PERFORMANCE ANALYSIS OF MAHILA KISAN SASHAKTIKARAN PARIYOJANA (MKSP) SCHEME IN THRISSUR DISTRICT

By

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THESIS

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DECLARATION

I, hereby declare that the thesis entitled **"Performance analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Thrissur district"** is a bonafide record of research done by me during the course of research and that it has not previously formed the basis for the award to me of any degree, diploma, fellowship or other similar title, of any other University or Society.
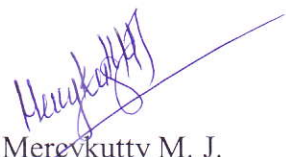
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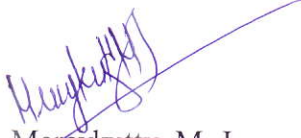25/09/2020

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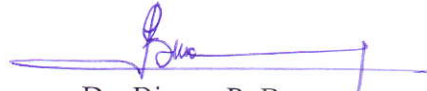
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RASHIDA

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LIST OF ABBREVIATIONS

Abbreviation	Full form
%	Percentage
ADS	Area Development Societies
ATMA	Agricultural Technology Management Agency
CDS	Community Development Societies
DAY-NRLM	Deendayal Antayodaya Yojana- National Rural Livelihood Mission
et al.	And others
FFC	Farmers Facilitation Centers
GoI	Government of India
GoK	Government of Kerala
Ha	Hectare
i.e.	That is
JEVA	JLG Evaluation Agent
JLG	Joint Liability Groups
MKSP	Mahila Kisan Sashaktikaran Pariyojana
MNREGES	Mahathma Gandhi National Rural Employment Guarantee Scheme
MoRD	Ministry of Rural Development
NABARD	National Bank for Agriculture and Rural Development
NFSM	National Food Security Mission
NGO	Non Governmental Organization
NHG	NeighbourHood Group
NTFP	Non Timber Forest Products
PC	Producer Companies
PIA	Programme Implementing Agency
RKVY	Rashtriya Krishi Vikas Yojana
SHG	Self Help Group
SPEM	State Poverty Eradication Mission

Introduction

CHAPTER I

INTRODUCTION

"*You can tell the condition of a nation by looking at the status of its women*" - Jawaharlal Nehru

Agricultural sector engages 52 per cent of overall manpower of India. Based on the 2011 census, 37 per cent of the total number of agricultural workers in the country is women and by 2020, this figure is expected to be about 45 per cent. Agriculture is also the largest employer of women with 80 per cent of them being engaged. Further, women comprise 33 per cent of the agricultural labour force and 48 per cent of self employed farmers.

Agarwal (2003) studied on schemes related to women in agriculture conducted in India and other developing and under developed countries and concluded that women contribute far more to the agriculture than had been generally been acknowledged. Women play a significant role in agricultural development and allied fields including in the main crop production, livestock production, fisheries, etc. In spite of being a key performer of the agricultural economy, woman faces much discrimination in terms of wage, credit support, etc. For mainstreaming the activities of women, they should be empowered through education, trainings and financial inclusion.

Many studies have also highlighted the significance of female labour in agriculture and allied activities. It was further stated that despite their presence in most of the agricultural operations they are considered as invisible workers.

The growing migration of male workers to urban areas in search of remunerative jobs and the dissatisfaction among the farmers on net profits are said to be contributing to the evolution of a kind of transformation in Indian agricultural sector. And this emerging phenomenon indirectly leads to the feminization of farming activities.

The government of India launched the Mahila Kisan Sashaktikaran Pariyojana(MKSP) in 2011 under National Rural Livelihood Mission (NRLM) with the major objectives as empowerment of women in agriculture by enhancing productive participation, creating sustainable agricultural livelihood opportunities, improving skills and capabilities to support farm and nonfarm based activities and to ensure food and nutrition security at household and community levels. The scheme also helps to provide better access to inputs and services of government and other agencies, resources of other institutions and also enhances managerial capabilities for better management of biodiversity.

In addition to these objectives, certain expected outcomes are laid out to measure the success of any of the programmes or interventions under MKSP such as increase in the incomes of the women, improvement in food and nutritional security, increasing area under cultivation, development of skills, reduction of drudgery through enhanced tools and technologies, increasing the visibility of women and entrepreneurial growth.

MKSP of M. S. Swaminathan Research Foundation (MSSRF) became the basis for the national programme under the same name. It is being implemented in most of the states with financial support of Ministry of Rural Development (MoRD) and representative State Rural Livelihood Missions (SRLM). This scheme is implemented to empower women who engaged in agriculture by making systematic investments so that enhance their participation and productivity, and also create and sustain agriculture based livelihoods of rural women. MoRD provides funding support of up to 75 per cent of the project cost submitted by Programme Implementation Agency (PIA) or State government. In case of North East and Hilly states it funds up to 90 per cent of the project. The balance is funded by state government or other agencies.

Kudumbashree is the poverty eradication and women empowerment programme implemented in Kerala by the State Poverty Eradication Mission (SPEM) of the state Government. Kudumbashree was set up in the year 1997 as per the recommendations of a three member task force appointed by the State government.

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Kudumbashree has a three-tier structure for its women community network, with Neighborhood Groups (NHGs) at the lowest level, following Area Development Societies (ADS) at the middle level, and Community Development Societies (CDS) at the local government level. In 2011, MoRD recognized Kudumbashree as the State Rural Livelihoods Mission (SRLM) under NRLM.

Kudumbashree had already been working on collective farming through its women's groups across the State. Kudumbashree has seen MKSP as an opportunity for capacity building of the JLG and thus providing an impetus to women's collectives engaged in farming. Kudumbashree became the PIA for MKSP in Kerala. MKSP was launched in Kerala by the then Minister for Rural Development Shri. Jairam Ramesh, at a State level workshop held at Nadathara Panchayat inThrissur district.

Kerala State Planning Board (2012) has evaluated that it would not have been likely to launch the MKSP at the national level without the success of Kudumbashree's intervention. The women being identified as master farmers under this scheme have proven to be instrumental in their transfer of knowledge about good agricultural practices and also in helping fellow women farmers to build sustainable livelihoods.

Strategic approach by Kudumbashree developed through JLG (Joint Liability Groups) in rural areas of Kerala by creating group of 4-10 people with similar socio economic background from same village or locality who mutually come together, can avail loan from a bank without any collateral security. It is a role model for all other NGO's or other firms who can also do collective farming, improve agriculture and thereby the process of 'Make in India' a reality (Reddy *et al*., 2020).

MKSP project was converged with the ongoing JLG farming activities of Kudumbashree with the aim of improving the capacity of the landless women farmers and for the creation of favorable ecosystem for women in agriculture. Gramapanchayat and CDS work together for availing leased land. Kudumbashree had also adopted Joint Liability Groups (JLG) as an institutional structure for making the

groups eligible for availing financial support under the schemes of National Bank for Agriculture and Rural Development (NABARD).

Women master farmer as community resource person was introduced for knowledge transfer under MKSP scheme. A community level agriculture machine pool was formed under the name of Farmer Felicitation Centre (FFC). A common place or room was identified in each Panchayat and agricultural machineries according to local necessities were purchased and kept at the centers for renting out for the demanding JLGs.

Monitoring and evaluation forms an integral part of MKSP programme implemented by Kudumbashree. A JLG subcommittee was formed under each of the CDS with JLG convener as head to address the issues and requirement of JLG in each of the Panchayat. At the programme level, agriculture block coordinators act as the first level of monitors. At the district level Assistant District Mission Coordinator (ADMC) and a consultant are placed for supervising the activity of the JLG and the block coordinators. At the state level a project team has been created for constant evaluation of the project.

It is pertinent to pay attention to the women group approach in farming since collective action in agriculture is essential to face challenges and to promote growth as well as equality in agriculture. Analysis of the effectiveness of the scheme and knowledge level of the beneficiary farm women can provide key inputs for designing further promotional strategies. So the study has been framed in such a way that it explores how various components of the scheme are perceived by the respondents.

Objectives

This study intends to address five key specific objectives regarding the Performance analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Thrissur district.

- To study the effectiveness of MKSP Scheme as perceived by the beneficiary farm women, implementing officers and facilitators

- To assess the knowledge of beneficiary farm women on cultivation of selected agricultural crops
- To study the group dynamics of the selected women Joint Liability Groups
- To study the profile characteristics of beneficiary farm women and their influence on group dynamics
- To explore the constraints and to suggest promotional strategies for improving the effectiveness of the scheme

Scope for the study

Many studies have been done to analyze the impacts and outcomes of various schemes and programmes implemented by Government of India for upbringing the primary sector i.e. agricultural sector. In fact many of the studies helped in assessing the effectiveness of such programmes and schemes and also brought the people's opinion in to public domain. No studies have been done for assessing the performance analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Kerala state.

The current study is focused on effectiveness of the scheme on promotion and enhancement of food and nutritional security. In this study, knowledge of beneficiary farm women on cultivation of selected agricultural crops will be assessed along with the group dynamics of the selected women Joint Liability Groups through which the scheme is implemented mainly. In addition, the study will also explore the constraints in implementing the MKSP programme. The result of the study can be utilized in analyzing the performance of MKSP scheme among women farmers of Thrissur district and there by suggesting the promotional strategies for improving the effectiveness of the scheme.

Limitations of the study

The study was a part of master's research work and was conducted in Thrissur districts of Kerala state. Regardless of the limitations, an attempt has been made to assess the performance analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in a systematic and objective way as possible. However, this study is subjected to the inherent limitations of being a single research project. Some of other usual limitations are given below.

- The data were collected from only one block of entire Thrissur district therefore; the findings may not be generalized.
- The outcomes of the study are based on the expressed responses of the sample; therefore, the objectivity of the study depends upon the free and frank opinion of the respondents. Hence their bias and prejudices while giving out the responses cannot be eliminated.
- The study put up usual limitation of resources such as time, money and researcher's experience.
- Although, utmost care was taken while selecting relevant variables for the study, a few more variables may be still missing in research design.

Organization of the study

The entire thesis is presented in five chapters. The first chapter is a brief introduction, comprising a small description about the scheme along with objectives, scope and limitation of the study. It is followed by the review of literature relevant to the research that is cited in the second chapter. The third chapter deals with the material and methods which are used for the measurement of variables, with statistical procedures used, while the forth chapter describes results and discussion based on the obtained results. Finally, the fifth chapter covers summary and conclusions of the thesis. Bibliography, appendices and the abstract of the study are given at the end.

Review of literature

CHAPTER II

REVIEW OF LITERATURE

The prime focus of this chapter is to analyze the different concepts regarding the study. Review of the available literature is essential as it provides a strong foundation for scientific investigation. It paves the way for better understanding of the present study and helps in interpreting the findings more accurately and scientifically.

Review of research is presented in the following sequence.

2.1 Empowerment of women in agriculture

2.2 MKSP scheme and its components

2.3 Factors influencing the implementation of scheme

2.4 Profile characteristics of beneficiary farm women

2.5 Benefits accrued by the beneficiaries

2.6 Knowledge level and participation of women in agriculture

2.7 Group dynamics through JLGs

2.8 Constraints felt by the respondent categories

2.1 Empowerment of women in agriculture

Giriyappa (1997) tried to understand women empowerment with respect to levels of discrimination and effectiveness of decision-making by them in different rural enterprises and concluded that the female leaded households were effective in taking decision in respect of schooling, work mobility, health care, asset creation, employment generation and social participation in low social status households. The informal empowerment was wide spread through women earning members but they face various degrees of discrimination by males in the decision making.

The average woman in India was disempowered completely relative to men but there is also small change in her empowerment over the course time. Even if

empowerment was measured in terms of the indicators of the evidence, sources or setting for empowerment, this result was same. Nevertheless, there was great degree of variation in the level of women's empowerment across the country and across indicators (Sunita and Gupta, 2004).

Satyavathi *et al*. (2010) stressed the call for a new agricultural research and extension agenda which integrates gender analysis into the process of technology generation and dissemination. The study also came up with future strategies to make women more active in important decision making both at the household and legislature levels. This research also emphasized the importance of balancing extension education, agricultural research systems, and policy-making bodies to attain women empowerment in agriculture.

Women empowerment could not be possible unless women wish to get empowered by themselves. There was a need to formulate reducing feminized poverty, promoting education of women, and prevention and elimination of violence against women (Hazarika, 2011).

Narang (2012) referred 'Women Empowerment' as enhancement in the strength of women such as spiritual, social, political, or economic. The most frequent description of "Women's Empowerment" is the ability to exercise full control over ones actions. Thus, women empowerment occurs in real sense when women achieve better control and participation in decision making that leads to their increased access to resources and develop confidence in their own capacities.

According to Kadam (2012) the Government of India, through passing timely and critical acts, and implementing rules and regulations trying to empower and strengthen the women in the country. Unless the acts, policies, rules, regulations etc are strictly implemented, the vision of women empowerment remains unachieved. Hence the efforts put forward by the government are still insufficient and the process of empowering women in India is long way to go.

The infrastructural facilities related to accommodation, transport and technical training of women workers are poor in the country. The central or state government

departments, research and development institutions and NGOs should come forward to promote improved technology to enhance labour productivity and reduce drudgery of women workers. In future participation of women in agriculture will increase mainly because; male workers get involved in other non-farm activities or migrate to towns and cities for other jobs. Therefore, women will play a major role in agriculture in future. So, they have to be empowered (Mehta *et al*., 2018).

2.2 MKSP scheme and its components

Kudumbashree is acting as a pillar of support to many of the poor women across the state of Kerala. Consequently, the women in the state have made active participants in the planning and implementation process of many anti poverty programmes. By participating in various income generating cum developmental activities which in turn leads to confidence of women reaching very high. Women who were regarded as voiceless and powerless started identifying their inner power, strength, opportunities for growth and also their role in reshaping their own destiny (Nidheesh, 2009).

Kerala State Planning Board (2012) evaluated that it would not have been possible to launch the MKSP at the national level if it not been for the success of Kudumbashree's intervention. The women being identified as master farmers under this scheme have proven to be instrumental in their transfer of knowledge about good agricultural practices and also in helping fellow women farmers to build sustainable livelihoods.

Sajesh (2013) observed that coordination with other agencies and institutions like line departments, co-operative banks, as well as convergence with various programmes of central and state governments have played a vital role in realizing the potential of group mobilization of JLGs.

The study conducted by Quesba *et al*. (2016) on SHGs revealed that the inputs that have been put in the process of NRLM have yielded quite satisfactory results. The study reported that the money received by the members under any fund was primarily been utilized on sustainable livelihoods.

Two transitions that is the movement of male workers to urban areas in search of jobs and the growing unhappiness among the farmers with regard to the expectation of profits from the farm, the farm sector is demanding a evolution which can transform Indian farm sector. It is nothing but feminization of farm activities. But the dark side of this apparently predictable transformation lies in the distribution of land holdings, a kind of gender disparity in the distribution of operational holdings, which, given institutional interventions like the KDMS, can be solved in future. The advent of MKSP has given stimulus to the process of farm feminization in Kerala (Kumar, 2017).

To improve the status of women in Agriculture and to enhance the opportunities for their empowerment, Government of India integrated "Mahila Kisan Sashaktikaran Pariyojana" (MKSP), as a sub component of the National Rural Livelihood Mission (NRLM). The specialty of the scheme is that it is aimed to increase the participation and productivity and also to create and sustain agriculture based livelihoods of rural women (Sundararajan and Deepa, 2018).

Mahila Kisan Sashaktikaran Pariyojana under NTFP (Non Timber Forest product) stream, a collaborative initiative by the Central Silk Board with the support of the Ministry of Rural Development in Central and North India has revolutionized the tasar production through creation of sustainable and replicable models of rural entrepreneurship, empowerment of women through self-employment and collectives, avoiding middle men in tasar value chain through collective procurement and marketing, ecological restoration through raising/rejuvenation of host plants and carbon sequestration etc. A brief analysis of this programme since inception substantiates the vital role it holds in the critical areas viz., seed supply, productivity levels, cocoon price, collective marketing, incremental income augmentation etc., so as to realize the project objectives (Sathyanarayana *et al.* 2018).

Sujatha and Rao (2018) stated that during the time of 2017-18, More than 33 lakh Mahila Kisans have been covered under MKSP in 17 States, to empower women in agriculture and enhance their participation and productivity in agriculture based livelihoods and also about 683 additional blocks have been covered under "intensive"

implementation strategy of DAY-NRLM bringing the cumulative total to 4330 blocks.

Bage *et al.* (2019) studied the impact of MKSP on the women farmers of Kalahandi district of Odisha with a focus on the involvement of women in different livelihood activities, the difficulties encountered for sustainable livelihood, challenges faced, opportunities perceived and benefits received by them. The data regarded to the participation of farm women in development programmes revealed that the highest percent beneficiaries were under ICDS (88.33%), followed by MKSP (72.50%) in which houses are allotted in the name of the woman or jointly between husband and wife.

2.3 Factors influencing the implementation of scheme

There are general problems relating to lack of credible monitoring and impact analysis, and poor capacity among Panchayats and district administration in successful implementation. There are also administrative and personnel problems, such as shortage of technical staff at the village and block levels (Saxena, 2007).

Patel (2014) had identified that lack of scientific planning, flaws in the action plan, lack of effective coordination and support from other institutions and agencies, poor monitoring process were the important factors contributing to unsatisfactory performance of the Integrated Rural Development Programme.

The implementing officers had perceived institutional factors as the most important one in both planning and implementing stages and people representatives perceived managerial factors as the most important in all stages of MGNREGS (Jonna, 2012). Seby (2017) revealed that among the factors affecting implementation, resource aspects were perceived as the most influencing factor, followed by scheme features and beneficiary aspects with respect to central and state schemes as well as schemes under decentralized planning.

Anirudh (2019) analyzed factors affecting voluntary subscription of crop insurance programmes and found out that level of education showed significant influence over the decision of voluntary adoption of crop insurance scheme.

2.4 Profile characteristics of beneficiary farm women

2.4.1 Age

Age exhibited positive and significant relationship with the knowledge of farmers (Thomas, 2000). Banerjee and Ghosh (2012) observed that age of the SHG members was a critical factor affecting empowerment.

A study conducted by Prita (2001) on performance of SHGs in Dharward district revealed that in a respondent group of 120, majority of the respondents (68.70%) belonged to middle age group while 18.32 per cent belonged to young age group and remaining belonged to old age group. Another study by Samuel (2006) on the empowerment of women through microfinance revealed that majority of the members (57.85%) belonged to middle aged group and 42.22 per cent belonged to young age group. According to Poojaben (2017) age and type of family had significant correlation with socio-psychological characteristics of SHG members.

2.4.2 Educational status

Education is a way to increases women awareness which finally lead to their overall development and thereby helping the prosperity of nation. Education helps women to resist exploitation besides empowering them to be self reliant (Singh, 2001). A study was conducted by Joseph and Eashwaran (2006) on SHGs and tribal development in Mizoram and according to them 51 percent of the members belonged to secondary education, followed by 33.33 per cent of the respondents with primary education and 7.69 percent each of literate and high school education and above status.

Another research by Geethamma (2007) on management of micro financial institutions and their functioning in empowering of rural poor and she reported that 35.33 percent of the respondents were illiterate, 20.67 percent of the respondents had completed middle school education and 18.67 per cent had high school education. According to Bhuvaneshwari *et al*. (2011), peri-urban SHGs had more number of literate members (36.23%) compared to rural SHGs (17.90%). Bihari *et al*. (2012) opined that participation of women with high education level was found to be more because of comparatively high knowledge level and their role in decision making.

2.4.3 Occupation

George *et al.* (2009) found that nearly one third of SHG beneficiaries had agriculture as their primary occupation with some animal husbandry component. Study on socio-economic characteristics and technology use pattern of farmers by Meena (2010) revealed that 72 per cent of the respondents had main occupation as agriculture followed by agriculture and other business (28%).

Majority of the Kudumbashree beneficiaries belonged to agriculture and allied activities (36.8%) followed by self employment (33.3%) daily labour (20%) and 3.3 per cent each in salaried and unemployed categories (Nair, 2011).

The evaluation study of State Planning Board, Kerala (2012) on Kudumbashree indicated that 83 per cent and 17 per cent of respondents respectively belonged to self employed or small business group and agricultural labour or seasonal employment or casual labours.

2.4.4 Family

Family size usually influences the spending capacity and the liberty of movement among the SHG members. The bigger the family, the lesser will be the spending power, which hinders the overall well-being of the entire family (Banerjee and Ghosh, 2012). Ritu *et al.* (2003) revealed that the family pattern of the SHG members and non members was found similar and non significant.

In a study conducted by Chithra (2011) reported that around 43.33 per cent of the respondents had small family size followed by large and medium family size with 30 percent and 26.67 per cent respectively. But in another study by Preethi (2011) revealed that majority (51.67%) of respondents belonged to medium sized families while 23.33 per cent belonged to large families. And also 16.66 percent and 8.34 percent of respondents fall in the small and very large families respectively.

According to Bhagyashree (2014) more than two third (68.89%) of the members of the women SHGs had medium family size, followed by those with large (13.33%), small (12.22%) and very large (5.56%) family size respectively.

2.4.5 Annual income

Sreedaya (2000) noted in her study that group cohesion had negative correlation with the annual income. In another study by Sharma and Kumar (2015) about empowerment of women through SHGs concluded that majority of the beneficiaries had an annual income of Rs. 40000 -60000.

Most of the respondents in the study conducted by Anusha (2016) on Kudumbashree members had medium annual income. There was no significant difference in empowerment of women in urban and rural area on the basis of monthly income (Suchitha, 2016).

2.4.6 Farm size

Dean *et al.* (1958) found that rationality in decision making was positively correlated with size of land holding. In another study by Kushwala and Pandey (1998), it was observed that land holding had a significant association with knowledge as well as adoption.

A study on the empowerment of rural women through self help groups revealed that there exhibited a non significant relationship between land holding and group characteristics (Jayaleksmi, 2001). A study among members of Self Help Group by Ukabai (2009) had reported that about 44.50 percent of women respondents were having one ha of land holding.

2.4.7 Mass media exposure

Mass media contact of farm women was positively and significantly correlated with their attitude towards self employment (Priya, 1996). Bhagat and Mathur (1989) in their study on mass media and farm women indicated that about 26 per cent of women had low media exposure whereas 25 per cent had high mass media exposure and rest had medium mass media exposure.

In another study it was revealed that micro-enterprises were the viable pathways for improving the economic status. Independent variables like education, income and mass media contact were positively and significantly related with the role of SHGs (Beevi and Devi, 2011).

