

**INSTITUTIONALIZATION OF DECENTRALIZED
PLANNING IN AGRICULTURE IN KERALA: TRENDS,
DETERMINANTS AND POLICY IMPERATIVES**

ABDUL JABBAR, P.K.

2016-21-001



DEPARTMENT OF AGRICULTURAL EXTENSION

COLLEGE OF AGRICULTURE

VELLANIKKARA, THRISSUR - 680 656

KERALA, INDIA

2022

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DETERMINANTS AND POLICY IMPERATIVES**

by

ABDUL JABBAR, P.K.

2016-21-001

THESIS

Submitted in partial fulfilment of the requirement for the degree of

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Faculty of Agriculture

Kerala Agricultural University



DEPARTMENT OF AGRICULTURAL EXTENSION

COLLEGE OF AGRICULTURE

VELLANIKKARA, THRISSUR - 680 656

KERALA, INDIA

2022

DECLARATION

I, hereby declare that this thesis entitled “**INSTITUTIONALIZATION OF DECENTRALIZED PLANNING IN AGRICULTURE IN KERALA: TRENDS, DETERMINANTS AND POLICY IMPERATIVES**” is a bonafide record of research work done by me during the course of research and the thesis has not previously formed the basis for the award to me of any degree, diploma, associateship, fellowship or other similar title, of any other University or Society.



ABDUL JABBAR P K

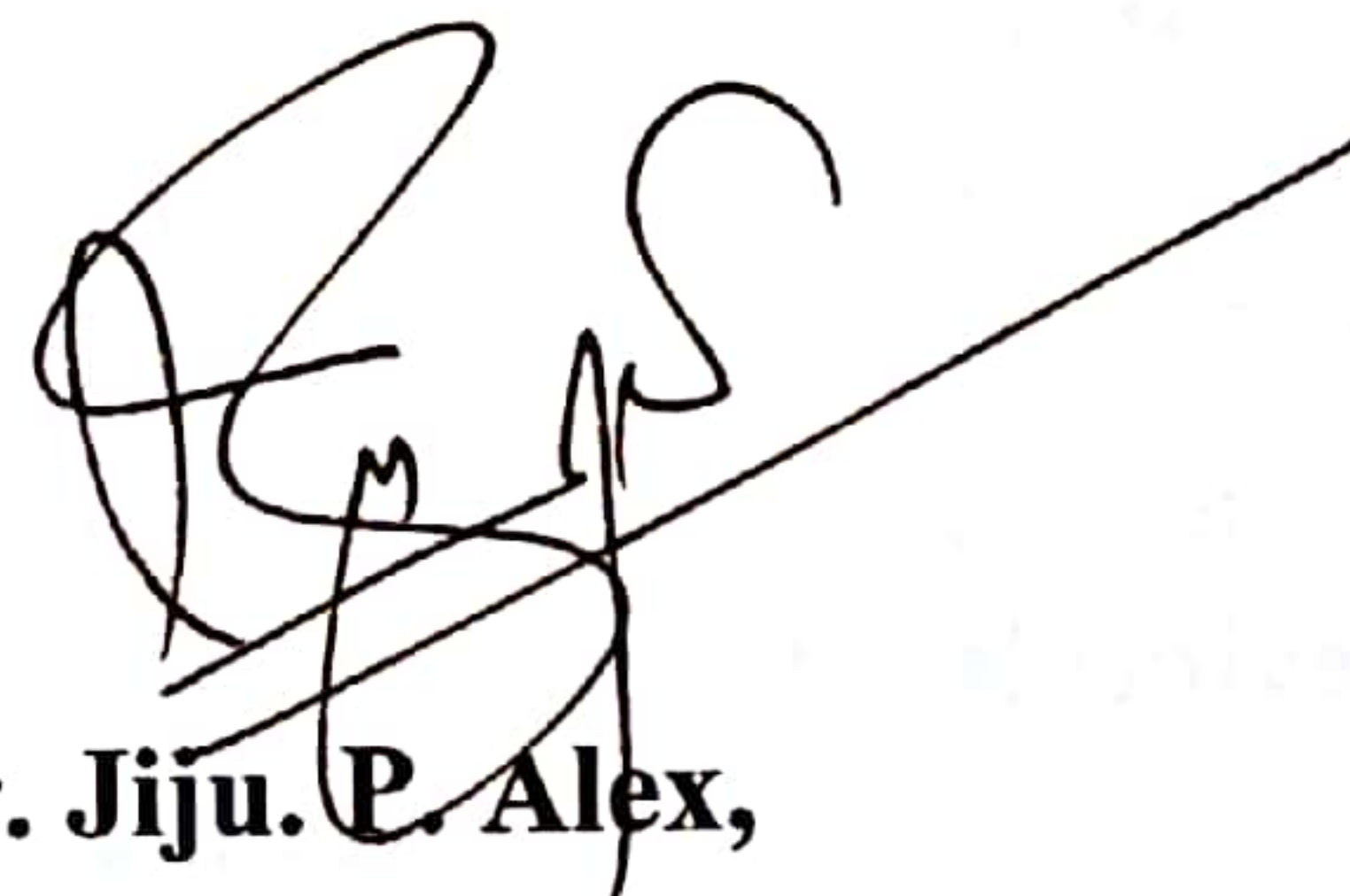
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Vellanikkara,

Date: 30.3.22

CERTIFICATE

Certified that this thesis entitled **“INSTITUTIONALIZATION OF DECENTRALIZED PLANNING IN AGRICULTURE IN KERALA: TRENDS, DETERMINANTS AND POLICY IMPERATIVES”** is a record of research work done independently by **Mr. Abdul Jabbar.PK (2016-21-001)** under my guidance and supervision and that it has not previously formed the basis for the award of any degree, diploma, fellowship or associateship to him.



Dr. Jiju. P. Alex,
Professor (Agricultural Extension)
Communication Centre, Mannuthy
Kerala Agricultural University
Thrissur – 680 651

Vellanikkara,

Date: 30.3.22

CERTIFICATE

We, undersigned members of the advisory committee of Mr. Abdul Jabbar.P.K. (2016-21-001) a candidate for the degree of **Doctor of Philosophy in Agriculture** with major in Agricultural Extension, agree that this thesis entitled **“INSTITUTIONALIZATION OF DECENTRALIZED PLANNING IN AGRICULTURE IN KERALA: TRENDS, DETERMINANTS AND POLICY IMPERATIVES”** may be submitted by Mr. Abdul Jabbar. P.K. (2016-21-001), in partial fulfilment of the requirement for the degree.


Dr. Jiju P Alex

Professor

Communication Centre, Mannuthy

Kerala Agricultural University

Thrissur – 680 651

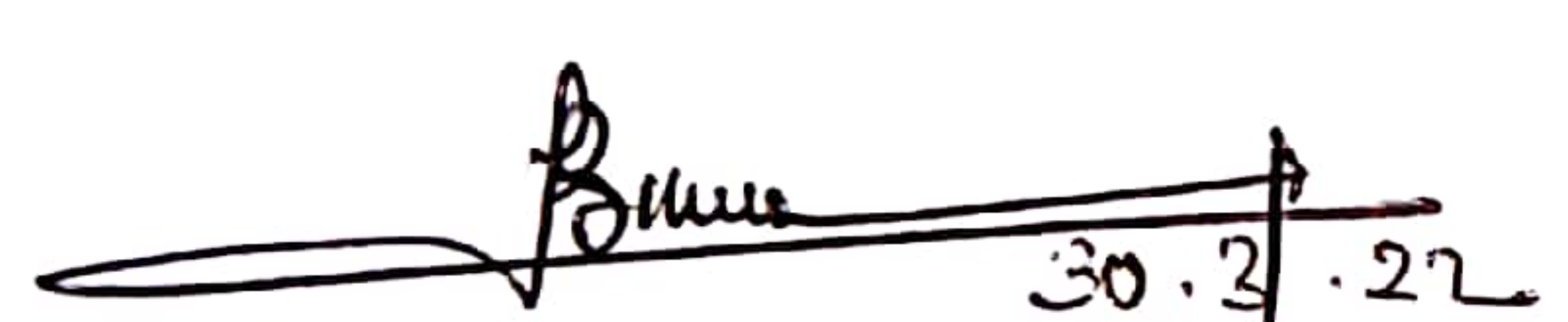

Dr. Jayasree Krishnankutty

Professor (Agricultural Extension)

Directorate of Extension,

Kerala Agricultural University

Thrissur – 680 651

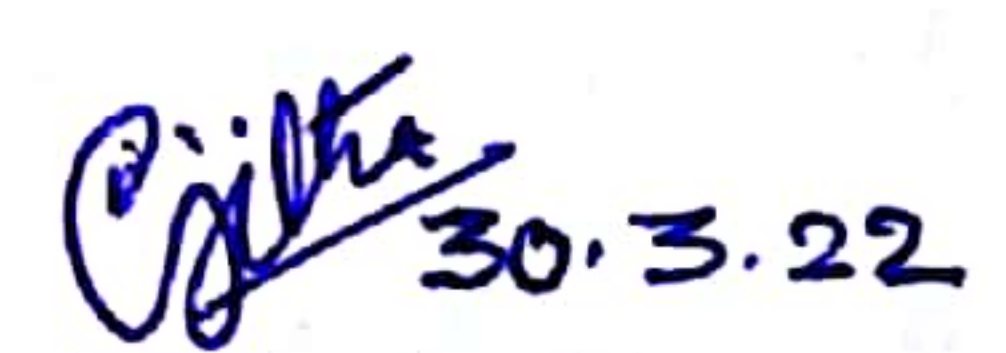

Dr. Bino P Bonny

Professor & Head

Department of Agricultural Extension

College of Agriculture, Vellanikkara,

Thrissur – 680 656


Dr. Ajitha T K

Professor

Department of Agricultural Statistics

College of Agriculture, Vellanikkara,

Thrissur – 680 656


Dr. Helen, S

Professor (Agricultural Extension)

Central Training Institute, Mannuthy,

Kerala Agricultural University

680651


EXTERNAL EXAMINER

Dr. Thamban C.

Principal Scientist (Agrl. Extension)

ICAR-CPCRI, Kasaragod

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1. INTRODUCTION

Globally, developing economies are looking for innovative solutions around democratic decentralization, participative local governance and citizen centred service delivery to solve their complex problems and achieve equitable and sustainable development. It is to be noted that participation of people in development is possible only in the context of decentralized administration. Decentralization and participation are complementary as participatory mode of governance requires decentralization and successful decentralization presupposes participation. This in turn calls for devolution of power and resources to Local Self Government Institutions (LSGI) to enable them to plan and implement development programmes at the grassroots level. From experiences across the world, this would be the pragmatic approach to ensure participation of people in decision making process.

Further, decentralised planning of development programmes has been widely accepted as an effective strategy to reduce marginalization of the weaker sections in decision making process. It also would ensure efficiency and equity in administration and sustainability of the development process due to its proximity with the grassroots level institutions and functionaries. Moreover, participation of people in decision making would be an effective conduit to distribute benefits to the people with least costs. On account of this and the other reasons cited above, decentralisation has become a major reform agenda in developing countries.

Decentralisation is considered to be a process of deepening democracy, which would make local development a challenge for the society to tackle with (Palanithurai, 2004). As stated earlier, the vital part of participation is effective devolution of power to the people, which is a pre requisite for empowerment. Citizens thus become agents of development rather than passive recipients. In addition, people's participation strengthens governance by making it more responsive to their aspirations and preferences of the people. However, in reality, participation of people in decision making processes has been ignored in the past, causing stagnation in development and performance deficiencies of developmental institutions. (Gopalappa.et al. 2011).

In India, the 73rd and 74th amendments to the constitution made democratic decentralisation the essential feature of the governance system in the country. These amendments defined the authority and status of the three tier local governments and urban local governments and rendered them mandatory. Moreover, a framework for democratic decentralisation was also formulated. Thus, the Panchayati Raj system was instituted as the strong third level polity in India's federal political system. It is regarded as "*institution of local self-government*". For instance, Gramasabha, which is a mandatory feature of this system and involving all voters of the village is considered to be the political space for citizen to participate in the decision-making process. The local self-governments would also be, inter alia, capable of formulating development programmes on their own. In order to further the scope of the amendments, the states were given mandate to enact their own legislations on democratic decentralisation following the broad framework outlined in the constitutional amendments.

In spite of the autonomy given by articles 243(G) and 243(H) of the constitution, the scope and degree of autonomy had remained at the discretion of states. However, taking advantage of the provisions of the 73rd and 74th amendments, Kerala successfully evolved a paradigm of decentralized and participatory development planning. This involved the historical decision of the Government of Kerala to devolve about 30 per cent of the total plan funds and transfer all the developmental departments to the LSGIs. This was also accompanied by formalizing a process of participatory planning by involving the people at different stages of formulation of development programmes. This process was initiated as a massive campaign viz. the Peoples' Plan Campaign in the ninth five-year plan led by the Local Self Government Institutions. This campaign included five phases of distinct activities to enable participatory planning of local development interventions. In the first phase grama sabhas were convened and people at the local level mobilised to assess the local felt needs. In the second phase, `development seminars were held in every village panchayat, followed by formation of `task forces' for the preparation of `development projects'. About 12,000 task forces were formed that worked out to around 12 task forces per village panchayat. In the third phase, `development reports' were prepared according to a format suggested by the State Planning Board, giving details such as the nature of activities envisaged and financial and organisational aspects. During the fourth phase, the plans of the grassroot tiers were prepared. The fifth phase was meant for the

preparation of annual plans for block and district panchayats by integrating the lower-level plans and, presumably, to develop their own plans that would be complementary to the village panchayat plans. During the sixth phase Volunteer Technical Corps (VTC) consisting of volunteers with expertise in selected fields was formed to evaluate the feasibility of projects formulated by LSGIs and suggest modifications. Expert committees at the Block, Municipality and Corporation levels were formed by drawing from VTC members to help the District Planning Committee in appraising plan and projects on the one hand and rendering technical assistance to local level planning on the other hand. There had been modifications in subsequent phases of the programme from time to time to address emerging issues.

People's plan campaign has undergone several changes during the last two decades. The conscientization phase of the campaign which was intended to educate the bureaucracy, political leadership and the people about the dynamics and structure of participatory planning gave way to institutionalization of the process during the 10th plan period, during which period the programme was rechristened as 'Kerala Development Plan' (KDP). Subsequently, during the 11th plan, the planning mechanism was further revamped to consolidate the institutionalization process. The approach of development adopted during 12th plan also adopted strong steps to strengthen various institutions and processes of planning based on previous experiences. The 13th plan adopted a watershed-based approach to address problems related to agriculture, drinking water, and management of natural resources and formulation of district plan.

Local governments in Kerala have been transformed as effective instruments for formulating and implementing development programmes through people's participation. They are meaningfully empowered to discharge such functions through strategic devolution of functions, functionaries and funds. This decentralised planning process through local self-governments has been quite unique because of three aspects – financial devolution, plan formulation and implementation, and extent of people's participation. Though devolution of local self-governments is based on a formula without discretion ensuring equity, the efficacy of planning process at grass roots have assumed varied levels of performance due to several constraints.

The performance of LSGIs since the introduction of decentralised planning process in Kerala had been subjected to objective assessment by two committees instituted by the Government of Kerala. The process of democratic decentralisation envisaged in Kerala was evaluated in 1996 by a committee on decentralization of powers (popularly known as the Sen Committee) which submitted its reports in December 1997. In compliance of the committee's recommendations, comprehensive amendments of the Kerala Panchayati Raj Act of 1994 and Kerala Municipality Act of 1994 were enacted in 1999.

While analysing the service delivery mechanism in decentralized system, Oommen (2004) revealed that service delivery to the poor was weak because of reasons such as lack of commitment for mobilization of the poor, poor accountability of elected officials, lack of political commitment to share power and inadequate resources and expertise in the local governments. Afterwards the committee headed by the same author in its reported submitted in 2009 found that despite strict guidelines, projects had not come up as desired in the production sector and hence Plan priorities and the allocation pattern of the LGs have to be reversed in favour of greater production. While analysing the sub optimal performance of grama panchayaths, Planning Commission (2013) also outlined that grossly inadequate devolution, existence of parallel systems, excessive control by bureaucracy, tied nature of funds, reluctance to use fiscal powers, status of the Gram Sabha as some of the deficiencies.

All the above conditions have necessitated institutionalization of decentralised planning. Datta and Sodhi (2020) opined that local self-governments, being the locus of decentralized planning, must institutionalize participation of the target groups. Decentralised planning in Kerala got institutionalised formally in the course of implementation of this process over different five-year plans. The process which started as a campaign with great social mobilisation and mass participation got evolved into a formal process, following general principles of participatory planning and implementation and mandatory processes to ensure accountability and transparency.

The long-drawn process of institutionalization of decentralized planning has impacted grassroots level planning in core sectors. Obviously, the process of institutionalization has impacted grassroot level planning for agricultural development in the state in several ways. For instance, the guidelines for planning on norms of

subsidies and ceilings of sectoral allocation of plan funds had been drastically changed from time to time. Different phases of institutionalization had also witnessed changes in the emphases and priorities in agricultural sector. There had also been changes with regard to the extent of integration between different tiers of local bodies and among different development departments.

It was in view of the above, the objectives of the study were formulated as follows:

OBJECTIVES OF THE STUDY

- To describe the process of institutionalization of decentralized planning in agriculture in Kerala.
- Transitions in the administrative framework and policy environment of decentralized planning.
- The determinants of the efficacy of decentralized planning in agriculture
- The nature of their influence as experienced by major actors of the process.
- The accomplishments in the agricultural sector since institutionalization of decentralized planning.
- Policy imperatives of the experiences of institutionalization

SCOPE AND IMPORTANCE OF THE STUDY

This study, which was formulated in the backdrop of the transformations in the decentralized planning paradigm, would primarily help policy makers understand the impact of these changes on the agricultural sector in the state. It would also help assess the performance of institutions in agricultural development under different policy environments. Moreover, the study would help evolve strategies for better institutionalization of planning in agriculture. Study on role performance of extension personnel, *gramasabha* and working groups would help the administrators formulate effective communication and extension strategies.

The measurement procedure developed for quantification of variables would be a useful contribution to the body of research in agricultural extension. Results of the study, particularly the factors affecting the perceived efficacy of participatory planning process would help us shape up better planning and facilitation processes. Assessment

of the role performance of agricultural officers in decentralized planning would unearth the deficiencies in their performance and the reasons thereof. That would also give inputs for formulating training strategies and to find out optimum factors that affect farmers' participation in decentralised planning. Analysing the pattern of achievements by the LSGIs in various development sectors, typology of projects and various determinants of efficacy would give directions as to how to forge better strategies for capacity building and technology back stopping at the grassroots level to facilitate decentralised planning in agriculture.

Limitations of the study

Since the study was carried out as part of the doctorate degree programme by a research scholar, time and resources to collect data from a large sample were limited. This would restrict the scope of generalisation of the study. Though the study of the efficacy of the process of decentralised planning was based on the responses of a set of stakeholders who had participated in decentralised planning at the grassroots level, the processes were not observed directly everywhere. However, care has been taken to draw the responses as objectively as possible by verifying the facts with available documents.

Presentation of the study

The report of the study is presented in five chapters. The first chapter pertains to the rationale of the study with objectives of the study along with its scope and limitations. In the second chapter the review of literature on which this study is based are presented. The material and methods which have bearing on measurement of variables, with statistical procedures used are presented in the third chapter. The fourth chapter contains results and discussion based on obtained results. The fifth chapter contains the summary and conclusion of the thesis. It is followed by bibliography, abstract and appendices of the study.

2. REVIEW OF LITERATURE

Review of literature aims at developing a theoretical framework of the study, with relevant definitions, ideas, concepts, observations and findings on various aspects of the topic. It presents the literature in an organised manner and critically analyses the information gathered by identifying gaps in current knowledge; by showing limitations of theories and points of view; and by formulating areas for further research. The prime focus of this chapter is to analyse various theoretical and empirical information on different aspects of the present study and develop perspectives and framework of enquiry. A systematic review of the literature, which is meaningful and relevant to the present study has been made and presented in this chapter under the following sub-headings:

- 2.1. Democratic decentralization and its advantages
- 2.2. Concept of decentralized planning
2. 3. Institutionalization of decentralized planning in in Kerala
- 2.4. Deficiencies in institutionalisation of decentralised planning
- 2.5. Perceived efficacy of decentralized planning process by local self-government institutions
- 2.6. Farmer participation in planning and development
- 2.7. Determinants of efficacy of decentralized planning in agriculture through local self-government institutions
- 2.8. Accomplishments of decentralized planning in agriculture sector by local self - government institutions
- 2.9. Role performance of agricultural officers in decentralized planning
- 2.10. Constraints and policy imperatives for better institutionalization of participatory planning process
- 2.11. Theoretical framework of the study

2.1. Democratic decentralisation and its advantages

Many scholars have described decentralisation in different ways. It is commonly defined as the delegation of power from a central authority to regional and local authorities. In democratic systems, the core aim of decentralisation is empowering people through strengthened local governments. Sen (1999) described that transferring authority, responsibility and resources from the centre to lower levels of administration, brings the governments closer to the citizens fostering their participation in decision making. He viewed it as delegation of decision making to the people, which would strengthen democracy at the grassroots level. It would enable the people to increase their capabilities, participate productively in the market and earn their freedom. Ultimately, it makes both governance and development inclusive.

Democratic decentralization, on the other hand has been generally explained as the development of reciprocal relationships between central and local governments and between local governments and citizens. Advantages of democratic decentralisation included delivery of service at the grassroots level, reduction of corruption and enhancement of accountability and answerability (Mathew, 1999, Aziz, 1994). Focusing on decentralization and devolution, Kuttappan (2017) observed that the process intended to develop political authority at the bottom level of local governments by transferring administrative, functional and fiscal resources from upper levels of governments. Autonomy and accountability would accelerate the efficiency of services to the people. However, while analyzing the service delivery mechanism in decentralized systems, Oommen (2004) underlined the need to strengthen decentralization on account of the fact that service delivery to the poor was weak due to lack of commitment for mobilization of poor, poor accountability of elected officials, lack of political commitment to share power and inadequate resources and expertise in the local governments. It was also observed that ambiguity in roles, existence of parallel mechanisms for flow of funds had weakened the autonomy of local governments, which was a looming threat to decentralization.

Reiterating the above, Alex and Sulaja (2012) observed that decentralization of governance structure had resulted in better delivery of vital services to the poor. For instance, interactions between officials and farmers in *gramasabhas*, the grassroots level platforms improved public service delivery, generating new solutions and useful

institutional learnings. Oommen (2014) further observed that decentralization brought the people close to decision makers, thereby providing the community with the opportunity to gain power which would be manifested through enhanced transparency, accountability and efficiency in using public resources. Nonetheless, Samanta and Nayak (2015) commented that participation of people had reduced over a period and quite often participation did not contribute to decision making.

Reflecting on the capacity of decentralization on fostering development for the marginalized, Datta (2019) outlined various ways of building their capabilities: making platform for people to deliberate on their preference, allocation of resources to the neediest, and helping the side-lined to raise their demands. While analysing the interconnectedness among extent of decentralisation, inequality and social capital in a decentralised system of Kerala, Rahul (2019) observed positive association between social capital and extent of decentralisation and negative relation between extent of decentralization and levels of inequality.

As inferred from the observations above, decentralisation strengthens democracy as it transfers responsibility, authority and resources with a space for people to participate. It promotes inclusiveness and delivers services with accountability. Through democratic decentralisation, people gain power through enhanced transparency and accountability. Democratic decentralisation particularly develops social capital, which would further enhance empowerment of people.

