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A Study On The Social, Economic And Organizational Constraints In Relation To Agricultural Information And Communication System Along With Their Suggestions For The Small & Marginal Farmers Of Khurda And Bhadrak Dist Of Odisha

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Extended Summary

Institutional innovations: Small holding agriculture faces many challenges. But, a number of innovative institutional models are emerging and there are many opportunities for small and marginal farmers in India. Institutions relating to (a) land and water management, (b) group or cooperative approach for inputs and marketing and, (c) value chains and super markets can enhance productivity, sustainability and incomes of small holding agriculture. Institutions for sustainable land and water management Development of irrigation and water management are crucial for raising levels of living in rural areas6. Major areas of concern in irrigation are: decline in real investment, thin spread of investment, low recovery of costs, decline in water table, wastages and inefficiencies in water use and, non-involvement of users Both investment and efficiency in use of water are needed. Major areas of reforms needed in irrigation are: stepping up and prioritizing public investment, raising profitability of groundwater exploitation and augmenting ground water resources, rational pricing of irrigation water and electricity, involvement of user farmers in the management of irrigation systems and, making groundwater markets equitable (Rao, 2009). In a recent study, Shah et al (2009) indicate that the impact of the drought of 2009 is expected be less severe than the drought of 2002 due to ground water recharge in the last few years. Ground water can be exploited in a big way in Eastern region. Watershed development

and, water conservation by the community are needed under water management. New watershed guidelines based on Parthasarathy Committee's recommendations were accepted by the Central Cabinet in March 2009. The implementation has to be stepped up in order to obtain benefits in rainfed areas. National Rainfed Area Authority has big responsibility in matters relating to water conservation and watershed development. Assets created under NREGS can help in improving land and water management.

Environmental concerns are among the policy priorities in India. Particularly degradation of land and water is alarming. Watershed development under the new guidelines, in general, has an overall positive impact on environment. However, groundwater tables are depleting at an alarming rate. The de facto privatization of groundwater and subsidized power supply are the main culprits. There has been a neglect of minor irrigation sources like tanks. Shortage of drinking water has accentuated and quality of water has declined over time.

An integrated approach is needed for water resources management in the country. An appropriate strategy should integrate institutional approaches with market principles. Since institutional innovation (Water user associations) is already in place for canal irrigation, it is time now to implement volumetric pricing. There is a need to de-link water rights from land rights in order to ensure equity and sustainability.

Institutions like the water user associations (WUAs) and watershed committees are important for water management. The experience of Andhra Pradesh shows that the impact of WUAs has been encouraging in these areas especially in terms of providing irrigation to tail end farmers. This has been made possible by cleaning of canals and water courses and monitoring of water losses by the WUAs. Area under paddy is reported to have increased significantly following reforms. However, much of the reported increase could be statistical because of underreporting of irrigated area before reform, as this meant lesser payment of water tax to revenue department. Paddy yields are reported to have increased by 40%. Long term solution for effective functioning of WUAs is awareness building and promoting participatory monitoring and evaluation. Unlike in the case of canal irrigation, WUAs are not found to be effective in respect of tank irrigation due to insufficient allocations

In the case of land and forestry, watershed approach and Joint Forest Management are crucial for protecting the environment. The critical issue is sustainability of these programmes. Although watersheds have shown positive economic impact, the social issues are missing. More participatory approach and involvement of women would lead to sustainability of watershed development approach. In the case of JFM, the focus is more on high income areas like timber. Low value products constituting sources of livelihoods for the poor have low priority. Customary rights of the tribal's on podu (shifting cultivation) have to be recognized. Awareness and involvement of the civil society is a precondition for checking environmental degradation.

Another concern is the land degradation due to excessive use of fertilizers and pesticides. Government has programmes such as Integrated Pest Management (IPM) and Integrated Nutrient Management (INM). Keeping in view the ill effects of pesticides and also National Policy on Agriculture, Integrated Pest Management Approach (IPM) approach has been adopted as a cardinal principle and main plank of plant protection in the country in the overall crop production programme. Besides ongoing activities, the thrust area will be pertaining to Pest Risk Analysis (PRA) and post entry quarantine surveillance. This has become essential in the light of WTO agreement, which will facilitate more and speedier movement of plants, planting materials globally.