2.1.8 Social participation

Parvathy (2000) in her study on participation of women in agriculture development programmes under people plan reported a positive and significant relationship between social participation and perception of women. And also Sreedaya (2000) in her study based on performance analysis of Self Help Groups in vegetable production in Thiruvanandapuaram district reported a positive and significant relationship between social participation and perception of women.

According to Kalyani and Seena (2012), collective attempt has been acknowledged as the fundamental thought of women empowerment which leads to sustainable social development. It was stated that economic development acts as base for all other development which leads women to have a better living status in the family. More over the health and educational necessities of the children were well satisfied and economic independence through Kudumbashree has improved members social participation.

Bhairve (2013) reported that 36 per cent of farm women fall under medium social participation group followed by 34 per cent and 30 per cent in high social participation group and low social participation group respectively. Singh (2013) observed that out of 110 farm women respondents 21.82 per cent had low participation, 51.82 per cent had medium and 26.36 had high level of social participation. While Sabira (2016) noted that women farmers, who work as groups in association with Self Help Groups, had more social participation in Kudumbashree unit.

2.4.9 Extension contact

Singh (2011) found that two fourth (42%) of the farm women had medium contact with the extension agency and 34 per cent and 24 per cent had high and low contact respectively for seeking information about improved agricultural practices and technologies.

A research study was conducted on decision making of farm women with respect to their involvement. Among the respondents, about 61.48 per cent of respondents showed medium level of extension contact (Thakur, 2013). According to Chouhan *et al.* (2014) majority (80.83%) of farm women had medium extension

contact followed by high extension contact 11.67 per cent while 7.5 per cent of farm women had low extension contact. Nearly half of the respondents (44.44%) are under medium level of extension contact followed by high and low levels about 37.22 and 18.33 per cent respectively (Sarkar, 2019).

2.4.10 Training received

Vengatesan and Santha (2003) observed that majority (89%) of respondents reported that the trainings given were useful in improving skill. Rao (2005) observed that training activities such as traditional farming practices and resource management were given to women members of SHG.

Mate (2008) observed that percentage of women respondents had received one training and not received any training were 54.98 and 28.32 respectively. And also only 9.99 per cent and 6.71 per cent of the respondents had received two and three training respectively. Agarwal (2019) reported that technical support and training in various field of agriculture were provided on a fairly regular basis by the Kudumbashree Mission and some village women were trained to be 'master farmers' to provide extra technical support to the JLGs.

2.4.11 Cosmopoliteness

Ferreira *et al.* (1982) indicated that cosmopolite farmers were found to be more inclined to adopt new technology. Farmers with high cosmopoliteness had significantly higher gain in knowledge about agricultural aspects (Siddaramaiah and Rajanna, 1984). Group approach helped the respondents to develop cosmopoliteness. The intervention of group brought changes in their conventional way of life (Jayalekshmi, 2001).

Priya (2003) concluded that group characteristics like social participation and cosmopoliteness were more relevant to technology adoption than the variables like area, knowledge, experience, education *etc*. In another study which explored the existing social capital status in two villages of Bangalore, three variables i.e. area under agriculture, long term investment in agriculture and cosmopoliteness collectively explained 37.2 per cent of the variation in social capital between the groups. Cosmopoliteness makes the farmer more conscious of information and its

utilization and causes him or her to stay connected with the latest innovations (Raghuprasad *et al.*, 2011). A research study by Sabira (2016) recognized that more than three fifth of the respondents (62.5%) had medium cosmopoliteness followed by high (19.20%) and low levels (18.3%).

2.4.12 Market orientation

Marketing facilities had a positive and significant contribution to the most of the variation in entrepreneurial behavior of Kudumbashree NHG women. It was observed that majority of the respondent category was with medium level of market facilities (Sreeram, 2013). Another study conducted by Anusha (2016) showed that market orientation was found to be positive and significant in their relationship with information processing and management behavior. It also contributed significantly towards variation in the information management behavior of rice farmers. It was suggested that marketing should be done through co-operative marketing chain and through incorporating new strategies (50.83%).

A good number of the farming groups in Kudumbashree uses civil supplies corporation as the marketing channel involving. Better procurement price and good brand image could be the two reasons contributed to this practice. The average farmers share in consumer rupee for a independent farmer it was 61 per cent while that of Kudumbashree collective farming group is 62 per cent. The dynamics in marketing were interpret and the study concluded that there is not a definite advantage in terms of marketing produce for a Kudumbashree farmer compared to independent farmer (Krishnan, 2012).

2.4.13 Economic motivation

Priya (2003) revealed that 92 per cent of the vegetable cultivators had medium level of economic motivation. Manjusha (2010) attempted to evaluate the level of empowerment of women community of Ulladan tribe of the North Paravur taluk in Ernakulam district of Kerala through the involvement in Kudumbashree. It was observed that a significant change has occurred in the socio-economic life of the women groups in the taluk after joining the Kudumbashree units.

The findings of the study by Gayathiri (2014) revealed that the SHG programme has promoted improvement in standard of living and household income of the poor. She concluded that the SHGs have paved the way for economic independence of rural women and contributed significantly in changing the conditions of female population and through this to eliminate poverty in the society.

Revathy (2015) revealed that 68 per cent of respondents have medium economic motivation, 23 per cent have high and only 9 per cent fall under low category.

2.5 Benefits accrued by the beneficiaries

According to Krishnakumar (1987), considerable per cent of the respondents (51.11%) were satisfied with the working of soil conservation schemes. He further stated that most of the respondents had increase in knowledge about agriculture (82.20%), skill in cultivation (74.40%), enhancement in income (70%) and cropping intensity (60%).

The micro-credit schemes using SHGs were introduced against the background of the failure of the previous schemes. A series of NABARD (1999) studies showed that despite a wide network of rural bank branches participating in poverty alleviation programmes, a large number of the poor continue to remain outside the purview of the formal banking system. According to a NABARD report, "Such research studies and some action research projects led to the evolution of 'self help group (SHG) - Bank Linkage' model as a core strategy".

The SHGs are proved to be a real boon for the rural women in many states of India. It has raised social status along with their income. Government of India has always given due importance to women empowerment in the country and several schemes has been introduced for the betterment of women entrepreneurs. Women work force ratio in the country is on increasing due to the increase in the women literacy rate in India (Singh and Raghuvanshi, 2012).

Ghosh and Ghosh (2014) concluded that women participation in agriculture is increasing over the time and women are now acknowledged with the status of

"agricultural worker". Even though discrimination in wages and working status still exist for women labour, due to various policies and initiatives introduced by government the invisibility of women as an agricultural worker is now reduced and would further diminish in future.

Venugopalan (2014) evaluated the influence of Kudumbashree programme in empowerment of women. The study revealed that after joining Kudumbashree there was a considerable development in decision making power, self-confidence, personal skills and awareness about need for nutrition, dangers of using pesticides, and abuse of liquor among the members.

The Kudumbashree Mission has influenced the mindset of the women of Kerala and created a silent social revolution. They have come out of the four walls of their houses, sat together and raised the demands for the betterment of their houses, economy and their habitat. Instead of casting their vote once in five years they have made a choice to raise their voice. The project helped them to recognize their innate but dormant talents of leadership and togetherness for a common purpose at the same time empowering the financial and social status (Seleena and Lysammal, 2018).

2.6 Knowledge level of women in agriculture

Jeya (1999) found that 60 per cent of farm women had medium level of knowledge about paddy cultivation practices, and 20.8 per cent and 19.2 per cent had high and low level of knowledge respectively. According to Farid *et al.* (2009), the women is actively involved in various farming and non farming activities like post harvest operations, homestead gardening, livestock and poultry rearing.

Women participation in agriculture sector will be acknowledged only when women farmer will be actively participate to build and advance their knowledge and also tried to gain access to new and essential information to make use of most of them in their farming activities. Through linking the knowledge and information flow amongst women, socio economic progress can be achieved (Dhaka *et al.*, 2012).

Bihari *et al.* (2012) concluded that regardless of their active involvement in almost all type of farm operations, role of women in decision making was found to be

very low. Reasons for the plight could be related to the low knowledge level, poor socio-economic condition, low media and social contacts.

A study was conducted to assess the possibility of integrating with organic farming in Uttarakhand through understanding the traditional knowledge and indigenous practices being followed by farmers in agriculture and animal husbandry. The study revealed that the farmers of Uttarakhand especially women possessed a large pool of indigenous knowledge with in livestock management leading to reduced dependence on externally purchased inputs as required under organic farming systems (Subrahmanyeswari and Chander, 2013).

2.7 Group dynamics through JLGs

The major factors discriminating the groups based on their effectiveness were social participation, level of education, group dynamics, economic motivation, and support from Kudumbashree mission. Groups with higher group dynamic effectiveness were more effective in terms of resources, technology, extension, marketing and capacity building. Efforts put forward by the Kudumbashree mission were influential in group mobilization as well as establishing their linkages with key stake holders. Convergence of various schemes and activities of line department with Kudumbashree mission have significantly related to the support received by the groups (Sajesh, 2013).

A study conducted by Kumar (1998) found that there was a positive and significant relationship between, annual income, farm size, cosmopoliteness, mass media participation and social participation with Group Dynamics Effectiveness Index. Cosmopoliteness is positively and significantly related with group characteristics (Jayalekshmi, 2001).

Venkatesh and Kala (2010) opined that primary basis for any SHG were commonality in group proposals, mutual understanding, shared beliefs, organization of small and controllable groups, presence of group unity, knowledge of economics and receiving skill training. Sajesh and Ramasundaram (2013) observed that group mobilization had potential to beat the various constraints faced by small farmers at individual level. Major factors influencing the effectiveness of farming groups were

found to be social participation, level of education, group dynamics, economic motivation and support from the promoting institution.

A study by Saxena and Kohli (2014) pointed out that lending through groups was a cost-effective method in terms of logistics, operations and collections. It was a successful endeavor. Positives of the group concept have been perceived as joint liability, timeliness, punctuality and discipline.

In another study conducted by Singh and Padhi (2017) concluded that in both SHGs and JLGs, longer association with microfinance groups helped in getting loans from SHGs or microfinance institutions (MFIs) followed by loans procured from other sources also compelled microfinance borrowers to demand larger loans from MFIs primarily for paying loan installments. Income, size of group, number of dependents in household and asset endowment characteristics of SHG or JLG members had also affected progressive loan demand by SHG or JLG members.

Payal (2019) found that around 65 per cent of the women's group had medium overall group dynamics effectiveness category. Strategic movement by Kudumbashree through JLGs (Joint Liability Groups) in rural areas of Kerala by created group of 4-10 people of same village or locality of homogenous nature and of same socio economic background, who mutually come together, can avail loan from a bank without any collateral security. It is a role model for all other NGO's or other firms who can also do collective farming, improve agriculture and thereby the process of 'Make in India' a reality (Reddy *et al.*, 2020).

Panda and Reddy (2020) examined the reasons behind credit defaults in Self help Group based microfinance programs in India among 960 respondents which were randomly selected from 240 SHGs. Three important attribution sets causing credit defaults were identified. They were bank-related attributes, agency related attributes and group dynamics.

2.8 Constraints felt by respondent categories

2.8.1 Constraints felt by beneficiaries

Thomas (1998) in his study on role of farm women in planning, management and implementing watershed development programme observed that major constraints

faced by respondents were, inadequate financial assistance, non availability of quality planting material political interference and in adequate training. Mehala (2012) found that for both men and women SHG, lack of financial support and insufficient money were the major problems among majority (90%) of the respondents.

Sharma *et al.* (2001) noted the major constraints faced by the rice growing farmers as technical constraints as know-how and do-how in rice production technology, input availability constraints as labour shortage at the time of transplanting, weeding and harvesting, problems in accessing chemical pesticide, fertilizers and machineries at time. The economic constraints were high cost of cultivation, lack of profitable marketing system and situational constraints experienced were drought and flood proneness of the area.

Maheswary (2016) identified the constraints evolved during the implementation of the Comprehensive Paddy Development Scheme in Kulakkada Panchayat in Kerala and disclosed the dominant constraints as high labour cost, non-availability of labourers on time, lack of proper marketing system, poor irrigation facility and low price.

2.8.2 Constraints felt by mission coordinators and facilitators

The study conducted by Bortamuly and Khuhly (2013) revealed that three fourth of the extension personnel (75%) reported the constraints of inadequate financial support under the ATMA scheme as the major constraint followed by involvement of ATMA functionaries in the schemes other than ATMA, lack of external trainer in close proximity, un time release of fund, lack of delegation of authority to the block level functionaries and negligence of voice of extension as 70.8, 67.5, 60, 55.8 per cent respectively.

Constraints expressed by the extension functionaries involved in ATMA were too many schemes and vacancies, less demonstrations on the existing farming systems in the district and lack of technological training on different farming systems pertaining to agriculture (Kumar *et al.,* 2011).

A research study was conducted by Tamgale and Badiger (2018). The results of the study depicted that, majority of respondents were found to possess overall job stress index of 64.14. A majority (87.14%) of the PDOs (Panchayat Development Officer) expressed political interference in implementing schemes and programmes as the major problem encountered during implementation of Panchayat programmes. Heavy workload and mental stress was felt as a problem by 89.05 per cent of respondents. The possible measures to reduce this problem were to conduct stress management trainings (45.99%), recruitment of additional staff (29.55%) and stopping target based programme implementation (25.67%).

According to Seby (2018) identified manpower constraints as the major constraints perceived by the extension personnel followed by financial, scheme feature, input, time and infrastructural constraints.

Methodology

CHAPTER III
METHODOLOGY

Research methodology has been defined as the systematic and theoretical analysis of the procedures applied in the field of study. Methods and procedures followed in the study are described in this chapter. The present research was carried out on the topic "Performance analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Thrissur district". In order to accomplish the objectives of the study, appropriate data collection tools and analytical methods were employed and the details are presented under the following subheads.

3.1 Research design

3.2 Locale of the study and description of the study area

3.3 Selection of the respondents

3.4 Selection of variables

3.5 Methods followed for measurement and quantification of variables

3.6 Tools used for data collection

3.7 Statistical tools and tests used

3.1 RESEARCH DESIGN

As the objective of the study proposed a post implementation evaluation of the performance of MKSP scheme, in the present research *ex-post facto* research design was used. *Ex-post facto* design is any systematic empirical enquiry in which the scientist does not have any direct control over the independent variable because their manifestation have already occurred or because they are inherently not manipulated (Kerlinger, 1973).

3.2 LOCALE OF THE STUDY AREA

Thrissur district where **MKSP** was first launched in Kerala was purposively selected for the study. The district lies between latitude 10^0 10' N and 10^0 46' N and longitude 75^0 55' E and 77 ^{0} 05' E in central Kerala.
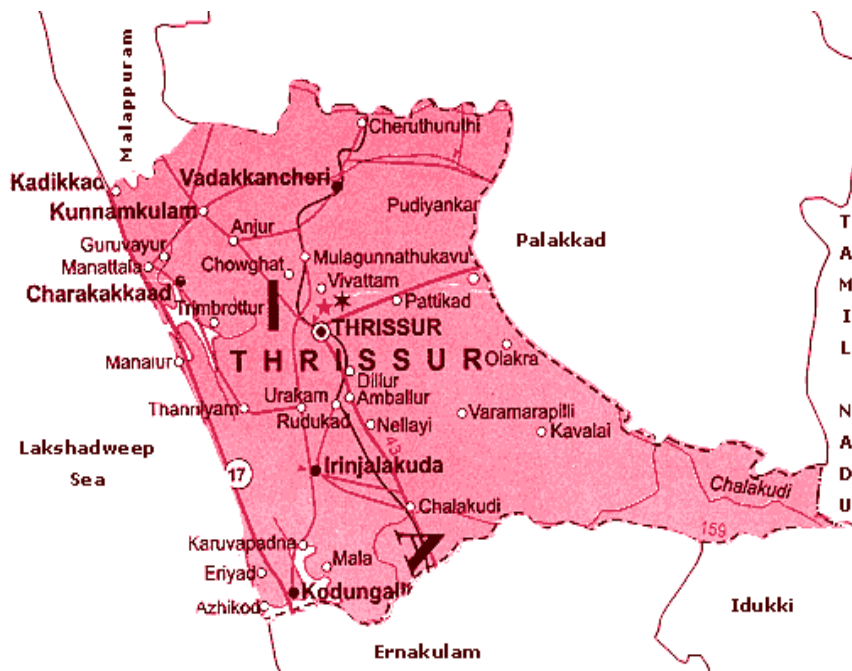
Figure 1 Map of the study area: Thrissur district

Based on the secondary data and discussion with the mission coordinators and facilitators of the scheme, Nadathara Panchayat was selected from Thrissur district with substantial cropped area representing vegetables and banana.

Features	Details
Total area	1112 Ha
Population	12593
Percentage of female population	51
Percentage female literacy	82

Source: Census Handbook, Census of India, 2011

3.3 SELECTION OF THE RESPONDENTS

Multistage sampling was adopted as the sampling procedure. The sample included a total of 90 respondents in which 60 beneficiary farm women and 30 Kudumbashree mission coordinators and facilitators. Thirty each beneficiary farm women representing vegetable and banana cultivation and thirty mission coordinators and facilitators from the three selected blocks constituted the sampling frame.

Respondents	Panchayat		Total
Beneficiary farmers	Vegetable	Banana	
	30	30	60
	Block		
Mission coordinators and facilitators	Ollukkara	Mala	Iringalakkuda	
	10	10	10	30

3.4 SELECTION OF THE VARIABLES

Based on the objectives, review of literature and consultation with experts in the field dependent and independent variables were identified. List of variables identified for the study and their measurement procedure is summarized below.

Dependent variable		
Sl. No	Variable	Measurement
1	Perception	Seby (2017)
2	Group dynamics	Bhatt (2009)
3	Knowledge level	Developed for the study
Profile characteristics of beneficiary farmers		
Sl. No	Variable	Measurement
1	Age	Census report of GOI (2011)
2	Education	Fayas (2003)
3	Occupation	Jayalekshmi (2001) with modification
4	Family size	Sabira (2016)
5	Annual income	Jonna (2012)
6	Farm size	Census report of GOI (2011)
7	Mass media exposure	Sarkar (2019)
8	Social participation	Krishnan (2017)
9	Extension contact	Sarkar (2019)
10	Training received	Kumar(2017)
11	Cosmopoliteness	Jayalekshmi (2001) with modification
12	Market orientation	Sajeevchandran (1989) with modification
13	Economic motivation	Supe (1969) with modification

3.5 MEASUREMENT AND QUANTIFICATION OF VARIABLES

3.5.1 Measurement and scoring procedure adopted for independent variables

3.5.1.1 Age

Age refers to the number of years completed by the women farmer at the time of interview. The respondents were categorized as young, middle and old age groups as per the method followed by census of India (Government of India, 2011).

Sl. No.	Category	Age (in years)	Score
1	Young	Up to 35	1
2	Middle	36-50	2
3	Old	Above 50	3

3.5.1.2 Educational status

It refers to the extent of literacy achieved by the respondent at the time of study. The respondents were classified based on the scoring procedure followed by Fayas (2003) with slight modification.

Sl. No.	Category	Score
1	Illiterate	1
2	Up to primary school	2
3	High school /higher secondary	3
4	Degree and above	4

3.5.1.3 Occupation

Occupation can be operationally defined as the present major employment or job of the respondent, from which the respondent received his major source of income for living. Scoring procedure followed by Jayalakshmi (2001) was modified for the present study.

Sl. No.	Major occupation	Score
1	Self employed	4
2	Farming	3
3	Wage labourers	2
4	Others	1

3.5.1.4 Family Size

Family size can be operationally defined as the total number of members in the respondent family living together at the time of study. The scoring procedure adopted by Sabira (2016) was used for the study.

Sl. No.	Number of members	Category	Score
1	Up to 2	Small	1
2	3 to 4	Medium	2
3	5 to 6	Large	3
4	Above 6	Very large	4

3.5.1.5 Annual income

Annual income is operationally defined as the total earnings made by the farmer and the members of the family in a year from all the sources for living in rupees. Scoring procedure followed by Jonna (2012).

Sl. No.	Annual income (in rupees)	Score
1	Low (< 50,000)	1
2	Medium (50,001 -1,00,000)	2
3	High (>1,00,000)	3

3.5.1.6 Farm size

Farm size refers to the total area cultivated including leased land by the respondent at the time of conducting survey.

3.5.1.7 Mass media exposure

Mass media is a form of communication which influence a large number of people within a short span time. Exposure of the women JLG member to mass media viz., radio, television, newspaper, farm publication and internet are taken into consideration here. By following Sarkar (2019) which is a the slightly modified scale of Nirban (2004), the responses obtained on a three point continuum according to the frequency of exposure viz., regular, occasional and never with scores of 2,1 and 0 respectively. The total score of mass media exposure is obtained summating the individual score. The respondents were categorized in to three groups namely low, medium and high on the basis of the distribution pattern of the variable.

3.5.1.8 Social participation

It refers to the degree of involvement of respondent in any formal organization. Procedure used for study followed by scale constructed by Krishnan (2017) with modification and the scores are assigned is as follows.

Sl. No.	Membership Status	Score
1	Membership in one organization	1
2	Member two organization	2
3	Member in more than two organization	3

Based on the total score obtained, mean and standard deviation was computed and accordingly respondents were categorized into groups.

3.5.1.9 Extension contact

It was defined as the degree to which the farm women contact with various extension personnel of line departments, as a source of information during last one

year with a view seek guidance of the issue related to Joint Liability groups. The method followed by Sarkar (2019) was used here. The identified communication sources were master farmer, agriculture officer, scientist, NGO worker, block development officer, CDS member and others if any.

Sl.No.	Frequency of contact	Score
1	Regular	2
2	Occasional/whenever problem occurs	1
3	Never/ no contact	0

The responses of variable were categorized in the groups namely low, medium and high on the basis of distribution pattern of variable. The equal class interval was followed in case of categorization after observing the maximum and minimum value of the variables distribution. The class interval was computed with the help of range of the distribution.

3.5.1.10 Training received

It is operationally defined as the total number of trainings received by the respondents. The scale constructed by Kumar (2017) is used for the study.

Sl. No.	Category	Score
1	Nil (no training)	1
2	Low (less than 2 training)	2
3	Medium (3-4 training)	3
4	High (more than 4 training)	4

3.5.1.11 Cosmopoliteness

It is operationally defined as the degree to which a women farmer is oriented to her immediate outside social system. Scoring procedure used by Jayalekshmi (2001) with slight modification was used for the study. In the study respondents were asked whether they have visited the neighboring villages or towns. Responses were

collected as yes or no with a score 1 and 0 respectively. To measure the frequency of visit the following scoring method was used.