2.2. Concept and process of decentralised planning

An important aspect of democratic decentralisation is the role of lower tiers of governments in activities related to development, particularly planning and implementation of development programmes. In India, democratic decentralisation intended empowerment of local self-governments, as envisaged in the historic 73rd and 74th amendments of the constitution, which paved the way for establishing better mechanisms for ensuring people's participation in development planning. Article 243-G of the Constitution endowed the panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may contain provisions for devolution of power and preparation of plans for economic development and social justice.

Decentralised planning is very much important for a country like India, where majority of the population live in rural areas. Several studies have described the significance of decentralised planning. Hanumantha Rao (1989) underlined the importance of decentralised planning as a means to achieve improvements in productivity through speedy adoption of modern technology as well as better allocation and utilisation of available resources and greater impact of such productivity improvements on the living conditions of the weaker sections of population.

Oakley (1991) observed that participation fostered sustainable development and participatory mode of governance needs decentralization. He also observed that successful decentralization favoured participation.

Issac and Harilal (1997) critically observed that despite acclaimed advantages of decentralisation of planning and repeated commitments made in its favour, planning process in India had remained as a highly centralised affair. According to them, a multi-level planning of development process originating from below would be the most effective way of making the planning process effective. They also revealed that a major reason for the failure of earlier attempts to decentralise planning was the absence of a popular administrative structure below the state level.

Alex (2021) reported that Kerala with its own legacy of democratic decentralization, drew up a specific plan in 1996 for democratic decentralization. This was made possible by establishing three levels of local governments at the district, block (the middle tier), and villages and devolving political and financial authority to these institutions. This included four distinct measures: (1) transferring key development departments in the rural sector and their personnel to the local self-governments; (2) devolving administrative authority to plan, implement, and monitor development program at the grassroots level; (3), devolving as much as 30% of development grants of the state government to the local governments; and (4) formulating an innovative framework of processes and procedures to draw up local-level development plans in all key sectors that have direct impact on the people.

As observed by Jayal et al. (2007) local self-government institutions had remained archaic without any relevant role in local development and the new legislative framework had infused significant vigor into these systems.

As the local governments were transformed into institutions with greater mandates, more authority and resources, a new web of linkages with other institutions and agencies became necessary.

As described by Vijayanand (2009), drastic changes were made in the administrative structure to make decentralised planning functional. First, as much as twelve development departments were transferred to the local governments to work under the supervision of the political leadership. Second, the state government formulated a robust system of delegating powers and resources to the local governments and drew up a well-orchestrated process to formulate grassroots-level development projects. This was primarily done by means of engaging people in the village councils by facilitating free interaction and recording their needs and reflections systematically to formulate development projects. This would be followed by prioritization of the proposals by the local body leadership and verification and approval by a team of experts and officials at the district level. Projectization of needs and suggestions would be led by the official of the development department deployed at the local body. Approved projects would also be implemented by this official based on broad fiscal guidelines and priorities decided by the state government from time to time. Grama sabhas are the primary fora where the dialogue on needs, requirements, and priorities take place. These deliberations are consolidated and projectized by working groups consisting of representatives of people and a few selected citizens who could be instrumental during the projectization phase. Subsequently, projects are finalized and prioritized by the local government, which is formed by elected representatives of the people. Beneficiaries of the projects are selected based on well-laid-out criteria and approved by the village council. Monitoring of implementation also is made in a participative manner by committees that include people's representatives and volunteers constituted for this purpose. This process is adopted in formulating and implementing development projects in all the key sectors of rural development: agriculture, animal husbandry, fisheries, health, education, sanitation, irrigation, housing, energy, roads, and social welfare.

Many authors have commented that this new system of participative decision-making and project implementation through a structured system of rural democratization has made the development administration more focused, target

oriented, responsive, and transparent. Alex (2021) further observed that the provisions of the decentralized governance had given considerable freedom to the local bodies to harness the support of institutions and agencies at the local level in innovative ways. For instance, investment in agriculture could be enhanced by seeking partnership from cooperative financial institutions in the locality. Similarly, small and marginal producers could be organized to establish a network of producer collectives to safeguard their interests more easily than before.

The platforms of rural democratic institutions offer innumerable opportunities for human resource development, social capital formation, negotiation, consensus building, conflict resolution, and creative thinking in several ways. Emphasising the importance of this administrative structure to facilitate decentralised planning, Oommen (2022) described that the most important contribution of the people's plan movement was the introduction of new methodology for decentralised planning which has widened the avenues of people's participation.

2.3. Institutionalization of decentralised planning in Kerala

The process of decentralised planning was launched in the Ninth Five Year Plan as a campaign to orient the people's representatives, officials and the people to the principles and practices of decentralised planning. However, the process of decentralised planning was eventually institutionalised to formalise the processes and standardise the procedures.

Institutionalization is a process where organisation and procedures get stability and values. Institutional structures hold organisation and procedures together with a meaning. But a high stability is disadvantageous when some roles in the system are not well addressed by the existing institutional framework. Institutionalization has been defined as an intentional activity to incorporate knowledge at the organizational level to make it persisting for re-use in future (Goodin,1996, Wiseman,2007). According to Muthuswamy; et al (2005), institutionalization required institutional learning and knowledge transfer inside an administrative unit. In this regard, Renziv (1996) observed that quite often, institutionalization involved five transitional phases such as awareness, experimentation, expansion, consolidation and maturity. Even after a

service had reached the consolidation stage, additional efforts might be required to help it reach maturity.

The newly created system of participatory planning and governance in Kerala had undergone a long institutionalization process from the ninth five-year plan to the 13th five-year plan. For instance, while allocating funds to panchayaths, the state government had fixed maximum and minimum allocation for the production, service and infrastructure sectors of development, with a freedom for local governments to fix priorities and formulate plans (GoK,2000). During tenth plan main focus was on promoting local economic development by increasing production and productivity of crops, achieving greater social justice, reducing gender disparities and upgrading the quality of basic services with focus on natural resource management and integrated area development, promotion of good governance .The thrust during eleventh plan was on local economic development by making additional income and more employment opportunities for relatively poor sections of the society. Priority was on integrated watershed management and joint forest management. But during the 12th plan the focus was on comprehensive development providing more autonomy to panchayaths and responsibilities to the officials. Plan appraisal was attached to a team of officials. Along with this, plan formulation and approval were made online (GoK,2002, 2011,2016).

In spite of the stipulations and control by the state government through guidelines, there were instances of local bodies going beyond mandated sectoral allocation limits. During 11th plan, the expenditure of panchayaths on productive sector was only 17.6 % and 18.7% of their total allocation in 2006-07 and 2007-08 respectively. It was also observed that violating all guidelines and the requirements of the economy, many panchayats exceeded the 30 % ceiling fixed for service sector. The plan priorities and allocation patterns have to be reversed for greater production in order to avoid various development deficiencies in the state. (GoK,2009).

Aiyar (2009) observed that the institutionalized spaces for participation and accountability created by the 73rd amendment could not implicitly result in participation by citizens and the establishment of an accountable system, which called for a number of institutional reforms to facilitate meaningful participation. Even while institutionalization had been projected as a necessity to improve development planning, the committee for evaluation of decentralized planning and development reported that

several innovative institutions created as part of decentralization had been abandoned (GOK, 2009).

The need to institutionalise decentralised planning to facilitate effective implementation of large-scale rural development programmes was emphasized by the Planning Commission (2011). Reforms were suggested in the structure of planning, mode of financing and implementation of centrally sponsored schemes through policy backup. In view of the need to improve systems and processes in decentralised planning, Kumar (2011) underlined the institutional reforms required to improve the efficiency of project identification, selection of projects, identification of beneficiaries and decision making by Grama Panchayats. It is obvious that the success and efficacy of decentralized planning depended on how effectively these policy objectives were achieved.

Similarly, the need to improve grassroots level institutions and to streamline the processes of decentralized planning also had been pointed out by several authors. For example, Saxena (2012) noticed that privileged sections of society kept away from local development processes, as evident from their very low level of participation in grama sabha.

Another major transition change was evolution of new institutional arrangements in harnessing social capital to hasten development process as seen in the case of self-help groups. While analyzing the functioning of self-help groups (SHGs), Vijayanand (2010) observed that SHGs in Kerala harmoniously associated with local governments, while in many countries they functioned outside the local government system. This had accelerated capacities of farm women and strengthened their ability to access services meant for them. Lease land farming by SHG women is a far-reaching innovation generated out of the decentralized system.

2.4. Deficiencies in institutionalization of decentralized planning

In spite of the attempts to institutionalize decentralized planning, there had been several deficiencies in the processes. These were revealed from the lapses in implementing decentralized planning process, reported from across the state. These lapses had affected the efficacy of decentralized planning system by local self-government institutions.

2.4.1 Problems in convening grama sabhas

An analysis of the decentralized process at Edayur panchayat of Malappuram revealed that stakeholder consultations were not conducted during the two plan periods that followed the Ninth plan (GoK,2015a). The report also highlighted the problems in conducting grama sabhas, as reported from across the state. Total voters who had turned up to participate in grama sabha was just above the minimal mandatory participation required for a grama sabha or even below. Working group proceedings and approval of minutes were also not proper. Observations on decentralized planning in Thiunavaya Panchayath of Malappuram showed that participation of people in gramasabha was below the mandatory requirement of 10 per cent (GOK,2015b).

It was reported that in Wadakkanchery Panchayath funds were divided among wards for various beneficiary-oriented projects, owing to less participation in gramasabhas. It was observed that average allocation for agriculture was less than 10 per cent, necessitating minimum ceiling for productive sector (GOK,2015c).

2.4.2 Problems in allocation and utilization of funds

Studies on allocations received by LSGIs revealed that local bodies of Kerala received 29 per cent of the state plan allocation during 9th plan period, 27 per cent during tenth plan and it subsequently followed a diminishing trend. (GoK,2009).

Reiterating this, studies at Ambalavayal Panchayath of Wayanad showed that during 2011-12 allocation to productive sector was 13.4 per cent and reached 7.6 per cent due to removal of sectoral ceiling, citing the relevance of plan guidelines in allocation. (GOK, 2015d). While analysing the planning process at Kelakam of Kannur, it was revealed that though institutionalization of decentralization with resources and functionaries has created a congenial environment at the grassroots, it has become centralized and mechanical with emphasis on subjective prioritization. It was also observed that often ward-based sharing of resources makes prioritization biased and it causes lesser participation in Gramasabha (GoK, 2015e).

2.4.3 Problems in the functioning of other democratic venues in democratic decentralization

Studies on the functioning of various democratic venues like working groups, development seminars, district planning committees etc. also revealed several deficiencies. For instance, the condition that recommendations of the Panchayath level development seminar in a given sector should be routed through the respective standing committees was found to be violated quite often. It was also reported that only officials were involved in the formulation and approval of projects. Withdrawal of the Technical Advisory Groups for approval had reportedly degraded the project verification process. It was also observed that online approval of projects process lacked transparency, with user IDs and passwords of vetting officers being shared indiscriminately by officials of the Panchayath. (GoK,2015). With regard to participation of people, participation was found to be low in planning and monitoring of projects. It was also observed that over a period of time, participation of women had increased (GoK,2016).

2.4.4 Changes in institutional arrangements for decentralized planning for early approval and implementation

While reviewing various accomplishments of democratic decentralization in Kerala many authors had appreciated that the state government devolving fund based on a formula to all local bodies without any discretion was a major policy decision which redefined the concept of decentralized planning in the country.

As seen earlier, several institutional changes were brought about in view of enhancing participation of people and experts in planning. Measures like formation of panchayat planning committees, launching of Gramasabha portal to receive the views of public, formation of District Resource Centres at DPC were reported to be adopted. (Government of Kerala, 2019).

At the same time, changes in the rates and increase in the scope of subsidies had helped local Governments formulate projects which were not in subsidy realm of decentralized planning earlier, but existed in the schemes of development departments. It was observed that more farmers were benefitted from agricultural projects consequent to enhancing the beneficiary income ceiling.

Delay in plan formulation and allocation of funds had plagued decentralized planning process at some point of time due to delay in vetting and approval of projects. It was in this context a new mechanism was instituted to expedite formulation of local plans so as to enable local governments to integrate the budget with their annual plans (Govt of Kerala,2019).

While reviewing the fodder innovation system, Dominic and Gupta (2019) attributed medium level of institutionalization to factors like weak implementation and follow up of project by officials, low land availability for group fodder cultivation, conflicts among members, less interest of the marketing agents in carrying out the activities and weak linkages with public and private sector actors. They observed that in order to promote institutionalization, public sector could further support interactions, collective actions, and broader public private partnership programmes. Only by institutionalizing the innovation platform, benefits would trickle down to the lower strata of the village community.

Gouroubera et al. (2020) while reviewing institutionalization of ICT in agricultural systems found problems of low innovation capacity as a major factor that would affect institutional innovations.

With the opportunity to initiate 13th plan at the beginning of the financial year itself, local bodies got more time for implementing projects. The modified procedure of submitting the local body annual plan first to the District Planning Committee and then for vetting had made the approval process easier and faster. Moreover, sanctioning officers got sufficient time to qualitatively analyze the projects (GoK,2020).

2.4.5 Changes in funding priority for development programmes

The plan allocation received and the own fund status of panchayath often determine the thrust of development within the local bodies. Rahul (2019) found that a panchayat with strong own fund status often possessed strong administrative and decision-making power.

There were several shifts in the emphasis on various sectors with regard to funding. It was observed that since service and infrastructure projects fetch tangible results to the political incentives, elected representatives got more inclined to these sectors. This turned out to be a norm in the 12th plan, with no specific allocation for

any sector, thereby resulting in low plan allocation to productive sector and comparatively higher allocations for infrastructure and service sectors.

Thus, as seen from the above studies, decentralized planning in Kerala has undergone a long institutionalization process, with different emphases in various plan periods. The structures and processes also have been evolved accordingly. In spite of the stipulations and guidelines, often local bodies went beyond mandated sectoral allocations. The process also has accelerated women capabilities and ability to access schemes. Advantaged sections of the society keep away from gramasabha. Getting institutionalised as an innovative platform will facilitate benefits trickling down to lower strata of the village community.

2.5. Perceived efficacy of decentralized planning Process at Local Self Government Institutions

Efficacy of a system is its ability to perform a task to a satisfactory, desired or expected degree. It is the capacity to generate a desired effect or success in achieving a given goal. While efficacy is the performance of an intervention in an ideal context, efficiency pertains to the ability to get the best possible results with the minimum waste of resources. While efficacy is how something is able to do or not, efficiency is how something is done.

Efficacy of decentralised planning has been analysed in many studies in various perspectives. Kurian (2000) observed a functional specialization emerging in gramasabha through sectoral group discussions and general sessions. It was suggested that from the mere roles of need identification and beneficiary selection, the gramasabha should involve in other aspects of decentralized planning such as plan implementation, monitoring and its evaluation. In the same line, Isaac and Joseph (2005) also found out that people's participation in various levels of problem identification, project formulation and implementation was insufficient and in most cases their role had reduced to that of the individual beneficiaries. Most of the participants could not attend the group discussion due to lack of awareness and transparency.

Role performance of stakeholders in decentralized planning had also been studied from different perspectives. While examining the role performance of horticultural officers, Rahul (2006) revealed that majority had medium level of role performance. Performance of the role was significantly influenced by experience, training received, rural- urban background, achievement motivation, organizational commitment, empathy, attitude towards farmers, organizational climate, facilities and resources and job satisfaction. GoK(2009) while evaluating the decentralized planning observed that working group members were satisfied on their roles in introducing projects development seminar and gramasabhas while their role in preparation of projects and monitoring was meagre. Members also shared a view that projects were mere repetitions of the earlier ones and that no stakeholder meetings were conducted. In order to assure responsiveness, decisions that a local government make should be based on felt needs of the community. To attain this accountability level, creation of effective, accessible and transparent grievance redressal machinery should be an integral part of the local government.

There are many deficiencies related to efficacy of decentralized planning reported in various studies. Mathew (2009) while analyzing the economic growth and equity in the development programmes under decentralized planning reported that level of misutilization of benefits by the beneficiaries is significantly high in Kerala. Cash assistance was more prone to misutilization than the assistance in kind. Sudhish (2011) in an evaluation on the implementation of peoples plan in Kerala found that in the case of formation of working groups, the local governments have failed miserably . Kumar(2011) while analyzing governance and decentralized planning in Kerala observed significant variation in transparency levels among various education groups, age groups, income and land holding size groups. The trend revealed that the transparency level improves with the e-governance initiative with lesser intensity variation among various socio-economic groups.

Through remarkable devolution of functions and resources, Kerala was ranked third in the overall devolution index and got second position in functionary and third in finances and accountability dimensions of devolution. The transparency in functioning of panchayats also was found to be high in Kerala. The functioning of the

State Finance Commission had been most effective when compared to other states. (GoI,2013).

As a crucial move for enhancing the efficacy of 12th plan, GoK (2013) institutionalized special grama sabhas for the differently abled and mentally challenged persons, formulation of district master plan for spatial planning, formation of citizens watch committee to monitor the progress of schemes through social audit, strengthening the mechanisms for gender budgeting and women capacity enhancing programme . In order to strengthen the gramasabha mechanism GoK(2013)introduced the concept of *Ayalsabhas* or neighbourhood sabhas of 50-100 families in all wards. It was also stipulated that out of the four statutory gramasabhas in a year, at least one should be special gramasabhas involving children, youth, old aged and physically challenged for ensuring inclusiveness in the process.

Emphasizing the need to strengthen decentralized planning, GOK (2015) outlined the functions that required to be institutionalized. This included integration of the efforts of multi-tier local bodies and development departments, the pattern of which had undergone several changes since the ninth plan. It was observed that in spite of several efforts, the local bodies were yet to acquire the project management skills.

Efficacy related issues in various local bodies had been studied by many researchers. For instance, absence of coordination delaying implementation were reported from Adat Panchayat of Thrissur. People were more oriented towards accruing benefits of participation in gramasabha rather than monitoring of schemes. There were other issues of poor maintenance of working group registers and minutes. In spite of large areas of kole lands within the panchayat, the allocation to agriculture sector was insufficient and integration of own fund was also poor. (GoK,2015g). It was also suggested that stakeholder meet should be conducted before working group meeting to facilitate its discussion. As the development seminar proposals are not recorded in gramasabha, local bodies could not include such proposals in annual plan. So, there is a need to statutorily back development seminar deliberations.

Some studies had enlightened the roles of people and promotion of livelihoods by local bodies. According to Harilal and Eswaran (2015) local governments were not successful in promoting livelihood opportunities in agriculture. In spite of

decentralisation, local self-government institutions had not raised to the occasion to triggering vibrancy in agricultural sector. Samanta and Nayak (2015) identified a change of role while people took part in the planning process. Role of people shifted from users and beneficiaries to policy makers, co-producers and public service evaluators.

While studying the efficacy of labour bank experiments under decentralized planning in Kerala, Shihans(2017)observed that the interventions named labour army in Kunnathukal grama panchayath and green army in Wadakkanchery block panchayath had attempted to bring casual agricultural labourers to a formalized framework. Though both interventions concentrated on providing skilled labour, the green army in Wadakkanchery was one among various components of an integrated rice development programmes, emphasizing on the production and marketing structures as well. But the Kunnathukal experiment lacked focus on production and marketing, affecting its sustainability. In spite of the availability of skilled labour, farmers neglected paddy cultivation forcing labour army to take up non-farming works. Economic incentives were felt necessary for attracting farmers back to rice cultivation.

It was also observed that participation of stakeholders in planning brought of desirable effects. According to Datta (2019), people's involvement in decision making made development target driven, group oriented and governance more inclusive. Citizen got motivated to avoid irrational and self-focused opinion than effecting the morality effect of public discussion.

In spite of all these, there were many bottle necks affecting efficacy of the process. Rahul (2019) while analysing the data supports for decentralised system in Kerala revealed that though there was centralised access to panchayath level data through the Information Kerala Mission, access for public policy research was highly limited, suggesting that access to the information on development of the state should be broadened. Further, there were instances of panchayaths violating stipulated mandatory minimum allocation for productive sector. But as a restoring measure the mandatory minimum allocation was enhanced to 30 per cent for Grama Panchayats helping them formulate more projects in the productive sector without focusing more on infrastructure sector (Government of Kerala, 2020). Reflecting on the interconnectedness between accountability and decentralization, Rahman and Hussain

(2021) argued that decentralization would be effective with increased accountability of the local government. Stressing on the need for intentionally structuring pro-accountability arrangements, they observed it would not occur from mere devolution of decentralization process. Active participation of people ascertained upward and downward accountability in a decentralized system having organizations in different tiers.

2.6. Farmer participation in planning and development

Agricultural development had been transferred to the local self-governments and they had been playing active role in formulating and implementing location specific development interventions. In the decentralised planning model tried out in Kerala, ample provisions were integrated to ensure participation of various stakeholders in the process of planning. Consultation with the farmers and producers assumed greater importance in the productive sector, as their needs were diverse and contextual.

In this regard, Palanaithurai (2004) observed that by deepening democracy, local development issues would be left to the community to address them realistically. Translating this concept into feasible action points could be witnessed in the process of decentralised planning in Kerala. As Sudhakaran (2006) observed, grama sabha would be the most important participatory space provided in the Kerala experiment with right to formulate the proposals and fixing the priority of schemes and development programmes to be implemented in the village panchayat. The beneficiary selection of all projects including centrally sponsored schemes (CSSs) and state sponsored schemes (SSSs) is made at the grama sabha. As Gopalappa, *et al* (2011) reiterated, whenever the contribution of farmer participation was overlooked, production came to a standstill and developmental institutions failed to perform. Keith and Torppa (2010) opined that participation in planning process made the personnel more receptive to changes, optimistic about the plan, as they got motivated to lead the plan to success with their enhanced capacity.

Vijayanand (2010) reported that an operational network of women NHGs collaborating and making partnership with local governments would provide synergy. By earmarking 10 % of annual grant to each Panchayath statutorily for women

empowerment activities, the scope for engendering decentralized participatory planning in Kerala was remarkable. Supportive of this concept, the World Bank (2014) observed that if right incentives for people and institutions for own planning were instituted, it triggered public action for better risk management.

In addition to the above, other outcomes had also been reported in several studies. Citizen participation in formulation, implementation and monitoring of plan is considered to be the uniqueness of decentralisation. In Kerala, in order to ensure participation by people, many micro level committees like working group, expert committees, technical advisory committees for vetting of projects, beneficiary committees for project implementation and monitoring committees for ensuring effective implementation motivated people to participate. But it was widely reported that the initial interest generated had gradually faded and participation had been declining due to many reasons (GoK, 2016).

Reflecting on participation of stakeholders in gramasabha, Pillai and Prakash (2016) observed declining trend of participation of middle class. Majority of people are not attending the meetings over the last plan periods. Outlining organization of gramasabha and participation in the planning process as the vital social capital aspects of people's representatives, Rahul (2019) stressed on the need to improve these roles and strengthen the functioning of these democratic venues for better public discussion.

The above studies revealed that participation in decentralised planning had many other outcomes as well. Participatory governance necessarily warrants decentralization as an important pre- requisite. As far as agriculture is concerned, experiences showed that ignoring the contribution of participation of farmers would cause a standstill in production. Being the participatory space for people, gramasabha and democratic venues had provided people with ample opportunity to formulate schemes with more receptivity to change. However, as shown above, participation of people in various democratic avenues including gramasabha had come down considerably.