Super markets and supply chains: Small farmers can benefit from the emerging super markets and value chains. The presence of super markets as retail trade is rapidly expanding in the emerging economies. According to Reardon and Gulati (2008), this process has developed in an astonishing speed: Supermarkets now enjoy a retail share of 50-60% in South America, East Asia (China excluded) and South Africa; and a 30-50% in Mexico, Central America and much of South East Asia. While in China, India and Vietnam their market is still low and variable (2- 20%), it is experiencing an annual growth between 30% and 50%.

Reardon and Minten (2011) examine the patterns and dynamics of diffusion of modern food retail in India. They emphasized three surprises in the rise of modern food retail in India. They are:

(1) That has occurred since the 1960s with waves of government, coop, and then private retail.

(2) That the private retail wave has been extremely fast in particular in its second phase, in the past 6 years, when it grew at 49% per year on average, some 5 times faster than the fast growth being experienced in the GDP.

(3) That the rise of private retail chains has been unique or rare in is drivers (in its great majority by domestic capital, not foreign investment), and “early” (compared with the prior experience in other developing countries) in its penetration of the food markets of the poor, of small cities and even rural areas, of fresh product markets, and its use of diverse formats to help toward the above ends”

In a study on food supply chains in India, Reardon and Minten (2011) indicate the following changes in the past two decades.

(1) A modern sector is emerging in the whole sale sector with the growth of modern logistics firms and specialized modern wholesalers.

(2) Tradition segment of the whole sale sector is also transforming. Based on earlier studies, this study presents the findings on transformation of traditional whole sale sector as follows.

(a) Rural traditional market transformation is much more advanced in certain regions For example,West and Central regions of Madhya Pradesh and West and Central Uttar Pradesh are different from Eastern regions of these states.

(b) The marginal farms (0-1 hectare) look more like traditional rural India with low market surplus, chemical use, credit use, lower use of clod stores etc. On the other hand, small and medium farmers are more dynamic.

(c) The conventional view is that food supply chains are dominated by long chain of many hands. The recent findings show that supply chains can be short.

(d) Conventional view is that farmers are at the mercy of money lender of because of tied credit. But, the surveys show that less than 5 per cent take advance or credit in any form from brokers or wholesalers.

(e) The surveys show rapid development of cold stores for potato in Uttar Pradesh and Bihar in 2000s.

In India, the expansion of modern retailing has the potential to spark investment in marketing efficiency and processing that yields benefits to both producers and consumers. In those cases where small producers have been able to integrate into the supplying chains, supermarkets have offered enhanced security and considerably higher margins than the traditional clients, such as wholesales and groceries. However, there is scope for exploitation in contract farming and super markets if rules are not framed properly.

Introduction

Policies to support to small holders: In the case of small holding agriculture, Government has to play an important role in improving productivity and incomes of small farmers. The 11th Five Year Plan says that “the agricultural strategy must focus on 85% of farmers who are small and marginal, increasingly female, and who find it difficult to access inputs, credit and extension or to market their output. While some of these farmers may ultimately exit from farming, the overwhelming majority will continue to remain in the sector and the objective of inclusiveness requires that their needs are attended to”.The National Commission for Enterprises in the Unorganized Sector (NCEUS) has recommended a special programme for marginal and small farmers. The report of NCEUS analyses the status and constraints faced by marginal and small farmers and focuses on the need for a special programme which aimed at capacity building of these farmers, both the farm and non-farm activities. As the marginal and small farmers suffer from market failures in agriculture in terms of credit, input supplies and marketing of output, access to new technologies etc. NCUS recommended the four measures. These are: (a) Special programmes for marginal and small farmers; (b) Emphasis on accelerated land and water management; (c) credit for marginal and small farmers; (d) Farmers’ debt relief commission.