Sl. No.	Frequency	Score
1	Most frequently	3
2	Frequently	2
3	Some times	1
4	Never	0

The purpose of visit is also considered for measuring cosmopoliteness. That is a score of 2, 1 and 0 is assigned for personal, group and both purpose. Individual score on cosmopoliteness was calculated by summing up of scores of all the aspects explained above.

3.5.1.12 Market orientation.

It is the degree to which the respondent is oriented towards the market in terms of demand and price of his produce. In the study scale used was followed by Sajeevchandran (1989) with slight modification. The scale consisted of 8 statements and the statements were given scores ranging from 5 to 1 for strongly agree to strongly disagree, respectively. The total was computed and the respondents were classified into categories based on the derived mean and standard deviation.

3.5.1.13 Economic motivation

Economic motivation refers to the extent to which the respondent is oriented towards profit maximization and other means of monetary gains. The measurement procedure followed by Supe (1969) with modification was used in the current study.

The scale consisted of five statements to be rated on a five point continuum ranging from strongly agree to strongly disagree with the score ranging from 5 to 1 respectively. The total score was computed by summating the scores obtained by the respondent for all the statements.

Mean and standard deviation was employed in study to classify the respondents into low, medium and high categories.

3.5.2.1 Perception

Perception of beneficiary farmers and mission coordinators and facilitators on effectiveness of MKSP scheme in Thrissur district was identified as the dependent variable in the study.

In this study perception on effectiveness on MKSP scheme is operationally defined as the meaningful interpretation of the effectiveness of the programme as sensed by the beneficiary farmers and extension personnel. Scale developed by Seby (2018) was used for the study with slight modification.

Perception of the respondents on effectiveness of MKSP scheme was taken as dependent variable, which studied under five dimensions namely socio-economic development, input supply, institutional support, knowledge and capacity building and empowerment perspective.

Each dimension represented by set of statements where every statement was evaluated by using a five-point continuum. The agreements were strongly agree, agree, undecided, disagree and strongly disagree and weights assigned for different agreement were 5, 4, 3, 2 and 1 respectively.

Perception index was calculated for each dimension using the following equation:

$$\textbf{Perception index} = \frac{\text{Total score obtained on each parameter}}{\text{Total possible score}} \times 100$$

Overall perception index and dimension-wise perception indices were found out for beneficiaries and mission coordinators and facilitators.

The beneficiary farm women, and mission coordinators and facilitators were categorized according to their perception indices.

Sl. No.	Perception index	Category
1	Less than 20	Very low
2	20 to 39	Low
3	40 to 59	Average
4	60 to 79	Good
5	80 and above	Excellent

3.5.2.2 Group dynamics of Joint Liability Group

Group dynamics is a system of behaviors and psychological process occurring within a social group, or between social groups. Scale developed by Ajith (2018) which was adapted from Bhatt (2009) was modified and used for the study. Group dynamics among the members of the JLG were quantified using four indicators namely

1. Attitude towards group management
2. Group cohesiveness
3. Teamwork
4. Decision making procedure

1. Attitude towards group management

It refers to both positive and negative attitude of members to the group management that manage the activities under JLG groups. An arbitrary scale was developed for this. Scale consists of five statements were arranged in a four point continuum. Scoring pattern used was as follows.

Sl. No.	Statements	Score
1	Strongly Agree	4
2	Agree	3
3	Disagree	2
4	Strongly Disagree	1

2. Group cohesiveness

Group cohesiveness was defined as the ability of members of the JLG to think and act 'as one' if the group is physically together or not. Schedule developed by Bhatt (2009) was used making suitable modifications statements were arranged in a five point continuum with the following scoring pattern and for negative statements the reverse scoring was applied.

Sl. No.	Statements	Score
1	Very true	5
2	True	4
3	Somewhat true	3
4	Not true	2
5	Not at all true	1

3. Teamwork

It is the measure of how much unity the members of the JLG possess and to what extent they are willing to move together towards a specific goal. A scale developed by Bhatt (2009) was used in this study. Team work was measured using a five point continuum Scoring was in the order of 1, 2, 3, 4 and 5 for positive statements and reverse for negative statements for the following category of responses.

Sl. No.	Statements	Score
1	Very low	5
2	Low	4
3	Average	3
4	High	2
5	Very High	1

4. Decision making procedure

The degree of involvement of the member in decision making procedure within the group as well as the support received by the member for his contributions and opinions in decision making regarding the functions, investments, and other activities of the JLG was measured under this. Also the feeling of gains in acknowledging that the group has accepted the members' contribution and group function as per the majority's decision was measured. Scale developed by Bhatt (2009) was modified and used. The scale consisted of 5 statements in a 5 point continuum. The scoring pattern was as following and for negative statements the scoring pattern was reversed.

Sl. No.	Statements	Score
1	Always	5
2	Sometimes	4
3	Few times	3
4	Rarely	2
5	Never	1

Group Dynamics Effectiveness Index (GDEI) $= \dfrac{R_1 \times W_1}{M_1} + \dfrac{R_2 \times W2}{M_2} + \ldots \dfrac{R_n \times W_n}{M_n}$

R- Score received by respondents for each indicator

M- Maximum score one can get for each indicator

W- Weightage score of each indicator

3.5.2.3 Knowledge level of farmers on selected crop

Knowledge in this study refers to the awareness and understanding of respondents about various basic aspects of cultivation like, seed and seed sowing, manures and manuring, planting, irrigation, plant protection and harvest and post harvesting.

Based on relevant literatures and also by discussing with expert teachers of the field, a knowledge test was developed. Various questions were asked straightly to the respondents and responses were recorded. A score of 1 was given for the correct answer and 0 was given for the wrong answer. Total score was found out and Knowledge Index was calculated. Respondents were then classified in to high, medium and low using the mean and standard deviation.

$$\textbf{Knowledge Index} \quad = \quad \frac{\text{Respondents total score}}{\text{Total possible score}} \times 100$$

Mann whitney U test was employed to compare the two groups.

3.5.3 Benefits accrued

By using the secondary data analysis, sets of all possible benefits that the beneficiaries might have gained from MKSP scheme implemented for the last five years were identified and enlisted. The respondents were asked whether the benefit was availed or not and their responses were assigned '0' and '1' weights for 'No' and 'Yes' respectively.

Percentage analysis was carried out here to quantify the benefits gained by the farmers.

3.5.4 Factors influencing the implementation of MKSP scheme

In the light of pilot study, literature review and discussion with the experts, various factors affecting implementation of MKSP scheme were identified using consensus approach and given to 30 mission coordinators and facilitators from three selected blocks. Factors were categorized under different dimensions for better understanding. The respondents were requested to rate their response for each factor as 'most influenced', 'somewhat influenced' and 'less influenced' having scores of 3, 2 and 1 respectively. Mean score was calculated and ranked to identify the extent of influence by the factors.

3.5.5 Constraints felt by the respondents

Here constraint can be defined as the difficulties or problems felt by the beneficiary farmers and extension personnel while implementing the MKSP scheme. Based on review of literature, pilot study, and discussion with extension personnel and experts, a number of constraints for both the respondents were identified and categorized. The scale adopted by Chaturvedani *et al.* (2017) was modified for the study. The procedure adopted is as follows:

The respondents were asked to mark their response on a three point continuum, as 'most serious', 'serious' and 'least serious' constraint based on the significance with which they had experienced the difficulty in implementing the scheme for which the weightage assigned were 3, 2 and 1 respectively.

Overall as well as dimension wise Constraint Index was calculated for each respondent using the equation:

$$\textbf{Constraint Index} = \frac{\text{Total score obtained by the respondent}}{\text{Maximum possible score}} \text{ X } 100$$

For identifying the constraints felt by respondent categories, constraint indices were calculated and ranked in descending order. To understand the constraints more specifically item wise analysis was done using mean score and was ranked in descending order. Kendall's W was found to test the agreement among the raters.

3.5.6 Details of Mahila Kisan Sashaktikaran Pariyojana scheme

Based on the secondary data collected from Kudumbashree offices of Thrissur, as well as data from various departmental websites, the details of Mahila Kisan Sashaktikaran Pariyojana scheme from 2011-12 onwards were collected.

3.5.7 Components of MKSP scheme

Based on the secondary data components of Mahila Kisan Sashaktikaran Pariyojana scheme was analyzed.

3.6 TOOLS USED FOR DATA COLLECTION

A structured interview schedule and questionnaire were developed based on the objectives of the study and review of literature. A pilot study was conducted using this schedule as a pre-testing in non-sample area for testing practicability and relevancy. The data were collected through personal interview method.

3.7 STATISTICAL TOOLS AND TESTS USED

The collected data were scored, tabulated and analyzed using the following statistical tools and techniques.

3.7.1 Frequency and percentage

Percentage analysis was carried out to analyse the secondary data, benefits

accrued by the beneficiary farmers and perception of mission coordinators and facilitators on effectiveness of MKSP scheme. Frequency as well as percentage analysis was employed to categorize the respondents based on their age, gender, educational status, family size, occupation, subsidiary occupation, annual income, and total farm size.

3.7.2 Mean

The arithmetic mean is the sum of the scores divided by the number of scores. It was used to categorize the respondents based on their economic motivation, risk orientation, mass media exposure, social participation, contact with extension agency, cosmopoliteness, extension contact, training received and market orientation were classified into low, medium and high categories.

3.7.3 Standard deviation

It was explained as the square root of the arithmetic mean of the sum of the square of the deviation taken from the arithmetic mean. This measure was used to categorize the respondents based on their economic motivation, mass media exposure, social participation, cosmopoliteness, training received, extension contact and market orientation into low, medium and high categories.

3.7.4 Mann whitney U test

It is a non - parametric method for testing whether the samples are originate from the same distribution. It is used for comparing two independent samples of equal or different sample sizes. The test was employed to measure the significant difference in the perceived effectiveness of MKSP scheme and constraints felt by the beneficiary farmers.

3.7.5 Indices

Perception Index, Group Dynamics Effectiveness Index, Knowledge Index and Constraint Index were employed to analyze the data.

3.7.6 Spearman's rank correlation

It is a non parametric measure of rank correlation (statistical dependence between the rankings of two variables) which assesses how well the

relationship between two variables can be described using a monotonic function. Spearman's correlation coefficient (ρ, also signified by r_s) measures the strength and direction of association between two ranked variables.

3.7.7 Kendall's Coefficient of Concordance

It is a non-parametric statistic. It can be used for assessing agreement among respondents for certain sets of questions. Its value gives the degree of unanimity among the various responses.

Statistical package for social sciences (version – IBM SPSS Statistics 22) and Microsoft Excel were used for the statistical analysis.

Results and discussion

CHAPTER IV

RESULTS AND DISCUSSION

This chapter highlights the findings of the study in accordance with the objectives and observations made.

4.1 Details of MKSP scheme implemented in Thrissur district

4.2 Components of MKSP scheme

4.3 Factors influencing the implementation of scheme

4.4 Profile characteristics of beneficiary farm women

4.5 Perception of beneficiary farm women, mission coordinators and facilitators on the effectiveness of MKSP scheme

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4.8 Group dynamics of selected JLGs

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4.10 Constraints felt by respondent categories

4.11 Identification and documentation of the Good Agricultural Practices followed

4.12 Suggestions to improvise the effectiveness of MKSP scheme

4.1 DETAILS OF MKSP SCHEME IMPLEMENTED IN THRISSUR DISTRICT THROUGH KUDUMBASHREE MISSION FROM 2011-12 ONWARDS

The MKSP project being implemented by Kudumbashree mission in the 14 districts of Kerala. The total investment was pooled during the initial implementation of scheme from different sources as listed below

Table1: Initial fund share of state and central governments in MKSP

Sl. No.	Agency	Fund(Rs.)	Percentage of total share
1	Central share (MKSP)	36 Cr.	46
2	GoK	27 Cr.	34.5
3	NRLM	14 Cr.	17.9
4	NREGs	1.2Cr.	1.6

In Kerala MKSP project is under Kudumbashree and the project target was kept at promoting 30,000 JLG, with 1,50,000 women farmers undertaking cultivation in 24,000 Ha.

MKSP scheme: An overview

Details of programmes under MKSP in Thrissur district are listed and discussed below.

Table 2: Basic details of JLGs in Thrissur as of 2018-19

Total no. of JLG registered	Area under cultivation(Ha)		Total area under cultivation(Ha)
	Vegetables	Banana	
5554	429.46	446.88	5038.89

1) Organic Cluster

It is to promote the production of agricultural commodities with organic certification. Even though cultivation has increased considerably under organic cultivation, so far no JLG in Thrissur has got organic certification.

Table 3: Details of organic farming

No. of organic clusters	No. of JLG	Area under cultivation (Ha)	Total no of farmers	No of bio-pharmacy
19	1672	1094.88	8360	12

2) Plant Nurseries

Presently, there are 159 plant nurseries under Kudumbashree in Kerala. Under the common brand name *'Jaivika'*, 10 more units per district would be established adding a total of 140 plant nurseries to the existing number across the state.

Table 4: Details of plant nursery

Particulars	Target	achievement
No. of plant nurseries	10	12

3) Value addition

One of the major aims of 2019- 20 AAP (Annual Action Plan) of Kudumbashree was to brand all MKSP value added products under single brand name. This is a bank loan linked scheme. Project cost expected was five lakhs. Bank loan up to Rs.4,50,000 could be availed. Then, subsidy amount of 40 per cent i.e. 2 lakhs could be sanctioned to the unit after 4 months. Every district in Kerala has achieved above the targets and now Kerala has 167 medium scale value addition units.

4) Intensive banana cultivation

To market the produce during festive season financial assistance would be provided to district JEVA team as revolving fund. They are supporting with Rs 10,000 for procurement and marketing activity.

Table 5: Details of intensive banana cultivation as of 2018

Area under banana cultivation (Ha)	No. of JLGs engaged
846.2	1157

5) Fallow less village

Fallow lands under each CDS are mapped and cultivated in convergence with grama Panchayats, MNREGS and Agricultural department. MNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) support would be utilized for land preparation and other basic activities.

Table 6: Details of fallow less village

Physical Target (Ha)	Area converted for farming (Ha)
40.5	53.5

6) Agricultural Producer Company

As part of MKSP value chain activity, producer companies would be established through this project, targeting of 14 Producer Companies (PCs) across the state. For this at state level 200 staff personnel get training on PC formation. Each district will identify at least one PC on any commodity as per local preference. Support for the PCs would be given in the form of administration expenses, infrastructure funds and share capital. For Thrissur district rice is the PC commodity. This project would get the assistance of NABARD promotional incentive at a rate of 2 lakh per PC. An amount of6.6 lakhs per selected districts will be provided.

7) Medicinal plant cultivation

Table 7: Details of medicinal plant cultivation

Area of cultivation (Ha)	No. of JLGs involved
35	70

A total of 70 JLGs were involved in medicinal plant cultivation.

8) Paddy producer companies

Establishment of 10 paddy collectives in the state and formation of an apex body for these producer companies are envisaged by this project. Revolving funds would be given at the rate of Rs 40/kg to these PCs for procurement and marketing. Along with these infrastructure funds would also be given. Four CFCs would be established at selected locations (Kottayam, Palakkad, Malappuram and Thrissur). After the setting up of regional PCs an apex state level promoting agency is the final target of this project.

9) Technology fund, interest subsidy and area incentives

Interest subsidy and area incentives are provided to JLGs for bank linkages and cultivation respectively. Technology fund is for encouraging farmers for adopting new technologies and ideas in crop management system. Incentives are provided at the rate of Rs.5000 per kg.

From the above details it is evident that MKSP is successfully implemented in Thrissur district as it could achieve the targets mostly and sometimes exceeded the targets. There was considerable increase in the area under cultivation especially under organic farming through various Kudumbashree interventions under MKSP scheme. Many programmes are successfully implemented and as a result new interventions are also included with the current programmes. Agri-therapy through vegetable cultivation, smart village programme, establishing tribal JLGs *etc*. are new interventions by Kudumbashree.

4.2 COMPONENTS OF MKSP SCHEME
4.2.1 Guidelines for the implementation of MKSP scheme

a) The organization and mobilization of women in agriculture into groups (SHGs/Federations/Women Farmer organizations) through technical and managerial capacity building of women in Agriculture in order to enable them to manage and sustain their activities.

b) The project may follow the Group Approach for the delivery of services.

c) Enhanced access to assets (leasing of water bodies and land etc.), for the benefit of women in Agriculture and also creation of productive assets should be given due importance.

d) Establishing institutional mechanisms for knowledge building, management and dissemination by women could be another element of this component. Knowledge, particularly relating to markets, post harvest practices and village level value addition should be included for the dissemination strategy.

e) Agriculture related productivity enhancement techniques/ measures should be given due importance.

f) Local natural resource based sustainable agriculture.

g) Blend Agriculture and Allied sector activities as also the post harvest processing activities that add value to the agricultural produce.

h) Improving market access and ensuring remunerative prices to women in agriculture should be a key element under the project. The marketing methods should be a combination of traditional marketing (marketing in established haats and bazaars, door-to-door marketing) and modern marketing including e-marketing. Under MKSP, building up marketing expertise of the women in agriculture is the key element.

i) Drudgery reduction through effective use of gender-friendly tools and transfer of technologies to women in agriculture.

j) Optimize the benefits from the project under MKSP, through converging with schemes of various Ministries/ Departments such as MGNREGS, ATMA, RKVY, Watershed Development Programme, National Food Security Mission of India (NFSM) *etc*. and similar schemes aiming at empowerment of women and enhancement of agriculture productivity under the Ministries of Agriculture and Women and Child Development.

k) Incorporation of planting of trees and fodder availability in order to derive maximum benefits out of the agricultural activities under the project.

l) Including Livestock activities wherever there is genuine integration with agriculture activities.

m) Food and Nutritional security of the women in agriculture at household and community level.

n) Innovative interventions may be considered for better management of risk associated with climate change.

4.2.2 Major components of MKSP scheme in Kerala

Table 8: Major components of MKSP scheme in Kerala

Sl. No.	Components	Sub components
1	Credit support	• Linking groups with formal credit • Robust system for loan issuance and monitoring
2	Input supply	• Establishing seed banks • Bio- pharmacy at FFC level to provide non chemical inputs
3	Extension services	• Selecting women master farmer, training and placing • Convergence with agricultural departments
4	Market interventions	• Sales through festival fairs • Village level weekly and monthly markets • Convergence with government agencies for procurement
5	Value addition	• Paddy processing • Cut vegetable unit • Value added products like jam, pickles, chips etc
6	Training and capacity building	• Constant capacity building and skill • Providing more training days

Achievements under MKSP in Kerala

Kerala has achieved many of its targets under MKSP so far. The achievement in various components under MKSP is furnished below:

Table 9: JLG growth over years

Sl. No.	Particulars	2016	2017	2018
1	No. of JLGs	54,167	65,601	70,388
2	No. of JLG Members	2,65,273	2,88,005	3,23,000
3	Area of Cultivation (Ha)	49,960	51,112.76	53,000

NABARD is providing an incentive of Rs. 2000 per JLG through bank linkage. Interest subsidy of 5 per cent is benefitted by the farmers for agricultural loan. This table clearly shows an increase in the number of women farmers engaged in cultivation. Number of mahila kisan reached 4,01,118 by 2019.

Table 10: Support for the diverse farming activity

Sl. No	Particulars	Target	Achievements
1	Integrated Farming System	1800	1559
2	Innovative or Indigenous farming system	140	119
3	Seed Bank		35 units

Table 11: Trainings details Community (JLG members)

Sl. No	Particulars	Target	Achievements
1	Capacity Building	1,50,000	2,01,650
2	Technical Trainings	60,000	55,408
3	Exposure visit to institutes of prominence	140	127

Table 12: Master Farmer details

Sl. No.	Particulars	Target	Achievements
1	Capacity building trainings	10,000	10598
2	Technical trainings	10,000	8393
3	Mechanization trainings	1656	912

Farmers are provided with a training stipend of Rs. 2000 per member.

Table 13: Achievement under community infrastructure development

Sl. No.	Particulars	Target	Achievements
1	Farmer Felicitation Centre	972	916
2	Market support	140	79

Source: Kudumbashree site

FFCs are provided with machinery support of Rs. 50,000 from MKSP scheme.

The above details showed the status of targets under MKSP in Kerala. It is evident that, it has surpassed its target in capacity building and achieved nearer to the target in other components. It is also clear that among the various components, MKSP lags behind in achieving targets under market interventions.

Many programmes are carried on under various components of the MKSP scheme in Kerala. The table 3 shows a summary of details regarding the programmes as of 2020. It is evident that considerable achievements are brought under MKSP which in turn gave an insight to its effectiveness so far in Kerala.

Table 14: Details of achievement under MKSP scheme in Kerala as of 2020

Sl. No.	Activities under MKSP in Kerala	Achievements
1	Organic farming	Area of cultivation - 5525Ha No. of local groups formed -10811
2	Intensive banana cultivation	Area under cultivation - 5226.11Ha No. of JLGs involved - 11642
3	Fallow less village	Area converted - 2545.47 Ha JLGs involved - 4567
4	Tribal JLG	Area of cultivation - 342.76 Ha JLGs formed- 1059
5	Medicinal plants	Area under cultivation - 251 Ha JLGs involved - 670
6	*Jaivika* plant nursery	No. of units functioning - 426
7	Medium scale value addition units	No. of functioning unit - 117
8	Paddy collectives	No. of collectives - 105 No. of JLGs involved - 1738
9	Agribusiness ventures	No. of functioning units - 320 Total no of beneficiaries - 638
10	Small scale value addition unit	No. of functioning units - 320 Total no of beneficiaries - 638
11	Bio pharmacy units	No. of functioning units - 124

4.3 FACTORS AFFECTING THE IMPLEMENTATION OF SCHEME

The implementation stage represents the work to be done to meet the requirements of the objectives under the scheme. During this stage, the implementing team accomplishes the work defined in the plan and made adjustments when the projects factors changed. Considering all these, Factors affecting implementation stage were recognized and ranked using mean score.

Various factors affecting implementation stage were identified and categorized under the dimensions viz; management approach of mission coordinators and facilitators, resource aspects, beneficiary aspects and scheme features. Mean score for each dimension was calculated and ranked. Similarly to understand the influence of factors more specifically, factor wise analysis was done and they ranked using the mean rank obtained. The results obtained are furnished below for discussion.