2.7. Determinants of the efficacy of decentralized planning in agriculture through Local Self Government Institutions

Efficacy of a system or process depends on several factors. It could also be seen as a function of the capacities of different actors involved in it. Mainly four categories

of actors are involved in the campaign for participatory planning. They are: (1) government officials of development departments; (2) representatives of people viz. ward members, panchayat presidents, block panchayat members, block panchayat presidents, district panchayat members and district presidents; (3) resource persons who are trained specifically for the purpose of facilitating the planning process, which included progressive farmers, retired government officials, professionals, post graduate and other well experienced persons in a locality acting as members of working groups and (4) the people of the locality coming out with their aspirations and needs, and for whom the plans are prepared.

Though there are only limited studies on the factors affecting efficacy of institutionalized democratic decentralization, an attempt was made to find out key factors that would affect the efficacy of a system, as reported from various experiences by practitioners and studies by different researchers.

Correlating accountability and efficacy, Carney (1995) outlined that accountability contributed to effectiveness and only institutions which were effective could be classified as truly efficient. Adding to it he stated that the effect of change upon the rural poor was particularly highlighted as overall improvements in effectiveness in the provision of the goods in question. With regard to efficacy of gramasabhas, Kurian (2000) stressed the need to make gramasabha members aware of the functions and powers of that platform. According to her, quite often, material benefits attracted citizens to participate in Gram Sabha meetings rather than social benefits. Role of gramasabhas was more in identification of needs, but low in monitoring and implementation. Reflecting on the leadership interplays in peoples planning program, Anjana (2001) found out that non officials had perceived various roles such as helping the beneficiaries based on eligibility criteria, motivating people to suggest their felt needs, deciding on pooling of local resources, conducting prior survey before the preparation of resource maps and making members enthusiastic to participate.

On the level of impact of decentralized plan, which is also a reflection of its efficacy, Chaudhuri and Heller (2004) revealed that participatory planning in Panchayats had strong bearing on development performance and on social inclusion, even though there was declining level of participation. According to Isaac and Joseph

(2005) peoples planning process had formed new set of values and mode of public functioning with transparency and public participation, which would be influencing efficacy in a greater manner.

It had been generally approved that without institutionalization, the planning process would not be sustainable. Though the campaign mode of decentralization had generated a conducive situation for most appropriate institutionalization, it would be sustainable only if better institutionalization and community participation was ensured. Guidelines and regulations issued for local bodies had accelerated the efficiency of the powers and responsibility transferred to the local community through devolution of financial resources (Jayan and Arunachalam, 2004)

While analyzing the contribution of participatory planning to social capital, Sudhakaran (2006) emphasized that participation should be 'inclusive' by way of higher participation of the marginalized sections of society and thereby increased allocation of resources in their favour. However, participation of several stakeholders had declined over a period of time. For instance, with the withdrawal of task forces, participation of local experts in the task forces/working groups also declined. While analyzing on perceived efficacy of public extension under decentralized agricultural extension Lodhi *et al* (2006) observed that decentralization had increased the efficiency of extension system along with more crop production programmes.

Further on, with regard to factors that would contribute to efficacy, Heller *et al.* (2007) stated that enhanced people's participation in decentralized planning had increased development performance and inclusion of all sections of society . Sultana and Abeyasekera (2008) in a study on efficacy of participatory planning for community management of fisheries revealed that support for community-based management of resources was more effective when initiated through participatory planning process. Communities through enhanced participation could take up more conservation-related interventions in finding common problems and solutions for natural resource management.

An important factor that affected efficacy was local passivity, which had crept into the process. According to Vijayanand (2010) this had necessitated revamping of the procedures to make planning more participatory. He further observed that

participation of the people would take place only when there were efficient democratic structures for facilitating participation. But according to Keith and Torppa (2010) efficacy could also be affected by the receptive and pessimistic approach of the personnel who participated in the planning process.

Kumar (2011) while analyzing the interactions between governance and decentralized planning in Kerala revealed that efficacy of decentralized planning would be reflected on the speedy delivery of services to needy people at a minimum effort with minimum number of visits to service provider's destinations. In a similar line, Jessica (2012) while analysing the factors of quality plan found that various capacities like building of trust and good relationship with government agencies, listening to other's views, technical a knowledge and resolving of conflicts generated effective and fruitful plans. Efficacy of process, according to her was influenced by quality of the decision and the quality of implementation.

Many studies had attempted assessment of the performance of LSGIs and functioning of officials transferred to them. Since efficacy of decentralised planning also depended on financial resources, the modes of resource mobilization by local self-government institutions had also been subjected to studies. In this regard, Balan *et al.* (2014) recommended changes in the Kerala Panchayat Raj Act to institutionalize resource mobilization. They suggested parameters for evaluating the performance of LSGIs such as qualitative change, speed of implementation, attitudinal change of the staff, level of participation, extent of equitable prioritization, participation of women, general response of the people and acceptability.

2.7.1. Socio economic traits that influence perception on efficacy of decentralized planning

The way in which various actors perceived the efficacy of decentralized planning would be a valuable information, to find out the factors that affect the perception. Review showed that perception on efficacy of decentralization was influenced by the socio-economic characteristics of the actors. A review of relevant studies conducted in this line are presented below:

While analyzing the participatory planning for agricultural development through LSGIs, Alex (1999) observed that dimensions like problem solving approach,

leadership styles, perception of development functions and sense of empowerment differed significantly among various categories of the personnel. Among them, resource persons had the highest score on sense of empowerment, level of participation and attitude towards participatory planning. Conflicts among programme personnel were found to negate fruitful participation. It was also revealed that resource persons had a catalytic role while officials and elected representatives needed clear definitions on mutual complementarity of roles. The resource persons adopted an enabling and facilitating style while officials resorted to a prescriptive style. He also revealed that during initial phases, peoples' participation in the planning process was dismally low and the average number was less than 10 % of the average population of the ward.

In this connection, several factors that influenced extent of participation of farm women in people's plan programme were identified by Parvathy (2000). She found that age, annual income, social participation, innovation proneness, mass media participation and leadership propensity had significant positive relationship with their perception about effectiveness of people's plan. Variables like economic motivation, leadership propensity, training, extension orientation, mass media participation, annual income, level of participation, annual income, level aspiration, political orientation, age and self-confidence contributed 36 per cent of variation in perception of rural women about people's plan. Study by Aziz et al (2000) delineated the relation between accountability and transparency. While accountability ensured effective delivery of services avoiding irresponsible action and improper use of public funds by leaders and officials, transparency favoured accountability.

Similarly, some studies had also attempted to correlate transparency, accountability and decentralised governance. According to Nazrul Islam (2004) the factors which ensured transparency at the Panchayath level were, regular grama sabha meetings, publications, local media, news broadcast and information boards put up various prominent places. However, there was reluctance on the part of officials and representatives to uphold transparency by convening gramasabha meetings. Accountability can be enhanced at the grass roots level by strengthening institutions of decentralized governance, ensuring people's participation. But with regard to overall level of co-ordination performance in peoples plan, Roy (2004) revealed that at grama panchayath level 36.84 % of the respondents belonged to the medium categories and

26.32% in high category with respect to their scores on extent of co-ordination. Maximum extent of co -ordination participation was accounted by the sub dimension of accountability (72.35%) followed by technical orientation (58.95%).

According to Rojas (2005) a locally accountable system was inevitable for decentralization and devolution. Accordingly, for greater accountability, local authorities have to be empowered. George (2005) found that accountability moderately influenced the effectiveness of community based organizations.

In a study on perception of beneficiaries on joint forest management programme, Sudheendra, et al (2005) found that extension contact was positively and significantly associated with perception of the beneficiaries. Farm size was negatively and not significantly associated with perception of the beneficiaries. However, age, education, family income, social participation, cosmopolitaness, level of aspiration and employment generation had positive, yet insignificant association with perception. It was also revealed that extension contact could greatly influence the perception level of the beneficiaries.

Rokonuzzaman *et al.* (2006) found that farmers' perception on sustainable agriculture was negatively correlated with age, while level of education, farm size, annual family income, training exposure, knowledge of environment-friendly farming, farming experience, experience on environment-friendly farming practice, extension media exposure, cosmopolitaness and organizational participation were positively correlated.

In this regard, Nayaka (2008) while analyzing the extent of participation in participatory planning in forest management observed that households with younger heads participated less in voluntary activities. The level of education of the household head was negatively related to the participation in voluntary collective activities related to participatory planning. The larger the household, participation in collective activities was more.

As regards interdependence among decentralization, accountability and participation, Net (2009) identified two levels of accountability - between the local government and the state termed as upward accountability and the accountability between government and their citizen, called as downward accountability.

Decentralization coupled with participation of people in decision making and implementing of development activities will foster downward accountability.

Reflecting on the interplay among farmer participation, capacity variables and farm attributes Emmanuel, et al. (2010) stated that while formal education did not influence participation, farm type, farm size, farm income were significant determinants of farm planning.

Focusing on the attitude towards Panchayati raj, Anu George et al. (2012) revealed that just more than half of the SHG members had favourable attitude towards Panchayati Raj whereas, more than half of the non-members were holding an unfavourable attitude. Jessica (2012) observed that most of the people perceived participatory planning as effective and the implementation was perceived successful due to the participatory planning process, funding, community support, leadership and early continued involvement of different stakeholders

Satish Kumar et al. (2013) in a study on attitude of beneficiaries in the watershed development found that favorable attitude could be converted to more favorable attitude by changing the variables such as organizational participation and extension participation of respondents. As an implication of this finding, he emphasized that focus of the administrators and policy makers should be on capacity building, implementation and provision of material and financial assistance be to beneficiaries.

Further, according to Kannan (2013) regular participation of the officials in grama sabha meetings significantly influenced joint agricultural activities such as demonstrations of new technology to farmers, effective deliberations on agricultural issues in grama sabhas and delivery of agricultural public services. However, according to Harilal (2013), due to inherent problems in the methodology of planning which failed to ensure better administrative co-ordination and cooperation in decentralised planning, participation of people in the panchayath level planning was declining and only the poor and lower middle class found it important to involve in this process. Obviously, the perception on efficacy of the system would be greatly influenced by the extent of direct participation in the consultation process prior to formulation of projects. Pillai

and Prakash (2016) revealed that high level of education tended to decrease interest of people to participate.

It was also pointed out that specific characteristics of grama panchayat leaders like social participation, extension participation and role performance contributed in developing favourable attitude towards Panchayati Raj Institutions (Srivastava et al. 2021). Only one independent variable i.e., age of grama panchayat leaders had made significant correlation with their attitude towards Panchayati Raj Institutions at 0.05 level of probability.

2.8. Accomplishments of decentralized planning in agriculture sector through Local Self Government Institutions

Many studies have attempted to review the accomplishments of the decentralized planning through LSGIs in Kerala. While analyzing the impact of women component plans of decentralized planning, Mathew (2009) found out that women were much benefitted. The neighborhood groups of women had developed into centres providing valuable opportunities of extra income generation, entrepreneurship development and social status through performance of new roles.

People's plan movement also had resulted in establishment of many infrastructural facilities. There was also an exclusive e- governance programme namely Information Kerala Mission for local governments. Kumar (2011) revealed that among various supporting initiatives, Sevana, Sulekha, Sankhya, Stapanam and Sanchaya were operational in majority of local bodies of Kerala under the supervision of Information Kerala Mission, facilitating vertical and horizontal integration of various administrative layers of decentralized planning.

Review of physical achievements in agricultural sector had shown that there had been considerable increase in area and production of paddy and vegetables. Analysing various achievements of decentralized plan of Kuttiyattur panchayat of Kannur, it was observed that paddy area had increased from 150 ha in 2006 to 233 ha in 2012. Group farming could be introduced in 12 *padasekhara samithies* (paddy farmers groups) raising the productivity to 5000 Kg/ha from 3000 Kg/ha. (GOK,2015).

However, decreasing trends also had been reported from Payyoli of Calicut. The net area sown of 2172 acres in 1996 during ninth had been reduced to 1317 acres


in 2011. In Mullankolly of Wayanad, the initial paddy area of 950 acres in 96-97 got decreased to 625 acres in 2011-12 while the number of ponds increased from 65 to 150.

There were also cases of panchayaths with very low areas in paddy failing badly to even in sustaining that area. For instance, Anchuthengu panchayath of Idukki in 1996-97 during ninth plan had just 17.5 acres of paddy which got reduced to 12.5 acres in 2012. But paddy area at Vattavada Panchayath which was 310 ha in 96-97 was increased to 489 ha in 2011-12. (GOK,2015f).

As understood from the review of studies, strengthening of local governments through decentralised planning was highly instrumental in empowering people. Various democratic venues formulated in connection with decentralised planning viz. grama sabhas, oorukoottams, beneficiary committees, stakeholder consultations and development seminars had enhanced the scope to participate in development planning at the grassroots level. Alongside, provision of authority to local government institutions enhanced responsiveness and accountability of service providers (GoK,2020). Transfer of resources and administrative powers to local governments transformed them into effective instruments for co-ordinating various agencies involved in local area development. This was demonstrated convincingly in the strategy to face difficult and contingent situations like floods of 2018 and the Covid-19 pandemic, where in local governments exercised their capability to harness resources and co-ordinate various development agencies and the people (Government of Kerala ,2021).

2.9. Role performance of agricultural officers in decentralised planning

As the study focused mainly on planning in the agricultural sector, it was important to understand the role performance of extension personnel in grassroots level planning through local governments. Though studies were limited in this regard, some relevant studies were reviewed to understand the probable roles played by extension personnel and issues experienced by them while performing those roles.

 While analyzing the role performance of agricultural extension personnel, Dharmindra (2015) observed that majority of officers had medium level of role performance. The study had outlined various roles under the dimensions of planning, organizing, staffing, directing, coordinating, reporting and budgeting. It was revealed

that factors such as service experience, training exposure, role awareness, role perception, attitude towards ATMA, achievement motivation, motivational climate and job satisfaction had positive and significant influence on the role performance of the respondents, with role awareness showing the maximum direct effect.

Similarly, in a study on analyzing the role performance of women agricultural assistants, Devmare (2015) found out that majority had medium level of role performance. While age did not show any significant correlation, variables such as education, work experience, training received, self-confidence and job satisfaction were found to be significantly correlated.

While studying the role performance of extension officers, Purnima *et al* (2018) revealed that hurdles related to administration and financial management were ranked as the major constraint to role performance by most of the respondents. Various roles performed included roles of advocacy on farmers interests, feed back to the farmers about agricultural activities, providing advisories on soil health management, water conservation, pest and disease management, capacity building and skill development, providing information on ongoing schemes and programs in agriculture and allied sectors.

Rahul (2019) while studying the triadic relationship among degree of decentralisation, inequality and social capital in a decentralised democratic system of Kerala observed social capital roles of elected representative like organisation of gramasabhas and participation in decentralised planning process. He also opined that elected representatives and the decentralised system had to develop a favourable attitude towards these roles.

2.10. Constraints and policy imperatives for better institutionalization of participatory planning process

As seen earlier, local governments in Kerala have transformed into effective instruments for formulating and implementing development programmes through people's participation, over a period of twenty-five years. They are meaningfully empowered to discharge such functions through strategic devolution of functions, functionaries and funds. This decentralised planning process through local self-governments has been quite unique because of three aspects – financial devolution,

plan formulation and implementation, and extent of people's participation. Though devolution of funds was carried out through a formula based, non-discretionary and equitable process, efficacy of planning process at grass roots had not increased as expected, due to several constraints.

With regard to constraints in local level planning, serious shortcomings such as political interference in beneficiary selection process, mis utilization of funds, lack of technical advice, meetings at inconvenient time and place, inadequate training and delay in implementing the programme were reported by Parvathy (2000). She observed that elected representatives, in fear of criticism of voters in gram Sabha, quite often resorted to ward level division of projects, undermining the rationality in planning. She also reported the inadequacy of micro level databases which limit appropriate formulation of strategies.

The prominence of local elites in decision making of local governments had been reported by many authors. Reflecting on various constraints of decentralisation, Walker (2002) identified local elites capturing the benefits of decentralisation. He also identified problems such as limited capacity to mobilize local financial resources, corruption from people getting access for political influence, weak administrative and management systems, poor human resource base, unwillingness of professional staff to work in remote areas and lack of participation of people

Constraints with respect to changes in the constitution and importance of various avenues for people's participation had also been quoted by many authors. Analyzing the changes in the procedure of decentralized planning in Kerala over a period of time, Sudhakaran (2006) observed that the task forces for local planning, which was an innovation of the people's plan campaign were given only less significance in the second phase of the campaign. The participation of all categories of members in the task forces/working groups had also declined in the second sub-period compared to the first. Aiyar (2009) observed that the institutionalized spaces for participation and accountability created by the 73rd amendment could not implicitly result in participation by citizens and the establishment of an accountable system, which called for a number of institutional reforms to facilitate meaningful participation.

Many studies have made recommendations to improve institutionalization of decentralized planning in Kerala. Some evaluation studies suggested measures such as forming a panel of experts drawing suggestions from LSGIs, block level coordination of development committees of panchayaths and blocks at various stages of planning and implementation, reducing grama sabha meetings to two per year with a quorum of 5%, integrating plan formulation process with budget formation, forming grama sabha subsystems like neighborhood groups with role specifications, introducing farmer gramasabhas, labour cost subsidies to paddy samithies, making the krishibhavan management manual operational, etc. Efficacy of decentralization is best judged from effective service delivery to people (GoK,2009).

While analysing the participatory planning experiences in Kerala, Vijayanand (2010) observed that a local passivity had crept into the process and the procedures had to be revamped to make planning more participatory. Participation of people took place only when there were efficient democratic structures for facilitating participation. In a similar vein, while hinting on institutional reforms, Kumar (2011) emphasized the need to improve the efficiency of project identification, selection of projects, identification of beneficiaries and decision making by Grama Panchayats.

There were also studies which observed that the decentralized planning process was overtly dominated by the bureaucracy as understood by frequent orders and guidelines from above, subduing the participatory and self-governance model. He also observed that participation of people could not be a substitute for expertise in planning at the grass roots level (Harilal,2013). Many other functional constraints hindering participation and performance of farmers in working groups at grama panchayath level were reported by Jabbar and Sundaramari (2014).

Constraints related to ceiling of sectoral allocation for local governments were pointed out as very significant by many observers. Norms on ceilings and minimum mandatory rates were changing quite frequently, resulting in lack of sustained focus on certain sectors. For example, cancelling the minimum allocation for productive sector during 12th plan severely affected the priority attached to productive sector by shifting the thrust to service sector. Continued dependence on plan fund was reported to have badly affected the local resource mobilization capabilities of the LSGIs (GOK,2015).

It was also reported that that lack of adequate expertise and team building skills of members of working groups and technical advisory groups (TAG) had been a major constraint in sustaining the interest in local planning. Lack of studies on panchayath level gender status which adversely affected gender-based planning and formulation of women component plans without assessing the skill gaps of women were the major constraints in ensuring gender equity in grassroots level development planning.

While analyzing decentralized planning at Edayur panchayat, it was observed that implementation of beneficiary-oriented projects got delayed due to delay in finalizing approved beneficiary list. It was also reported that absence of micro sector codes caused great difficulty in formulating projects in some crops like daincha.

Lack of training of working group members had been a significant constraint in people's plan movement. It was observed that in order to make them aware of the process of project formulation and new ideas in various development sectors, members of working groups had to be oriented and trained properly (GoK,2015a). An analysis of the planning process at Kuttiyattoor of Kannur by the State Planning Board revealed that dearth of funds, frequent changes in plan formulation guidelines, delay in finalizing beneficiary list, absence of guidelines for pooling of local manures were some of the important constraints. There were also no specific guidelines for promoting biodiversity, which posed difficulties in formulating projects in this sector (GOK,2015).

With regard to participation, it was observed by Pillai and Prakash (2016) that only poor and lower sections of the middle class were appreciating the empowering potential of the gram Sabha. They emphasized that gramasabha needed to be strengthened to make them evolve into a functional institution with strict follow up for its decisions. Regarding the functioning of the working groups, it was seen that they lacked subject experts and representatives of banks. There were also problems like poor maintenance of minutes. Lack of data support and preparation of annual plan without prioritizing the suggestions put forth by the panchayath level development seminar (GOK, 2016).

Inadequate funding and diversion of funds to unimportant sectors were also pointed out as constraints. Examining the trend of expenditure of local bodies of

Kerala, GoI (2018) observed that though the modified guidelines of the 12th five-year plan of LSGI directed to provide priority for productive sector projects, the actual expenditure figures reveal that local governments of Kerala gave only low priority to productive sector. The amount spent on productive sector for 2016-17 was found to be 10.45 % of the total development expenditure and 8.15 % during the period 2012-13 to 2016-17. Though Finance Commission grants were not be used for purposes other than basic services, an amount of 22.72 crores had been diverted for projects not meant for delivery of basic services.

Delay in plan process was pointed out as an important constraint in the process of plan implementation. Prolonged plan processes had caused unnecessary delay and bureaucratic supremacy and disrupts people's participation and efficiency. Hence, in the 13th five-year plan, a simple, speedy procedure fostering participation of volunteers and experts was instituted (GoK, 2018).

It was also revealed that lack of clear explanations to distinguish between mandatory requirements and desirable practices in the guidelines had caused ambiguity leading to several audit objections on implementation of local plans in the past (GoK, 2018).

2.11.Theoretical framework of the study

Based on the literature reviewed a diagram depicting the theoretical framework of the presumed relationship among various selected variables is presented as **Fig. 1**.

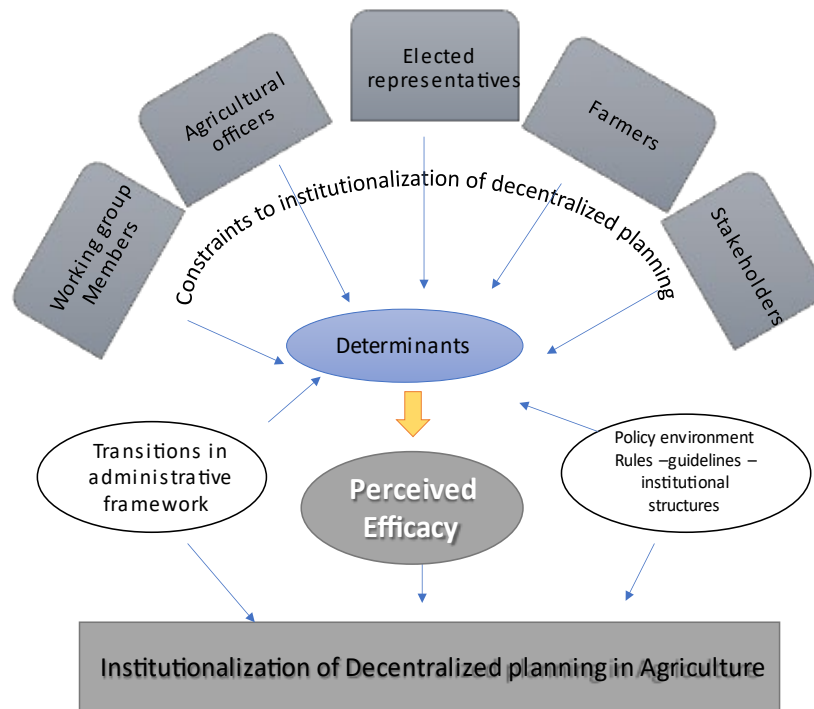


Figure .1. Theoretical framework developed for the study

3. RESEARCH METHODOLOGY

Research methodology is the systematic way of solving a research problem. Designing an appropriate methodology ensures the research against failures. Methodology forms the nerve centre for any research project. The research methodology employed for the present study has been discussed in this chapter under the following subheads. This section explains the qualitative and quantitative methods employed to accomplish the objectives of the study.