The Commission strongly advocates that a strategy for marginal and small farmers must focus on group approaches in order to benefit from the economies of scale. A focused approach can be used to incentivize the formation of farmer’s groups and apex organizations and government and

other can facilitate in finding solutions to problems of irrigation, inputs, procurement, markets and risk. The Commission has considered four important models for group approach in the country. These are: Co-operatives,producer's companies, farmers' groups such as those in Andhra Pradesh and SEWA (Self Employed Women's Association) Farmers' model.

Cooperatives and farmers' groups on the lines of Self Help Groups (SHGs) seem to hold greater promise for expansion. It may be noted that formation of marginal and small farmers' groups on the lines of SHGs has developed under agency structure such as 'Velugu' or Indira KrantiPradham (IKP) or CMSA mentioned above in Andhra Pradesh, 'Kudumbashree' in Kerala and SEWA in Gujarat. Such initiatives are being developed in Tamil Nadu, West Bengal, Orissa and Madhya Pradesh as well. As the Commission mentions that the 'main lesson of these experiences is the capacity building and group formation among the poor marginal and small farmers cannot be simply seen as an extension of routine departmental activity and as one of the many activities that a programme seek to promote" (p.39). These groups under agency approach can be promoted where farmers' cooperatives are not operating.

The elements of special programmes advocated by NCEUS (2008) are the following (a) Promotion of Marginal and Small Farmers' Groups: In many states groups on lines of self-help groups (SHGs) are few. Special efforts have to be made to facilitate formation of such groups. The special programme proposes setting up of Marginal and Small Farmers'

Development Society (MSFDS) for the promotion, capacity building and coordination of development of marginal and small famer's groups. (b) Enabling greater access to institutional credit: Linking Marginal and small farmer's groups to banks is an essential step towards needed credit flow to these farmers. (c) Training and capacity building: The special programme aims at motivating and enabling marginal and small farmers to acquire skills by establishing Community Resource Centres, by promoting marginal and small farmer activists at the village, cluster and block levels. (d) Support for strengthening and creation of non-farm activities: This aims to bridge the farm activities and non-farm activities of small holding agriculture as income from small farming is hardly sufficient to meet the basic needs of the farm households. (e) Gender-focused activities: It is known that the share of women is increasing in agriculture. This programme aims that the farmers' groups should have adequate representation of women farmers. (f) Planning for development of small and marginal farmers: The small and marginal farmers Development Society wound develop a medium term development strategy for these farmers.

Rural non-farm sector, the income from small and marginal farms is not enough to take care of daily consumption and they have to borrow to survive. Therefore, small holdings farmers have to get part of income from rural non-farm activities. Therefore, promotion of rural non-farm sector is essential for generating incomes for rural population. Poverty cannot be removed with 55% of workers in agricultural sector. Ultimately, many of the small and marginal farmers have to be shifted to rural non-farm sector and urban areas.

India currently produces about 50 million tons of fruits and 90 million tons of vegetables. Only 2% of these fruits and vegetables are processed as against 23% in China, 78% in Phillippines, 83% in Malaysia. Half of those engaged in agriculture are still illiterate and just 5% have completed higher secondary education. Even in 2004-05, around 60% of rural male workers and 85% of rural female workers are either illiterate or have been educated up to primary level. In other words, education and skills are constraints. India can learn from China on rural transformation. China experienced a structural transformation in the last three decades. The state's role has been decisive in building up the physical and social infrastructure (including land reforms). India should learn from China on reforms in agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is quite significant (Rao, 2007). China started with agricultural reforms. Agricultural growth was quite high. The economic and institutional reforms in the whole economy created space for rural non-farm sector. Diversification towards rural non-form sector in China is one of the important factors responsible for rural poverty reduction (poverty is only 3%).