Table 15: Dimension wise analysis of factors influencing implementation stage

Sl. No.	Dimension	Mean score	Rank
1	Management approach of mission coordinators and facilitators	2.17	4
2	Resource aspects	2.42	2
3	Beneficiary aspects	2.36	3
4	Scheme features	2.58	1

(n=30)

Result revealed that scheme feature factors were the most influencing factors followed by factors under resource aspects, beneficiary aspects and management approach of mission coordinators and facilitators.

A total of 19 items were considered under factors affecting implementation stage. Kendall's Coefficient of Concordance was used and ranked the factors accordingly.

Table 16: Factors influencing implementation stage of scheme

Sl.No.	Dimensions	Mean rank	Rank
1	**Management approach of mission coordinators and facilitators**		
	a) Awareness about the interest and needs of the group	12.55	9
	b) Providing leadership for setting up of groups	3.62	19
	c) Establishing communication among groups and giving necessary help and advice	9.13	11
2	**Resource aspects**		
	a) Timely release of fund	14.03	2
	b) Timely availability of inputs	9.07	12
	c) Timely technical support	6.07	15
	d) Adequate quantity of inputs	7.07	14
	e) Provision of institutional facilities	12.85	8
	f) Availability of storage facilities for inputs supplied	10.83	10
	g) Availability of land and water resources	13.13	7
3	**Beneficiary aspects**		
	a) Area under cultivation	4.77	18
	b) Crop under cultivation	5	17
	c) Group dynamics among the members in JLGs	13.78	3
	d) Farming experience of JLGs	8.52	13
	e) Attitude of beneficiaries toward collective farming	13.77	4
4	**Scheme features**		
	a) Criteria for selecting beneficiaries	5.12	16
	b) Scheduling of activities under the scheme	13.18	6
	c) Financial support	14.05	1
	d) Convergence with development programmes of other agencies	13.47	5

$W = 0.56$ (n=30)

The value of W (0.56 > 0.5) shows a good degree of agreement among mission coordinators and facilitators in ranking the factors Among the factors, financial support was ranked as one. It was followed by timely release of fund, group dynamics among the members and attitude of beneficiaries towards collective farming. It was also found that factors like providing leadership for setting up of groups, area under cultivation, crop under cultivation and criteria for selecting beneficiaries were ranked as least influential among the factors listed.

Awareness about the interest and needs of the group, providing leadership for setting up of groups and establishing communication among groups and giving necessary help and advice were categorizes under management approach of mission coordinators and facilitators. It was revealed that, among them providing leadership for setting up of groups had least influence. There was not much role for facilitators in forming groups as the groups are formed by the women themselves which might resulted in getting low score.

While considering factors affecting resource aspects, timely release of fund was the most important factor perceived by officers. It was also rated as the second most important factor among all the factors considered under implementation of MKSP. It is followed by availability of land and water resources, availability of institutional facilities, availability of storage facilities, timely availability of inputs, timely technical support and adequate quantity of inputs. MKSP scheme contribute more focus on capacity building and funding support rather than providing inputs. This could be the reason why regardless of being an important factor, availability of inputs was ranked one among the least influencing factor in implementation of MKSP.

Among Beneficiary aspects, Group dynamics among the members in JLGs was identified most influencing factor perceived by officers followed by attitude of beneficiaries towards collective farming, farming experience of JLGs, crop under cultivation and area under cultivation. In Kerala, MKSP scheme is solely for women engaged in group farming. So, group dynamics becomes an important factor.

Scheme feature factors were the most influencing in the implementation of scheme. Other than inclusion of all farmers, all other factors had high ranks. Financial support was ranked one in scheme features which was followed by, Convergence with various departments and agencies, convergence with various departments and agencies, trainings given for beneficiaries and knowledge about MKSP scheme. Criteria for selecting beneficiaries were rated as one among the least influencing factors. One of the probable reasons could be that, MKSP scheme is exclusively for women. So this factor has no direct effect in the implementation of scheme.

So, it can be briefed that scheme feature factors were perceived as the most influencing factor among factors affecting implementation stage followed by resource aspects, beneficiary aspect and management of mission coordinators and facilitators.

A study conducted by Jonna (2012) revealed that institutional factors as most important in both planning and implementing stages perceived by implementing officers, While people representatives perceived managerial factors as most important in all stages of MGNREGS.

4.4 PROFILE CHARACTERISTICS OF BENEFICIARY FARM WOMEN

4.7.1.1 Age

Table 17: Distribution of beneficiary farm women according to their age

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Young	5	16.67	1	3.33
2	Middle	16	53.33	17	56.67
3	Old age	9	30	12	40
Total		**30**	**100**	**30**	**100**

Table 17 showed that 53.33 per cent of the vegetable farmers belonged to middle age category, while 30 and 16.67 per cent belonged to old and young age categories respectively.

It can be also seen that among banana farmers, 56.67 per cent belonged to middle age group while 40 per cent belonged to old age category. Only 3.33 per cent belonged to young age group.

Majority of respondents of both vegetable and banana farmers belonged to middle aged, followed by old and young age. The result showed that participation of young generation in farming activities is lesser compared to middle and old age categories. This may be due to their perception of farming as a non profitable activity and also in Kerala educated youth are more interested towards white collar job.
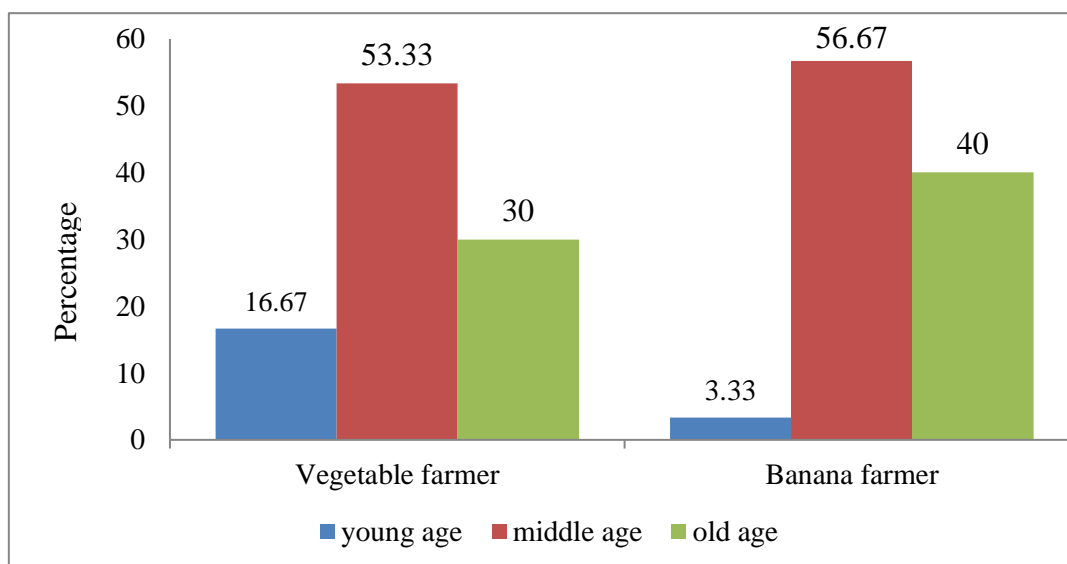
Figure 3 Distribution of beneficiary farm women according to the age

4.7.2. Educational status

Table 18: Distribution of beneficiary farm women to their educational status

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Up to primary	5	16.67	7	23.3
2	HS/HSS	23	76.67	22	73.3
3	Degree and above	2	6.66	1	3.4
	Total	**30**	**100**	**30**	**100**

From the Table 18 it is evident that among vegetable farmers majority of respondents were educated up to high school/higher secondary class(76.67%), followed by up to primary class(16.67%) and degree and above(6.66%). Table 18 also shows a similar trend in the distribution of banana farmers where majority of respondents had high school/higher secondary class (73.3%) education followed by up to primary class (23.32%) and degree and above (3.4%). Kerala being a state with literacy of 93.91 per cent, it is natural that all the respondents had attended schooling. And also lower per cent of respondents with degree and above might be because people with high qualification may not find farming as a better profession.
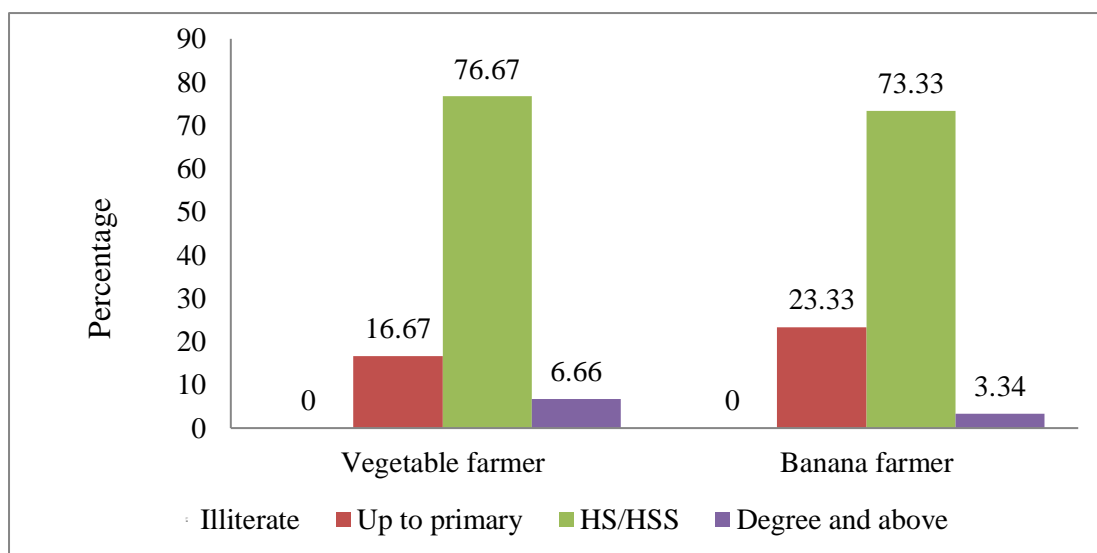
Figure 4 Distribution of beneficiary farm women according to the educational status

4.7.3 Occupation

Table 19: Distribution of beneficiary farm women according to their occupation

Sl.No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Self employed	1	3.34	2	6.67
2	Farming	17	56.66	17	56.66
3	Wage Labour	7	23.34	9	30
4	Others	5	16.66	2	6.67
	Total	**30**	**100**	**30**	**100**

Table 19 clearly shows that among the vegetable farmers majority (56.66%) were engaged in farming as the main occupation followed by wage labour (23.34%). The remaining respondents were fall under self employment (3.34%) and others (16.66%) categories. The distribution of banana farmers showed that 56.66 per cent had their major occupation as farming, followed by 30 per cent were doing labour work as the major occupation. Similar to vegetable farmers remaining respondents were fall under categories of self employment (6.67%) and others (6.67%). These farmers had been practicing farming for many years and started group farming once they felt collective farming is more profitable. The reason behind labourers getting motivated towards JLG collective farming might be their expectation for an additional income. Consciousness about health and need of safe food to eat along with extra returns also had acted as motivating factors for some respondents.
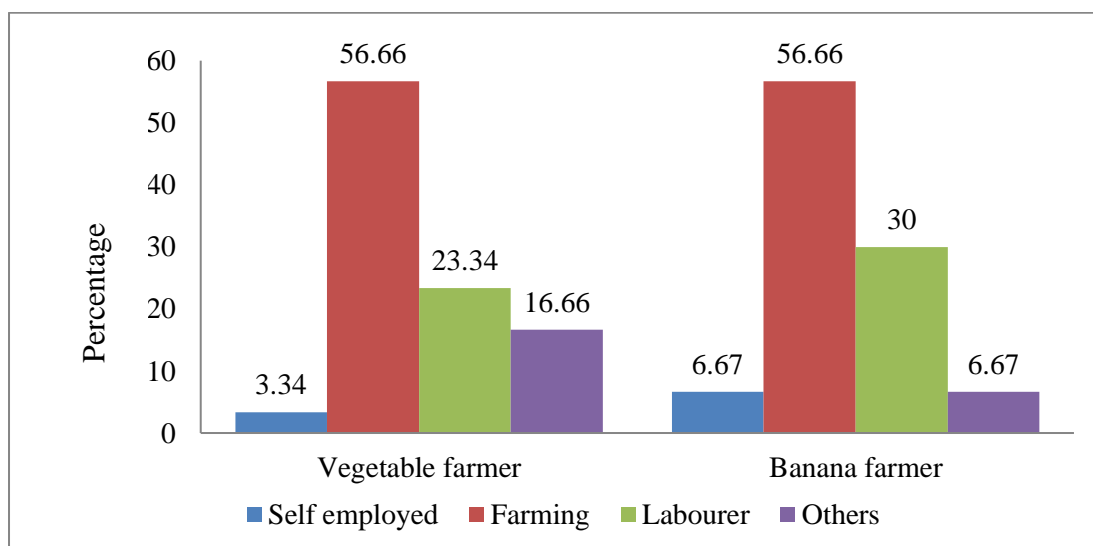
Figure 5 Distribution of beneficiary farm women according to the occupation

4.7.4 Family Size

Table 20: Distribution of beneficiary farm women according to family size

Sl. No.	Category	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Small	5	16.67	3	10
2	Medium	14	46.67	10	33.33
3	Large	10	33.33	16	53.33
4	Very large	1	3.33	1	3.34
Total		**30**	**100**	**30**	**100**

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According to the Table 20 among vegetable farmers about 46.67 per cent of respondents belonged to medium family size, followed by 33.33 per cent large, 16.67 per cent small and 3.33 per cent very large size family.

Among banana farmers majority of respondents belonged to large, followed by 33.33 per cent medium, 10 per cent small and only 3.34 per cent very large families.
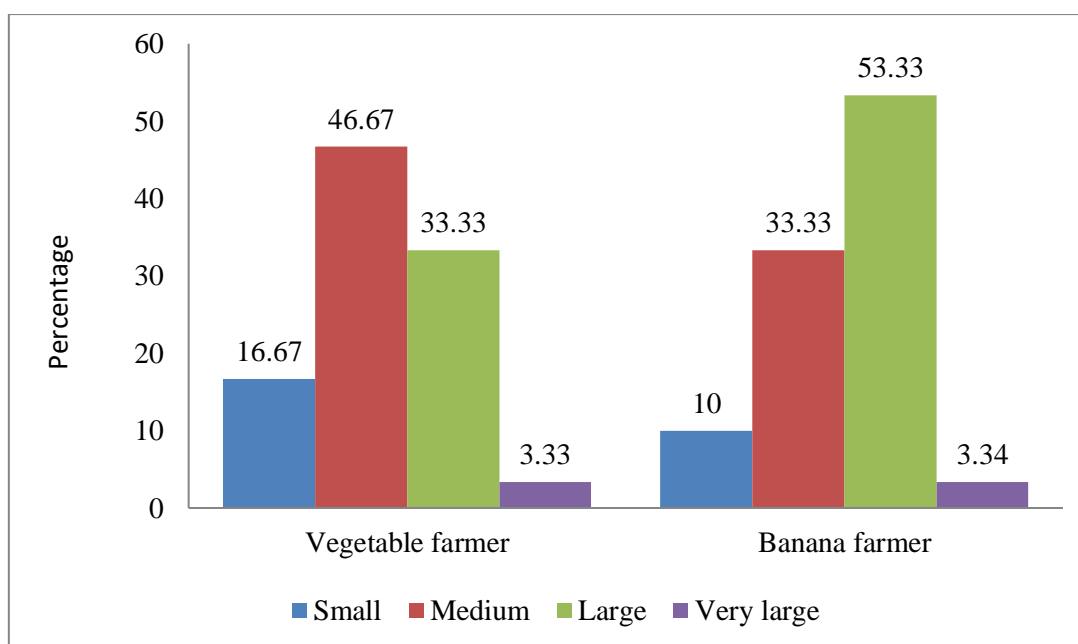
Figure 6 Distribution of beneficiary farm women according to the family size

4.7.5. Annual income

Table 21: Distribution of beneficiary farm women according to their annual income

Sl. No	Categories	Vegetable farmer		Banana farmer	
		Frequency	**Percentage**	**Frequency**	**Percentage**
1	Low	4	13.33	7	23.33
2	Medium	20	66.67	19	63.34
3	High	6	20	4	13.33
Total		**30**	**100**	**30**	**100**

Table 21 shows that annual income of majority (66.67%) of vegetable farmers belonged to medium category followed by high (20%) and low (13.33%) income categories.

Regarding banana farmers more than half of the respondents belonged to medium (63.34%), followed by low (23.33%) and high (20%) income categories. Among the groups, majority were under medium income category which shows that they were able to find their living through farming activities. They were also able to support their family income source through their earnings. A considerable per cent of respondents belonged to low income category. It can be related to the fact that some of the respondents were labourers. And it is because of the low income of their family, they might have moved towards JLG group farming for getting an additional income.
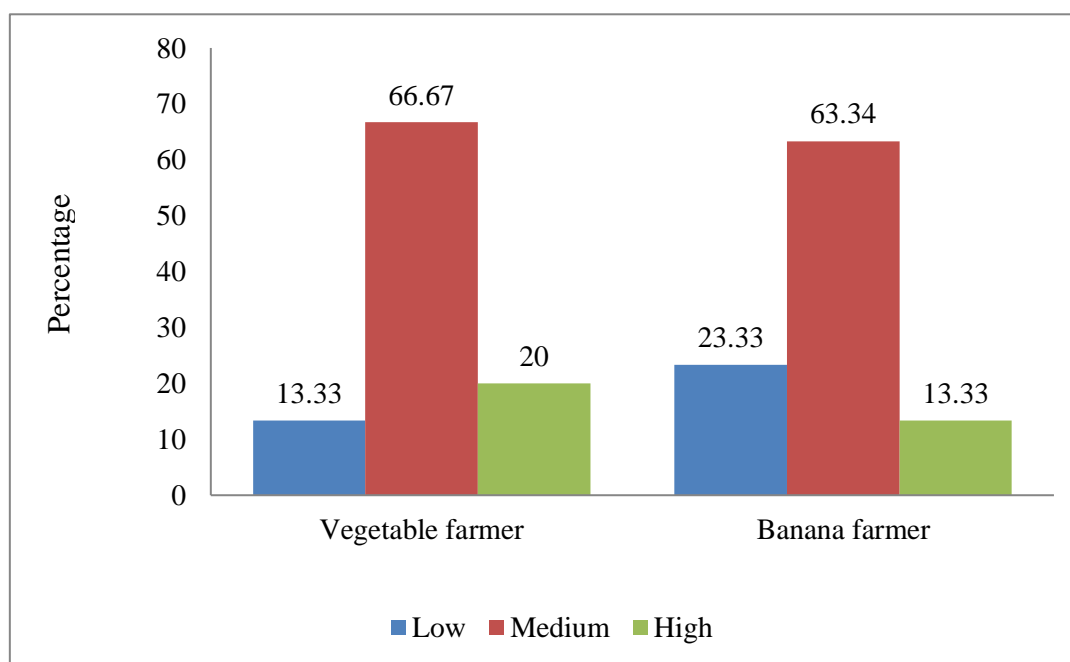
Figure 7 Distribution of beneficiary farm women according to the annual income

4.7.6 Farm size

The major portion of the land under cultivation was leased and divided between the members of the groups. But the farming activities were carried out collectively.

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Table 22: Distribution of beneficiary farm women according to the farm size

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Marginal	7	23.33	12	40
2	Small	9	30	16	53.33
3	Medium	14	46.67	2	6.67
Total		**30**	**100**	**30**	**100**

From table 22, it can be seen that majority of the respondents belonged to medium (46.67%), followed by small (30%), and marginal (23.33%) farmers.

Among banana farmers some difference was observed. More than one half of the respondents were coming under small (53.33%), followed by marginal (40%) and medium (6.67%) categories. Majority of vegetable farmers belonged to medium category while banana farmers were in small category. The probable reason could be that most of the vegetable land was located in hilly areas and more land was available for farming as most of it would remain as un used otherwise. While for banana, plain land was preferred and was comparably difficult to lease it from the owners. Hence it might be the possible reason for the differences among vegetable and banana farmers.
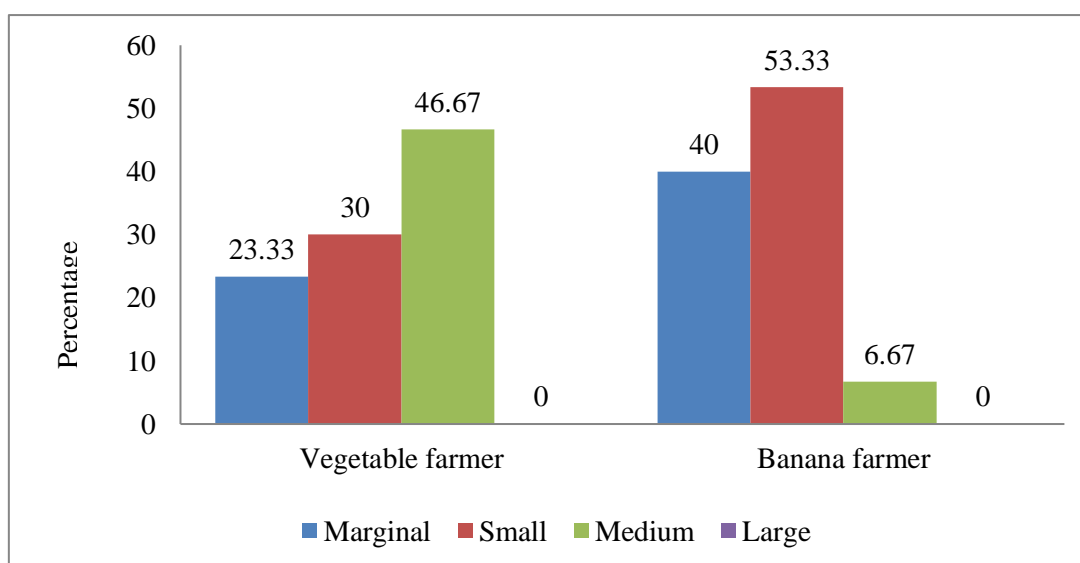
Figure 8 Distribution of beneficiary farm women according to the farm size

4.7.7 Mass media exposure

Table 23: Distribution of beneficiary farm women according to Mass media exposure

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	4	13.33	8	26.67
2	Medium	23	76.67	16	53.34
3	High	3	10	6	23
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean-5.03 S.D-1.38**		**Mean-4.37 S.D-1.33**	

It could be observed from table 23 that majority (76.67%) of vegetable farmers had medium mass media exposure, while 13 percent had low and 10 per cent had high level of mass media exposure.