3.1. Research design

3.2. Locale of the study

3.3. Selection of the sample

3.4. Description of agro climatic zones.

3.5. Methods used for data collection

3.6. Process of institutionalization of decentralized planning in agriculture

3.7. Efficacy of decentralized agricultural planning through local self
government institutions

3.8. Determinants of efficacy of decentralized planning in agriculture

3.9. Accomplishments in the agriculture sector since institutionalization of
decentralized planning in agriculture

3.10. Constraints and policy imperatives in decentralized planning in agriculture

3.11. Statistical tools of the study.

3.1. Research design

Research designs are developed to enable the researcher to answer question as validly, objectively, accurately and economically as possible. According to Hoffer and Bygrave (1992) it is basic plan for collecting the experimental data necessary to validate or disprove the basic underlying theories or conceptual models that are investigated. This study with the main objective of analyzing the efficacy of institutionalization of grass root level participatory planning process in agricultural

developments as perceived by the actors of process was conducted, adopting an ex-post- facto research design. In ex-post-facto research, the investigators explore an effect that has already occurred to its probable causes. In this systematic empirical enquiry, the scientist lacks direct control over the independent variables (Singh, 2006).

3.2. Locale of the study

The state of Kerala is situated between 8°18' and 12°48'N and 74°52' and 77°22'E longitude in the south -western part of India. The total geographical area is 38.355 km² or 1.18 per cent of the total area of the country. Kerala state is divided into five agro ecological zones based on its physiography, climate, soil characteristics, sea water intrusion, irrigation facilities and land use pattern. The zones are southern, central, northern, high altitude and special zone of problem areas. One district was randomly selected from each of the five agro climatic zones of Kerala. From each district eight Panchayaths with high cropping intensity was selected. List of Panchayaths selected from five districts have been given below:

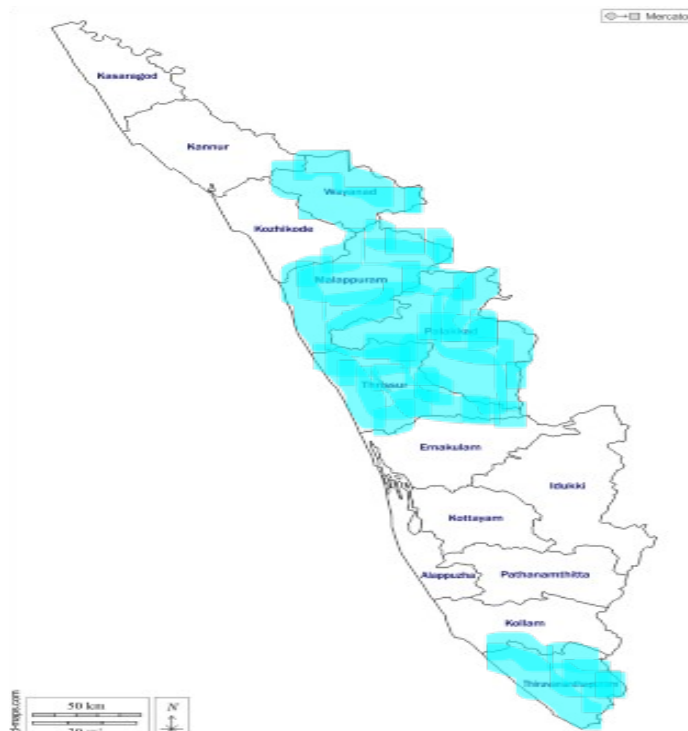


Fig.2. Map of Kerala with districts selected for the study

Table. 3. 1. List of Panchayats Selected for the study based on cropping intensity

SI No	Name of District	Panchayaths selected	Cropping intensity
1	Thiruvananthapuram	Cherunniyur	152.90
		Manickal	145.05
		Parassala	155.36
		Kunnathukal	147.18
		Chirayinkeezh	143.72
		Peringamala	146.21
		Uzhamalakkal	150.69
		Ottoor	153.79
2	Thrissur	Choondal	156.69
		Kadavallur	157.52
		Adat	162.43
		Mulankunnath Kavu	155.42
		Madakkathara	154.90
		Mattathur	159.97
		Parappukkara	163.62
		Pazhayannur	157.58
3	Palakkad	Paradur	156.22
		Perumatti	172.07
		Alathur	167.82
		Kadampazhipuram	169.23
		Vellinezhi	164.64
		Anakkara	158.07
		Karimba	161.78
		Ongallur	158.53
4	Malappuram	Edayur	176.96
		Aliparamba	168.91
		Angadipuram	156.75
		Edapal	164.42
		AR Nagar	156.23
		Thennala	155.92

		Thirunavaya	163.30
		Vengara	167.07
5	Wayanad	Padinjarathara	155.48
		Thavinjal	157.80
		Vellamunda	159.56
		Vengappalli	155.71
		Edavaka	157.76
		Nenmeni	158.94
		Noolpuzha	165.31
		Pozhuthana	153.7987

3.2.1. Profile of the districts – an overview

The profile of the districts with basic data on important characteristics is given in Table 3.2.

Table 3.2. Profile of the districts with basic data on important characteristics

Parameter	Thiruvana tha puram	Thrissur	Palakka d	Malappu ram	Way nad
Area (sq Km)	2192	3032	4480	3550	2131
Forest Cover (sq. Km)	1304	1159	2084	1981	1580
Population 2011 (in Lakh)	33.01	31.21	28.1	41.13	8.17
Density	1508	1031	627	1157	384
SC population as % of total Population	11.3	10.4	14.4	7.5	4.0
ST population as % of total Population	0.8	0.3	1.7	0.6	18.5
Production of Rice in Kerala (2019-20) in tonnes (Wetland)	4541	76556	248199.0	28214	19513
Net area irrigated (2019-20) in ha	7842	62227	86026	29528	12186
No. of registered SSI/MSME 2019-20	1363	1594	1694	1177	264
No of grama panchayaths	73	86	88	94	23

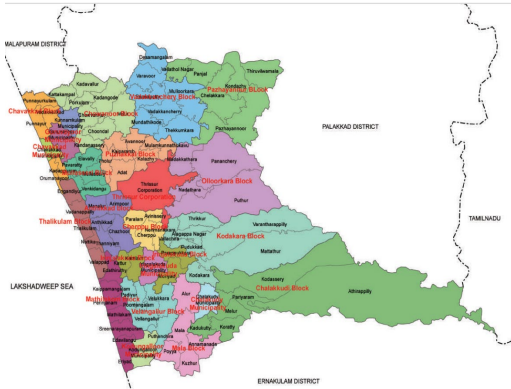
Maps of the study area



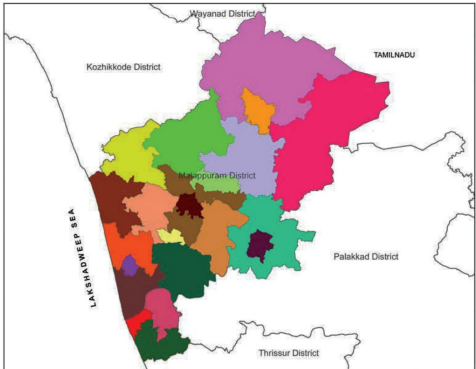
Wayanad District



Palakkad District



Thrissur District



Malappuram District



Thiruvananthapuram District

Fig.3. Maps of the study areas in five districts

A glimpse through the study districts reveals that Palakkad has the highest area (4480 Sq Km) while Wayanad had the lowest (2131 sq km.). With respect to forest cover also Palakkad stood first (2084Sq km) and Thrissur was lowest (1159 sq.km). Population was highest in Malappuram (41.13 lakhs) the density being highest in Thiruvananthapuram (1508), followed by Malappuram (1157) and lowest in Wayanad. (14.4%). Population of SC community was high in Palakkad (14.4%) while ST population was high in Wayanad (18.5%). Palakkad had the highest production of rice (2,44,199 tons) while Thiruvananthapuram had the lowest. (4541 tons). Thiruvananthapuram had the lowest net area irrigated. (7842 ha) with highest area in Palakkad (86026 ha). Number of registered SSI/MSME was high in Thrissur (1694) and lowest in Wayanad (264) Malappuram had the highest number of Panchayaths (94) followed by Palakkad (88) and Thrissur (86).

3.3. Sample Selection

Stratified random sampling procedure was followed for the purpose of drawing sample for the study. One district each was randomly selected from each of the five agro climatic zone of Kerala. From each district eight Panchayaths with high cropping intensity were selected. The sample of respondents comprised of 40 agricultural Officers, 40 Grama Panchayat Presidents and 80 farmers. Agricultural Officers and Panchayat Presidents were selected at the rate of one each from a Panchayat. Two farmers who are members of the working group on agriculture were selected from each Panchayat, making to a total sample size of 80 farmers. Thus, the total sample size was 160. Cherunniyur, Manickal, Parassala, Kunnathukal, Chirayinkeezh, Peringamala, Uzhamalakkal and Ottoor were the panchayaths selected from the southern zone. Paradur, Perumatti, Alathur ,Kadampazhippuram, vellinezhi, Anakkara, Karimba and Ongallur were the panchayaths selected from the central zone, while the special zone of problem areas had Choondal. Kadavallur, Adat, Mulankunnathukavu, Madakkathara, Mattathur, Parappukkara and Pazhayannur as the representative panchayaths. The northern zone comprised panchayaths of Edayur, Aliparamba, Angadipuram, Edapal, AR Nagar, Thennala, Thirunavaya and vengara while the high range zone had Padinjarathara, Thavinjal, Vellamunda, Vengappalli, Edavaka, Nenmeni, Noolpuzha and Pozhuthana panchayaths as the study area.

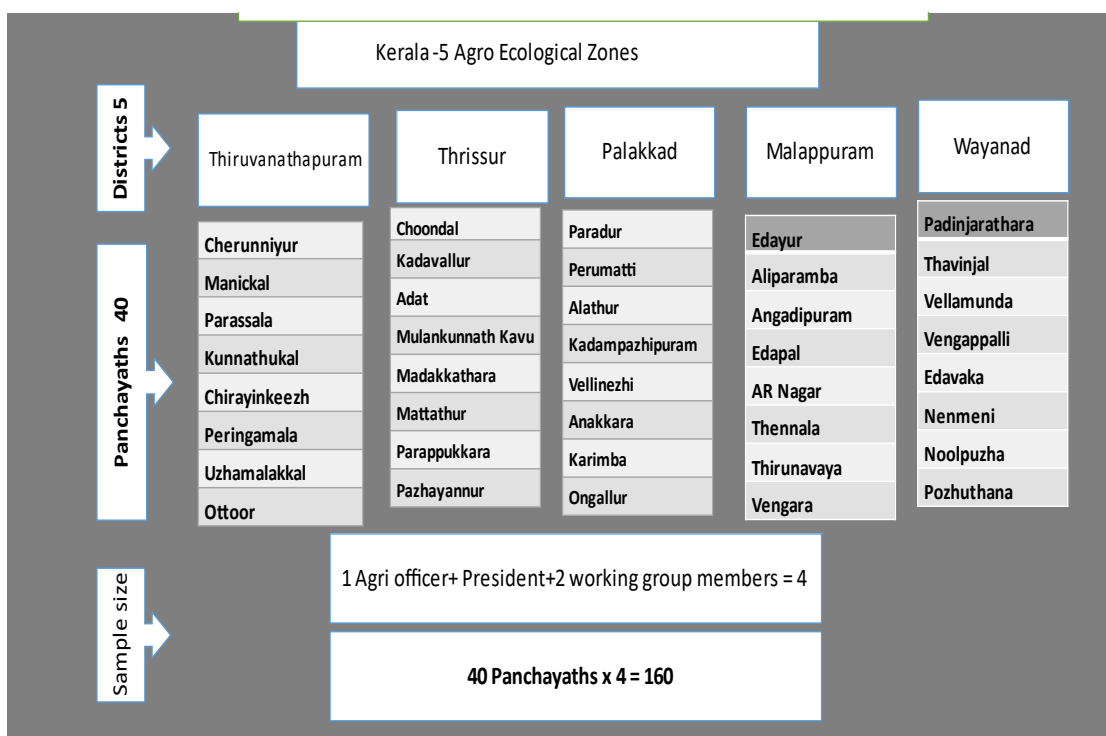


Fig. 4. Flow diagram showing the selection of sample for the study

3.4. Description of agro climatic zones of Kerala

Kerala is divided into five agro climatic zones based on its physiography, climate, soil characteristics, sea water intrusion, irrigation facilities and land use pattern. These zones adopted for the present study are:

1. Southern
2. Central
3. Northern
4. High altitude (high range)
5. Special zone of problem areas

Various districts coming under each agro climatic zone along with cropping intensity have been given in Table. 3.3.

Table.3.3 Study districts and the cropping intensity

sl no	Name of agro climatic zone	Name of district	Cropping intensity
1	Southern zone	Trivandrum	128.34
		Kollam	143.56
		Pathanamthitta	138.11
		Alappuzha	139.22
		Kottayam	130.13
2	Central zone	Ernakulam	148.42
		Thrissur	138.39
		Palakkad	149.29
3	Northern zone	Malappuram	142.748
		Kozhikode	144.185
		Kannur	128.617
		Kasargode	114.447
4	High altitude zone	Wynad	180.309
		Idukki	139.32
5	Special zone of problem areas	Kottayam	130.13
		Thrissur	138.39

Southern zone

The southern zone comprises the districts of Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha and Kottayam with total geographical area of 726,200 hectares forming 18.68 per cent area of the state. The soils are generally lateritic, the texture ranging from sandy to sandy loam, clay loam. The major crops grown in the region are rice, coconut, vegetables, tapioca, pepper, arecanut, banana, etc.

Central zone

The central zone consists mainly of three districts: Ernakulam, Thrissur and Palakkad excluding the high ranges, central saline tracts and other isolated areas like kole lands with special soil and physiographic conditions. Geographical area of the zone is 973689 hectares forming 25 per cent area of the state. The soil type is generally laterite. This zone is the major rice growing tract of the state. Coconut, arecanut, vegetables, banana are the other important crops grown in the region

Northern zone

Northern zone consists of four districts viz. Malappuram, Kozhikode, Kannur and Kasargode. The total geographical area of region is 1094600 hectares covering 28.2 per cent of the state. The major soil types are coastal alluvium, laterite and forest loam. Nearly 88 per cent of the population of the region depends on agriculture and allied activities. Rice, coconut, vegetables, arecanut, pepper, cashew, banana and rubber are the important crops in this region.

High range zone

This zone comprises Wayanad and Idukki districts, Nelliampathy and Attapady hill ranges of Palakkad district, Thannithode and Seethathode Panchayaths of Pathanamthitta district, Ariyankavu, Kulathupuzha and Thenmala Panchayaths of Kollam district and Peringamala, Aryanad, Vithura, Kallikad and Amboori panchayaths of Thiruvananthapuram district. The total geographical area of the region is 2177280 hectares. pepper, cardamom, tea and coffee are the important crops grown in the region.

Special zone of problem areas

This zone comprises of sub regions viz. Onattukara, Kuttanadu, Pokkali and kole spread over the six districts viz. Alappuzha, Kollam, Kottayam, Ernakulam, Thrissur, and Malappuram. Rice, coconut, sugarcane, vegetables and sesamum are the important crops in these regions.

3.5. Methods used for data collection

Personal interview method was used in the primary data collection for which a structured schedule developed for the purpose of the study was used. It included adopted or developed instruments for the measurement of all variables selected in the study and is given as Appendix-I. Data from respondents were collected by means of pre-tested structured interview schedule. Data on various aspects of institutionalization were collected from secondary sources such as reports of the State Planning Board, guidelines of five-year plans, circulars and notifications of the department of agriculture, economic reviews, periodic progress reports etc.

3.6. Process of institutionalization of decentralized planning in agriculture

Institutionalization is the process of embedding some conception within an organization. In this process new ideas and practices are adopted by individuals and organizations and become part of ‘the norm’. Institutionalization is the process transforming a set of activities in to an integral and sustainable part of a formal system (Zida *etal.*2018). A sequence of events in institutionalization makes new practice in to a standard practice. (Bennett *et al.*2011). Institutionalization of a service requires a stable environment, a mandate from the Government and sufficient financial and human sources.

There are a series of reforms initiated in Kerala in the 9th, 10th, 11th, 12th and 13th five-year plans to institutionalize the decentralized planning in order to transform it in to a standard practice and an integral and sustainable part of a formal system. So in this study various transitions were observed.

A. Transitions in the administrative framework

These were collected from the secondary sources such as reports of the state planning board, guidelines of various five-year plans, circulars and notifications of the department of Agriculture, LSGD and economic review.

The major points of observation are:

- Changes in the pattern of fiscal allotment to agricultural sector in LSGIs since institutionalization
- Changes in the institutional structures of decentralized planning
- Changes in vertical and horizontal integration in agricultural sector
- Changes in the project approval process
- Changes in the subsidy guidelines to broaden the scope of subsidies in various plans

B. Transitions in the policy environment

The major points of observation made:

- Changes in the policy framework of decentralized planning with special reference to agriculture

- Trends in the state allocation to Local Self Govt Institutions LSGIs
- Changes in the pattern of sectoral ceilings in plan fund allocation in agriculture
- Changes in the criteria for beneficiary selection and targeting
- Perception on the policy environment for efficient decentralized planning in agriculture
- Policies for enhancing people's participation
- Policies to enhance transparency and accountability
- Policy to enhance quality of projects and implementation

3.7. Efficacy of decentralized agricultural planning through local self government institutions

Efficacy is the ability of a system to perform a task to a satisfactory, desired or expected degree. It is the capacity to generate a desired effect or success in achieving a given goal. While efficacy is the performance of an intervention in an ideal context, efficiency pertains to the ability to get the best possible results with the minimum waste of resources. While efficacy is how something is able to do or not, efficiency is how something is done.

Parvathi (1995) defined perception as the expressed opinion about a particular object by the individuals in relation to the set criteria. It seems likely that greater the perceived efficacy of participatory planning, greater would be the desire on the part of stakeholders to involve in it. Hence, for this study, perceived efficacy of decentralized participatory planning (PEDP) was operationalized as the degree to which the stakeholders of participatory planning perceived the system to perform the tasks at various levels satisfactorily as expected. Various parameters pertaining to institutionalization of participatory planning formed the basis for working out the Perceived Efficacy Index.

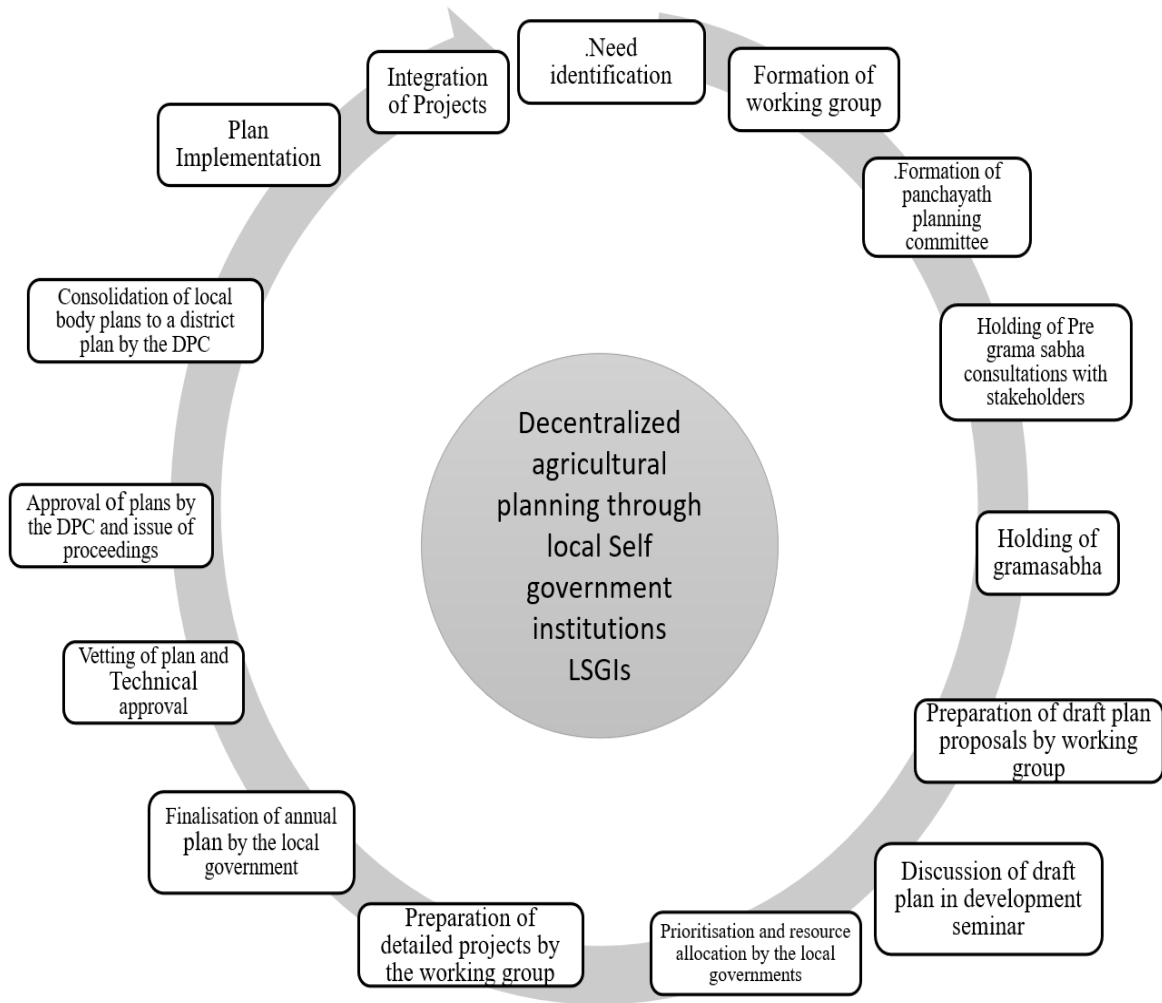


Fig.5. Stages of decentralized agricultural planning through local self-government institutions LSGIs

3.7.1. Efficacy dimensions of decentralized agricultural planning through local government institutions

The decentralised agricultural planning through Local Self Government Institutions has been institutionalised through a process involving 15 stages. After close scrutiny of various guidelines and orders of the LSGI and State Planning Board, perusing the past research studies and relevant literature in the area of participatory planning and by discussing with the agricultural scientists 120 parameters determining the efficacy of various stages were arrived at. These parameters were subjected to

judges rating and a final 60 parameters were selected under 15 dimensions with four parameters under each dimension.

Each parameter was judged based on the degree of efficacy of that parameter against a five-point continuum of mostly adopted, often adopted, occasionally adopted, rarely adopted and not adopted with scores 5,4,3,2 and 1 respectively.

Method of summated rating was adopted to develop a perception scale to measure the efficacy of decentralised planning. For this a tentative list of 120 items relating to efficacy of different steps of decentralised participatory planning was collected from secondary sources like review of literature, published reports, orders of the government, guidelines of the state planning board and consultation with the experts.

The positive and negative items were selected in order to eliminate the effects of social desirability and bias of positive response. This will also help to maintain the consistency of the respondent in giving correct response to the items. These items were corrected and edited in accordance with the 14 informal criteria proposed by Likert (1932) and Edwards (1969). Finally, sixty items were maintained which included 42 positive statements and 18 negative statements.