Rural Infrastructure Development Regarding protection of agriculture in OECD countries, some suggest that developing countries also should protect their agriculture. However, a better option is to provide more rural and agricultural goods that are undersupplied by the market (Lipton, 2006). It also includes rural infrastructure development like roads, irrigation, communications etc. Returns are also high from investments in agricultural R&D, rural roads and other infrastructure and knowledge generation (Hazell, 2011). The rural infrastructure will enable small and marginal farmers to compete with other famers in India as well as in other countries.

Review of Literature

Reddy and Reddy (1997) stated that personal visits and telephone calls are the most used methods by the researchers to communicate with farmers. In such they are the two potential methods, their limitations of meeting large number of farmers by the research system, the other potential methods like training programmes, field days, kissan melas,group discussion, cattle shows etc. should be extensively used by the researchers in co-ordination with extension personnel to communicate with farmers.

Rath and Pattanaik (1997) revealed that mass contact with audio-visual aids and mobile exhibitions seems to enthuse the small and marginal farmers. If audio- visual scripts are developed in local language, can both be entertained and informed small and marginal farmers of technologies that would help them lead a purposeful and confident life.

Bhaskaran and Suthurao (1998) reported that small farmers communicate relatively less with one another when compared to progressive farmers.

Nidagundi et al. (1998) revealed that large percentage of farmers have favourable attitude towards field day irrespective of their personal characteristics. Hence, it is imperative to have field days for effective communication. The formal source, Agricultural Assistant, must be well exploited as he forms the major influential source of information followed by Assistant Agriculture Officer and research stations.

Tajuddin and Mohan (1998) reported that among various extension tools, tried to transfer the technology, communication through written words i.e. the publication of articles and write ups in journal/ magazines and newspapers had better response among the farmers.

Research Methodology

RESEARCH METHODOLOGY

The systematic planning and conduct of a piece of research programme demands an appropriate research methodology. This is a vital pre requisite of any research study since, it has a direct bearing on the relevance and validity of the research findings. In the realm of social science, again, it is essential to use a standard method of research design, appropriate techniques of measurement of variables and rules or procedures for the testing of observations.

This chapter deals with various research procedures followed by the investigator to analyze the problem during the course of investigation .They have been presented in detail under the following headings:

1. Selection of problem
2. Plan of work
3. Location of the study
4. Pilot Study
5. Preparation of the interview schedule
6. Sampling
7. Pre-testing
8. Interviewing
9. Measurement procedures
10. Concept and operationalization with scoring key
11. Processing and analysis of data

Result and Discussion

TO STUDY THE SOCIAL, ECONOMIC AND ORGANIZATIONAL CONSTRAINTS IN RELATION TO AGRICULTURAL INFORMATION AND COMMUNICATION SYSTEM ALONG WITH THEIR SUGGESTIONS.