While among banana farmers, majority had medium (53.34%) mass media exposure, followed by 26.67 percent and 23 per cent with low and high respectively. Exposure of the women JLG member to mass media viz., radio, television, newspaper, farm publication and internet were taken into consideration here. The result showed that women in JLG groups were able to exploit the use of different mass media for seeking information to a better extent. One of the probable reasons could be that in Kerala women have more access to mass media like television and internet. According to the IAMAI (Internet And Mobile Association of India) report of 2020, Kerala's internet penetration was ranked second after Delhi with 54 per cent. High literacy per cent also contributes to higher exposure to various mass media. The reason for more respondents belonged to low category than high mass media exposure can be related to the percentage difference in the young and old age category, because the old age category may not be much comfortable with electronic gadgets.
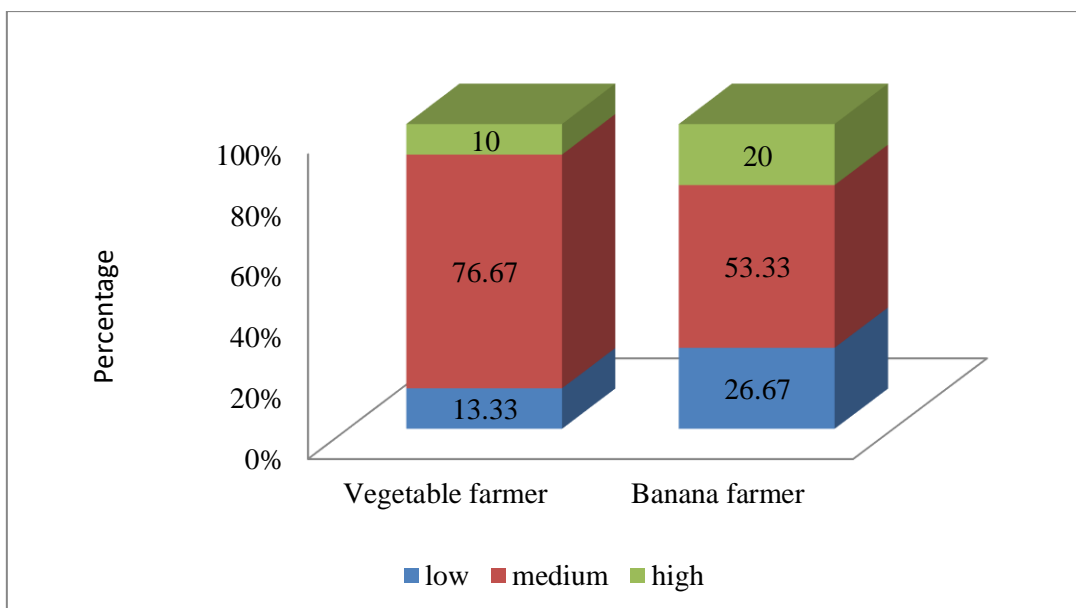
Figure 9 Distribution of beneficiary farm women according to the mass media exposure

4.7.8. Social participation

Table 24: Distribution of beneficiary farm women according to their social participation

Sl. No.	Category	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	7	23.33	8	26.67
2	Medium	9	30	10	33.33
3	High	14	46.67	12	40
Total		**30**	**100**	**30**	**100**

Table 24 shows the distribution of farmers based on their social participation for vegetable and banana farmers. Among vegetable farmers, majority falls under high (46.67%) level which is followed by medium (30%) and low (23.33%) level categories. In the case of banana farmers, majority of respondents were belonged to high (40%), followed by medium (33.33%) and low (26.67%) category.

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So, comparing to banana farmers vegetable farmers showed more degree of social participation. From the results it is clear that women respondents had high level of social participation even though there were not much drastic differences between the categories. Participation in social organization makes an individual more informative and aware of new trends and technologies.

The result was on par with the results of Sabira (2016) who had also noted that women farmers, who work as groups in association with Self Help Groups, had more social participation in Kudumbashree unit. It is also notable that there are not much differences in the category.

So the results showed an insight about the empowerment that achieved by women farmers in Kerala by being a part of Kudumbashree and JLG groups. A considerable per cent of respondents were belonged to low participation category among both vegetable and banana farmers. The low participation makes them more vulnerable in accessing the resources.
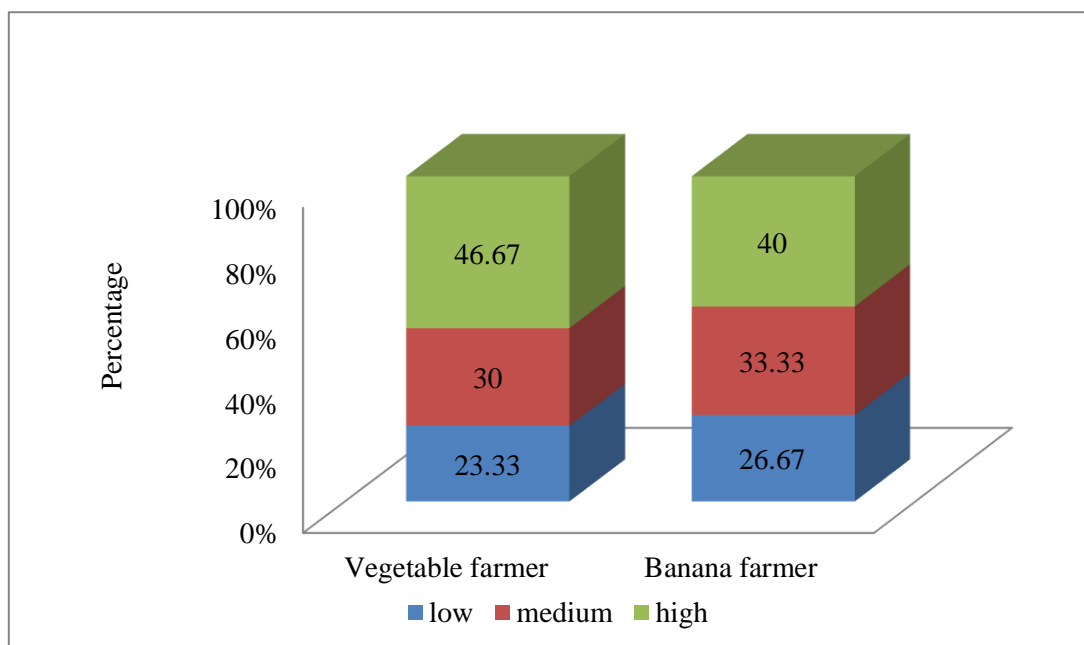
Figure 10 Distribution of beneficiary farm women according to the social participation

4.7.9 Extension contact

Table 25: Distribution of beneficiary farm women according to their extension contact

Sl.No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	3	10	4	13.33
2	Medium	23	76.67	19	63.34
3	High	4	13.33	7	23.33
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean-5.36**	**S.D-1.42**	**Mean-5.36**	**S.D-1.54**

From the table 25 it can be seen that more than three fourth (76.67%) of the vegetable farm women had medium contact with the extension agencies while 13.33 per cent had high and 10 per cent had low contact for seeking agricultural related information. Table 25 also showed that among banana farmers 63.34 per cent had medium level while 23.33 per cent had high and 13.33 per cent had low contact with extension agencies. Agriculture officer was the most contacted extension agent followed by master farmer by the respondents. The results go in line with the findings presented by Sarkar (2019).
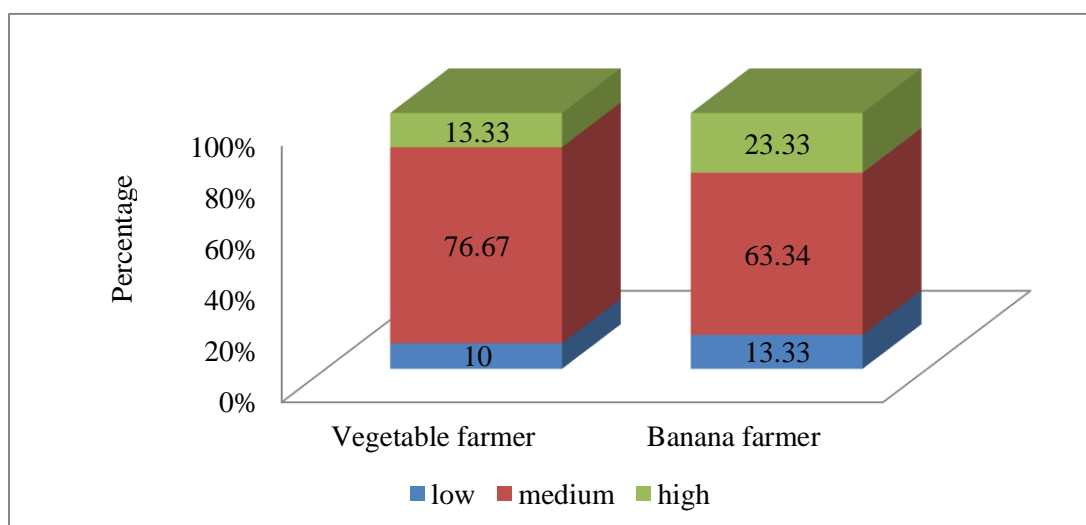
Figure 11 Distribution of beneficiary farm women according to their extension contact

4.7.10. Training received

Table 26: Distribution of beneficiary farm women according to the training received

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Nil (no training)	1	3.33	5	16.67
2	Low(less than 2 training)	6	20	5	16.67
3	Medium (3-4 training)	13	43.33	12	40
4	High(more than 4 training)	10	33.34	8	26.66
	Total	**30**	**100**	**30**	**100**

The results from the table 26 reveals that about 43.33 per cent of vegetable farmer respondents had medium level of training received while 33.34 per cent had high and 20 per cent comes under low category.

Among of banana farmers, 40 per cent, 26.66 per cent, 16.67 per cent, and 16.67 per cent respondents were under medium, high, low respectively. It was found that 16.67 per cent could not attend any training at all.

One of the major objectives of MKSP scheme is the capacity building of the women through training. Majority of respondents have received more than one training. But there were few respondents who had not received training. One of the probable reasons could be the age related difficulties of some respondents to attend the training.
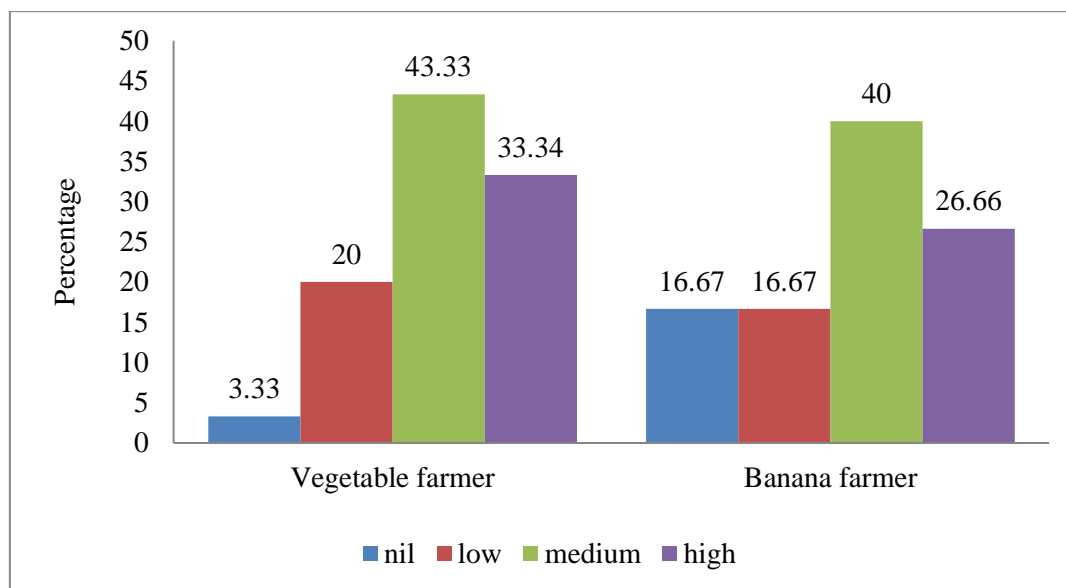
Figure 12 Distribution of beneficiary farm women according to their training received

4.7.11. Cosmopoliteness

Table 27: Distribution of beneficiary farm women according to their cosmopoliteness

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	6	20	1	3.33
2	Medium	18	60	24	80
3	High	6	20	5	16.67
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean–4.47 S.D-1.04**		**Mean -4.73 S.D-0.78**	

It is evident from table 27 that for vegetable farmers, majority of respondents showed medium (60%) level of cosmopoliteness, followed by 20 per cent each by both high and low categories.

Among banana farmers about 80 per cent were under medium level followed by 16.67 and 3.33 per cent in high and low categories of cosmopoliteness

respectively. It shows the orientation of women farmer towards their immediate outside social system. Sabira (2016) had also obtained similar results in her study.
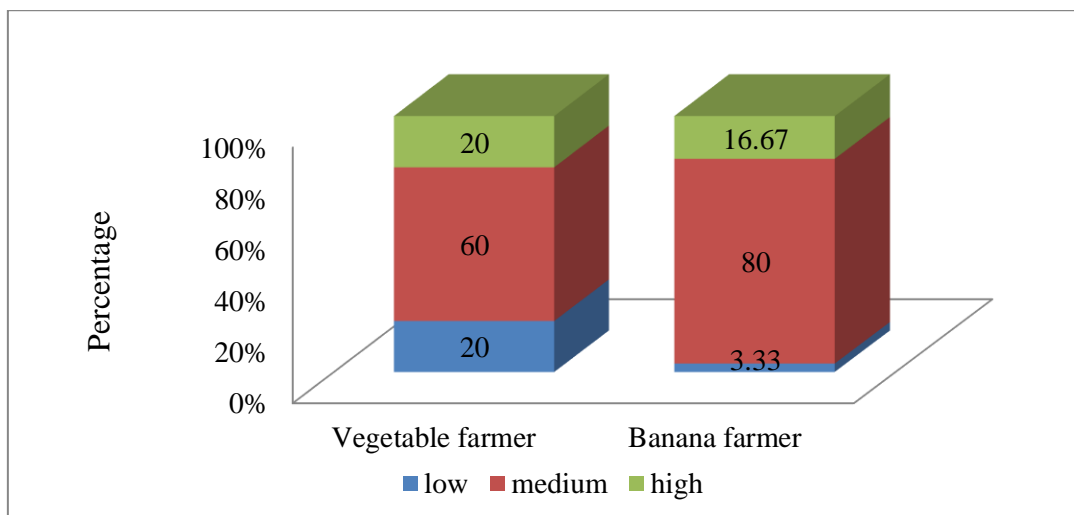
Figure 13 Distribution of beneficiary farm women according to their cosmopoliteness

4.7.12 Market orientation.

Table 28: Distribution of beneficiary farm women according to their market orientation

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	3	10	3	10
2	Medium	25	83.33	24	80
3	High	2	6.67	3	10
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean-31.03 S.D-2.44**		**Mean-31.83 S.D-2.65**	

Table 28 reveals that majority of the respondents of vegetable farmers had medium (83.33%) level of market orientation while 10 per cent had low and 6.67 per cent had high level of orientation.

It is also evident from table 28 that among the respondents of banana farmers 80, and 10 per cent each showed medium, high and low levels of market orientation respectively. To be a successful farmer, one must be very well oriented towards market for better price realization and exploiting market opportunities. Bhagyashree (2014) had obtained similar results in her study.
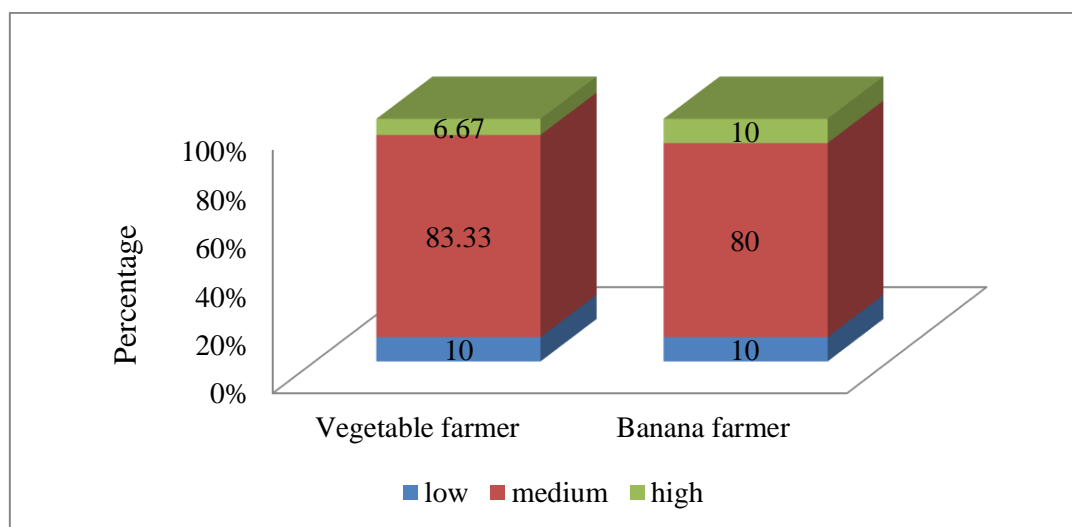
Figure 14 Distribution of beneficiary farm women according to their market orientation

4.7.13 Economic motivation

Table 29: Distribution of beneficiary farm women according to their economic motivation

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	**Percentage**	**Frequency**	**Percentage**
1	Low	5	16.67	4	13.33
2	Medium	20	66.66	21	70
3	High	5	16.67	5	16.67
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean-20.33**	**S.D-2.25**	**Mean -20**	**S.D-2.82**

Table 29 revealed that among vegetable farmers majority of respondents belonged to medium (66.66%) and the remaining respondents equally belonged to low (16.67%) and high (16.67%) categories of economic motivation.

The results from the table 29 also shows that among banana farmers about 70 per cent belonged to medium, while 16.67 per cent had high and 13.33 per cent had low level of economic motivation. Pandey and Grover (2009) had obtained similar results in their study.
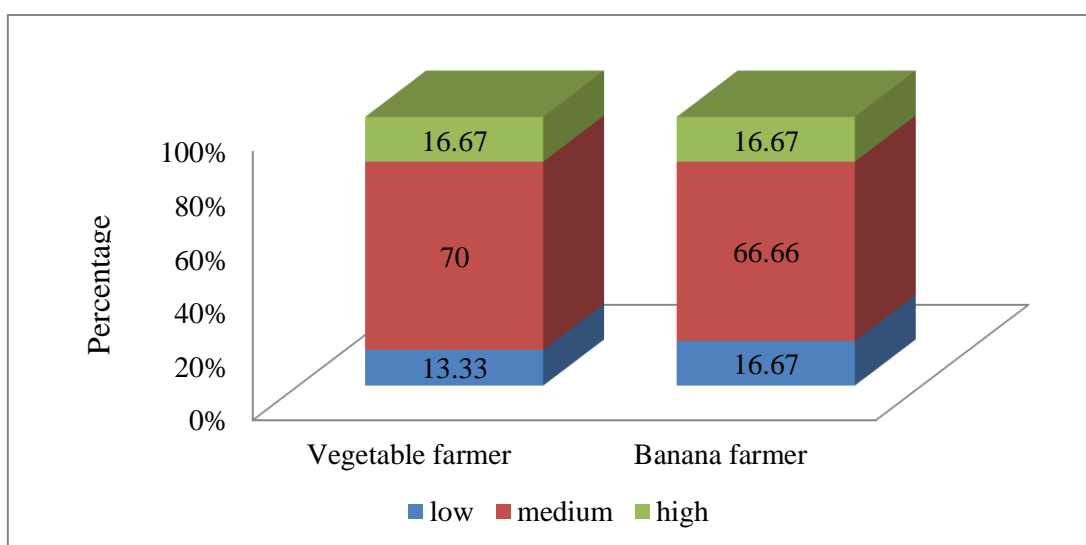
Figure 15 Distribution of beneficiary farm women according to their economic motivation

4.5 PERCEPTION OF BENEFICIARY FARM WOMEN, MISSION COORDINATORS AND FACILITATORS ON THE EFFECTIVENESS OF MKSP SCHEME

4.5.1 Perception of beneficiary farmers on the effectiveness of Mahila Kisan Sashaktikaran Pariyojana scheme

Percentage analysis of the perception by beneficiary farm women is discussed in the table 30.

Table 30: Percentage analysis of beneficiary farm women on effectiveness of scheme

Sl.No	Dimension	Category	Vegetable farmer		Banana farmer	
			Frequency	%	Frequency	%
1	Socio-economic development	Good	1	3.33	3	10
		Excellent	29	96.67	27	90
2	Agricultural input supply	Average	3	10	14	46.67
		Good	26	86.67	16	53.33
		Excellent	1	3.33	----	----
3	Institutional support	Good	14	46.67	14	46.67
		Excellent	16	53.33	16	53.33
4	Knowledge and capacity building	Good	9	30	13	43.33
		Excellent	21	70	17	56.67
5	Empowerment perspective	Good	-----	-----	4	13.33
		Excellent	30	100	26	86.67
1	**Over all perception**	Good	14	**46.67**	16	**53.33**
		Excellent	16	**53.33**	14	**46.67**

(n=30)

Source: Compiled from primary data

A percentage analysis was employed and result revealed that majority of the vegetable farmers (53.33%) had perceived the effectiveness of MKSP scheme as excellent followed by 46.67 per cent as good. But majority of banana farmers (53.33%) had perceived it as good followed by 46.67 per cent rated as excellent category. There was only slight difference between good and excellent categories of both the respondent groups. Other than input supply, no other dimension was rated in average category. It is evident that no respondent had rated the overall effectiveness

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of scheme as average, low and very low category. This results show that programmes under MKSP scheme had a positive response among respondent categories.

Table 31: Perception of beneficiary farm women

Sl. No.	Dimension	Vegetable farmer		Banana farmer	
		Perception Index	Rank	Perception Index	Rank
1	Socio-economic development	84.13	2	84.26	1
2	Agricultural input supply	66.8	5	63.2	5
3	Institutional support	79.8	4	78.9	3
4	Knowledge and capacity building	81.1	3	78.3	4
5	Empowerment perspective	88.4	1	82.4	2
1	**Overall perception**	**80.12**		**76.64**	

Mean score of perception indices were calculated and ranked accordingly. Difference in the overall Perception Index between vegetable and banana farmers indicated that beneficiaries of vegetable farmers had perceived the scheme more effective than banana farmers.

While comparing the dimensions among vegetable farmers, it was found that empowerment perspective was scored more followed by socio economic development, knowledge and capacity building, institutional support and agricultural input supply. Among banana farmers highest rank was scored by socio economic development followed by empowerment perspective, institutional support, knowledge and capacity building and agricultural input supply. Banana farmers also had high

perception mean score on each dimension which indicated their satisfactory opinion about MKSP scheme.