The 60 edited items were handed over to 40 judges who had expertise in the area of decentralised planning in the LSGIs of Kerala and they were asked to give responses on a 5-point continuum of mostly adopted (5), often adopted (4), occasionally adopted (3), rarely adopted (2) and not adopted (1) for positive items and the scoring pattern was reversed for negative items. By adding the scores for each item, the total score of the judge was calculated. Sixty items thus selected were related to 15 steps of decentralised planning such as *need identification, formation of working group, formation of panchayath planning committee, holding of pre-grama sabha consultations with stakeholders, holding of gramasabha, preparation of draft plan proposals by the working group, discussion of draft plan in the development seminar, prioritisation and resource allocation by the local governments, preparation of detailed projects by the working group, finalisation of annual plan by the local government, vetting of plan and technical approval, approval of plans by the DPC and issue of proceedings, consolidation of local body plans to a district plan by the DPC, plan implementation and integration of projects.*

The scores obtained by each respondent were arranged in descending order based on the total individual scores. Thus, two groups, one with high score values and another with low score values based on the total individual scores were obtained. The higher group thus had 25% of the judges and lower group had bottom 25% of judges with their total scores. For each item, t- value was calculated by discriminating between the values for each item in higher and lower groups. (Edwards,1969). Sixty items with t values more than 1.75 were selected for final inclusion in the scale for perceived efficacy of decentralised agricultural planning in Grama Panchayath. Cronbach's alpha was calculated to determine the reliability of the scale. The content validity was tested by expert judgement.

3.7.2. Efficacy dimensions at different stages

Various efficacy dimensions and related parameters selected under each dimension have been listed below.

Table. 3.4. Efficacy dimensions and related parameters selected under each dimension

SI No	Stage of planning process	Efficacy dimension	Maximum Score value
1	Need identification	Analysis of sectoral data and preparation of status report by the working group	20
		DPC to provide guidelines to local governments in January every year based on District Plan priorities	
		DPC to not to convene meeting of LGs to consolidate working group reports and deliberate on joint projects	
		Local bodies to prepare detailed development report	
2	Formation of working group	Working group members not to have expertise in farming	20
		Working group not to accept proposals from public on enhancing people's participation	
		Academic leadership of working group for stakeholder discussions, Gramasabha meetings and Development Seminar	
		Development Standing committee to ensure that Working Group on agriculture is periodically convened	

3	Formation of Panchayath planning committee PPC	Panchayath Planning Committee PPC not to find out additional resource pooling opportunities	20
		Conduct studies to increase the quality of plan formulated	
		Avoid spread of resources to ineffective small projects	
		PPC to coordinate plan formulation, implementation and monitoring	
4	Holding of pre Gramasabha consultations with stakeholders	Seek NRI opinion and cooperation in formulation and implementation through Gramasabha window of the Panchayath website	20
		An official to be designated as Gramasabha coordinator	
		Pre-Gramasabha multi-platform campaign to be organized with media, educational Institutions, People's organizations, Kudumbasree, etc.	
		Draft proposals not to be discussed in Neighborhood sabhas before the Gramasabha	
5	Holding of Gramasabha	Notice of the Gram Sabha showing the date, time, venue and agenda to be publicized at least a week before	20
		WG members not to lead sectoral discussions on draft proposals in Gramasabha	
		Gramasabha selects five representatives for the Panchayath Development seminar and minutes signed by 15 participants to reach the Secretary of Panchayath on the next working day	
		Beneficiaries of agricultural projects are not selected through Gramasabha	
6	Preparation of draft plan proposals by the working group	Updating the status report by the working Group	20
		Draft plan to fill the gaps identified in the working Group status report	
		WG to assess the logic, efficiency, feasibility, legality, environmental impact and prospects of each project	
		WG not to fix priority for project proposals based on Gramasabha decisions	
7	Discussion of draft plan in	WG members should not lead sectoral discussions in development seminar	20

	development seminar	Development seminar to have a panchayath perspective in strategy setting rather than ward based considerations	
		All elected peoples representatives of three tier LSGDs, members of the Working groups, CDS members and officials of Panchayath to attend the development seminar	
		Development seminar to incorporate all project modifications suggested by Gramasabha	
8	Prioritization and resource allocation by the local governments	Standing committee to issue directions to respective working groups under them	20
		Linking central and State sponsored schemes and own fund realistically with the plan	
		Explore joint projects with other Panchayaths	
		Recommendations of development seminar not to be considered by LG while resources are allocated	
9	Preparation of detailed projects by the working group	WG to facilitate data entry of Panchayath approved projects in the Sulekha software	20
		Standing Committee not to finalise allocation based on mandatory sectoral allocations	
		Implementing officer to formulate only projects related to statutory responsibilities of Panchahayth	
		Multi year projects to be preferred for activities to be continued over years	
10	Finalization of annual plan by the local government	PPC to convene the meeting of lead bank officials and bankers' committees	20
		Local Government not to explore potentials of joint projects with Co-operative sector	
		Forward development seminar Project proposals to upper tiers and state Government	
		Identify Special projects to tap corporate social responsibility funds	
11	Vetting of plan and technical approval	Vetting officers not to conduct project clinics to reduce delay in project approval	20
		Projects to be approved within seven days	
		District level monitoring committee to monitor Vetting Officers to reduce delay	
		Implementing officer of a project can be a member of the approval committee	
12	Approval of plans by the DPC	DPC to ascertain that project are prepared as per the severity of problems in the status report	20

	and issue of proceedings	DPC not to ascertain that mandatory minimum allocation to productive sector is safeguarded	
		Only Plan of Panchayath is approved by the DPC and projects by the designated officers	
		Performance audit wing to observe and report the Grama sabha fact report to DPC	
13	Consolidation of local body plans to a district plan by the DPC	Integrate LSG plans with state and central schemes	20
		Special technical Committee to scrutinize innovative projects of Panchayaths	
		Local Governments not to prepare plans and projects based on priorities and perspectives of the District Plan	
		District plan facilitate projects for sharing of water, other natural resources and environmental protection among local governments.	
14	Plan implementation	During implementation the Working Group should not function as monitoring committee	20
		Implementation officer to make an implementation calendar with working group assistance	
		Maximum resources as beneficiary share to be mobilized through padasekharams, watershed committees, Resident Associations etc.	
		Implementing officer not to accept an approved project if it is beyond his technical expertise	
15	Integration of projects	Agricultural projects should not be formulated on a watershed basis	20
		Priority to organic farming, organic manure units and organic pesticides units	
		Agricultural projects to be integrated maximum with MGNREGA	
		Projects to promote procurement centres, value addition primary processing and marketing to be organized through Farmer organisations and FPOs	

3.8. Determinants of the efficacy of decentralized planning

Determinants of the efficacy of decentralized planning as perceived by actors of the process were finalised after extensive consultation and judges' rating.

Table.3.5. Operationalization and measurement of independent variables.

Sl No	Independent variable for the study	Methodology adopted
1	Age	Nirmala (1993)
2	Experience in farming	Surendran. (2000).
3	Land size	Basava Prabhu (1995)
4	Formal education	Trivedi (1963)
5	Mass media exposure	Prasidha (2006)
6	Leadership quality	Meera (2001)
7	Social participation	Sachana (2015)
8	Sharing of responsibility	Surendran (2000)
9	Innovativeness	Seema (1997)
10	Attitude towards Panchayati Raj	Anu George (2005)
11	Leadership propensity	Surendran (2000)
12	Attitude towards participatory planning	Alex (1999)
13	Extension agency contact	Kalaivani (1992)
14	Accountability in planning and implementation	Surendran (2000)
15	Transparency within the group	Surendran (2000)
16	Sense of empowerment	Jiju(1999)
17	Nature and extent of participation in working group	Jabbar and Sundaramari (2014)
18	Role performance of agricultural officers	Developed for the study

3. 8.1. Role performance of Agricultural officers in decentralized planning

For this study role performance of Agricultural officers in decentralized planning is defined as the extent to which various roles related to planning, execution and implementation, financing and budgeting, administration and supervision, monitoring and evaluation and agricultural extension functions are satisfactorily performed.

In order to analyse the role performance of agricultural officers various functions of agricultural officers in six dimensions were collected based on the office management manual for Local Government Institutions and state Agricultural Policy of the Government of Kerala. 60 functions thus were clustered in to six dimensions – Planning, execution and implementation, financing and budgeting, administration and supervision, monitoring and evaluation and agricultural extension functions. There

were 10 functions related to role performance related to decentralized planning under each dimension.

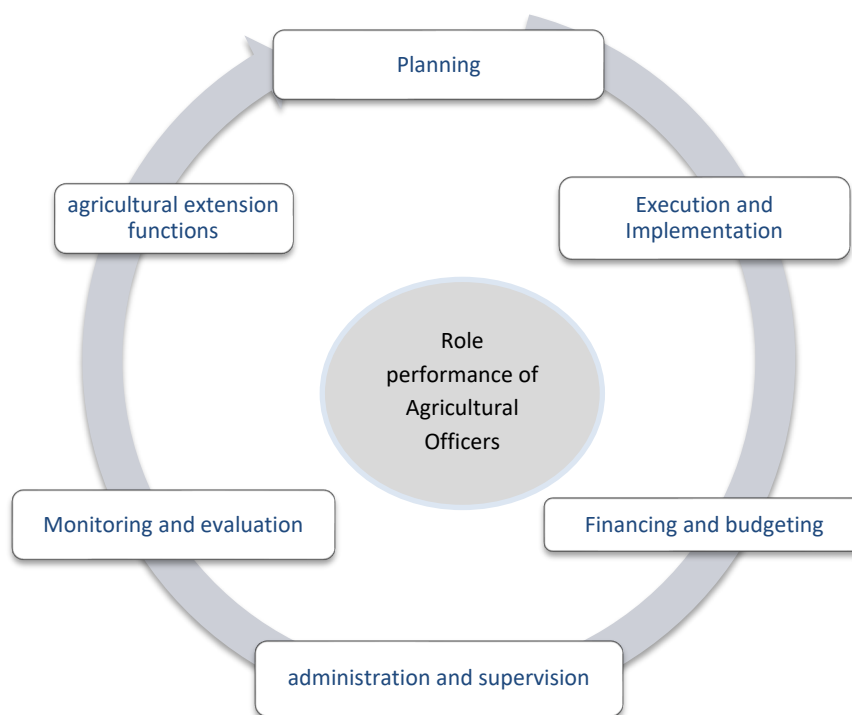


Figure.6. Dimensions of the role performance of agricultural officers in decentralized planning



3.8.1.1. Planning

Selected ten parameters of Agricultural Officers under the planning dimension were *preparing the vision document; development plan and projects for decentralized agricultural planning; estimating input requirement of the village agriculture; identification of fallow land in association with agricultural development committee ADC; delineation of micro watersheds and preparation of watershed-based master plan; integration of LSGI plans with state and central programs of agricultural development; enlist ITKs and local varieties in People’s Bio Diversity Register PBR ; networking for custom hiring services of farm machinery; collection and updating of essential database at Panchayath level; adopt measures for ensuring timely supply of seeds and quality planting materials and Sourcing of farm technologies for young entrepreneurs.*

3.8.1.2. Execution and implementation

Under the execution and implementation dimension the functions of Agricultural Officers selected were : *implementation of state and local self-Government agricultural development programmes; participating in Gramasabha and development seminar meetings of participatory planning process; participation in the development standing committee meeting; organizing Self Help Groups SHGs among farmers; organizing and strengthening Farmer Producer Organisations and Farmer Interest Groups; encouraging systems of cooperative group farming; implementation of income generation projects for women as ex-officio member of Kudumbasree CDS; providing platforms for marketing of farm produce; fixing eligibility and priority criteria for selection of beneficiaries for agricultural projects and preparation of calendar of agricultural activities of the Krishibhavan and ratification by Development Standing Committee.*

3.8.1.3. Financing and budgeting

Under the financing and budgeting dimension ten functions selected were : *verification and issue of natural calamity and crop insurance assistance to farmers; giving expenditure statements of all schemes to the controlling officer and Grama Panchayat; assessing credit requirements of farmers and submit to financing agencies; provide credit through banks and subsidies linked to farmers; submit verified claims for financial assistance under various schemes/ projects to higher officials; drawing and disbursing Officer for LSG schemes under decentralized planning; financial management of Govt. Funds and custodian of connected registers & records; timely release of subsidy to farmers during each cropping season; provide bankable projects for enterprising farmers and assisting local government in preparing annual budget and plan document.*

3.8.1. 4. Administration and supervision

Under the administration and supervision dimension the functions selected were *convening the agriculture working group meetings for participatory planning process ;training the working group members on guidelines for annual plan formulation ;allocation of estimated fallow lands to SHGs; convergence of national rural employment program MGNREGA with other agricultural programmes; maintenance*

of traditional water sources, waterways and canals under the control of Grama Panchayath; verifying and sanctioning applications of farmers and farm labourers for availing pension; initiate steps for obtaining Government approval for the organic fertilizers produced on large scale by the Self Help Groups of farmers and farm women; enter preferred agenda note in the Sakarma Meeting Management Software and presenting opinions on the topic at Panchayat meeting; convening staff meeting of the Krishibhavan involving the Development Standing Committee members after the Grama Panchayat Level Evaluation and Planning meeting and convening meeting of the Agriculture Development Committee ADC at the Krishibhavan every 3rd Saturday of the month.

3.8.1.5. Monitoring and evaluation

The various functions included under this dimension were diagnostic field visits to suggest remedies for pests, diseases and nutritional disorders; monitoring ward level Agro Clinics and farm field schools assigned to agricultural assistants; convening periodical meetings of the Padasekhara Smithies, Kera smithies , Farmers Groups etc. and encourage their formation wherever feasible; acting as convener and reporting officer of the local level monitoring committee under Kerala paddy and wetland act 2008; work as middle level technocrat in passing on the researchable issues at field level to scientists and their feedback to farmers; initiate timely action to settle the objections in the Performance Audit, State Audit Department, AG Audit; preparing Five-Year Plan involving detailed master plan of the projects to be implemented in the agriculture sector of the Grama Panchayat for the next five years; rendering adequate division of workforce & co-ordination of efforts as convener and technical member of Agricultural Task Force of service providers; smoothening crop risk management among farmers through enrolment in crop insurance programs and provide crop management solutions to the farmers on the basis of soil test results

3.8.1.6. Agricultural extension functions

Functions selected under the agricultural extension dimension were providing technical advice and training to the farmers and field staff; participating and organizing agricultural exhibitions and seminars ; spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms;

use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce; adopting technologies for making farming system climate resilient ;promotion of organic and safe to eat standards of food production ;motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc.; enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector; promoting self-reliance in organic manures and vegetables and promoting Integrated Farming System models with progressive farmers.

A respondent is required to judge each function under various dimensions against a five-point continuum from very good, good, average, poor and very poor based on the extent of role performance with Score values of 5,4,3,2 and 1 respectively. The ratio of total score obtained for each dimension for an officer to the maximum obtainable score depicts the index of performance. The aggregate score received for all dimensions will give the total role perception index. Based on the mean performance index score the respondents were divided in to three groups of low, medium and high performance.

3.9. Accomplishments in the agriculture sector since institutionalization of decentralized planning in agriculture

Data on plan implementation from 40 Krishi bhavans were collected for the period from 2012-13 to 2018-19. Data provided included the implementing officer expenditure report and consolidated report pertaining to plan implementation of each year. Accomplishments of decentralized planning in agriculture were quantified in terms of physical targets, financial achievements and other parameters of agricultural development based on availability of benchmark data. The following data on accomplishment were collected:

Typology of agricultural projects implemented
Accomplishment of physical targets in selected LSGIs in the agricultural sector
Accomplishments of financial targets in selected LSGIs in the agricultural sector
Percentage of expenditure on the allocation received
No of projects implemented in agricultural sector

Total outlay and total no of projects implemented
Sectoral allocation and expenditure
Additional area brought under cultivation
No of farmers benefitted
Innovative projects implemented under decentralized planning

.3.10. Constraints and policy imperatives in decentralized planning in Grama Panchayats

In the present study, constraint was operationalized as a problem experienced by members of working group hindering them from effectively participating in participatory planning process. In order to identify severity of various constraints encountered the following procedure was adopted.

A list of possible constraints that may hinder the participation in participatory planning process was prepared after review of literature and information available from different sources such as researchers in the area and extensionists. After that a pilot study was conducted among 50 non sample farmers of the study area to identify the constraints experienced by them, where in the prepared list of constraints was used as a check list. Necessary modifications were made in the list of constraints, more constraints were added, and important constraints were identified during the pilot study. The selected constraints were presented in the final interview schedule and the sample farmers were asked to rate them based on their severity and importance on a five-point continuum of most important, important, undecided, less important and least important with scores of 5,4,3,2 and 1 respectively.

The scores obtained for each constraint based on the responses of all the respondents were summed up and divided by the total number of respondents to get the severity score of each constraint. Then based on the severity scores, the constraints were ranked.

Kendall's W statistic, called the Coefficient of Concordance was used to assess agreement between different raters on different constraints listed. Kendall's W statistic ranges from 0 to 1. A value of zero shows there is absolutely no agreement between raters, while 1 shows perfect agreement. The higher the value of Kendall's W,

the stronger is the association. Usually, Kendall's coefficients of 0.9 or higher are considered very good.

Various policy imperatives necessary to support the process of institutionalization were outlined from the list of constraints and from the brainstorming sessions with working group members and Agricultural officers conducted specifically for the study.

3.11. Statistical tools used for the study

The data collected from the respondents were scored, tabulated and analysed using suitable statistical methods. Keeping in view the objectives of the study the data were subjected to different statistical tools. An outline of various tools used in this study has been given below.

A. Tabulation

Mean and standard deviation

Mean score is a measure of simple comparison obtained by dividing the sum of the scores by the total number of items/respondents. The respondents were grouped in to categories with reference to the means of the independent variable. After grouping the respondents in to categories, the frequency of respondents in each category and respective percentage were worked out. Standard deviation is the square root of the mean of the squared deviations of the individual values from their means.

Percentage analysis: The means and standard deviations of the dependent and independent variables were worked out and the respondents were categorized in to different groups with their relative proportions expressed in percentages. For calculating the percentage, the frequency of the concerned cell was divided by the total number of respondents in each category and multiplied by 100. The percentages were corrected to two decimals.

B. Statistical analysis

Analysis of variance (ANOVA)

The analysis of variance is an analysis tool for partitioning the overall variation in the responses obtained in to different components. Each component is attributed to

an identifiable cause or source of variation. It is a method of determining if various sample means are equal, by comparing the sample variance estimated between the groups to that estimated within groups.

Stepwise multiple regression analysis

Stepwise multiple regression analysis was employed to obtain information regarding the best sub group of independent variables and the relative contribution of each of these external factors (X_i) towards the variations in the dependent variables (Y). It selects the best subset of external factors in predicting variations in the dependent variable in such a manner that

- a) It yields the largest multiple correlation among all subjects
- b) Inclusion of the remaining variables does not significantly improve the prediction of dependent variable.

Principal component analysis (PCA)

Principal Component Analysis is one of the popular multivariate techniques. Principal components are linear combinations of random or statistical variable which have special properties in terms of variances. By principal components analysis it is possible to concentrate on those factors or linear combinations of the factors which are mainly responsible for the variation between the respondents. The total variability present in the data is divided into different components (equal to the number of factors) such that each component is a linear combination of the different factors. These combinations (or functions) are called principal components. The first linear combination obtained will have the maximum variation, the second has the next maximum variation and so on. First few components explaining more than 75 per cent of variability are identified through this study.

Factor analysis

Factor analysis is essentially a method of meaningful reduction of data (Dillon and Goldstein, 1984). Factor analysis is used to reduce the dimensionality of the dataset down to fewer unobserved variables. The purpose of this technique is to reduce the large amount of variables to a smaller set of underlying variables by creating factors (Kim and Mueller 1978).

There are several ways to conduct factor analysis (principal components, unweighted least squares, generalized least squares, maximum likelihood, principal axis factoring, alpha factoring, image factoring) and alternative choice of methods (correlation matrix or a covariance matrix) (Ather and Balasundaram, 2009). However, the principal component analysis method is used in this study.

Factor loadings, also called component loading in Principal Component Analysis (PCA), are the correlation coefficients between the variables (rows) and factors (columns). Variables with a factor loading of higher than 0.5 are grouped under a factor.

The Eigen value for a given factor measures the variance in all the variables which is accounted for by that factor. Scree plots are formed by plotting the number of factors against their respective Eigen value.

KMO and Bartlett’s test

Kasier – Meyer –Olkin (KMO) measure of Sampling Adequacy tells whether or not the distribution of value is adequate for conducting factor analysis.

3.3.4.2 Coefficient of concordance

Kendall’s W statistic, called the Coefficient of Concordance is used to assess agreement between different raters. Kendall’s coefficient of concordance (W) is

calculated as,
$$W = \frac{12S}{p^2 (n^3 - n) - pT}$$

- where, n = the number of objects
- p = the number of judges
- T = the correction factor for tied ranks

$$S' = \sum_{i=1}^n R_i^2 = SSR$$

- where, ‘S’ = the sum of squares from row sums of ranks R_i.
- m = the number of groups
- t_k = the number of tied ranks in each (k) of m groups

Kendall's W statistic ranges from 0 to 1. Zero shows there is absolutely no agreement between raters, while 1 shows perfect agreement. The higher the value of Kendall's W , the stronger the association. Usually, Kendall's coefficients of 0.9 or higher are considered very good.

Reliability analysis of scale

Reliability of a scale ensured the stability, dependability, consistency and accuracy of measurement by the instrument (Kerlinger, 1978). The reliability of the index was established through coefficient alpha (Cronbach, 1951).

4. RESULTS AND DISCUSSION

This chapter deals with the results of the study by employing the methodology discussed and prescribed in the preceding chapter. Keeping the objectives in view the findings as well as the discussion on them are presented here under the following headings.

4.1. Process of institutionalization of decentralized planning in agriculture in Kerala

- 4.1.1. Trajectory of the evolution of decentralized planning in Kerala
- 4.1.2. Transitions in the administrative framework of decentralized planning with special reference to agriculture
- 4.1.3. Changes in the policy environment of the decentralized planning

4.2. Efficacy of decentralized planning in agriculture

- 4.2.1. Perceived efficacy of dimensions of decentralized planning through LSGI
- 4.2.2. Determinants of the efficacy of the decentralized planning as experienced by stakeholders
- 4.2.3. Role performance of agricultural officers in decentralized planning

4.3. Accomplishments in agricultural sector since institutionalization of decentralized planning in agriculture

4.4. Constraints and policy imperatives of institutionalization

- 4.4.1. Constraint analysis of the decentralized planning process in LSGIs
- 4.4.2. Policy imperatives of the experiences of institutionalization

4.1. Process of institutionalization of decentralized planning in agriculture in Kerala

The concept of decentralised planning, called as *peoples plan* campaign, was introduced in 1997 in the local governments during the 9th Five Year Plan (1997-02) for the effective utilisation of plan funds. Within a time span of 25 years the local governments have completed four five year plans and four annual plans during which, they have gained much experience in the formulation and implementation of decentralised planning.

The process of decentralised planning and Panchayati raj had undergone many changes while institutionalising the procedures through supporting institutions like State Finance Commission, Information Kerala Mission, State Election Commission, LSGD Engineering Wing etc. The benefits of Information Communication Technology (ICT) had been gradually synthesised to a great extent in the plan formulation and monitoring system and in the routine activities of grama panchayats.


The campaign on farmer participation had been continuing in Kerala from 9th to 13th five-year plans. Here, an attempt has been made to document the features of the program and the processes in each phase of the program, as stipulated and specified in various plan guidelines of the Kerala State Planning Board published from 1996 to 2021 in order to guide the efficacy assessment to be made for this study.

