same reason of good and satisfactory. Response in the quality of manure was cited good by 78 farmers. Quality of input like plant protection chemicals were reported to be satisfactory and poor 78.00 per cent and 22.00 per cent of farmers.

9.8.3. Animal Products and Input Markets.

Animal products sell to various agencies, out of 51 same households, highest 37.25 percent reported through sold local traders and 31.39 percent of households sold directly to other households and the same percentage of households to co-operative and government agencies. No sample farmers have sold the animal products to the agencies of commission agent and processors. Among the groups majority of medium, large and very large category farmers sale their produce to other households. The study found that the sample households, sold their animal produce milk, eggs, and live animals and the average households received the highest amount Rs.2558 from milk, followed by Rs.1287 and Rs.240 from live animals and eggs. On the whole it was Rs.4084. Across the household groups medium and large farmers households received highest amounts (Rs.6673 and Rs.4855) respectively. Majority of sample households expressed the opinion of deductions for loans in the dissatisfaction at the disposal of their produce. Out of the total no of t8 reported households, 62.50 percent of farmers from small farmer category reported to have purchased animal seed. In the case of procurement of inputs out of 51 reported households, 82.35 percent farmers reported through have green fodder procured from farm saved and 17.65 percent of households purchased. 47 households were reported and highest 87.23 percent reported to have dry fodder procured through purchased from others. Procurement of concentrates was reported through purchasing is the major source. Out of total 25 reported households, 48.00 percent of farmers from marginal farm category reported to have purchased veterinary related items.

Data shown that seed for animal husbandry was procured through agencies 1)local traders and 2) other farmers (62.50% and 37.50%) respectively. Out of total 51 farmers reported procured green fodder through own farm (82.35%) and other farms (17.65%) of farmers. In the case of dry fodder 41 farmers reported that the own farm and other farmers (14.58% and 85.42%) are to be procurement agencies. Local traders and co-operative and government agencies were accessed to procure concentrates for animal husbandry reported by 57.78% and 37.78% of farmers. As far procurement of veterinary related services procured by veterinary

doctor respectively. On overall level highest per household expenses for purchasing inputs related to animal husbandry were evident on animal feed i.e. Dry fodder followed by labour charges, concentrates, veterinary charges, animal seed, green fodder and interest payments (Rs.471, Rs.363, Rs.279, Rs.137, Rs.113, Rs.111 and Rs.49) respectively. Average per household expenses incurred in purchasing inputs relating to animal husbandry was estimated as Rs.1523. Prices of animal seed were felt to be reasonable and high by equal number of household. (50% and 50%). In regard to reasonability of prices paid for reported related to animal husbandry, viz green fodder, dry fodder, concentrates and veterinary charges, reasonable was reported by a good number and prices being high by a few households (88.24%, 68.75%, 73.33%, 100.00%).

Under the reasons for prices of inputs being unreasonable, five factors were considered. 1) not subsidized 2)very few sellers 3)no government sellers 4)private sellers and 5)no price control. In regard to pricing of animal seed out of 8 reported farmers 75.00 percent and 25.00 percent of households expressed not subsidized and no government control to be cause for it being unreasonable. Very few sellers were the only reason described by 6 reported households responsible for prices of green fodder whereas dry fodder out of 15 sample farmers expressed that there were two reasons reported not subsidized (66.67%) and no government sellers (33.33%) being unreasonable. In the case of concentrates 12 farm households told that very few sellers and no government sellers were stated to be reasons for unreasonable prices (58.33%) and 41.67%) respectively.

9.8.4. Labour markets.

Family labourers along with casual labourers were engaged in farm and livestock operations. On an overall, the average number of hours employed for farming and livestock operations were higher in male family labour, casual labour and female family labour, casual labour. The aggregate picture of higher average number of days employed by male family and casual labourers (204.85 and 2.25) is seen in our study. In this case family labour and casual labour have been found to have devoted 179.40 and 3.11 days for employment. The average wage rates paid to male casual labour is Rs. 337.50 per day and Rs. 237.50 per day for female casual labour. The all India**@** annual average daily wage rate for field labour (male) during 2018-19 was 330/day, with Andhra Pradesh paying the wage to field labour (male) 362/day,

Average daily wage rate for field labour (female) at all India and 262/day and Andhra Pradesh Female wage rate is 256/ day respectively. Altogether more than 50 per cent of households reported high wage rates for labour due to limited labour supply in the study area.