The beneficiaries showed increased interest towards self employment and group farming activities due to various operational supports to JLGs. There was also increased access of women for inputs and services and also asset generation. Through this scheme they were able to generate various assets for common usage of members of JLG like knapsack sprayers, tillers, conoweeder and brush cutters. These all factors might have contributed to high score for empowerment perspective. The study conducted by Quesba *et al.* (2016) on SHGs revealed that the inputs that had been put in the process of NRLM had yielded quite satisfactory results.

The mean score of socio economic aspects was also high. The beneficiaries had perceived that, there was a considerable increase in production and productivity as a result of the schemes, which resulted in increase in the income of farm women. Incentives might have helped the beneficiaries to meet the immediate needs and skills obtained through trainings had helped in reducing the cost of cultivation. Through various training programmes, beneficiaries could perceive considerable increase in the knowledge of farming specifically on organic mode and they might have also experienced improvement in attitude towards natural resource management especially converting fallow land and waste land. This might have contributed in obtaining high mean score for knowledge and capacity building.

Credit support through loan issuance and monitoring was perceived as most effective among the institutional support. Through JLG bank linkage farmers were able to access loan easily which was a laborious task before. Master farmers under MKSP scheme had made it even easier through helping the farmers by timely assisting in renewal of loan. Support to organic farming and value addition also had high impact on beneficiaries. They responded that even though some delays were there in receiving payments, incentives and bank subsidy had a huge impact on their cultivation. Market interventions were perceived as less effective among the institutional support. Kudumbashree had introduced many interventions which had helped beneficiaries in selling their produce. But during seasons due to huge quantity

of produce from many farmers, all the farmers were not able to sell their produce through fairs and exhibitions conducted by Kudumbashree. That might be the possible reason which might have contributed in securing low mean score.

Comparing to other dimensions, agriculture input supply had low mean perception score. MKSP scheme had not many components for input supply other than providing machines through farmer facilitation centre at CDS level. Seed bank which was meant for input supply as a part of MKSP was also not fully successful. Bio pharmacy was helpful for farmers in providing non chemical inputs. They had opined that machines available were satisfactory and helped in cultivation.

Unlike vegetable farmers socio economic development was scored more than empowerment perspective among banana farmers. It was due to the reduced score of banana farmers on empowerment perspective. Banana farmers had less access to inputs and services comparing to vegetable farmers. Similarly, they had also perceived institutional support more effective than knowledge and capacity building even though there was not much difference in the mean scores of these two dimensions. Since the major portion of the farmers of Ollukkara block were vegetable farmers, more inputs, trainings and other services were available for vegetable farmers. That might be the probable reasons for differences in the mean Index scores of empowerment perspective, institutional supply and knowledge and capacity building between vegetable and banana farmers.

Sajesh (2013) observed that coordination with other agencies and institutions like co-operative banks, line departments as well as convergence with various programmes of central and state governments had played an important role in realizing the potential of group mobilization of JLGs.

4.5.2 Perception of mission coordinators and facilitators on effectiveness of Mahila Kisan Sashaktikaran Pariyojana

Percentage analysis of the perception by mission coordinators and facilitators is discussed in the table 32.

Table 32: Percentage analysis of mission coordinators and facilitators on effectiveness of scheme

Sl. No.	Dimension	Category	Respondents	
			Frequency	**Percentage**
1	Socio- economic development	Good	7	23
		Excellent	23	77
2	Agricultural inputs supply	Average	1	3
		Good	20	67
		Excellent	9	30
3	Institutional support	Average	1	3
		Good	20	67
		Excellent	9	30
4	Knowledge enhancement	Good	23	77
		Excellent	7	23
5	Empowerment perspective	Good	3	10
		Excellent	27	90
I.	**Overall perception on effectiveness of MKSP scheme**	**Good**	**23**	**77**
		Excellent	**7**	**23**

Source: Compiled from primary data   **(n=30)**

It can be seen from table 32 that majority of the mission coordinators and facilitators (77.00 %) had perceived the effectiveness of MKSP scheme as good and 23 percent had rated as excellent.

Among the different dimensions, most of the mission coordinators and facilitators had assessed effectiveness of socio-economic development and

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empowerment perspective as excellent. This result can be interpreted that in Thrissur district MKSP scheme were successful in achieving its two important goals. It is also notable that 90 per cent of them had perceived empowerment perspective as excellent pointing that MKSP was successful in achieving its most important goal. They had noticed considerable changes in the attitude of women towards decision making and access to resources after joining in the group.

A small per cent of them had perceived effectiveness of agricultural input supply and institutional support as average. Failure of establishing seed banks and lack of components for providing inputs in the scheme might be the possible reason that had contributed in rating of input supply as the average. For institutional supply, despite JLG bank linkage had acted as a major attractive force towards forming JLG group among members, the low score perceived in providing market facilities might have resulted in average rating by some respondents on the effectiveness of institutional support.

Table 33: Perception of Mission coordinators and facilitators

Sl. No.	Dimension	Mission coordinators and facilitators	
		Perception index	**Rank**
1	Socio-economic development	81.6	2
2	Agricultural input supply	73.8	5
3	Institutional support	75.9	3
4	Knowledge and capacity building	75.14	4
5	Empowerment perspective	85.8	1
1	**Overall perception**	**78.19**	

Source: Compiled from primary data   **(n=30)**

Dimension wise indices were compared and it was found that empowerment perspective was perceived as most effective among the dimensions followed by socio economic development, institutional support, knowledge and capacity building and agricultural input supply.

Majority of them stated that, scheme was relevant to the situation and had resulted in increasing the area and production of crops. They opined that through JLG group farming, farm women were able to find income by their own which attracted even more women towards this field. According to them, trainings had helped in enhancing the agricultural knowledge which might have contributed to empowerment.

So from the results, it is evident that mission coordinators and facilitators had a good overall perception about effectiveness of MKSP scheme. In a study conducted by Seby (2017) showed that majority of the extension personnel (90%) had perceived the effectiveness of paddy promotion programmes implemented under decentralized planning was good and 10 percent as excellent .

It is evident that no respondent had rated the scheme as average, low and very low category. In a nutshell, the performance of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme was successful in Thrissur district. It enhanced the capacities of women in collective farming and also helped them in attaining a sustainable livelihood. Feminization of agricultural sector being a key factor in both agriculture and economic development of the country, MKSP would able to empower the women through its various components. However, need for further development still exists especially in component like input supply in Thrissur. The study conducted by Quesba *et al.* (2016) on SHGs had also reported that the money received by the members under any fund was primarily been utilized on sustainable livelihoods.

4.6 BENEFITS ACCRUED

The benefits availed by the farmers through the implementation of scheme were identified and noted down. Benefits were listed under dimensions and a percentage analysis was employed. The result is presented and discussed in the following table 34.

Table 34: Percentage analysis of benefits derived through MKSP scheme

Sl. No.	Dimensions	Vegetable farmer (%)	Banana farmer (%)
1	Socio-economic development	88.8	87.3
2	Input supply	56.67	52.2
3	Drudgery reduction	86.6	83.3
4	Credit support	77.5	81.67
5	Market interventions	66.67	80
6	Skill development	82.7	77.7
1	**Total benefit accrued**	**78.84**	**78.11**

(n=30)

The benefits availed by the farmers were categorized under socio-economic development, inputs supply, drudgery reduction, credit support, market interventions and skill development. Percentage analysis revealed that, among the out puts, socio economic development and drudgery reduction were the most received benefits for both vegetable and banana farmers. Similarly benefits under input supply were the least received by both respondent categories.

The benefits under each dimension are listed and discussed in the following table 35.

Table 35: Benefits derived through MKSP scheme

Sl. No	Dimension	Benefits	Nadathara Panchayat	
			Vegetable farmer (%)	Banana farmer (%)
1	Socio-economic development	Increase in income from farm	93.3	90
		Self employment motivation	100	100
		Assistance provided helped to reduce cost of cultivation	86.7	76.7
		Convert fallow land under cultivation	70	80
		Increased interest towards collective farming	93.3	90
2	Input supply	Seed banks established and maintained	10	3.33
		Bio-pharmacy at FFC level to provide non chemical inputs	60	56.67
		Machines available for farming at FFC level	100	100
3	Drudgery reduction	Use of gender friendly tools and techniques	83.3	76.7
		Increased access to farm implements	100	100
		Increased participation in farm activities usually done by men	76.6	73.3
4	Credit support	JLG bank linkage	100	86.7
		Provision of incentives and subsidies	86.7	73.3
		Support to organic farming	73.3	86.7
		Support to value addition	50	80
5	Market interventions	Market intervention through festival fairs, exhibitions etc.	73.3	76.7
		Convergence with other government agencies for procurement	56.7	83.3
6	Skill development	Ability to identify pests, diseases and weeds	76.7	66.7
		Improved technical knowledge on operation of machines	83.3	73.3
		Promoted group feeling among JLG members	86.7	83.3
		Improved knowledge on new technologies	80	80
		Enriched knowledge on organic farming	100	90
		Enhanced knowledge on market and price	70	73.3

Source: Compiled from primary data

(n=30)

The results denoted that socio economic development was the most important output for both vegetable and banana farmers. It is also evident that 100 per cent beneficiaries of both categories had gained self employment motivation. Similarly high per cent of farmers also had gained increase in income from farm and increased interest towards collective farming. The result also proved the role of MKSP in converting fallow land for cultivation. More per cent of banana farmers were able to cultivate in fallow land comparing to vegetable farmers. The assistance provided had helped them to reduce cost of cultivation.

Regarding the input supplied, it received the least score among benefits. This can be related to the difficulties in establishing seed banks. Only a few seed banks were established and even those were not properly functioning. But establishment of bio- pharmacy was successful and it was functioning at FFC level to provide non chemical inputs to farmers. Floods occurred during 2018 and 2019 had affected some FFCs and they were not fully functional which might be lead to the low score. But all the farmers unanimously accepted the fact that machines available for farming at FFC level were very helpful in their cultivation. The common assets available were brush cutter, tiller, sprayer etc. They were available at low rents and the rental money was taken for maintaining FFCs.

Drudgery reduction was a major goal under MKSP scheme which was very well perceived by farmers as a benefit. Many of the farm implements were available at FFCs and farmers were able to make use of them in their field. There was 100 per cent acceptability from farmers about the easy access to farm implements. Access to gender friendly tools and techniques achieved through various trainings had helped them to reduce the cost of cultivation through minimizing the dependence on external labour. Trainings provided through MKSP scheme might have led to increased participation in farm activities that were usually done by men.

Credit support was another benefit received by farmers. Under MKSP scheme, incentives and interest subsidy were provided for all the farming groups having bank linkage. Credit support was one of the major components under MKSP scheme. It was the major reason why many individual farmers became a member of JLG and started

to work on a group basis. For farmers, capital is always a big concern and too much of bank formalities always act as a hurdles before them. NABARD helps JLG bank linkage and master farmers who are trained through MKSP scheme are making that linkage more easily. They help farmers for renewing the loan and completing other procedures. This might have acted as a major attractive force towards forming JLG group and group farming. Incentives were provided as area incentives. These all factors might have created an increased motivation towards JLG group farming. Farmers were able to get special support for organic farming and value addition. Banana farmers were more oriented towards organic cultivation which had helped them to receive more incentives. Also many of the banana farmers were doing value addition like chips which was also supported under MKSP scheme.

Market interventions were another goal expected out of MKSP scheme. The result showed that banana farmers had been more benefited out of market interventions through MKSP scheme. Even though Kudumbashree was conducting weekly markets and other fairs during festivals, most of the vegetable farmers were depending on external market for selling their products. At the same time banana farmers were able to sell banana chips and other value added products through these markets. Banana farmers also used VFPCK for selling their produce.

From the table 35 it is evident that respondents had positive response about their skill development as a part of MKSP scheme. They felt considerable changes in their knowledge on organic farming, group dynamics among JLG members, technical knowledge on operation of machines and knowledge on new technologies. It was also found that all the vegetable farmers had increased knowledge on organic farming. Banana farmers had also showed high response towards increased knowledge on organic farming (90%). Respondents had also gained knowledge about identification of pests, diseases and weeds and knowledge on markets and price.

So, it can be briefed that other than input supply and market interventions more than 75 per cent of respondents of both categories of farmers had received all the benefits. Input supply was the least received benefit for both vegetable (56.67%) and banana farmers (53.33%). So, MKSP scheme was successful in achieving most of

its expected objectives. Majority of the benefits were distributed to the farmers on group basis i.e. through JLGs and then the benefits are divided in between the members.

Ghosh and Ghosh (2014) concluded that women participation in agriculture is increasing over the time and women are now acknowledged with the status of "agricultural worker". Even though discrimination in wages and working status still exist for women labour, due to various policies and initiatives introduced by government the invisibility of women as an agricultural worker is now reduced and would further diminish in future. The advent of MKSP has given fillip to the process of farm feminization in Kerala (Kumar, 2017).

4.7 KNOWLEDGE LEVEL OF FARMERS ON VEGETABLES AND BANANA CULTIVATION

Table 36: Knowledge level of beneficiary farm women on vegetables and banana cultivation

Sl.No	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	4	13	6	20
2	Medium	20	67	19	63.33
3	High	6	20	5	16.67
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean- 88**	**S.D- 9.34**	**Mean- 82.67 .**	**S.D9.35**

The table 36 reveals that majority of respondents among both vegetable and banana farmers belonged to medium category i.e., 67 per cent and 63.33 per cent respectively and also that both of the farmer categories had high mean score. This can be related to the fact that, major occupation of majority of respondents was

agriculture. Various training programmes also might have helped them to gain more knowledge related to agricultural practices.

Table 37: Test result of Mann whitney U test on knowledge level

Sl. No.	Knowledge level	Mean	Mann whitney U value
1	Vegetable farmer	88	**311***
2	Banana farmer	82.26	

*significant at 0.05 level (2-tailed) ** significant at 0.01 level (2-tailed)

Mann whitney U test was employed to check whether there is difference between knowledge level of vegetable and banana farmers. The results revealed that there was significant difference at 0.05 level. The possible reason could be that vegetable farmers were more oriented towards training programmes. There was more number of banana farmers who had not received trainings compared to vegetable farmers.
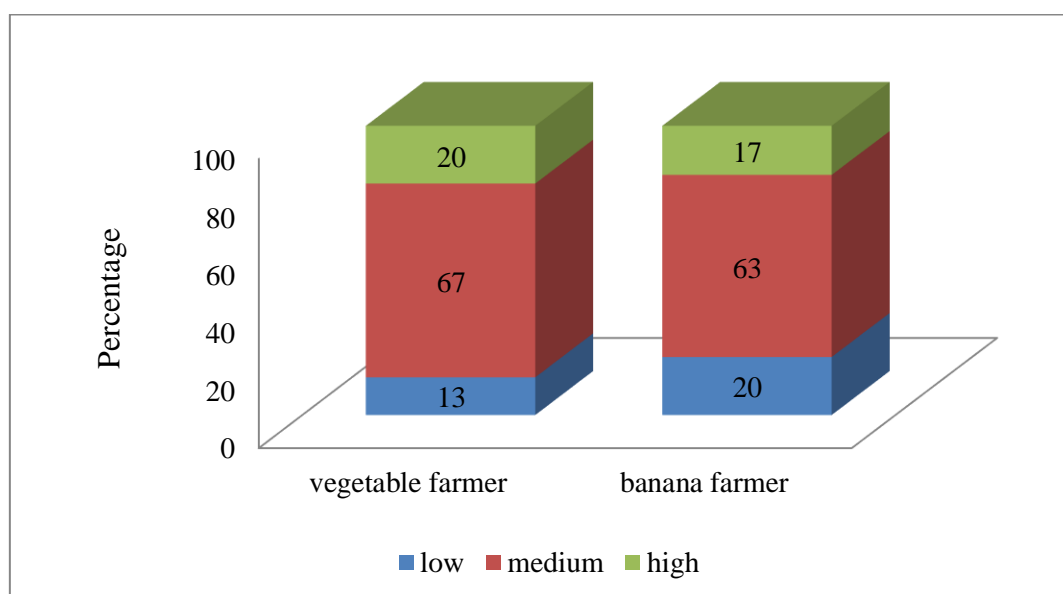
Figure 15 Distribution of vegetable and banana farmers according to their knowledge level

The present study is also in agreement with findings of Jeya (1999)who had reported that 60 per cent of farm women had medium level of knowledge followed by 20.8 per cent and 19.2 per cent had high and low level of knowledge respectively.

4.8. GROUP DYNAMICS OF THE SELECTED WOMEN JOINT LIABILITY GROUPS

Group dynamics can be defined as a system of behaviors and psychological processes occurring within a group or between the groups. MKSP scheme in Kerala is acting through the JLG groups. Group dynamics has an important role in success of JLGs. Four dimensions were considered to understand the group dynamics of the members and results are noted below. The dimensions considered were attitude towards group management, group cohesiveness, teamwork and decision making procedure. Group Dynamics Effectiveness Index was found out and the respondents were categorized accordingly.

Table 38: Distribution of farmers based on GDEI

Sl. No.	Categories	Vegetable farmer		Banana farmer	
		Frequency	Percentage	Frequency	Percentage
1	Low	6	20	4	13.3
2	Medium	21	70	22	73.4
3	High	3	10	4	13.3
Total		**30**	**100**	**30**	**100**
Mean and S.D		**Mean- 66.57**	**S.D-2.98**	**Mean -71.16**	**S.D-3.5**

From the table 38 it is clear that majority of the respondents of both vegetable and banana farmers were belonged to medium category which was 70 and 73.4 per cent respectively. For vegetable farmers it was followed by low (20%) and high (10%) respectively. While for banana farmers there were equal number of respondents in low (13.3%) and high (13.3%) categories. The findings are similar with that reported by Payal (2019).

Group dynamics function has a very significant role in achieving appropriate group participation and execution. So the results can lead on to the conclusion that, all the operations conducted by the groups must be achieved with maximum participation of all the members. Some farmers were forced to suspend the group due to lack of land availability for group farming. This may be the probable reason behind more per cent of respondents in low category comparing to high for vegetable farmers.

4.9. INFLUENCE OF PROFILE CHARACTERISTICS ON GROUP DYNAMICS

To understand the relationship of profile characteristics with group dynamics effectiveness index, simple correlation analysis was done and findings are presented in the following table 39.

Table 39: Correlation analysis of profile characteristics with GDEI   (n=30)

Sl. No.	Personal variables	Correlation coefficient vegetable farmer(r_s)	Correlation coefficient banana farmer(r_s)
1	Age	0.03	0.24
2	Educational status	0.06	0.06
3	Occupation	0.21	**0.48****
4	Family	-0.02	0.11
5	Annual income	**0.51****	**0.52****
6	Farm size	**0.60****	**0.60****
7	Mass media exposure	**0.68****	**0.62****
8	Social participation	**0.62****	**0.86****
9	Extension contact	0.25	0.06
10	Training received	**0.47****	**0.40***
11	Cosmopoliteness	**0.44***	**0.61****
12	Market orientation	**0.36***	**0.59****
13	Economic motivation	**0.61****	**0.72****

*Correlation significant at 0.05 level (2-tailed) ** Correlation significant at 0.01 level (2-tailed)

Improvement in annual income can lead to better productivity and performance of the group. Better farm size promotes to expand the cultivation and also adopt new technologies with more information. Mass media create a favorable condition for interaction and information exchange. Increased social participation can result in exposure to new knowledge through establishing better contacts and this increases the interaction behavior.

Training received was also had a significant relation with GDEI. Receiving more training will lead to better problem solving capacity and increased attitude towards group management activities. Similarly cosmopoliteness also increases the knowledge. Market orientation and economic motivation can also arise need for new knowledge and create a motivating environment for better group interactions and performance.

There was significant correlation with occupation of banana farmers, but not with vegetable farmers. This can be related with the fact that banana farmers had more percentage of respondents under self employment category. So they might have more motivated towards group activities considering it as an additional source of income.

These all might be the possible reasons that have contributed to the positive and significant correlation of these characteristics with GDEI. A study conducted by Kumar (1998) found that there was positive and significant relationship between, annual income, farm size, cosmopoliteness, mass media participation and social participation with Group Dynamics Effectiveness Index. Cosmopoliteness was positively and significantly related with group characteristics (Jayalekshmi, 2001).The results of present study are in agreement with the above findings.

4.10 CONSTRAINTS FELT BY THE RESPONDENT CATEGORIES

Constraint Index was calculated for dimension wise analysis to identify the constraints felt by the respondent categories. To understand the constraints more specifically item wise analysis was done using Kendall's Coefficient of Concordance and they were ranked using mean score to recognize the most influenced ones.

4.10.1. Constraints felt by beneficiary farm women

Constraint Index was calculated for each dimension and was ranked using the mean Index score.

Table 40: Constraints felt by beneficiary farm women

Sl. No.	Dimension	Vegetable farmer		Banana farmer	
		Constraint Index	Rank	Constraint Index	Rank
1	Input constraints	53.33	5	61.67	4
2	Time constraints	50	7	54.07	6
3	Financial constraints	58.89	2	65.83	2
4	Infrastructural constraints	56.29	3	62.2	3
5	Knowledge constraints	56.22	4	54.89	5
6	Market constraints	83.33	1	75.18	1
7	Scheme feature constraints	52.5	6	52.22	7

(n=30)

Constraints were ranked using the mean constraint score. The dimensions considered were input, time, financial, infrastructural, knowledge, market and scheme feature constraints. According to the mean score, constraints were compared and it was revealed that market, financial and infrastructural constraints were the most serious constraints felt by both vegetable and banana farmers. This was followed by knowledge, input, scheme feature and time constraints for vegetable farmers and input, knowledge, time and scheme feature constraints for banana farmers.

Market was the major concern of the beneficiaries. Most of the farmers were depending on the local markets for selling their products. Even though there were monthly and weekly fairs for marketing by 'Kudumbashree', only a small per cent of respondents had been benefitted from that. Most of the respondents among vegetable farmers were depending on middle man for selling their produce. They buy their produce from the farm gate. This might have resulted in reducing their profit. But due to lack of direct marketing they were forced to depend on them so that at least they can sell their produce. During seasons Kudumbashree fairs were not able to sell produce from all the farmers. Among the respondents, banana farmers were more benefitted from these fairs. Banana farmers had also received more benefits through VFPCK. When compared to market constraints, all other constraints had low scores.