4.1.1. Trajectory of evolution of decentralized planning in Kerala

When the Government of Kerala adopted a strong initiative to draft the proposals of the ninth five year plan with massive people's participation, the prerequisites for this initiative such as organizational reorientation, re deployment of officials, definition of the roles of government officials and people's representatives had not been complete. The state planning board was assigned with the task of developing modus operandi of the programme. The board decided to initiate a people's planning campaign in order to empower the panchayats to draw up the ninth plan schemes within their respective areas of responsibility.

4.1.a. 1. Constitution and the functions of Panchayats:

Article 243G, read with the eleventh Schedule, stipulates the Panchayats to be endowed with such powers and authority as may be required to enable them to function as institutions of self-government and also the preparation and implementation of plans for economic development and social justice including those in relation to the 29 matters as follows, listed in the eleventh schedule.

 **Table 4.1. Functions of local self- governments under different sectors as envisaged in the constitutional amendment**

Productive sector	Service sector	Infrastructure sector
Agriculture and allied sectors, including extension	Drinking water	Maintenance of community assets
Animal husbandry, dairying and poultry	Health and sanitation hospitals. Primary health centers, dispensaries	Markets and fairs
Minor irrigation, water management watershed development	Women & child development	Rural housing
Fisheries	Poverty alleviation programmes	Roads, culverts, bridges, ferries, waterways other means of communication
Social forestry farm forestry	Education, including primary and secondary schools	Rural electrification, distribution of electricity
Minor forest produce	Technical training vocational education	Non-conventional energy
Small scale industries, food processing industries	Adult and non-formal education	Land improvement, land reforms, consolidation, soil conservation
Khadi, village and cottage industries	Cultural activities and Libraries	
Fuel and fodder	Family welfare	
	Social welfare, welfare of the handicapped and the mentally retarded	
	Public distribution system	

4.1.1.2. Phases of the Peoples Planning Program

The Kerala State planning board came out with a series of programs for accomplishing peoples plan and suggested administrative measures to help the process. The unique features of the decentralization experiment conceived by the government based on the deliberations of the state planning board may be summarized as:

1. As much as 35 to 40 per cent of the plan outlay of the State was earmarked for projects formulated by the local bodies.

2. Nature of devolution and financial powers would be so liberal that it gives maximum autonomy to the local bodies in drawing up development program.
3. Devolution of financial authority envisages or rather on the formulation of a comprehensive area plan by each local body by integrating state and centrally sponsored schemes, projects that can operate on the revenue owned by the local bodies, loans from financial institutions, voluntary labour, donations etc.
4. The criteria followed for intra –tier distribution of plan grants-in aid from the 9th five year onwards were the following.

Table. 4. 2. Criteria followed for distribution of plan grants to Panchayats in Kerala

Indicators	% Weightage		
	Grama panchayat	Block panchayat	Zila panchayat
Population (excluding SC/ST)	65	65	55
Geographical area excluding area under forests	5	10	15
Area under paddy	5	-	-
Own income of Grama Panchayath	10	-	-
Composite index of agricultural labourers, persons engaged in livestock, fisheries,etc and marginal workers	15	25	20
Composite index of backwardness , houses without latrine and houses without electricity	-	-	10
Total	100	100	100

(Source: Economic Review,2010)

5. The government would pursue appropriate legislations to facilitate meaningful and effective decentralization. Many administrative reforms committees have been instituted to overhaul the state’s administrative machinery in the context of decentralization.

6. A massive campaign to conscientize the people and to empower the local bodies had been designed. This was to make the people, bureaucrats, volunteers, experts, etc., to rally behind local bodies and to bring out favorable attitudinal changes and generate a political consensus to institutionalize the new found values. (Gulati, 1996).

The entire course of participatory planning programme was designed in a phased manner. with specific objectives for each distinct phase. The program was formally initiated on 17th August 1996, on the farmers' day with the following phases.

4.1.1.2.1. Phase.1. Grama sabha (August-October 1996)

Grama sabhas, defined as the assembly of all the voters in an electoral ward (normally, there are 1500 to 2500 voters in a Panchayat ward) were held to throw open sufficient opportunities for the people to participate in formulating local development plans, based on the felt needs identified by them. Given the relatively larger size of grama panchayaths in Kerala, special guidelines had to be formulated to conduct them conveniently and to make them represent the interest of all sections of people and all sectors of development. Accordingly, development issues pertaining to the major development sectors were to be discussed group wise in grama sabhas. But for a brief inaugural session and a valedictory session (wherein all the participants come together) , all other deliberations were in these groups of 25-50 participants. It was estimated around 3 million persons participated in these gramasabha out which 27% were women. (Economic Review, 98)

Developmental issues were discussed in 12 sectoral groups such as agricultural and irrigation , animal husbandry and fishing, education , drinking water and public health, industry, transportation and energy, habitation and social welfare, culture, women empowerment, scheduled castes/scheduled tribes welfare, cooperation and resource mobilization. In the inaugural session, the elected representative of the ward, local resource persons and the president of the village panchayats address the gathering with brief remarks on the problem of centralized planning, the importance of people's planning, how to participate in discussions so as to have focused deliberations, etc.

After the introductory remarks, the participants of the Grama sabha split into twelve groups, generally, according to one's interest. A participant could decide as to

which sector he/she makes his/her contribution. The discussion groups were facilitated by resource persons who were trained at the local level to act as *facilitators*. A semi structured questionnaire containing directives meant to regulate the flow of discussions and to be used exclusively by the facilitators were prepared and distributed. Nearly one lakh local resource persons LRPs were trained at the state level to participate in grama sabhas as facilitators. Members of working groups at Panchayath level will guide discussions in the related discussion group.

The group would normally discuss the problem on local development in the light of locally available information. Then they were guided to analyse these problems based on their experience and suggest possible solutions. The discussions were facilitated by local resource persons, elected representatives of the panchayat and officials of various development departments who attended the meeting. The plenary session, summed up the deliberations of all the programs. For each group, one or two representatives were selected to participate in the development seminar that formed at the panchayat level.

Once the grama sabhas of all the constituent wards were over, development report for the Panchayat based on the deliberations in grama sabhas and incorporating its history, information on natural resources, pertinent statistics of the panchayath and issues related to the 12 major development sectors identified by the people was prepared. Thus, each of the Kerala's 991 panchayats and 54 municipalities had produced a development report.

Local bodies resorted to various measures to ensure public participation. The statutory quorum of the grama sabha has been fixed to be 50 and the frequency of meeting, twice a year. To ensure maximum participation, the grama sabhas were convened on holidays. Squads of volunteers consisting of local resource persons, political and social activists and elected representatives of local bodies visited households in advance to explain the function on grama sabhas. Preparatory meeting of mass organizations was also held. Various novel propaganda methods such as 'development quiz', '*Vilambara jadha*' (declaration rally), etc. were also employed to cultivate awareness among the people.

4.1.1.2.2. Phase ii: Development seminars (October -December 1996)

Once the people identified their felt needs in grama sabhas, an objective assessment of the natural and human resources of the locality was made subsequently. This was to evolve a perspective for local development and to secure a judicious blend of local needs and aspirations with local resources availability. The assessment of natural and human resources was made possible through a series of studies done in every panchayat and municipality, employing participatory appraisal techniques.

4.1.1.2.3. Collection of secondary data

Due to paucity of time, instead of collecting primary data, relevant secondary data were gathered from documents and registers of different line departments in a pre-designed uniform format. In addition, to study local geography and natural resources ,rapid appraisal of the natural resources was undertaken by means of ' transect walk' technique. Eco zones in every panchayat were identified by first demarcating the area in to various zones on the basis of topography or land form and then identifying the soil, water and vegetation characteristics in each zone.

4.1.1.2.4. Review of ongoing schemes

Each department operating at the Panchayath/block/ district/ Municipality/ Corporation/ level was directed to prepare *sectoral reports* in their respective domain and make them available to the local bodies to enrich participatory planning initiatives.

4.1.1.2.5. Transfer of responsibilities and personnel

Panchayaths have been given officers in 12 sectors to implement various sectoral projects.

4.1.1.2.6. Transfer of financial resources

On an average 25-30 % of the state budget allocation has been transferred to panchayaths for addressing development needs of three sectors as given under.

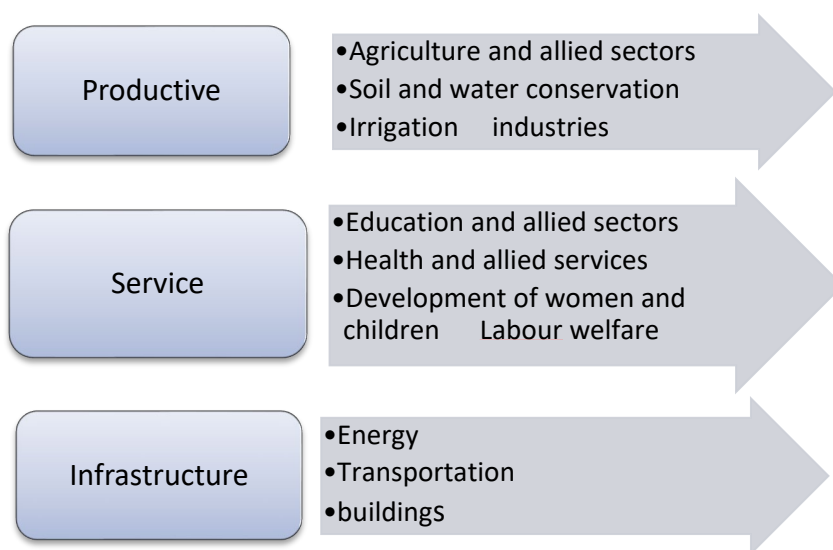


Figure. 7. Three sectors of development handled by local governments

All the plan grants due to local governments were separately budgeted in a document given as Annexure IV of the state budget. It is non-divertible for other purposes. In addition, traditional non-plan grants continued to be given as before. The plan grants flowed in four installments to the local bodies. A local government had to spend at least 75% of its allocation during a year failing which the shortfall would be reduced from the next year's allotment.

4.1.1.3. Decentralized planning –Institutions and methodology

Apart from the three tiers of grama panchayath at the village level, block panchayat at the block level and Zila panchayath at the district level there are various institutional structures for fostering people's participation

4.1.1.3.1. Grama sabha (GS)

This platform at the ward level should have a quorum of ten per cent. implementing officers and elected representatives should attend the gramasabha meetings. There will be an official coordinator for each gramasabha to keep its records.

4.1.1.3.2. Neighbourhood groups

Being the subsystem of gramasabha, neighborhood groups (*Ayalkootams*) were formed as an association of women members of 20-25 families. The *Ayalkootam* identifies women from among themselves and form Self Help Groups (SHGs) for carrying out group activities; mainly for utilizing the 10% plan grants earmarked under women Component plan (WCP).

4.1.1.3.3. Working groups

Felt needs of farmers and their aspirations have been reflected in the participatory planning process through the working groups involving farmer representatives. Moreover, working groups facilitate discussion groups involving farmers in grama sabha, development seminar and stake holder discussions. They will facilitate timely implementation of projects and help in concurrent monitoring making the planning process participatory.

Local bodies are to form working groups for each of the departments transferred depending on the availability of officers and local necessity. Working groups have to be under the control and directions of respective standing committees. There are specific guidelines suggested for the formation of working groups (GoK,2017).Implementing officers, should send a proposal of working group members in the prescribed proforma to the Panchayath and the secretary has to initiate an order on various members of the working group members in the proforma prescribed incorporating the preferences of the gramasabha and local body .Without prior consent of the Panchayath and without exceeding the total number stipulated working groups can co-opt more members as, special invitees, if necessary. Members will be automatically disqualified if they fail to attend three meetings consecutively and new members can be inducted.

A working group can have 10-15 members, the quorum of the meeting being one third of the total members. A member other than the official or elected representative of people will act as the vice chairman. Presence of chairman and convener in each meeting is made mandatory. The chairperson of the working group should be a member of the standing committee other than the standing committee chairman. The president will control all standing committees and the respective

standing committees will control working groups assigned to each standing committee. The senior most officer in respective sector will be the convener of working group and in addition to him another officer also will be a member.

The meeting deliberations should be minuted by the convener in registers. In the common general body of working groups, the president will present an assessment about ongoing projects. The standing committee chairman will present the development perspective, approach, and priorities of the Panchayath. Each working group will hold separate meetings to prepare draft project proposals and action plan for current year plan formulation of the working group. WG should prepare a status report and draft project proposals in the proforma and submit to the local body. Other functions include providing details to be printed and circulated in grama sabha and plan document, advising respective standing committees and if necessary, other working groups, preparing projects having economic viability and technical feasibility in the prescribed proforma, providing academic leadership for the discussions in grama sabha, stake holder meet and development seminar and monitoring implementation of approved plan projects.

One third of working group members should be women. Members of the Kudumbasree community development society CDS should be members in working groups. SC promoters, literacy workers, youth coordinators should also be members in working group. Representatives of the banks, forest officials, eco development committee members, should be members in respective WGs. Tribal community should also be represented. While selecting members, it is specified that care should be taken to select role models from farmer, industrialists, entrepreneurs, practitioners, professionals, experts and academicians in respective sectors.

Table. 4.3. Standing committees of the panchayath and working groups under their control

Standing committee of local government	Working groups assigned	Convener of working group at Panchayath level
Finance	Working group on Accounts/ documents /good governance	Secretary of grama panchayath
Development	Agriculture and allied (soil conservation,irrigation,ecology,social forestry)	Agricultural Officer
	Animal husbandry and dairying	Veterinary Surgeon
	Small scale industries	Village Extension Officer
	Fisheries	Fisheries Extension Officer
	Public works (including energy and electricity)	Assistant Engineer
Welfare	Poverty alleviation including housing	Member Secretary, Kudumbasree
	Social welfare(including old aged physically and mentally challenged	ICDS Supervisor
	Development of scheduled castes	Village Extension Officer
	Development of scheduled tribes	VEO/Tribal Extension Officer
	Development of women and children	ICDS Supervisor
Health and education	Health	Medical Officer
	Drinking water, sanitation, (including waste disposal)	Assistant Engineer
	Education, culture, art, sports, and youth welfare	Head Master

(Source: Guidelines for 12th five-year plan, GOK)

4.1.1.3.4. Committee System

All the panchayaths in the three-tier system have various standing Committee (SCs), each assigned with certain subjects. The SCs are co-ordinated with a *Steering Committee* consisting of the President, Vice President of the Panchayat and the chairpersons of the SCs. Agriculture comes under the development standing committee.

Govt of Kerala. (2013) vide GO(MS)no. 362/2013/LSGD called for setting up of a *Grama Kendra* for acting as nerve centre of grama sabha in each ward and authorized each Panchayath to sanction an amount of Rs.50,000 per ward in connection with operational costs of the centre.

4.1.1.3.5. Expert Committees:

Expert committees involving officials and farmers were formed from 10th five year plan onwards for plan approval. But these TAGs were dissolved by the government in 12th plan period. In the 12th and 13th five year plans, approval has been made to projects by the officer authorized, mostly the controlling officer of the Panchayath level implementing officer. The DPC will sanction only the annual plan and not individual projects.

4.1.1.3.6. Panchayath Planning Committee:

During the 13th five-year plan Panchayath Planning Committee (PPC) was constituted to foster people's participation in the process. The major responsibility is to help the local body in plan formulation, implementation and monitoring. The PPC has 12 members with the secretary of the Panchayat being the Plan Coordinator and another implementing officer as Asst Plan Coordinator. With a tenure of five years, PPC will organize brain storming on development issues of the panchayath assist the working groups in forming perspectives, explore additional resource mobilization opportunities, coordinate plan implementation, help local body in coordinating working groups. PPC will conduct specific studies. It will initiate stakeholder discussion and will network volunteering citizens, experts and academicians for enriching the participatory planning system within the panchayath.

4.1.1.3.7. District Planning Committee (DPC):

The plans made by LSGIs in the district would be submitted to the DPC, which would give formal approval to them. The DPC will not have the power to alter the priorities fixed by PRIs, but could only ensure that the guidelines were followed.

4.1.1.4. The project approval process in decentralized planning at Panchayath level

Government of Kerala (2017) has revised the plan formulation and approval process to enhance accountability and reduce unnecessary delay.

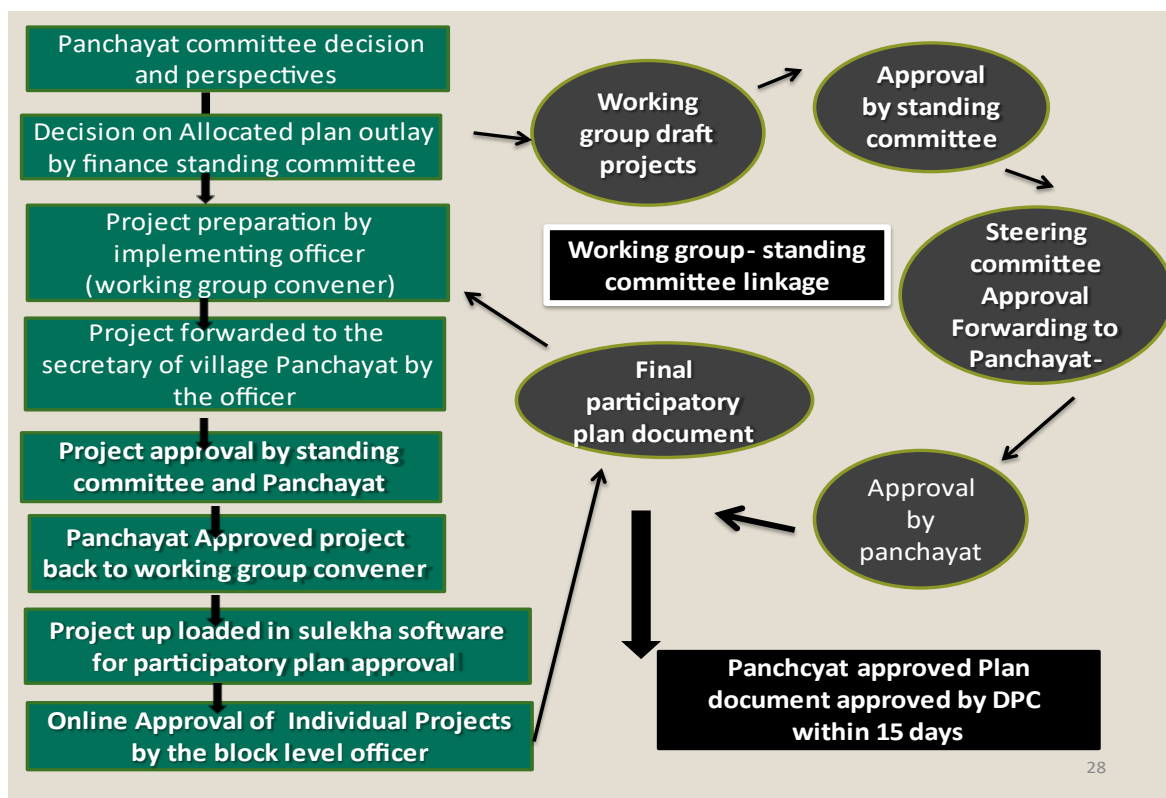


Fig.8. Plan formulation and approval process in decentralised planning of LSGI

4.1.1.4.1. Formulation of annual plan

Development proposals from various gramasabhas are consolidated by the working groups and forwarded for the approval of the local body. The Panchayat Planning Committee would help the local body in coordination of all stages. The approved proposals are then presented in the development seminar. The development seminar will have all the elected representatives, members of the Panchayath Planning Committee, gramasabha representatives, implementing officers, SC/ST promoters, representatives of ADS, CDS, financial institutions, professionals and other stakeholders. The development seminar will discuss the draft development document

on working group basis. Project proposals that can be undertaken will be given to the respective working groups. Others will be given to the block and district panchayats. Working group will prioritise the project proposals, assess its environmental impact and will scale down the projects avoiding ineffective projects and integrating viable proposals. Considering the thrust areas and priorities and guidelines of the State government, local body through a resolution will finalise the outlay for plan and projects. Based on this each standing committee after approving the projects will issue directions for project formulation to respective working groups under their control. (Govt of Kerala,2017)

4.1.1.4.2. Project preparation

Projects approved by a local body and prepared by the working group will be subjected to data entry in *Sulekha* software along with a simple project summary. The working group convenor and chairperson are to sign the hand written summary of the project. Each implementing officer has a use name and password for ensuring accountability. The implementing officer before data entry is to ascertain that the project is legal, coming under mandated responsibility of the local body, without violating subsidy norms, having approved rates, technical viability, practical utility, quality and with written project summary. (Govt of Kerala,2017)

4.1.1.4.3. Approval of the project

The proposed project is sent to the secretary, LSGI by the implementing officer. After incorporating the details pertaining to Panchayath approval on all the projects received from various working groups, the annual plan formulated will be sent to the DPC. The DPC will approve only the annual plan. Each project in the annual plan will be approved by the officers authorised, who will be the controlling officer of the Panchayat level implementing officer. Thus, projects of the agricultural officer will be approved by the Assistant Director of Agriculture at the block level. It is specified that projects have to be approved within seven days. Innovative projects formulated by Panchayats for which guidelines of assistance have not been specified will be sanctioned by a special technical committee under DPC. (Govt of Kerala,2017)

4.1.1.5. Important milestones in decentralization and participatory planning in Kerala

The trajectory of evolution starts with the constitutional amendment in 1994. Devolution of authority, separate budget for local bodies, institutionalization, watershed master plan, working group -standing committee linkage, IT support, project approval and formulation, *navakerala* mission, district plan, *subhiksha keralam*, local disaster management plan etc are some of the salient turning points in the trajectory. Various stages in the trajectory of evolution of decentralized plan through local self-government institutions of Kerala from 9th plan to 13th five-year plan have been given below.

Table. 4.4. Important milestones in decentralization and participatory planning in Kerala.

<i>Year</i>	<i>Development in evolution</i>
1994	Acts supporting constitutional amendment
Sept 1995	Devolution of authority, functions, institutions and staff to local bodies
October 1995	Local bodies in three tier system materialised
February 1996	separate budget allocations for local governments
July 1996	Initiated allocating 35 to 40% of the state plan to panchayats
August 1996	Initiated people's planning campaign. 600 Key Resource Persons (KRPs), 10000 district resource persons, one lakh Local Resource Persons were trained - Task forces at village level for plan formulation
July 2000	Officials at district level also transferred to district panchayath
2001	Officials of panchayat designated as gramasabha co ordinators
2005	Institutionalization of peoples planning
2007	Started 11 th five year plan - Local economic development given thrust - TAG Technical Advisory Group at block level constituted - Minimum of 40% development fund stipulated for productive sector and 20% for the infrastructure sector
2009	To promote grama sabha as the fourth tier of local governance, observed as year of grama sabha
2010	Project formulation proforma introduced people participation reduced.
2011	Watershed master plan for NREGA to be integrated to plan

2012	<ul style="list-style-type: none"> ▪ Long term perspective plan ,development report and five year plan documents ▪ 10 per cent fund earmarked for women ▪ 5 per cent for children, old aged and physically challenged and for palliative care
2013	Working groups assigned to the respective control of standing committees. Govt removed the mandatory minimum ceiling in productive sector
2014	<ul style="list-style-type: none"> ▪ Technical advisory group TAG dissolved ▪ Superior officers delegated with that function. ▪ Project formulation and approval transformed as on-line activity. ▪ Software <i>Sulekha</i> introduced for the specific purpose
2016	Navakerala mission started, <i>Haritha keralam, ardrum, life, education rejuvenation missions</i>
2017	District plan formed by DPCs Local Governments first started making by June15
2019	‘Special Window of Innovative Programmes’
2020	<i>Subhiksha Keralam</i> program initiated to combat food scarcity against the backdrop of Covid-19 outbreak First time in the country, all Grama Panchayats in the State prepared local disaster management plans

(GoK, 2020)

4.1.2. Transitions in the administrative framework of decentralized planning with special reference to agriculture

Under the transitions in the administrative framework of decentralized planning , observations have been made on the trends in the state allocation to Local Self Govt Institutions LSGIs, Changes in the patterns of expenditure in local self-government institutions, mandatory minimum sectoral allocations stipulated, transitions in the financial allocations in various zones, comparison of the allocations to productive sector in Grama Panchayats from 2012-13 to 2018-19,analysis of total allocation and sector wise distribution of projects in Panchayaths of five zones, changes in the institutional structures of the decentralized planning and changes in the vertical and horizontal Integration have been described below.