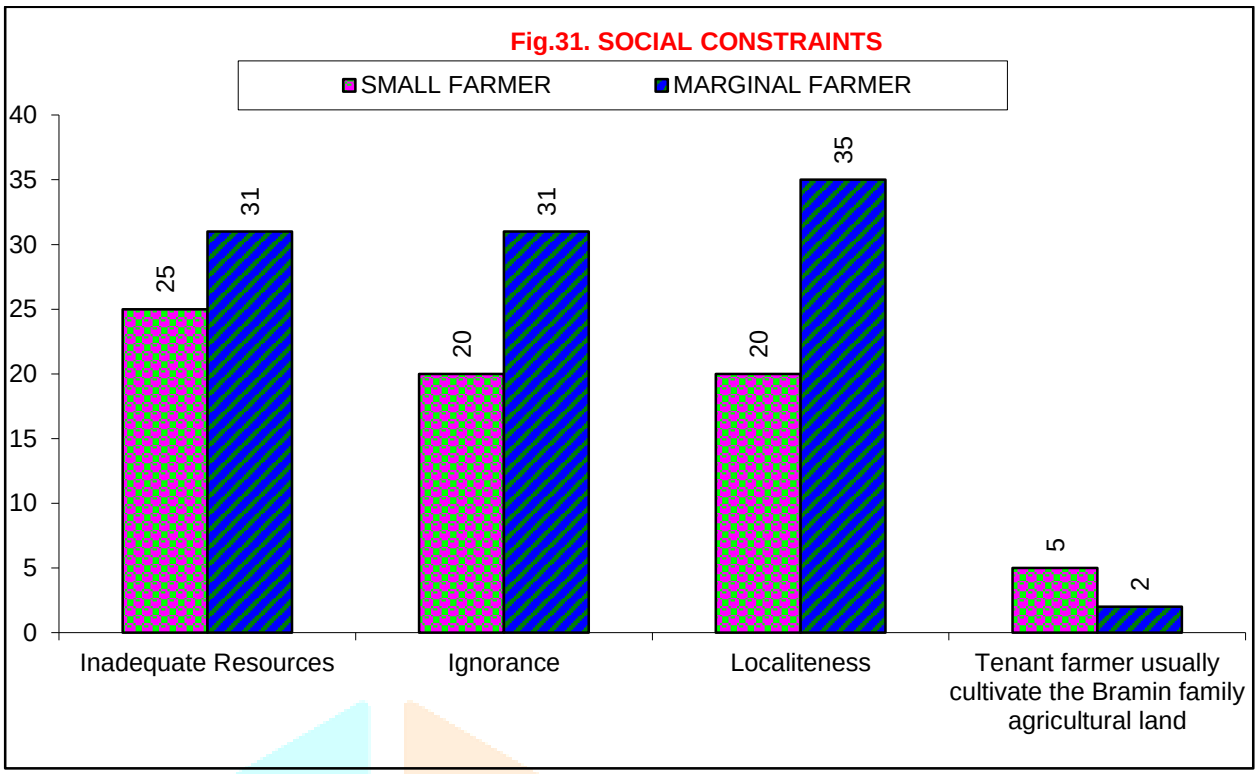
SOCIAL CONSTRAINTS

Table – 6.4.1

N = 114

SOCIAL CONSTRAINTS	SMALL FARMER	MARGINAL FARMER
Ignorance	20(28.16)	31(72.09)
Localiteness	20(28.16)	**35(81.39)**
Tenant farmer usually cultivate the Brahmin family agricultural land	5(7.04)	2(4.65)

The data presented in Table 6.4.1 revealed that localiteness of the small famers and marginal respondents were 28.16 percent and 35.21 percent respectively because they usually donot go to the agriculture office in their locality.