Despite satisfaction of respondents towards JLG bank linkage through the scheme, financial constraint was ranked second to market constraints even though the score was much lower than the score of market constraints. Delay in receiving the incentives and also high production cost may be the probable reason for financial constraints.

Infrastructural constraints including lack of storage facilities for produce, lack of availability of leased land for farming and lack of water facilities were the other major problems faced by farmers of Nadathara Panchayat. Many of the farmers opined that there was reluctance from the owners of the fallow land to give it back for leasing once it made in to cultivable land after cultivating for two to three years.

Due to lack of water sources major cultivation was rain-fed. Inadequate supply of inputs, lack of timely availability of fund, lack of scientific cultivation practices and lack of special support to local varieties were the major input, time, knowledge and scheme feature constraints respectively.

Kendall's Coefficient of Concordance was employed and items were ranked according to the mean score obtained. Most serious ten constraints were identified from a total of 24 items and discussed in table 41.

Table 41: Item wise analysis of constraints felt by beneficiary farm women

Sl. No.	Constraints	Vegetable farmer		Banana farmer	
		Mean score	Rank	Mean score	Rank
1	Inadequate supply of inputs	13.07	9	16.47	7
2	Lack of timely availability of fund	13.33	8	16.07	8
3	High cost of cultivation	18.48	2	18.35	2
4	Delay in receiving payment	13.40	7	16.77	6
5	Lack of storage facility	17.78	5	16.85	5
6	Poor adoption of scientific cultivation practices	12.98	10	14.88	9
7	Lack of assistance in procurement	18.15	4	13.07	10
8	Inadequate assistance in timely marketing of produce	18.45	3	17.43	4
9	Problems in marketing the produce	20.95	1	19.55	1
10	Lack of special support to local varieties	17.28	6	17.82	3

(n=30)

Inadequate supply of inputs, lack of timely availability of fund, high cost of cultivation, delay in receiving payment, lack of storage facility, lack of scientific cultivation practices, lack of assistance in procurement, lack of assistance in timely marketing of produce, problems in marketing channels and lack of special support to local varieties were identified as most serious constraints felt by beneficiary respondents. Table 41 reveals that problems in marketing channels, high cost of cultivation and lack of assistance in timely marketing of produce were most serious among vegetable farmers while problems in marketing channels, high cost of cultivation and lack of special support to local varieties were the most serious constraints felt by the banana farmers.

The findings of the study were in agreement with the results obtained by Thomas (1998) and Mehala (2012). Thomas (1998) observed that major constraints faced by respondents were, inadequate financial assistance, non availability of quality planting materials, political interference and in adequate training. Mehala (2012) reported that for both men and women SHGs lack of financial support and insufficient money were the major problems among majority (90%) of the respondents.

4.10.2 Constraints felt by the mission coordinators and facilitators

Constraints felt by the mission coordinators and facilitators were noted and are explained in the following table 42.

Table 42: Constraints felt by mission coordinators and facilitators   **(n=30)**

Sl. No.	Dimension	Constraint Index	Rank
1	Input constraints	37.2	6
2	Time constraints	45.18	5
3	Financial constraints	60	1
4	Infrastructural constraints	59.25	2
5	Manpower constraints	47.7	4
6	Scheme feature constraints	50.5	3

The results revealed that the major constraints perceived by the mission coordinators and facilitators were financial constraints followed by infrastructural, scheme feature, manpower, time and input constraints.

Among financial constraints high cost of cultivation and delay in receiving fund for disbursement of incentives were the main concerns. Lack of storage facilities and lack of availability of leased land and irrigation facilities for farming were the major limitations identified under infrastructural constraints. Flood occurred during 2018 and 2019 had badly affected many of the FFCs, one of the major storage centers. They had also explained about the difficulty of not having proper storage facilities especially during seasons where large amount of produce are harvested.

They had revealed that many of the farmers had quit the JLG group due to reluctance from the land owners to give it back for leasing once it was made in to cultivable land by the hard work of farmers. Even though there was labour shortage, linking with MGNRGS was reduced the intensity considerably which resulted in low Index score. In scheme feature constraints, main difficulties were raised due to the lack of components to cope up with natural calamity and absence of components for promoting local varieties. Delay in release of fund was the major time constraint. Input constraints were the least felt constraints from the mission coordinators and facilitators.

Kendall's Coefficient of Concordance was employed and items were ranked according to the mean score obtained. Most serious ten constraints were identified from a total of 18 items and are tabulated below:

Table 43: Item wise analysis of constraints felt by mission coordinators and facilitators (n=30)

Sl. No.	Constraints	Mean score	Rank
1	Lack of timely availability of fund	12.10	5
2	Lack of proper financial assistance	8.60	10
3	High cost of cultivation	14.62	4
4	Delay in receiving payment	15	2
5	Water scarcity for farming	9.17	8
6	Lack of storage facility	15.07	1
7	Labour shortage	8.95	9
8	Lack of availability land for farming	9.85	7
9	Lack of components to cope up with natural calamity	11.35	6
10	Lack of special support to local varieties	14.85	3

Lack of timely availability of fund, lack of proper financial assistance, high cost of cultivation, delay in receiving payment, lack of irrigation facilities for farming, lack of storage facility, labour shortage, lack of availability of land for farming, lack of components to cope up with natural calamity and lack of special support to local varieties were identified as most serious constraints. Item wise analysis of constraints revealed that most serious constraints felt by mission coordinators and facilitators were lack of storage facilities, delay in receiving fund for disbursement and lack of special support to local varieties.

Kendall's W indicates the agreement among the respondents. The intermediate values of W (0-1) indicate a greater or lesser degree of unanimity among the respondents. Kendall's W values for vegetable farmers, banana farmers and facilitators and mission coordinators were 0.470, 0.479 and 0.578 respectively. The values show that agreement among facilitators and mission coordinators and unanimity in agreement among respondents followed by banana farmers and vegetable farmers. The results also show that the values are highly significant.

A study conducted by Bortamuly and Khuhly (2013) identified inadequate financial support under the ATMA scheme as the most important constraint experienced by majority of the extension personnel (75%) followed by involvement of ATMA functionaries in the schemes other than ATMA (70.8%), lack of external trainer in close proximity (67.5%), untimely release of fund (60.0%) and lack of delegation of authority to the block level functionaries (55.8%).

4.11 IDENTIFICATION AND DOCUMENTATION OF THE GOOD AGRICULTURAL PRACTICES FOLLOWED

Good agricultural practices followed by respondents were identified and categorized under soil and moisture conservation, nutrient management, pest and rodent management, disease management, pre harvest practices, harvest and post harvest practices, and storage and processing practices.

Soil and moisture conservation:
- ✓ Farm ponds

✓ Rain water harvesting

Nutrient management:

✓ Tank silt application: Application of tank silt will improve soil fertility and water holding capacity

✓ Application Farm Yard Manure (FYM): Application of decomposed FYM

✓ Green manure crops: Green manure crops will improve soil structure and organic matter content. After reaching flowering stage incorporate green manure crops into soil.

✓ Micronutrient deficiency: For nutrient deficiency (Iron, Zinc and Potash) in nursery and in main field spray cow urine and cow dung.

✓ Green leaf manure: Green leaf manuring with *Pongamia*, Neem etc will improve soil fertility

✓ Intercropping of monocots and dicots

✓ Crop rotation with pulse crops

✓ Mulching with green leaf and crop residues

Pest and rodent management:

✓ Deep summer ploughing: Summer ploughing exposes the pupae surviving inside the soil.

✓ Seed treatment with non-chemical components

✓ fruit trap: keeping smashed banana along with pesticide in the fields as hangings in between the *panthals*

✓ Pheromone traps: Keeping Pheromone traps for mass trapping of pests

✓ Growing of trap crops: Grow yellow flower Marigold (tall growing plants are preferred) and Castor around field, ensure flowering before main crop completes vegetative stage

✓ Using cover crops like *Calapogonium sp.* and *Centrocema sp.* in the field

✓ Use of *Glyricidiumsp.* as live fencing

✓ Application of Botanical extracts: use of Neem seed kernel extract and Neem oil emulsion.

✓ Use of rodent traps

- ✓ Rodent repellent crops such as *Calotropis sp.*, turmeric, castor plants which are rodent repellants

Disease management:
- ✓ Selection of Seed: selection of disease free and disease resistant variety
- ✓ Green and green leaf manuring: incorporation of plants into soil
- ✓ Application of cow dung slurry
- ✓ Reduce chemical fertilizer usage
- ✓ Crop rotation: Rotate crops particularly with pulses to prevent disease spread
- ✓ Alleys: Alleys provide enough sunlight and wind flow and prevent disease spread

Weed management:
- ✓ Use of women friendly mechanical machineries appropriate to specific crop

Pre harvest practices:
- ✓ Harvesting of produce at the right time, taking into account the factors determining produce maturity and storability
- ✓ Prior to harvest, avoid use of pesticides and toxic chemicals which will have residual effect on crop produce

Harvest and post harvest practices:
- ✓ Timely harvesting
- ✓ Use of mechanical harvesters to reduce drudgery in harvesting and crop loss
- ✓ Avoid chemical-induced ripening of fruits
- ✓ Cleaning the produce to remove physical impurities
- ✓ Appropriate packing of produce in order to reduce wastage during transport
- ✓ Use of packing material made of compressed paper/fiber/wooden/plastics depending on the produce to be packed in standard size to enable handling and stacking

Storage and processing practices:
- ✓ Adopt integrated pest management strategies to control storage pests
- ✓ Take precautionary measures against pathogens and rodents

✓ Value addition to the primary products to enhance market value and income of women farmers

4.12 SUGGESTIONS TO IMPROVE THE EFFECTIVENESS OF MKSP SCHEME

✓ **For improving market interventions:**
  ❖ More market facilities and opportunities have to be introduced through converting weekly and monthly markets in to daily markets
  ❖ Strengthen the institutional linkages – Farmers Service Cooperative Banks, input dealers, and marketing agents
  ❖ The groups should be given detailed orientation programme on the converging institutions for agriculture and the support systems availed from these institutions
  ❖ Tie up with these institutes should be made for the timely access of inputs and marketing facilities for the groups
  ❖ Explore the possibilities of farmer producer organizations

✓ **For improving financial situation:**
  ❖ Timely disbursement of incentives to farmers
  ❖ Provision of production incentives along with area incentives
  ❖ Include an emergency fund for meeting the unexpected loss due to natural calamity

✓ **For improving infrastructural facilities:**
  ❖ Timely re-building of the infrastructural facilities lost during flood
  ❖ Building of cold storage facilities at Panchayat level
  ❖ Panchayat body should be oriented and strengthened to make necessary arrangements for availing lease land and fixing standardization for the lease amount

✓ **For improving input supply:**
  ❖ Timely supply of inputs should be ensured
  ❖ Seed banks should be strengthened
  ❖ More trainings should be provided for Groups to made them aware about the reliable sources for input identification

- ❖ Facilities from Agricultural universities, VFPCKs, KVKs and allied universities should be reached to the public and for this tie ups can be made with the departments for the timely supply and quality assurance for the products
- ✓ Promote formation of 'green army' groups by Kudumbashree members and youth at Panchayat level
- ✓ Support and more emphasis to be given for conservation of local varieties
- ✓ Awareness campaigns should be organized before the implementation of the schemes so as to make the beneficiaries familiar with its components
- ✓ Special orientation and training programmes on processing technologies and value addition should be organized

Summary and conclusion

CHAPTER V

SUMMARY AND CONCLUSION

Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme is implemented to empower women in agriculture by making systematic investments so as to enhance their participation and productivity, and also create and sustain agriculture based livelihoods of rural women. In Kerala it is undertaken by Kudumbashree through women Joint liability Groups. The assistance for achieving these goals is provided by central and state governments together. It is not evident, whether this programme was effective in bringing about the desired change. So, assessing the perception of the farmers and mission coordinators and facilitators on the effectiveness of scheme is an effective way to analyze the output of the scheme. And in Kerala limited studies have been attempted in this line. Therefore the present study was under taken with the following specific objectives:

- ✓ To study the effectiveness of MKSP Scheme as perceived by the beneficiary farm women, mission coordinators and facilitators
- ✓ To assess the knowledge of beneficiary farm women on cultivation of selected agricultural crops
- ✓ To study the group dynamics of the selected women Joint Liability Groups
- ✓ To study the profile characteristics of beneficiary farm women and their influence on group dynamics
- ✓ To explore the constraints and to suggest promotional strategies for improving the effectiveness of the scheme

The research was carried out in Thrissur district. Random sampling technique was followed. Nadathara Panchayat of Ollukkara block was selected as study area. Thirty beneficiary farmers each representing vegetable and banana farmers were selected. And from blocks viz, Nadathara, Mala and Irigalakkuda, thirty mission coordinators and facilitators were selected randomly. The total number of respondents for the study was 90. The primary data was collected using a pre-tested and structured interview schedule

and focused group discussions. The secondary data were collected from the state Kudumbashree site and various government websites.

Details of MKSP scheme implemented in Thrissur district through Kudumbashree mission from 2011-12 onwards were collected and the components were delineated. The dependent variable perception was divided into different sub dimensions based on the MKSP scheme implemented. Further the perception of beneficiary farmers and mission coordinators and facilitators on effectiveness of Mahila Kisan Sashaktikaran Pariyojana scheme was studied. The profile characteristics selected were also studied and its effect on group dynamics was analyzed. The factors influencing implementation of scheme were identified and ranked based on the mean rank. In addition, the benefits accrued by the beneficiary farmers were also tabulated. Knowledge of beneficiary farm women on cultivation of selected agricultural crops was also assessed. Kendall's Coefficient of Concordance test was carried out for item wise analysis of constraints and also for assessing the agreement among the respondents. Good Agricultural Practices were identified and documented. Accordingly suggestions were made to improvise the effectiveness of MKSP scheme.

The salient findings of the study are summarized and presented below:

➢ The details collected about MKSP scheme implemented in Thrissur district through Kudumbashree mission from 2011-12 onwards revealed that project has surpassed many of the targets and at the same time it was lagging behind in input supply due to failure in establishing seed banks.

➢ The major components identified under MKSP scheme were training and capacity building, credit support, extension services, market interventions, input supply and value addition.

➢ Scheme feature factors were perceived as the most influencing factor among factors affecting implementation stage followed by resource aspects, beneficiary aspect and management of mission coordinators and facilitators.

➢ Majority of the beneficiary vegetable farmers belonged to 'middle' age group (35 to 50), had high school or higher secondary education, belonged to medium family(3to 4 members), had farming as major occupation, had middle annual income(50001-100,000 INR), and medium farmers where cultivation mainly in leased land.

➢ Majority of the beneficiary banana farmers belonged to 'middle' age group (35 to 50), had high school/higher secondary education, belonged to large family(5- 6 members), had farming as major occupation, had middle annual income(50001-100,000INR), and small farmers where cultivation mainly in leased land.

➢ Both vegetable and banana farmers were found to have medium level of mass media exposure, contact with extension agency, market orientation, economic motivation, training received, cosmopoliteness and high level of social participation.

➢ Percentage analysis revealed that majority of the vegetable farmers (53.33%) has perceived the effectiveness of MKSP scheme as excellent followed by 46.67 per cent rated as good. But majority of banana farmers (53.33%) perceived it as good followed by 46.67 per cent rated as excellent category. No respondent rated the scheme as average, low and very low categories.

➢ While comparing the sub dimensions among vegetable farmers, it was found that empowerment perspective was the most effective dimension followed by socio economic development, knowledge and capacity building, institutional support and agricultural input supply.

➢ Among banana farmers perception score was ranked as socio economic development followed by empowerment perspective, institutional support, knowledge and capacity building and agricultural input supply.

➢ Majority of the mission coordinators and facilitators (77.00 per cent) has perceived the effectiveness of MKSP scheme as good and 23.00 percent has rated the effectiveness as excellent category.

- The benefits listed out were socio economic benefits, input supply, drudgery reduction, credit support, market interventions and skill development.

- Percentage analysis was employed and the result showed that among the out puts, socio economic development and drudgery reduction were the most received benefits for both vegetable and banana farmers. Similarly benefits under input supply were least received by both respondent categories.

- Other than input supply and market interventions more than 75 per cent of respondents have received all the benefits. Input supply was the least received benefit for both vegetable (56.67%) and banana farmers (53.33%). Majority of the benefits were distributed to the farmers on group basis i.e. through JLGs and then they divide in between the members.

- Majority of respondents among both vegetable and banana farmers belonged to medium knowledge level i.e., 67 per cent and 63.33 per cent respectively.

- Mann whitney U test revealed that there was significant difference in the knowledge level of vegetable and banana farmers at 0.05 level.

- Majority of the respondents of both vegetable and banana farmers had shown medium level of Group dynamics Effectiveness which were 73.33 and 70 per cent respectively.

- Correlation analysis was done to understand the relationship of profile characteristics with Group Dynamics Effectiveness Index.

- Correlation revealed that, annual income, farm size, mass media, social participation, training received and economic motivation of vegetable farmers existed a significant relationship with group dynamics at 0.01 level and cosmopolitans and market orientation were significant at 0.05 level. However variables age, education, occupation, family and extension contact did not have any significant relationship with dependent variable.

- For banana farmer's occupation, farm size, annual income, mass media, social participation, cosmopoliteness, market orientation and economic motivation exists a significant relationship with group dynamics at 0.01 level and training received

was significant at 0.05 level. While variables like age, education, family and extension contact did not have any significant relationship with dependent variable.

➢ The dimensions considered under constraints felt by beneficiary farm women were input, time, financial, infrastructural, knowledge, market and scheme feature constraints.

➢ Among the constraints, market, financial and infrastructural constraints were the most influenced constraints for both vegetable and banana farmers. This was followed by knowledge, input, scheme feature and time constraints for vegetable farmers and input, knowledge, time and scheme feature constraints for banana farmers.

➢ Market constraints were the major concern felt by the respondents. Even though Kudumbashree is conducting weekly and monthly markets, most of the respondents were not fully able to make use of it.

➢ Item wise analysis revealed that problems in marketing the produce and high cost of cultivation were the most seriously felt constraints by both vegetable and banana farmers.

➢ Among the respondents, banana farmers were more benefitted from the fairs conducted by Kudumbashree. Also banana farmers got more benefit of VFPCK market. This resulted in experiencing more market constraints by vegetable farmers than banana farmers.

➢ Respondents especially vegetable farmers were mostly depending on middle man who buys their produce from the farm gate which resulted in reducing the profit for their produce.

➢ The dimensions considered under constraints felt by mission coordinators and facilitators were input, time, financial, infrastructural, man power and scheme feature constraints.

➢ The major constraints perceived by the mission coordinators and facilitators were financial constraints followed by infrastructural, scheme feature, manpower, time

and input constraints.

➢ Item wise analysis of constraints revealed that most serious constraints felt by mission coordinators and facilitators was lack of storage facilities, delay in receiving fund for disbursement and lack of special support to local varieties.

➢ Good agricultural practices followed by respondents were identified and recorded as soil and moisture conservation, nutrient management, pest and rodent management, disease management, pre harvest practices, harvest and post harvest practices, and storage and processing practices.

➢ Suggestions to improvise the schemes include

✓ For improving market interventions:
   ❖ More market facilities and opportunities have to be introduced through converting weekly and monthly markets in to daily markets
   ❖ Strengthen the institutional linkages - Farmers Service Cooperative Banks, input dealers, and marketing agents
   ❖ The groups should be given detailed orientation programme on the converging institutions for agriculture and the support systems availed from these institutions
   ❖ Tie up with these institutes should be made for the timely access of inputs and marketing facilities for the groups
   ❖ Explore the possibilities of farmer producer organizations

✓ For improving financial situation:
   ❖ Timely disbursement of incentives to farmers
   ❖ Provision of production incentives along with area incentives
   ❖ Include an emergency fund for meeting the unexpected loss due to natural calamity

✓ For improving infrastructural facilities
   ❖ Timely re-building of the infrastructural facilities lost during flood
   ❖ Building of cold storage facilities at Panchayat level

- ❖ Panchayat body should be oriented and strengthened to make necessary arrangements for availing lease land and fixing standardization for the lease amount
- ✓ For improving input supply:
  - ❖ Timely supply of inputs should be ensured
  - ❖ Seed banks should be strengthened
  - ❖ More trainings should be provided for Groups to made them aware about the reliable sources for input identification
  - ❖ Facilities from Agricultural universities, VFPCKs, KVKs and allied universities should be reached to the public and for this tie ups can be made with the departments for the timely supply and quality assurance for the products
- ✓ Promote formation of 'green army' groups by Kudumbashree members and youth at Panchayat level
- ✓ Support and more emphasis to be given for conservation of local varieties
- ✓ Awareness campaigns should be organized before the implementation of the schemes so as to make the beneficiaries familiar with its components
- ✓ Special orientation and training programmes on processing technologies and value addition should be organized

Future line of work

- ❖ Similar studies with the same objectives can be replicated in other districts for complete understanding of MKSP scheme in Kerala and drawing more valid conclusions.
- ❖ Studies for comparing MKSP scheme with other women supporting scheme for better understanding of achievements under MKSP scheme.
- ❖ To have an in depth analysis of the scheme, case studies of successful JLGs may be taken up to understand various components contributing to the success.

PLATE 1: **PHOTOS TAKEN DURING SURVEY**

Interview with the farm women at Nadathara

Vegetable cultivation by JLG members

Banana cultivation by group members' members of JLG

Banana field of JLG

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APPENDIX I QUESTIONNAIRE FOR BENEFICIARY FARM WOMEN

KERALA AGRICULTURAL UNIVERSITY (KAU)
COLLEGE OF HORTICULTURE
KAU P.O. THRISSUR 680656
Department of Agricultural Extension

PERFORMANCE ANALYSIS OF MAHILA KISAN SASHAKTHIKARAN PARIYOJANA IN THRISSUR DISTRICT

The information furnished will be used only for the research purpose and the data will be kept strictly confidential.

1.)   **PART A (Profile of the farm women)**

1) Name of the farmer:

 2) Age:

3) Educational qualification: Illiterate ☐ **Up to primary** ☐ **HS/HSS** ☐

                    Degree and above ☐
4) Occupation:

5) Family:

6) Annual house hold income:

7) Farm size:

Crops under cultivation

Crop	Area under cultivation

8) Mass media exposure
a) Frequency of contact: regular/sometimes/never
   Most commonly used mass media (put tick mark in the representative column)

Sl.No.	Statements	
1	Radio	
2	Television	
3	Newspaper	
4	Farm publication	
5	Internet	

9) Social participation

Put tick mark in the respective column

Sl. No.	Membership Status	Yes/No
1	Membership in one	
2	Member in two organization	
3	Member in more than two organization	

10) Extension contact

Sl. No.	Frequency of contact	Regular	Occasional/whe never problem occurs	Never/ no contact
1	Master farmer			
2	Agriculture officer			
3	Scientist			
4	Block Development Officer			
5	CDS member			
6	NGO worker			
7	Others if any.			