4.1.2.1. Trends in the state allocation to Local Self Govt Institutions LSGIs

The study aimed to analyze the trends in allocations from the state government to local self-government institutions over different plan periods starting from ninth plan period to the 13th plan. Data on allocation to LSGIs were collected from the planning board documents and have been detailed below in Table.4.5.

Table.4. 5. Trends in the state allocation to local self Govt institutions

Five Year plan	Period	Allocation to LSGIs (Rs.in crores)	Percentage of state allocation
9 th	1996-2001	5464	29.29
10 th	2002-07	6784	26.89
11 th	2007-2012	10524	24.48
12 th	2012-2017	21728	22.90
13 th (Till 2020-21)	2017-2022	33385	24.21

(Source: Economic Review, 2002,2008,2012,2017,2020)

It can be seen that the allocation to local self-governments has been on a decreasing trend over the period. Local bodies were given an allocation of 5464 crores in 9th plan period which was 29.29 percent of the state allocation. During 10th plan the location was 6784 crores, being 26.89% of the state allocation. During 11th plan it went down to 24.48 % of the state allocation. During 12th plan the allocation to LSGIs were 21728 crores which was 22.90 % of the state allocation. Though the allocation amount has increased, the percentage is low when compared to the ninth and tenth five-year plan period.

4.1.2.2. Changes in the patterns of expenditure in Local Self Government institutions

In order to assess the pattern of expenditure of local bodies during various plan periods, expenditure of LSGIs from ninth plan to 12th FYP were collected. The data have been given in Table.4.6.

Table. 4.6. Expenditure of LSGIs under decentralized planning in Kerala during various FYPs (Rs. Crore)

Five year plan	Period	Allocation to LSGI	Expenditure	Percentage of Expenditure
5 years of 9 th plan	1996-2001	5464	4087.62	74.81
10 th	2002-07	6784	5521.76	81.39
11 th	2007-12	10524	11009.95	105.25
12 th	2012-17	21728	19001	87

(Source: Economic Review, 2002,2008,2012,2017,2020)

The expenditure of local bodies has ranged from 74.81 to 105.25 % during this period. The above figures depict those local self-governments have performed fairly well in utilizing the amount allotted to them from the State government. Highest percentage of expenditure was during 11th five-year plan.

4.1.2.3.Changes in the pattern of sectoral ceiling in plan fund allocation in agriculture

In order to analyse the trends in sectoral allocations over different plan periods data on minimum mandatory sectoral ceiling for productive sector (%) and maximum ceiling for infrastructure (%) were collected. Perceptible changes could be observed in the pattern of sectoral ceiling in plan funds in the productive sector from time to time. The details of these differences are shown below:

Table. 4.7. outlines sectoral allocations stipulated during various plan periods. The minimum sectoral allocations for productive sector during ninth plan period was prescribed as 40% but there was no maximum ceiling fixed for infrastructure sector. Hence a control over local bodies on their unnecessary tilt to infrastructure sector could not be made. This deficiency was corrected during 10th plan by fixing a maximum ceiling of 30% for infrastructure sector. But the minimum ceiling for productive sector was reduced from 40% to 30%. But during 11th plan owing to observations that productive sector has not been addressed by LSGIs in a desired manner the Govt of Kerala again enhanced as 40% in productive sector. Further the maximum ceiling for

infrastructure was reduced to 20%. This step could safeguard the productive sector in a significant way.

Table.4.7. Mandatory sectoral allocations stipulated in various plans

Plan period	Minimum mandatory sectoral ceiling for productive sector (%)	Maximum ceiling for infrastructure (%)
9 th plan	40	30%
10 th plan	30	30
11 th plan	40	20
12 th plan	No minimum prescribed. left to discretion of local bodies	45
13 th plan	30% for productive sector 10% for women component plan 10% for waste management and water conservation initiatives	Not more than 30% for infrastructure

(Source: Economic Review, 2002, 2008, 2012,2017,2020)

But during 12th five-year plan period, on the contrary, there was no minimum ceiling prescribed for productive sector. The decision to allocate funds to productive sector was left to the discretion of the local bodies. Further, the maximum ceiling for productive sector was raised to 45%. This decision had far reaching consequences of neglecting the productive sector in many panchayaths. It was also observed that during the last years of the 12th five year plans some panchayaths selected for study had conceived only projects for providing labour cost for paddy for some years continuously without opting any other sectors of agriculture. During 13th five-year plan 30% was fixed as minimum ceiling for productive sector, 10 % for women component plans. For waste management and water conservation initiatives, 10 % of the allocations was prescribed. For infrastructure sector an upper ceiling of 30% as done in 10th plan was reinstated. These measures have caused an upsurge in productive sector projectisations of the LSGIs.

As a measure to ensure accountability and transparency in village panchayat in their sub sectoral allocations, the state government stipulates mandatory minimum allocation in each sector. This enables each implementing officer and working group to get a minimum plan share for projectization. The mandatory allocations stipulated during 13th plan has been given in Table.4.8.

Table.4.8. Mandatory minimum sectoral allocations stipulated during 13th plan

Sub sector	Per cent allocation
Productive sector	30 %
Disabled & children	5 %
Old age and palliative population	5 %
Women component plan	10 %
Sanitation	10 %

(Source: Economic review,2020)

During 13th plan five sub sectors had minimum stipulated sectoral allocations. Productive sector had 30% minimum stipulated allocations. Disabled and old age palliative population had an allocation of 5% each. There was 10% specified for women component programs and sanitation initiatives.

4.1.2.4. Transitions in the financial allocations in various zones

Data were collected from 40 Panchayats for the years 2012-13 to the 12th five-year plan (2012-2017) and two annual plans of 13th five-year plans (2017 -19 and to 2018-19). Allocation to Panchayaths from the state government comprised of normal share, 11th Financial Commission grant (EFC). Data related to the performance of Panchayats in productive, service and infrastructure sectors and SC sectors in various projects prepared by local self-governments through people's participation under decentralized planning.

The mean allocation and expenditure under productive sector in all zones were observed and has been shown in Table.4.9. It can be seen that high range zone had the maximum allocation (326.32 lakhs) followed by Central Kerala (182.39 lakhs).

Table.4.9. Mean allocation and expenditure under productive sector of all zones

Mean allocation and expenditure under productive sector of all zones			
Zone	Mean allocation under productive sector (Lakhs Rs.)	Mean expenditure under productive sector (Lakhs Rs.)	Percentage of expenditure
Southern Kerala	71.18	35.86	50.38
Northern Kerala	112.51	90.79	80.69
High Range	326.32	240.04	73.56
Problem area	154.72	123.69	79.94
Central Kerala	182.39	103.72	56.87
Mean	169.24	118.84	70.21

(Source: Krishibhavan expenditure reports)

Southern zone had the lowest mean allocation to productive sector (71.18 Lakhs). With regard to the percentage of expenditure, northern zone ranked first (80.69) followed by problem area zone (79.94) and high range zone (73.56) respectively. It can be seen that high range zone with maximum allocation under productive sector ranked third with regard to the percentage of expenditure in productive sector. Similarly central zone which stood second in allocation could reach the third position only (56.87%) with regard to the percentage of expenditure. This shows that the efficiency of utilization of fund in high range zone and central zone needs improvement. Southern Kerala had the least mean zone allocation and mean zone percentage of expenditure. This shows that both the attention paid to productive sector allocations and expenditure incurred have to be improved strategically in the southern zone.

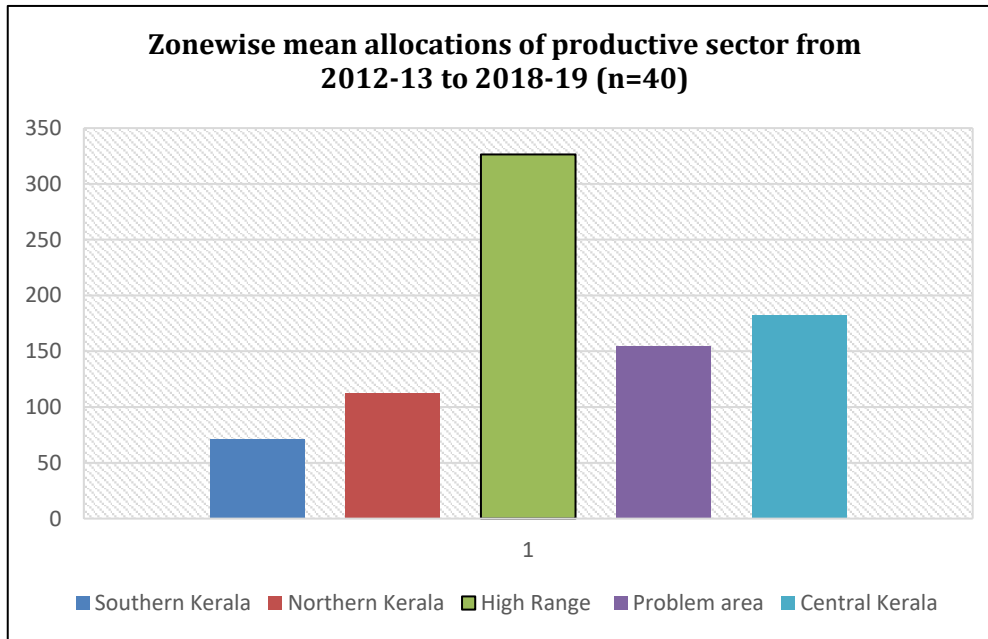


Fig. 9. Zone wise mean allocations of productive sector from 2012-13 to 2018-19

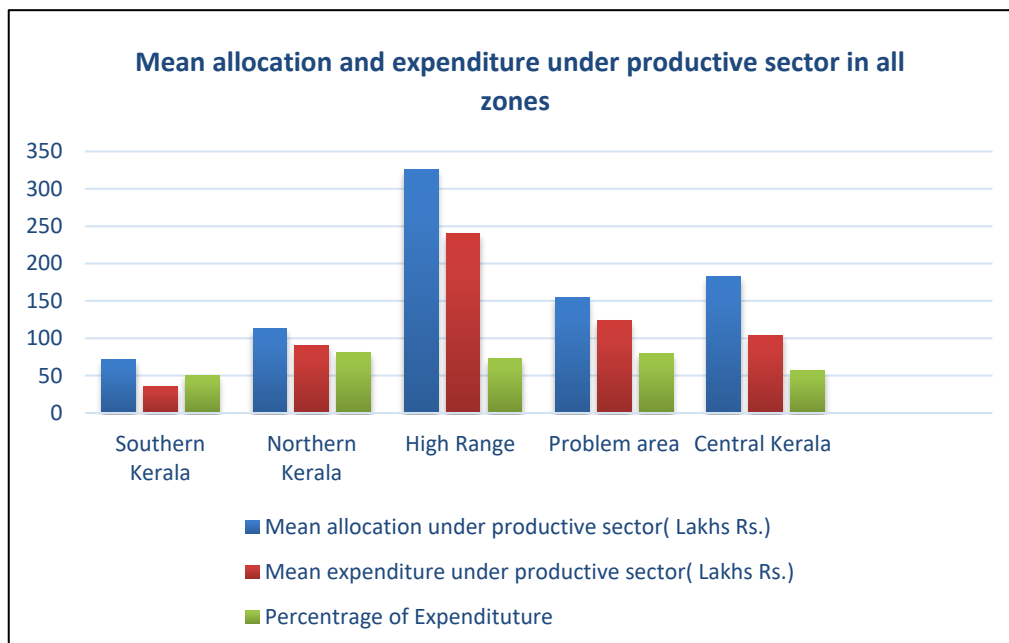


Fig.10. Mean allocation and expenditure under productive sector in all zones

4.1.2.5. Comparison of the allocations to productive sector in Grama Panchayats from 2012-13 to 2018-19

Allocations to productive sector in grama Panchayaths from 2012-13 to 18-19 have been compared in Table.4.10 . and Fig. 11.

Table. 4.10. Allocations to productive sector in Grama Panchayats from 2012-13 to 2018-19

Zone	2012	2013	2014	2015	2016	2017	2018
Southern	615351	662401	520483	619460	1191918	2423499	2453488
Central	793442	1421126	1602830	1391302	1723662	2621182	8685794
Northern	827569	863406	1152099	1043569	1662249	3007781	2694594
Problem area	1147443	1716504	1892367	1858614	2357926	2962770	3305778
High range	2611987	3639388	4795905	5117876	3579714	6185427	7152809

(Source: Krishibhavan expenditure reports)

It can be seen that southern zone and northern zone panchayaths had comparatively lesser allocations in all the years. High range zone and central zone panchayaths received comparatively higher allocations in all years, high range zone being the highest. A big leap in allotment could be observed in 2018 in central and high ranges during 2017 and 2018.

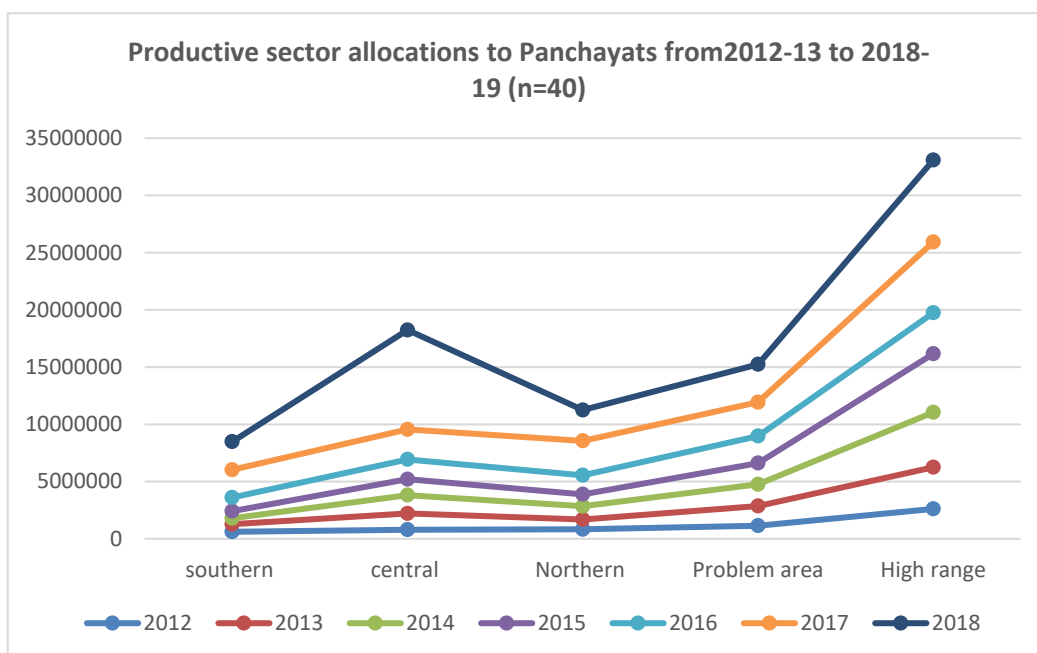


Fig.11. Trend of allocations to Grama Panchayats from 2012-13 to 2018-19

4.1.2.6. Comparison of the expenditure in productive sector of Grama Panchayats from 2012-13 to 2018-19

Productive sector expenditure in all panchayats of different zones from 2012 to 2018 have been compared in Table.4.11. and Fig.12.

Table. 4.11. Expenditure in productive sector of Grama Panchayats from 2012-13 to 2018-19

Zone	2012	2013	2014	2015	2016	2017	2018
Southern	459480	630804	482143	547146	865257	2058003	1863068
Central	590471	1008292	1345369	1294459	1415166	2444948	2273564
Northern	590538	717410	964209	872932	1320144	2412163	2201695
Problem area	1240163	1479811	1601070	1445317	1919674	2245413	2437995
High range	1943635	2783278	2764599	4005084	3248338	4330891	4928902

(Source: Krishibhavan expenditure reports)

It can be seen that the trend of expenditure has adopted a skewed pattern. Northern zone and southern zone experience a shortfall in expenditure in 2014. In all the zones expenditure increased in 2017. In high range zone and northern it was seen in an increasing trend.

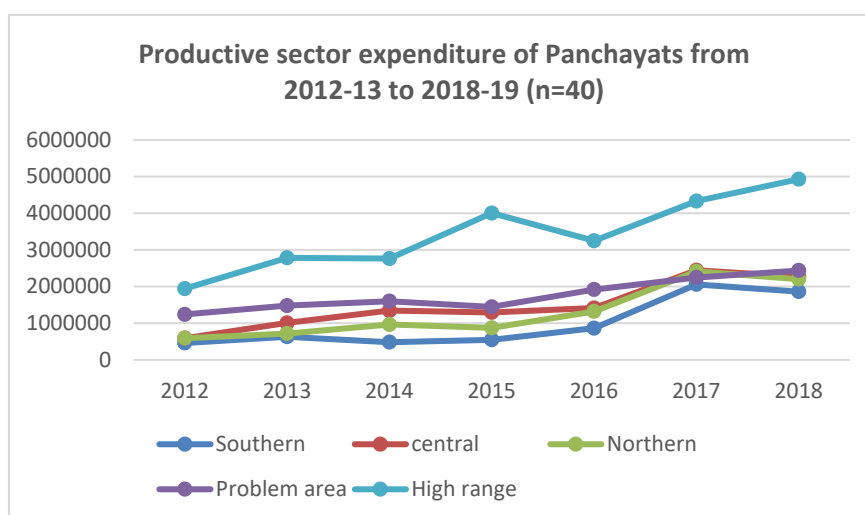


Fig.12. Trend of productive sector expenditure of Grama Panchayats from 2012-13 to 2018-19

4.1.2.7. Analysis of total allocation and sector wise distribution of projects in Panchayaths of five zones

An analysis of the data from eight Panchayats of Palakkad district in Table 4.12 revealed that the mean allocation received was 8.805 crores and the mean no of project was 207.

Table .4.12. Total allocation and sector wise distribution of projects in Panchayaths of Central zone

Name of Panchayath	Total allocation (Crores)	Total no of projects	No of projects in productive sector	No of projects in service sector	No of projects in infrastruture
Alathur	6.82	164	9	67	65
Anakkara	7.10	264	11	59	137
Kadamba zhipuram	10.08	232	12	53	117
Karimba Mannarkkad	6.90	182	14	61	82
Ongallur	11.70	257	16	74	121
Parathur	6.38	210	11	65	102
Perumatty	10.99	167	9	54	72
Vellinezh y	4.71	187	11	69	77
Mean	8.805	207	12	63	97

(Source: Krishibhavan expenditure reports)

The average number of projects in productive sector was 12 while the service sector had 63 and infrastructure sector had an average number of 97 projects. Perumatti and Ongallur and Kadambazhippuram Panchayats of Palakkad had high allocations in productive sector. Anakkara panchayat had the highest number of projects.

4.1.2.8. Total allocation and sector wise distribution of projects in Panchayaths of Southern zone

Allocations and sector wise distribution of projects pertaining to eight panchayats of the Southern zone has been given in Table.4.13. An analysis of the data revealed that the mean allocation received was 9.43 crores and the mean total project of 189. The average number of projects in productive sector was 16 while the service sector had 65 and infrastructure sector had an average number of 83 projects. Kunnathukal, Parassala and Peringamala panchayaths had comparatively higher allocations and total number of projects. With regard to projects in productive sector. Parassala, Cherunniyur and Chirayinkeezh panchayaths had more projects in productive sector. Parassala had the highest number of total projects.

Table 4.13. Total allocation and sector wise distribution of projects in Panchayaths of Southern zone

Name of Panchayath	Total allocation (Crores)	Total no of projects	No of projects in productive sector	No of projects in service sector	No of projects in infrastructure
Kunnathukal	12	239	15	80	130
Parassala	13	255	17	82	129
Peringamala	13	212	15	74	87
Cherunniyur	5	164	19	54	50
Manickal	11	175	17	56	85
Uzhamalackal	8	163	15	67	67
Chirayinkeezh	11	179	19	70	68
Ottoor	4.00	126	13	39	48
Mean	9.43	189	16	65	83

(Source: Krishibhavan expenditure reports)

4.1.2.9. Total allocation and sector wise distribution of projects in Panchayaths of northern zone

An analysis of the data from eight Panchayats of Malappuram district in Table. No.4.14 revealed that the mean allocation received was 7.79 crores and the mean total project of 221. The average number of projects in productive sector was 15 while the service sector had 79 and infrastructure sector had an average number of 108 projects.

Table . 4.14. Total allocation and sector wise distribution of projects in Panchayaths of northern zone

Name of Panchayath	Total allocation (Crores)	Total no of projects	No of projects in productive sector	No of projects in service sector	No of projects in infrastructure
Aliparamba	8.05	253	16	70	137
Angadipuram	12.06	357	23	113	201
Edapal	6.05	148	17	68	65
Edayur	6.01	200	12	86	74
Thennala	4.62	149	15	50	75
Thirunavaya	8.71	224	14	88	99
Vengara	10.63	233	13	74	126
AR Nagar	6.19	201	14	86	82
Mean	7.79	221	15	79	108

(Source: Krishibhavan expenditure reports)

It could be seen that Angadipuram and Vengara panchayats had comparatively high allocations. Total number of projects was also highest in Angadipuram . with regard to number of projects in productive sector also Angadipuram topped in the zone.

4.1.2.10. Total allocation and sector wise distribution of projects in Panchayaths of problem area zone

Data from eight Panchayats of Thrissur district showed that the mean allocation received was 10.29 crores and the total project of 199. The average number of projects in productive sector was 18 while the service sector had 62 and infrastructure sector had an average number of 96 projects. (Table.4.15.)

Among the panchayats, Madakkathara , Mattathur and Pazhayannur had comparatively higher total allocations. The total number of projects and the number of

productive sector Panchayats was highest in Mattathur. MG Kavu panchayath had the lowest mean total allocation.

Table. 4.15. Total allocation and sector wise distribution of projects in Panchayaths of problem area zone

Name of Panchayath	Total allocation (Crores)	Total no of projects	No of projects in productive sector	No of projects in service sector	No of projects in infrastructure
Adat	6.69	152	13	52	67
Choondal	6.81	223	17	75	116
Kadavallur	8.94	185	11	65	92
MG kavu	5.30	186	15	56	95
Madakkathara	20.82	111	17	48	46
Mattathur	13.76	329	36	73	174
Parappukkara	7.33	198	16	50	102
Pazhayannur	12.68	209	18	76	81
Mean	10.29	199	18	62	96

(Source: Krishibhavan expenditure reports)

4.1.2.11. Total allocation and sector wise distribution of projects in panchayaths of high range zone

Data from eight Panchayats of Wayanad district in Table.4.16. showed that the mean allocation received was 12.13 crores and the total project of 267. The average number of projects in productive sector was 17 while the service sector had 77 and infrastructure sector had an average number of 117 projects. Nemeni and Noolpuzha panchayats had the highest mean total allocations, total number of projects and number of projects in productive sector. Vengapalli Panchayath had the lowest number of projects.