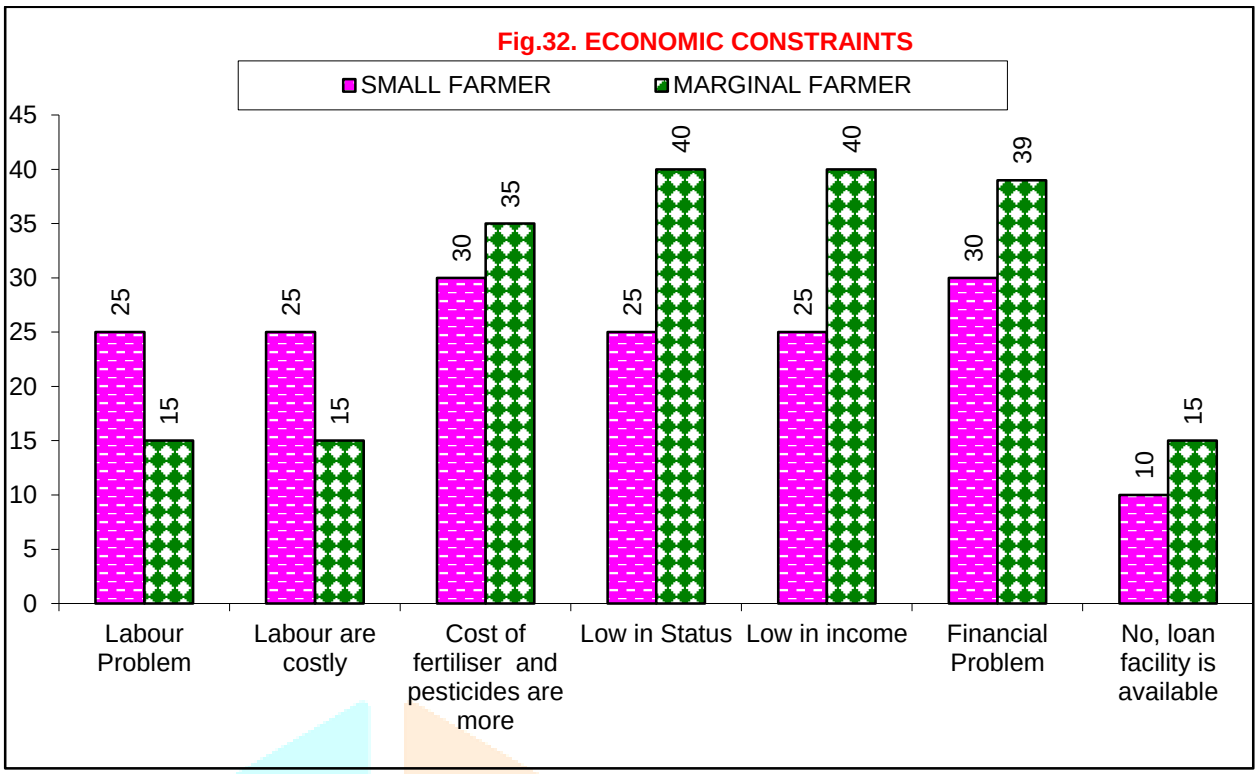
ECONOMIC CONSTRAINTS

Table – 6.4.2

N = 114

ECONOMIC CONSTRAINTS	SMALL FARMER	MARGINAL FARMER
Labour Problem	25(35.21)	15(34.88)
Labour are costly	25(35.21)	15(34.88)
Cost of fertilizer and pesticides are more	30(42.25)	35(81.39)
Low in Status	25(35.21)	**40(93.02)**
Low in income	25(35.21)	**40(93.02)**
Financial Problem	**30(42.25)**	39(90.69)
No loan facility is available	10(14.08)	15(34.88)
Inadequate resources	25(35.21)	31(72.09)

The data presented in table 6.4.2 revealed that financial problem of the small famers respondents were 42.25 percent. The marginal respondents were 93.02 percent low in status and so low in income