11) Training received

a) Number of trainings under gone from JLG:

b) Trainings attended:

12) Cosmopoliteness

1) Whether they have visited the neighboring villages: yes/no

2) Frequency of visit: Most frequently/ Frequently/ Sometimes/ Never

3) Purpose of visit   : group /individual/both

13) Market orientation

Sl. No.	Statements	SA	A	UD	DA	SDA
1	A farmer can get good price through value addition					
2	A farmer can get good price by grading his products					
3	Farmers are ready to wait for better price, provided they have better storage facility					
4	Market is the most important component as far as the farmer is concerned					
5	One should grow those crops which have more market demand					
6	One should cultivate those varieties which have more market demand					
7	Formation of niche market can help farmers to get more profit					
8	A farmer can get high price by following quality standards					
9	One should follow suitable planting time based on the market demand					

 SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= Strongly disagree

14) Economic motivation

Sl. No.	Statements	SA	A	UD	DA	SDA
1	A farmer should work aiming high yield and economic profit					
2	A successful farmer makes good profit					
3	A farmer should try any new farming idea which may help him to earn more money					
4	A farmer should cultivate according to market for better income					
5	A farmer should develop skills to maximize output with reducing cost of cultivation.					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= Strongly disagree

PART B
1) Perception of beneficiary farm women on effectiveness of MKSP scheme

1. Socio -economic development

Statements	SA	A	UD	DA	SDA
1. Schemes were relevant to the situation and addressed the immediate need of the farmer					
2. As a result of the schemes, production and productivity increased considerably					
3. Scheme helps in tracking market opportunities					
4. The profit from cultivation increased and thereby increase in annual income					
5. Provision of incentives helps in meeting immediate needs					
6. Various training programme as envisaged by the scheme helped to avoid the unnecessary cost incurring while cultivation of crops					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

2. Agricultural input supply

Statements	SA	A	UD	DA	SDA
1. Inputs were not available on time					
2. Quality of inputs distributed through the schemes was satisfactory					
3. The quantity of inputs supplied through the scheme failed to meet the demand requirement from farmers					
4. Implementation of scheme increased the usage of organic inputs					
5. Establishment of seed banks and bio pharmacy for providing non chemical inputs					
6. Agricultural machines made available through the schemes were highly useful					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

3. Institutional support

	Statements	SA	A	UD	DA	SDA
1.	Aided the farmers for market led farming					
2.	Extension personnel helped in tackling the problems of cultivation					
3.	Providing convergence with government agencies for procurement					
4.	Support for organic farming					
5.	Credit support through loan issuance and monitoring					
6.	Expert guidance during various stages of cultivation was lacking					

4. Knowledge and capacity building

	Statements	SA	A	UD	DA	SDA
1.	Improvement in attitude towards natural resource management especially wetland conservation					
2.	Increased knowledge on farming through extension services provided by trained local master farmers					
3.	Improved awareness and knowledge on cultivation practices					
4.	Increased attitude towards market led production					
5.	Schemes encouraged adoption of scientific cultivation practices					
6.	Developed more awareness and interest towards organic cultivation					
7.	Developed interest towards collective farming					

5. Empowerment perspective

	Statements	SA	A	UD	DA	SDA
1.	Recognition to masters farmer enhanced the motivation among the farming community					
2.	Generated various assets for common usage of members of JLG like grass cutter, arbana and sprayers					
3.	Increased capacity building through training					
4.	Scheme helped in mechanization of operations which leading to higher productivity of labour					
5.	Aroused interest among farmers for self employment					
6.	Revitalization of group farming activities through various operational supports to JLGs					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

2) Benefit accrued through MKSP scheme

Sl. No	Benefits accrued	Yes	No	Specify
1	**Socio - economic development**			
	1. Increased income from farm			
	2. Self employment motivation			
	3. Assistance provided helped to reduce cost of production			
	4. Convert fallow land in to cultivation			
	5. Increased interest towards collective farming			
2	**Input supply**			
	1. Seed banks established and maintained			
	2. Bio-pharmacy at FFC level to provide non chemical inputs			
	3. Machines available for farming at FFC level			
3	**Drudgery reduction**			
	1. Use of gender friendly tools and techniques			
	2. Increased access to farm implements			
	3. Increased participation in farm activities usually done by men			
4	**Credit support**			
	1. JLG bank linkage			
	2. Incentives and subsidies			
	3. Support to organic farming			
	4. Support to value addition			
5	**Market support**			
	1. Market intervention though festival fairs			
	2. Providing convergence with government agencies for procurement			
6	**Skill development**			
	1. Ability to identify pests, diseases and weeds			
	2. Increased technical knowledge on operation of machines			
	3. Promoted group feeling among JLG farmers			
	4. Improved knowledge on new technologies			
	5. Enriched knowledge on organic farming			
	6. Enhanced knowledge on market and price			

3) Knowledge level of farmers

Vegetable farmer

Seeds and seed sowing

1. Name two varieties of any of the cultivating vegetable?
2. Seed rate of crop cultivating?
3. Name the fungicide used for seed treatment?

Manures and Manuring

1. Recommended rate of application of N: P: K for your crop?
2. Time of application of manure?
3. Name two chemical fertilizers?

Planting

1. What is the correct spacing recommended for the crop?
2. Which is the correct planting time/season of crop?
3. Which is the critical stage for your crop?

Irrigation

1. Which are stages of crop critical for irrigation?
2. Name a micro irrigation method that can be adopted for your crop?
3. How much quantity of water is required for irrigating 1 ha of your crop?

Plant protection

1. Which is the major pest that attack vegetables?
2. Which the disease that considerably reduce the yield of vegetable?
3. Name two pesticides that can be used against fruit borer?
4. Name two bio pesticides?
5. Name a border crop that can reduce pest attack?

Harvest and post harvest

1. Which is the correct harvesting time for your crop?
2. What is the storage period of your crop?
3. Name two value added products of your crop?

Banana farmer

Seeds and seed sowing

1. Name a variety of banana that got GI recognition?
2. Seed rate of banana?
3. What is the storage period of seed?

Manures and Manuring

1. Recommended rate of application of N: P: K?
2. Time of application of manure?
3. Name two chemical fertilizers?

Planting

1. What is the correct spacing recommended for the crop?
2. Which is the correct planting time/season of crop?
3. What is the time duration of banana?

Irrigation

1. Which are stages of crop critical for irrigation?
2. Name method of irrigation that is adopted for your crop?
3. How much quantity of water is required for irrigating 1 ha of your crop?

Plant protection

1. Which is the major pest that attack banana?
2. Name two diseases of banana that affect the yield?
3. Name a chemical that can be used against banana psuedostem weevil?
4. Name two bio pesticides developed by CTCRI against banana weevil?
5. Name any disease resistant variety of banana?

Harvest and post harvest

1. Which is the correct harvesting time for your crop?
2. What is the storage period of banana?
3. Name two value added products of your crop?

4) Group dynamics

1) Details about the JLG group
Name of the JLG Group:

      Year of starting   :

      No. of members   :

Address of JLG group   :

2) Details about the members

Sl. No.	Members	Age	Main occupation

3) The major activities taking under JLG group:

4) Reason for taking membership:
……………………………………………………………………..
………………………………………………………………………
………………………………………………………………………
………………………………………………………………………
5) Changes brought by JLG in earnings:

6)Advantages felt by doing collective farming:

7) Source of Capital
   a) Owned capital   :
   b) Borrowed capital
   1. Name of the Bank :
   2. Credit amount   :
   3. Interest   :

8) Financial details of JLG group
   1. Annual expenditure :
   2. Annual income   :
   3. Profit   :

9) General information about group activities
   1. Rules and regulation for running the group 1.oral 2. Written 3. Don't know
   2. Do you update rules and regulations 1. Yes 2.No
   3. What is the periodicity of group meeting(monthly/weekly/fortnightly/no specific interval):
   4. Percentage of regularity of members attending the meetings:
   5. How you select the group leaders(nominated by members/election/rotating system/nominated by official o bank staffs/don't know):
   6. Is there transparency in JLG activities (Yes/No):
   7. How the decisions are made in group(collectively/decision by leader/voting/don't know):
   8. Did trust among group members influence group activities(Yes/No):
   9. Is there any major disagreement in the group(Yes/No)
   10. Is there any record maintained in JLG(minute book/attendance register/loan ledger/cash book/other/don't know):

10) Group dynamic effectiveness of selected JLGs

a) Attitude towards group management

Statements	**SA**	**A**	**DA**	**SDA**
1. Group management conducts meetings regularly				
2. Group management respects and considers your views and opinions				
3. Group management organizes trainings regularly				
4. Group management provides ample services at right time				
5. Group management addresses issues and problems of members and acts collectively to solve it				

SA=Strongly agree; A= Agree; DA=Disagree; SDA=Strongly disagree

b) Group cohesiveness

Statements	**VT**	**T**	**SWT**	**NT**	**NAT**
1. I feel that the group worked well because the members are attached to one another emotionally					
2. I feel dissatisfied and would like to quit the group immediately					
3. Members run to support each other during hardships					
4. Members do not rely on one another in the group for carrying out the group task					
5. Group members enjoy working with each other and manage any disagreement effectively					
6. I can sense a feeling of belongingness among the group					
7. I do not feel comfortable to work with some group members					

VT=Very true; T=True; SWT=Somewhat true; NT=Not true; NAT= Not At All true

c) Team work

Statements	VL	L	AVG	H	VH
1. Do members try to pressure group unity while achieving their objectives					
2. Is the group working as a team in all activities					
3. Do you feel the combined effort of the group brought much success					
4. Do you prefer to work alone without the help of your group members					
5. Are there individuals in your team who claim to here all recognition for the group achievement					
6. Does the leader/management guide the members and lead them as a team					

VL=Very low; L=Low; AVG=Average; H=High; VH=Very high

d) Decision making procedure

Statements	AL	ST	FT	R	N
1. Leader/President tries to get full participation of the members while taking decision					
2. I feel that majority's decision is valid in JLG					
3. Usually all group decisions are taken jointly by all members in a participative manner					
4. I feel that other members do not seek my opinion in group decision					
5. I usually prefer to take my decision, whether personal or concerning the groups all by myself					

*AL=Always; ST= Sometimes; FT=Few times; R= Rarely; N=Never

5) Constraints in adopting the scheme:

Sl. No	Statements	MS	S	LS	Reason
1	**Input constraints**				
	Inadequate supply of inputs				
	Lack of good quality inputs				
2	**Time constraints**				
	Lack of timely availability of inputs				
	Lack of timely availability of fund				
	Lack of timely monitoring				
3	**Financial constraints**				
	Lack of proper financial assistance				
	High labour cost				
	High cost of cultivation				
	Delay in receiving payment				
4	**Infrastructure constraints**				
	Lack of availability of land for farming				
	Water scarcity for farming				
	Lack of storage facility				
5	**Knowledge constraints**				
	Lack of technical knowledge				
	Lack of knowledge about plant protection chemicals				
	Poor adoption of scientific cultivation practices				
	Lack knowledge on value addition				
	Lack of knowledge on organic farming				
6	**Market constraints**				
	Lack of assistance in procurement				
	Inadequate assistance in timely marketing of produce				
	Problems in marketing the produce				
7	**Scheme feature constraints**				
	Complexity involved in availing the scheme				
	Lack of components in scheme addressing crop loss due to various climate vagaries				
	Lack of skill development trainings				
	Lack of special support to local varieties				
Others, if any:					

*MS = Most serious; S = Serious; LS = Least serious

6) List of Good agricultural practices followed

Sl. No.	Statements	Yes	No
1	Are you strictly follows the Conditions for application of fertilizer near water courses		
2	Do you practice Crop rotation		
3	Are you follows the correct Animal density		
4	Did Capacity and construction of manure storages follows the standards		
5	Periods when the application of fertilizer is inappropriate		
6	Establishment of fertilization plans		
7	Are you follows POP for Rate and uniformity of spreading fertilizer and livestock manure		
8	Do you have any shallow dug wells for drinking water		
9	Are you follows integrated method for pest and disease control		
10	Use of resistant varieties		
11	Proper field monitoring for identifying incidence of insect and pest		
12	Avoiding the use of plant protection chemicals during harvesting stage		
13	Use of only registered plant protection		
14	Use of safety accessories while using chemicals		
15	Any other		

7) Suggestions for improving the effectiveness of scheme

APPENDIX II QUESTIONNAIRE FOR MISSION COORDINATORS AND FACILITATORS

KERALA AGRICULTURAL UNIVERSITY (KAU)
COLLEGE OF HORTICULTURE
KAU P.O. THRISSUR 680656
Department of Agricultural Extension

PERFORMANCE ANALYSIS OF MAHILA KISAN SASHAKTHIKARAN PARIYOJANA IN THRISSUR DISTRICT

The information furnished will be used only for the research purpose and the data will be kept strictly confidential.

PART A (Profile of the mission coordinators and facilitators)

1. **Name**
2. **Name of the Block and Panchayat:**
3. **Gender:**
4. **Age:**
5. **Academic qualification**
6. **Designation:**
7. **Official address:**

PART B

1) Perception of mission coordinators and facilitators on effectiveness of Mahila Kisan Sashaktikaran Pariyojana scheme (Dependent Variable)

1.Socio -economic development

Statements	SA	A	UD	DA	SDA
1. Schemes were relevant to the situation and addressed the immediate need of the farmer					
2. As a result of the schemes, production and productivity increased considerably					
3. Scheme helps in tracking market opportunities					
4. The profit from cultivation increased and thereby increase in annual income					
5. Provision of incentives helps in meeting immediate needs					
6. Various training programme as envisaged by the scheme helped to avoid the unnecessary cost incurring while cultivation of crops					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

2. Agricultural input supply

Statements	SA	A	UD	DA	SDA
1. Inputs were not available on time					
2. Quality of inputs distributed through the schemes was satisfactory					
3. The quantity of inputs supplied through the scheme failed to meet the demand requirement from farmers					
4. Implementation of scheme increased the usage of organic inputs					
5. Establishment of seed banks and bio pharmacy for providing non chemical inputs					
6. Agricultural machines made available through the schemes were highly useful					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

3. Institutional support

Statements	SA	A	UD	DA	SDA
1. Aided the farmers for market led farming					
2. Extension personnel helped in tackling the problemsof cultivation					
3. Providing convergence with government agencies for procurement					
4. Support for organic farming					
5. Credit support through loan issuance and monitoring					
6. Expert guidance during various stages of cultivation was lacking					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

4. Knowledge and capacity building

Statements	SA	A	UD	DA	SDA
1. Improvement in attitude towards natural resource management especially wetland conservation					
2. Increased knowledge on farming through extension services provided by trained local master farmers					
3. Improved awareness and knowledge on cultivation practices					
4. Increased attitude towards market led production					
5. Schemes encouraged adoption of scientific cultivation practices					
6. Developed more awareness and interest towards organic cultivation					
7. Developed interest towards collective farming					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

5. Empowerment perspective

Statements	SA	A	UD	DA	SDA
1. Recognition to masters farmer enhanced the motivation among the farming community					
2. Generated various assets for common usage of members of JLG like grass cutter, arbana and sprayers					
3. Increased capacity building through training					
4. Scheme helped in mechanization of operations which leading to higher productivity of labour					
5. Aroused interest among farmers for self employment					
6. Revitalization of group farming activities through various operational supports to JLGs					

*SA= Strongly Agree; A=Agree; UD=Undecided; DA=Disagree; SDA= strongly disagree

2) Factors influencing the implementation of schemes

Factors	MI	SWI	NI
1.1. Management approach of mission coordinators and facilitators			
1. Awareness about the interest and needs of the group			
2. Providing leadership for setting up of groups			
3. Establishing communication among groups and giving necessary help and advice			
1.2. Resource aspects			
1. Timely release of fund			
2. Timely availability of inputs			
3. Timely technical support			
4. Adequate quantity of inputs			
5. Availability of institutional facilities			
6. Availability of storage facilities for inputs supplied			
7. Availability of land and water resources			
1.3. Beneficiary aspects			
1. Area under cultivation			
2. Crop under cultivation			
3. Group dynamics among the members in JLGs			
4. Farming experience of JLGs			
5. Attitude of beneficiaries toward collective farming			
1.4. Scheme features			
1. Criteria for selecting beneficiaries			
2. Scheduling of activities under the scheme			
3. Financial support			
4. Convergence with development programmes of other agencies			

* MI = Most influenced; SWI = somewhat influenced; NI = Not influenced

3) Constraints felt by mission coordinators and facilitators

Sl. No.	Statements	MS	S	NS	Reason
1	**Input constraints**				
	1. Inadequate supply of inputs				
	2. Lack of good quality inputs				
2	**Time constraints**				
	1. Lack of timely availability of inputs				
	2. Lack of timely availability of fund				
	3. Lack of timely monitoring				
3	**Financial constraints**				
	1. Lack of proper financial assistance				
	2. High labour cost				
	3. High cost of cultivation				
	4. Delay in receiving payment				
4	**Infrastructure constraints**				
	1. Lack of availability land for farming				
	2. Water scarcity for farming				
	3. Lack of storage facility				
5	**Man power constraints**				
	1. Labour shortage				
	2. Shortage of Officers				
6	**Scheme feature constraints**				
	1. Complexity involved in availing the scheme				
	2. Lack of components in scheme addressing crop loss due to various climate vagaries				
	3. Lack of skill development trainings				
	4. Lack of special support to local varieties				
Others, if any:					

*MF = Most serious; S = Serious; NS = not serious

4) Suggestions for improving the scheme effectiveness

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PERFORMANCE ANALYSIS OF MAHILA KISAN SASHAKTIKARAN PARIYOJANA (MKSP) SCHEME IN THRISSUR DISTRICT

By
Rashida V.K.
(2018-11-082)

ABSTRACT OF THE THESIS

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DEPARTMENT OF AGRICULTURAL EXTENSION

COLLEGE OF HORTICULTURE

VELLANIKKARA, THRISSUR- 680656

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ABSTRACT

Women play a significant role in the development of agriculture and allied fields. In spite of being a key part of the economy, women face much discrimination in terms of wage, credit support and access to various other services. The migration of male workers to urban areas in search of remunerative jobs is one of the factors contributing to the evolution of a kind of transformation in Indian farm sector. And this emerging phenomenon is nothing but a feminization of farm activities. With an objective to empower women in agriculture, government of India has introduced Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in 2011. Analysis of the effectiveness of the scheme can provide key inputs for designing further promotional strategies. Keeping these issues in view, the study entitled "Performance Analysis of Mahila Kisan Sashaktikaran Pariyojana (MKSP) scheme in Thrissur district" has been framed.

The present research work was taken up to study about the effectiveness of MKSP scheme in Thrissur district. The components of the scheme were delineated. The study has also analyzed the perception of beneficiary farm women, mission coordinators and facilitators on the effectiveness of MKSP scheme. Various factors influencing the implementation of the scheme were also identified. Knowledge level of beneficiary farm women on cultivation of vegetables and banana and group dynamics of the selected women Joint Liability groups were also analyzed. Along with that influence of profile characteristics on group dynamics were also studied. Apart from this the benefits and constraints of the programme were also analyzed. For this, thirty number each of beneficiary farm women who were cultivating vegetables and banana under MKSP scheme from Nadarhara Panchayat of Ollukkara block were selected as the farmer respondents. Thirty mission coordinators and facilitators from the three blocks *viz*; Ollukkara, Mala and Iringalakkuda constituted the other category of respondents. The secondary data were collected from the Kudumbashree office and various government websites.

The details collected about MKSP scheme implemented in Thrissur district through Kudumbashree mission from 2011-12 onwards revealed that project has

surpassed many of the targets and at the same time it was lag behind in input supply due to failure in establishing seed banks. The major components identified under MKSP scheme were training and capacity building, credit support, extension services, market interventions, input supply and value addition. Scheme feature factors were perceived as the most influencing factors affecting implementation stage followed by resource aspects, beneficiary aspect and management approach of mission coordinators and facilitators.

It was found that majority of the vegetable farmers has perceived the effectiveness of MKSP scheme as excellent while majority of banana farmers and mission coordinators and facilitators perceived it as good. Percentage analysis was employed and the result showed that among the out puts, socio economic development and drudgery reduction were the most received benefits for both vegetable and banana farmers. Similarly benefits under input supply were the least received component by both respondent categories.

Majority of both vegetable and banana beneficiary farm women w belonged to 'middle' age group (35 to 50), had high school/higher secondary education,), had farming as major occupation, had middle annual income(50001- 100,000INR), and cultivation was mainly in leased land. But the family of majority of vegetable farmers was medium (3 to 4 members) and that of banana farmers was large family (5 to 6 members). They were also having differences in farm size as majority of vegetable farmers were medium farmers and banana farmers were small farmers. Both vegetable and banana farmers were found to have medium level of mass media exposure, extension contact, market orientation, economic motivation, training received, cosmopoliteness and high level of social participation.

Majority of respondents in both beneficiary categories belonged to medium knowledge level and Mann whitney U test revealed that there was a significant difference in the knowledge level of vegetable and banana farmers at 0.05 level. Similarly, Majority of the respondents of both beneficiary categories had showed medium level of Group dynamics Effectiveness. It was revealed that, variables like annual income, farm size,

mass media, social participation, training received, economic motivation, cosmopolitans and market orientation had a significant relationship with group dynamics for both vegetable and banana farmers. Occupation of banana farmers had also showed significant relation with its GDEI.

Among the constraints, market, financial and infrastructural constraints were the most influenced constraints for both vegetable and banana farmers. But for the mission coordinators and facilitators the major constraints perceived were financial and infrastructural constraints. Good agricultural practices followed by respondents were identified and recorded as soil and moister conservation, nutrient management, pest and rodent management, disease management, weed management, pre harvest practices, harvest and post harvest practices, and storage and processing practices. The important suggestions include increasing the markets by converting weekly markets in to daily markets, detailed orientation for JLGs on converging agencies for exploitation of more markets, enhancing the input supply through strengthening the seed banks and proper system for availing lease land.

In a nutshell, the performance of Mahila Kisan Sashaktikaran Pariyojana scheme was effective in Thrissur district and it enhanced the capacities of women in collective farming. Feminization of agriculture sector being a key factor in both agriculture and economic development of the country, MKSP would able to empower the women through its various components. However, need for further development still exists especially in components like input supply and market interventions in Kerala.