9.8.5. Credit Markets.

Out of the total selected households, at overall level, more than half of the total households have taken some kind of loan. It was very surprising to note that all the farmers from Small farm holdings group have income is less than the expectation as well as expecting the loan waiver. Borrowed money and the lowest borrower ratio were reported in case of very large farm landholder. Thus, it is clear that incidence of loan increases with the size of land holding. The major sources of the money borrowed by the land holders were formal agencies such as government bank and cooperative society to meet capital expenditure in farm business and to meet day to day working expenditure in farm business. The average rate of interest charged by the formal lending agencies such as banks, cooperative society and SHGs was between 4.0to 8.0 per cent per year. About 50% of total households have repaid the loans. Some of them who could not repay the loans were mainly due to multiple reasons such as payment would be made after harvesting, due to medical expenses,

9.8.6. Asset Endowments of the Households, Government Support Programs and Insurance.

On an average the per household expenditure incurred by the sample farmers for the purchase of product assets is reported to be RS.3, 41,556/-. Across the groups the per household expenditure varied from Rs.2,50,000/- in case of medium farmers to Rs.4,91,667/- in case of marginal farmers. The reasons to have incurred excess amount by the marginal farmers compared to other size groups may be attributed to have not having purchased product farm assets earlier. As a result they have incurred high expenses for the purchase of product assets.

On the average the per household receipts from the sale of productive assets is reported to be Rs.1, 72,361/-. Across the groups the receipts obtained from the sale varied from Rs.1,08,285 in case of marginal farmers to Rs. 3,37,417/- in case of medium farmers.

About 92.50 per cent of households reported to have received technical advice from the source of 1. Extension agents 2. Agri.university/college 3. Radio/tv/newspaper/internet 4.

Veterinary dept and 5. NGOs. Of the total reported households, 57.84 per cent of households sought technical advice from extension agents, 21.08 per cent of households from Radio/tv/newspaper/internet etc, 15.14 per cent of households from Veterinary dept and 3.78 per cent of households from NGOs, a negligible percentage of 2.16 per cent have sought advice from Agri.university/college. Observing across the groups the farmer households sought technical advice accessed large from extension agents. Among the total reported households, majority percentages of all the farmers are reported the reason for not accessing source of krishi vigyan Kendra is due to not available to seek advice from the source of krishi vigyan Kendra advice.

Across the groups the percentage of farmers report of the frequency of contact with radio/tv/newspaper/internet seasonally varied from 20.00 per cent in case of large farmers to 100 per cent in case of very large farmers. On the other hand the percentage of farmers reported the reason of the frequency of contact with radio/tv/newspaper/internet need based ranged between 6.67 percent in case of small and 25.00 per cent in case of medium farmers.

Of the total reported households, 59.88 per cent of households adopted technical advice from extension agents, 20.35 per cent of households from Radio/tv/newspaper/internet etc, 13.95 per cent of households from Veterinary dept and 3.49 per cent of households from NGOs, a negligible percentage of 2.33 per cent have adopted advice from Agri.university/college. Observing across the groups the farmer households adopted technical advice accessed large from extension agents. Out of the total no of 200 sample households 86.00 per cent of the households reported about the usefulness of the adopted advice from different agencies. A negligible 2.33 per cent of farmers respond to have benefited by the advice of Agriculture University.

On the other hand 37.50 per cent of farmers reported to have benefited by the adoption of the advice given by source veterinary department. Moreover 16.67 per cent of farmers reported to have no effect by the adoption of the advice given by source veterinary department. Glancing across the groups majority percentage of the farmers from all size groups reported to have moderate benefited by the adoption of advice given by the source veterinary department.

Of the total no of 54 reported farmers 46.30 percent of marginal, 40.74 per cent of small, 7.41 per cent of medium, 3.70 percent of large and 1.85 per cent of very large farmers have reported the awareness of MSP price with respected to kharif paddy crop. On the other hand 25.00 of the total no of farmers reported the awareness of MSP towards rabi paddy crop.

Moreover out of total no 36 farmers, 50 per cent of farmers from marginal, 25.00 per cent of from small, 19.44 per cent of medium and 5.56 per cent of large farmer category reported the awareness about the MSP with respect of maize crop. The percentages of farmers reported the awareness about the MSP towards chilies crop varied between 2.56 per cent from very large category and 43.29 per cent from small farmer category. Across the groups the farmers from small, medium and large farmer category reported the awareness about the MSP towards cotton crop. The percentages of reported the awareness of the MSP with respect to the cotton crop from medium farmer category and 42.11 per cent from small farmer category.

On an average the payment received per household is reported to be RS.3938/-. Across the groups the per household payments received varied between 3932 in case of marginal and Rs.3943/- in case of small farmers.

Out of total no of 200 households, 65.50 per cent of farmers reported that they have not insured the crops grown. On the other hand 34.00 per cent of farmers stated that they have insured their crops only when received loan. A negligible percentage of farmers reported to have insured additionally.

Of the total no of 52 reported farmers, 38.46 per cent of farmers reported due to inadequate rainfall/drought they have expressed crop losses. On the other hand 34.62 per cent of farmers stated due to disease/insect they have crop loss. Moreover 29.62 per cent of farmers reported that the other natural causes for the loss their crops.

9.8.7. Problems in Farming, Economic Risks Faced, Coping Strategies and Social Networks.

Out of the total 200 farmer households only 35.00 per cent of farmers expressed the adequate of income from farming obviously 65.00 per cent of farmers expressed that they have got inadequate income from farming. About 64.50 per cent of farmers expressed that the price is they got is not remunerative. 48.50 per cent of farmers stated that there are poor market facilities. Nearly 37.50 per cent of farmers suffered from insufficient irrigation. Due to payment of high rates of interest to money lenders nearly 34.50 per cent of farmers got inadequate income from farming.