ORGANISATIONAL CONSTRAINTS

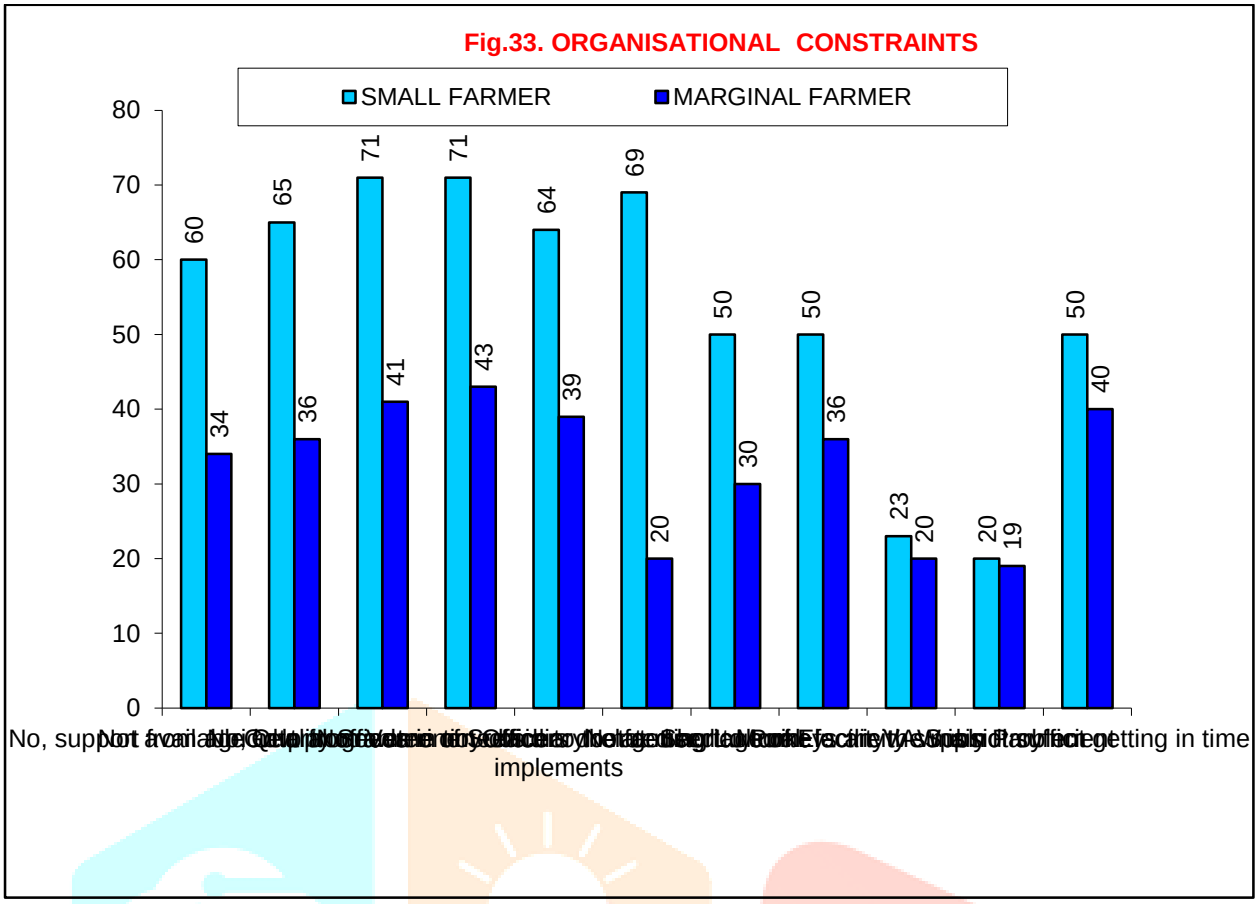
Table – 6.4.3

N = 114

ORGANISATIONAL CONSTRAINTS	SMALL FARMER	MARGINAL FARMER
No, support from agricultural officer	60(84.50)	34(79.06)
Not available Quality Seeds in time	65(91.54)	36(83.72)
No, help from the vetenery officer	**71(100)**	41(95.34)
Govt. programme not reach to the farmer	**71(100)**	**43(100)**
Not aware of Subsidiary related agricultural implements	64(90.14)	39(90.69)
Officers do not used to come	69(97.18)	20(46.51)
Not getting L.I Point facility	50(70.42)	30(69.76)
Shortage of Electricity supply	50(70.42)	36(83.72)
Monkeys are the main Problem	23(32.39)	20(46.51)
VAW is not sufficient	20(28.16)	19(44.18)
Subsidiary not getting in time	50(70.42)	40(93.02)

The data presented in table 6.4.3 revealed that the govt. programme do not reach and not getting help from the vetenery officer to the small famers respondents were 100 percent. The govt. programme do not reach to the marginal farmers respondents were 100 percent.

Fig.33. ORGANISATIONAL CONSTRAINTS



CONCLUSION

1. Awareness programme should be conducted.

By organizing awareness programme farmers will be aware of new scheme new technology related to agriculture and allied sector.

2. Weekly visit of AAO Officer is necessary.

The meetings should be organized and maximum number of farmers should attend the meeting. Helps to know practically oriented scheme. Provide information related to subsidiary in agriculture and allied sector. So that most of the Farmers will be benefitted from government agricultural scheme. Government should directly give subsidiary to the farmer. So that maximum numbers of farmers will be benefitted from government policy.

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