Among the groups, the high rate of severity expressed is ranged between 2.17 per cent in case of small farmers and 12.50 per cent of in case medium farmers. Majority of the farmers of

various groups expressed the seasonal un-employment is the major risk among the risks faced by them. Moreover 69.50 per cent of farmers revealed that mortgaged/leased out lands were faced economic risks from farming.

Out of total no of 200 farmers, 93.00 per cent of farmers are member in the self help groups, 25.00 per cent of farmers are members in development group or NGO, similarly 25.00 per cent of farmers in credit cooperative society and 25.0 per cent are members in cast association. Moreover 21.00 per cent of sample household in agriculture co-operative society.

Across the groups 69.23 per cent of large farmer category expressed the gram panchayat is available but no opportunity to be a member. Across the groups 100 per cent of very large farmer category expressed that due to non-availability of dairy/milk co-operative society; they are not getting a member in dairy/milk co-operative society. Out of 12 reported farmers, 83.33 per cent of farmers from large category and 16.67 per cent from very large category of farmers reported the reason that self-help groups is available but no opportunity to be a member in self-help groups.

Out of 19 reported farmers, 94.74 per cent of farmers expressed that they have benefited of enjoying govt schemes as being a member of gram panchayat. On other hand, 84 reported farmers, each 50.00 per cent of farmers expressed that they have benefited of enjoying input usage and credit sources as a being member of agriculture co-operative society. moreover 26 reported farmers 46.15 per cent of farmers from marginal category, 26.92 per cent of from medium category, 19.23 per cent of farmers from small category and 7.69 per cent from large category of farmers enjoyed the benefits of agricultural practices & livestock management benefits as a being member of dairy/milk cooperative society and out of 50 reported farmers 58.00 per cent of farmers from small category, 30.00 per cent of from marginal category and 12.00 per cent from medium category of farmers reported to have derived credit source benefits as being a member of credit co-operative society.

9.9. Policy suggestions.

The following are the policy suggestions relating to the study of market imperfections in Andhra Pradesh.

- ✓ The Rythu Bharosa Kendras (RBKs) are an innovative scheme launched by Andhra Pradesh Government on 15th October, 2019 caters to the needs of its farmers. This scheme may be adopted government of India and extended to other parts of the country

so as to ensure confidence among farmers. As a part of the scheme, the farmers are being supplied with better quality seeds and fertilizers, technical advice, e-cropping and different marketing channels for the benefit of the farmers by State Government.

- ✓ Input costs reducing mechanism is to be evolved.
- ✓ Keeping in view of the rising labour costs, it shall be linked to MGNREGA scheme so that labour costs may be minimized.
- ✓ Interest free loans for tenant, marginal and small farmers should be provided.
- ✓ Since the heavy weight machinery destroys the fertility of the soil, light weight machines should be provided.
- ✓ PMKISAN scheme provides Rs.6000/- for marginal and small farmers and the same benefit may be extended to tenant farmers and the limit more than Rs.6000/- should be introduced.
- ✓ The present scheme of crop insurance being provided by the private agencies is not suitable and sufficient for the farmers, hence the scheme should be taken up by the public sector for the benefit of the farmers and free crop insurance provide to all marginal, small and medium farmers.
- ✓ The produce of the farmers be purchased by government agencies during the time of harvesting seasons only instead of processing the produce when there is down fall in price of farm produce.

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Comments on the report of market imperfections by AERC, Waltair

1) There were several grammatical and spelling mistakes in the text. Sentences are incomplete and unclear which makes it difficult for a reader to understand what exactly the authors are trying to convey. So a thorough editing is required.
2) The section on methodology is very generic and lacking in detail. For instance, on what basis the districts, villages were selected? And what sampling technique was used? Keeping these questions in view, please revise this section.
3) Please note that the executive summary also has to be revised in the light of the above comments.
4) In the introduction chapter (1), citation is missing with respect to the secondary data discussed in the sub section on 'seed village programme', 'fertilizers', 'credit' and 'land'.
5) A critical review of existing literature needs to be provided. The insights coming out of the literature review, which could be relevant for the study, need to be highlighted.
   Further, please provide the corresponding year of the studies discussed in the section on literature review. For instance, study by Bhattacharya and Kumbhakar has been cited without the corresponding year. Same applies for other studies as well.
6) Interpretations of some of the tables are not clear. For instance, table 2.3 on 'distribution of households by social groups across the landholding categories'; table 2.7 on 'distribution of households by farm machinery/equipment possession across the landholding categories' in chapter 2.
7) In chapter 7, the section on government support programmes for farming in Andhra Pradesh merely describes the existing programmes. However, inclusion of some insights obtained from the field would have helped to shed light on whether the farmers were able to access these programmes and get benefitted from it.

ACTION TAKEN

As per the comments of the Coordinator of the Study, the final report is primed and submitted.

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