Table .4.16. Total allocation and sector wise distribution of projects in Panchayaths of high range zone

Name of Panchayath	Total allocation (Crores)	Total no of projects	No of projects in productive sector	No of projects in service sector	No of projects in infrastructure
Edavaka	12	195	14	64	87
Nenmeni	17	335	22	106	138
Noolpuzha	16	338	23	84	168
Padinjarathara	9	270	14	83	112
Vellamunda	13	313	21	80	153
Pozhuthana	9	216	10	66	94
vengappally	5	151	9	47	50
Thavinjal	14	316	19	84	134
Mean	12	267	17	77	117

(Source: Krishibhavan expenditure reports)

4.1.2.12. Comparison of the total allocation and sectoral distribution of projects in various zones

The total allocation and sectoral distribution of projects in productive, service and infrastructure sectors in five zones have been shown in Table.4.17. It is clear that among all the zones mean total allocation was highest in high range zone followed by problem area zone. Mean total projects was also high in high range zone followed by north zone. Average number of projects in productive sector was high in problem area zone followed by high range zone. Number of projects in service sector was high in north zone. Number of projects in infrastructure sector was high in high range zone followed by north Kerala.

Table.4. 17. Comparison of total allocation and sectoral distribution of projects in various zones

Zone	Mean Total Allocation	Mean total projects	Av. no of projects in Productive sector	Av. no of projects in service sector	Av. no of projects in Infrastructure sector
North Kerala	7.79	221	15	79	108
South Kerala	9.43	189	16	65	83
Central Kerala	8.805	207	12	63	97
Problem area zone	10.29	199	18	62	96
High range Zone	12	267	17	77	117

(Source: Krishibhavan expenditure reports)

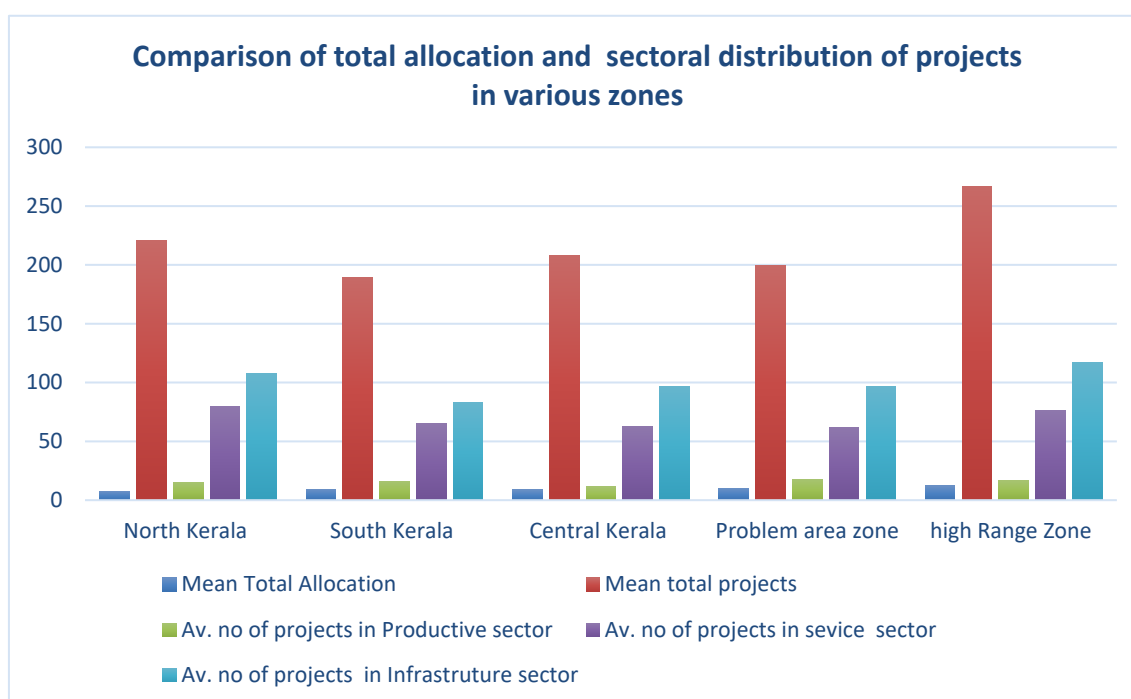


Fig. 13. Comparison of total allocation and sectoral distribution of projects in various zones

Among all the 40 panchayats selected for the study, mean total allocation was highest in Madakkathara panchayat of Thrissur (20.82 crores) followed by Nenmeni panchayath of Wayanad (17 crores). Angadipuram panchayat of Malappuram district topped with respect to total projects prepared under decentralized planning with a mean of 357 followed by Noolpuzha of Wayanad (338) and Mattathur of Thrissur (329).

Mean number of projects under productive sector was highest in Mattathur of Thrissur (36) followed by Angadipuram of Malappuram (23) and Noolpuzha of Wayanad (23). With regard to mean number of projects for service sector Angadipuram of Malappuram ranked first (113) followed by Nenmeni of Wayanad (106). With regard to the number of projects in infrastructure, Angadipuram of Malappuram was high with 201 projects followed by Mattathur of Thrissur district (174).

4.1.2.13. Changes in the institutional structure of decentralized planning

For studying various changes that have occurred in the institutional mechanisms during different plan periods, details of various structures made during each plan were collected from plan guidelines and related orders of the Government. The same was classified as democratic venues for people's participation, institutional mechanisms for project formulation, institutional mechanisms for project and plan approval and institutional structures for coordination and monitoring as described below.

4.1.2.13.1. Democratic venues for people's participation:

During ninth plan gramasabha at ward level was the constitutional platform for people's participation. Reports of the discussions in gramasabha were required to be consolidated at the development seminar at panchayath level. There were model *gramasabhas* organized at selected places to sensitize people on the processes. In addition, as a basis for beneficiary selection in gramasabha, there was a prioritized BPL list prepared based on fixed norms. But during 10th FYP, in addition to above, three women and three men were designated as facilitators for each gramasabha. Gramasabha quorum was fixed as 25% of the total voters. An official was entrusted to coordinate gramasabha. During 11th plan, need assessment and prioritization by people were emphasized in place of that by elected representatives and officers as done in previous plans. A system of Stakeholder meet was introduced before gramasabha. During 12th *Ayalsabhas* Neighbourhood groups of 20-100 families were envisaged in all wards. Introduced special *gramasabhas* for children, youth, old aged and physically challenged for inclusiveness. Gramakendras introduced as office of Gramasabha. During 13th plan, The *ayalsabhas* were made only desirable, not mandated. Only gramasabha was made essential. The gramasabha coordinator was required to prepare the minutes and hand over the minutes to the secretary, with minimum members

signing in it. Each gramasabha had to select five representatives for the development seminar including two women and one member belonging to the SC community.

4.1.2.13.2. Institutional framework for project formulation

During 9th plan, development report by resource persons – sectoral committee make written projects. There were task forces formed to consolidate the sectoral discussions, with an elected representative as the chairperson and the implementing officer as the convenor. A uniform pattern of project with 8 components was also suggested. During 10th plan, working group system was introduced with a total of 8 groups. Agricultural & allied sector working group as entrusted with agricultural planning. Application software was developed for IT support. During 11th plan, pre - Gramasabha Stakeholder discussions were introduced and the number of working groups was enhanced to 12. Agricultural working group renamed as watershed management working group. Special planning committees in all Panchayats were introduced. During 12th plan, a system of Shelf of projects for 5 YP was introduced. Provision for making more working groups and sub committees if required by LSGI was made. working group quorum made as 1/3. During 13th plan, need assessment and draft projects was entrusted to working group. Project forms 1,2,3 introduced for online project formulation in *sulekha* software. Working group on biodiversity management, climate Change, environment protection and disaster management was additionally made.

4.1.2.13.3. Institutional framework for project and plan approval

During 9th plan project appraisal was through Voluntary Technical Corps (VTC) of retired experts and professionals. Projects were approved by the DPC on the recommendation of Block Level Expert Committee (BLEC) at block level. DPC was to approve plan & projects within 15 days. During 10th plan period a system of Technical Advisory Group TAG was initiated for plan approval. DPC was to approve plan & projects within 10 days. During 11th plan TAG system continued and project forums and model projects were introduced. Helpdesk system was initiated. Information Kerala Mission IKM support initiated and project approval made through *Sulekha* software. During 12th plan TAGs at block level were dissolved. Project approval was made by designated officers and plan approval by the DPC. Approval

was made through Sulekha software. During 13th plan, project approval was made through designated officers and plan approval by the DPC. Further, specific guidelines for formulating joint projects and multi year projects were also issued. Project data entry by the implementing officer in the *sulekha* software was insisted.

4.1.2.13.4. Institutional framework for coordination and monitoring

During 9th plan there was not a designated plan coordinator. There was also no linkage between NGOs and local governments. Beneficiary committee system got institutionalized for plan implementation during 10th plan, with an official designated as plan coordinator. Bill system and implementing officer's proceedings, requisition, President's authorization and letter of allotment were prescribed as essential systems for transparency and accountability in implementation. During 11th plan the system of official plan coordinator was continued. Standing committee to ensure inter working group coordination was introduced. Consolidation of working group reports at Panchayat level and DPC level was also introduced. State Resource Group for decentralization was institutionalized during this period. During 12th plan, the major role carried out by the District planning Committee (DPC) in decentralised planning was streamlined. The State Level Coordination Committee headed by the cabinet members was constituted, mandating the institutional clearance of issues in project implementation. The sectoral allocation in different sectors were also modified. Integrating pattern of state and centrally sponsored schemes were revised. The ceiling on expenditure at the end of the financial year was relaxed. A system for carry over of backlog funds and schemes was also introduced.

4.1.2.14. Changes in the subsidy guidelines and criteria for beneficiary selection in various plans

Guidelines for subsidy for various components of farming have been subjected to change across different plan periods in order to provide inclusiveness for agricultural sector to cater to marginal sections of the clientele. Broadening the subsidy base also has helped to diversify projects in Panchayath level. Various changes in the eligibility criteria for beneficiaries and the subsidy guidelines have been given below in Table.28.

Table. 4.18. Eligibility criteria for beneficiaries and subsidy guidelines in various plans

Plan period	Eligibility criteria for farmers	Subsidy guidelines
9th Plan	Only to small & marginal farmers Others if engaged in group farming are eligible Irrigation wells to BPL families	Paddy seed ,veg seeds , seedlings 100%, others 50% Manures, fertilisers & PPC @50% Farm machinery @50% , 75% to SC farmers Irrigation wells @100%
10th Plan	Small and marginal farmers Others if engaged in group farming are eligible Farm machinery to registered farmer groups Irrigation well to small & marginal farmers	Paddy seed ,veg seeds , seedlings 100%, others 50% Manures, fertilisers & PPC @50% 100 % for farm machinery irrigation well 50%
11th Plan	Small and marginal farmers Others if engaged in group farming are eligible	Paddy seed ,veg seeds , seedlings 100% Others 50% Locally produced organic manures Subsidy of well @100% to BPL, 50% to APL families 10 % beneficiary contribution for watershed development programs
12th plan	All subsidies to small and marginal farmers , Farm machinery only for farmer groups upon MoU, self employment enterprises only for BPL families	Seeds & seedlings limited to Rs. 2500/-per beneficiary @75- 80% Organic manures &lime 75% Farm machinery only to groups b@ 75%. Minimum 10 cents area in vegetables , Assistance to biogas plants@ 90%- Labour cost assistance only for 2 ha per farmer@6000/ha Assistance for self employment ventures-33 % max. 50,000
13th plan	All subsidies to marginal farmers Farm machinery only for farmer groups upon MoU irrigation well to small & marginal farmers	lime and manures @75%, Fertilizers & pesticides- 50% Seeds of paddy and vegetables 80% Fruits plants, medicinal plants & tubers 75%(limited to Rs. 2500/-per beneficiary) Labour cost assistance only for 2 ha per farmer@6000/ha Farm machinery to groups @ 75% – rate of service@25% lesser rate Assistance to biogas plants@ 90% portable biogas 50% Revolving fund to padasekharams Assistance for self employment ventures-33 % max. 50,000

(Source: Plan guidelines for 9th plan, 10th ,11th ,12th and 13th five year plans, State Planning board, Kerala)

4.1.2.15. Changes in vertical and horizontal integration

There had been significant changes in the mode of operation of intergrating development projects at various strata and the development schemes of different departments. Major changes that had been brought to the process of integration are narrated below:

The decentralised planning through the LSGIs has a unique advantage of horizontal and vertical integrations ensuring forward and backward linkages, while such integration is difficult in centralised plan where plan is prepared on departments basis. Hence the study attempted to explore the extent of integration of various state funds and own funds in agricultural plans of 7 years in five zones and the results are described below.

Table.4.19. Integration of own fund and state sponsored schemes to decentralised plan in southern zone

Name of the Panchayath	Av. Own fund integrated to plan			State sponsored schemes integrated	
	Allocation	Expenditure	Percentage of expenditure	Allocation	Expenditure
Kunnathukal	0	0	0	0	0
Parassala	300000	255500	85.16	0	0
Peringamala	73311	63406	86.49	0	0
Cherunniyur	1544	1544	100	339250	339250
Manickal	342748	298500	87.09	0	0
Uzhamalackal	0	0	0	0	0
Chirayinkeezh	379500	368000	96.97	0	0
Ottoor	666309	400450	60.09	0	0

(Source: Krishibhavan expenditure reports)

Out of the 8 panchayaths in southern zone, 6 Panchayaths had integrated own funds to the plan with an average expenditure of 75.96. Only one panchayath had integrated state fund allocation to the agricultural plans prepared in decentralised plan.

Table. 4.20. Integration of own fund and state sponsored schemes to decentralised plan in central zone

Name of the Panchayath	Average own fund integrated to the plan			State sponsored schemes integrated	
	Allocation	Expenditure	Percentage of expenditure	Allocation	Expenditure
Alathur	60000	60000	100	0	0
Anakkara	447493	44493	9.94	0	0
Kadambazhipuram-	68847	64000	92.96	2047500	0
Karimba	8067	7450	92.35	0	0
Ongallur	1373455	612029	44.56	375000	0
Parathur	540638	123750	22.89	0	0
Perumatty	6000000	2935269	48.92	0	0
Vellinezhy	0	0	0	440000	0

Out of the 8 panchayaths in central zone, 7 Panchayaths had integrated own funds to the plan but the average expenditure of own fund was only 52 % . Only two panchayaths had integrated state fund allocation to the agricultural plans prepared in decentralised plan

Table. 4. 21. Integration of own fund and state sponsored schemes to decentralised plan in northern zone

Name of the Panchayath	Average own fund integrated to the plan			State sponsored schemes integrated	
	Allocation	Expenditure	Percentage of expenditure	Allocation	Expenditure
Aliparamba	100000	100000	100	0	0
Angadipuram	6136605	2202853	35.89	0	0
Edapal	1175325	892239	75.92	0	0
Edayur	815680	364745	44.72	0	0
Thennala	0	0	0	0	0
Thirunavaya	946500	192900	20.38	0	0
Vengara	257500	80000	31.07	0	0
AR Nagar	1722534	1387950	80.58	0	0

(Source: Krishibhavan expenditure reports)

The table revealed that out of the eight panchayaths of northern zone , 7 had integrated own funds to the decentralised plan with an average expenditure of only 48.56. No local government had integrated any state allocation received to the plan.

Table.4. 22. Integration of own fund and state Sponsored schemes to decentralised plan in probem area zone

Name of the Panchayath	Average own fund integrated to the plan			State sponsored schemes integrated	
	Allocation	Expenditure	Percentage of expenditure	Allocation	Expenditure
Adat	2878648	2263740	78.64	0	0
Choondal	2263740	501191	22.14	0	0
Kadavallur	2339250	1335260	57.09	0	0
MG Kavu	13000	0	0	0	0
Madakkathara	226005	214905	95.09	112500	0
Mattathur	1731800	87500	5.05	0	0
Parappukkara	500000	300000	60	0	0
Pazhayannur-P	62000	59127	95.37	0	0

(Source: Krishibhavan expenditure reports)

The table revealed that out of the eight panchayaths of Probem area zone, all Panchayaths had integrated own funds to the decentralised plan with an average expenditure of 51.67. Only one local government had integrated state allocation received to the plan.

Table.4. 23. Integration of own fund and state sponsored schemes to decentralised plan in high range zone

Name of the Panchayath	Average own fund integrated to the plan			State sponsored schemes integrated	
	Allocation	Expenditure	Percentage of expenditure	Allocation	Expenditure
Edavaka	0	0	0	0	0
Nenmeni	761500	243025	31.92	0	0
Noolpuzha	0	0	0	0	0
Padinjaraathara	99200	74785	75.39	0	0
Vellamunda	50000	30000	60	0	0
Pozhuthana	0	0	0	0	0
vengappally	0	0	0	0	0
Thavinjal	909950	206280	22.67	0	0

(Source: Krishibhavan expenditure reports)

Out of the eight LSGIs of high range zone only 4 Panchayaths had allocated own funds to plans. The average expenditure was only 27.13. None of the Panchayaths selected for the study had not allocated any state sponsored scheme to the plan.

4.1.2.15.1. Distribution of Panchayats based on own fund expenditure across zones

Based on the data discussed above the distribution of Panchayaths based on own fund expenditure has been given below. Panchayaths have been categorised in to below 50% expenditure and above 50% expenditure.

Table.4. 24. Distribution of panchayaths based on own fund expenditure in various zones (N=40)

Distribution of Panchayaths based on own fund expenditure in various zones		
Zone	No of Panchayaths below 50% own fund expenditure	No of Panchayaths above 50% own fund expenditure
Southern zone	2	6
Central Zone	5	3
Problem Area zone	3	5
North zone	5	3
High range zone	6	2
Total	21	19

(Source: Krishibhavan expenditure reports)

4.1.2.15.2. Distribution of panchayaths based on integration of state scheme in all zones

The data revealed that out of the 40 Panchayaths in various zones only 5 Panchayaths had integrated state sponsored schemes to the decentralised plan. It can be assumed that out of state sponsored allocation integrated to plans only 10.23% expenditure was incurred. High Range zone and northern zone had not integrated even a single state sponsored scheme to the decentralised plan during the study period.

Table.4. 25. Distribution of Panchayaths based on integration of state scheme integration in all zones (N=40)

zone	No of panchayaths with state fund allocation	No of panchayaths without state fund allocation
Northern	0	8
Central	3	5
High Range	0	8
Southern	1	7
Problem Area Zone	1	7
Total	5	35

(Source: Krishibhavan expenditure reports)

From the, above it can be concluded that panchayaths in all zones are not giving proper attention for integrating own fund and state sponsored schemes allocated to them to the decentralised plan prepared through people’s participation through Grama Sabha. In spite of the advantages of decentralised planning mechanism has with respect to the possibility of assuring forward and backward linkages, this area still remains untapped.

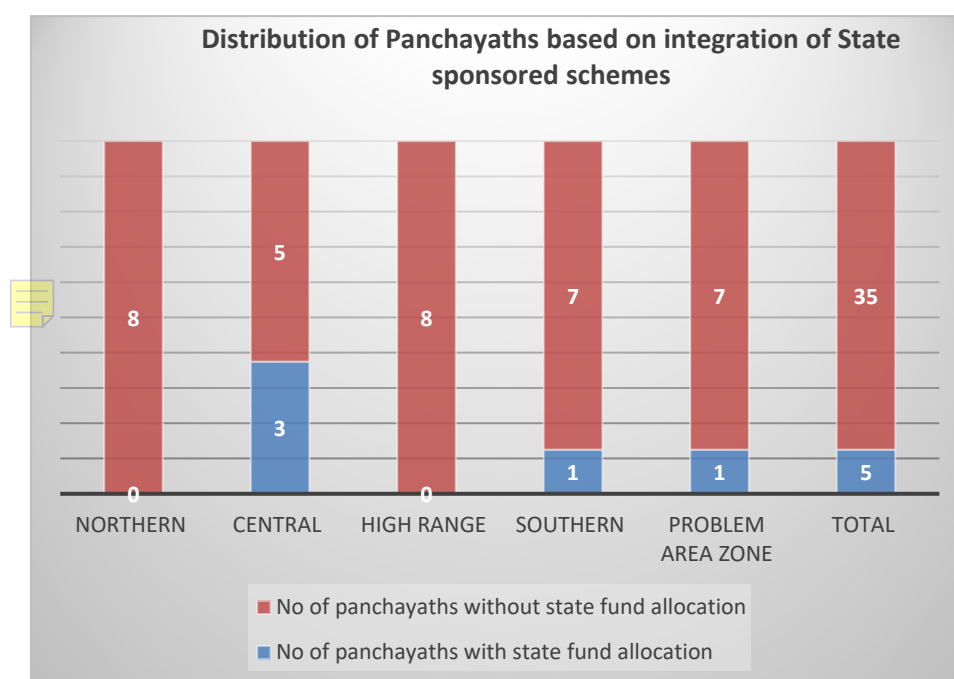


Figure.14. Distribution of Panchayaths based on integration of State sponsored schemes

4.1.3. Changes in the policy environment of decentralized planning

Changes occurred in the policy environment of the decentralized planning have been analyzed in different dimensions such as transitions in the policy framework, policies for enhancing people's participation, policies to enhance transparency and accountability and policy to enhance quality of projects and implementation.

4.1.3.1. Transitions in the policy framework of decentralized planning with special reference to agriculture

The thrust areas adopted for decentralized planning through local self-governments from 9th plan to 13th plan periods are given below.

FYP	Thrust area
9 th	Adopted a campaign mode with devolution of 1/4 th plan funds to local panchayats based on a clear formula. It also developed a participatory methodology for local level planning.
10 th	Stressed on institutionalization of process, local economic development increasing production and productivity of agriculture & allied sectors, traditional and small-scale industries and poverty eradication and employment opportunities. Stressed on a citizen responsive process with integration of projects, participation of people and transparency. A reforms plan was suggested. Also stressed on additional resource mobilization through taxes and credit mobilization. A system of five-year perspective planning was also introduced.
11 th	Stressed on institutionalization of the process, resurrection of agriculture and quality of public service delivery, enhanced people's participation, cooperation of professionals. Stressed on need assessment and prioritization by people unlike in 9 th and 10 th plans where it was done by officials and elected representatives in gramasabha. Proposed a good governance plan.
12 th	Sustainable growth of productive sector with production and marketing of crops, eggs, meat and fish. Improving basic amenities for standard of living, quality of service delivery, asset maintenance and traditional markets were emphasized. Strengthening the planning process with ICT backing - Participation in project approval camps made a mandatory responsibility of officials. Ward development centers and ward level community plan introduced.
13 th	Thrust was to simplify procedures, reducing delay in approval, enhancing people's participation and pooling expertise. Initiated early plan formulation and implementation. Annual plan was linked with local body budgets. Integrated watershed approach in planning, focusing on integrated farming systems. <i>Subhiksha Keralan</i> was initiated with food security and local self-

FYP	Thrust area
	reliance as main goals. Thrusts for value addition, organic farming, strengthening of village markets, orchards in homesteads, farming in fallow lands, diversifying through formation of FPOs. Adopted a mission approach. District plans were made by the DPC. A window of ‘Innovative Programmes’ for innovative programs was opened for local bodies. Under DPC District Resource Centres were formed in all districts to ensure professionals and research system supporting local bodies.

4.1.3.2. Policy measures for enhancing people’s participation

Decentralized planning in Kerala has adopted a campaign mode in 9th plan period to attract people’s participation. Emphasis was on need assessment and prioritization by people unlike in 9th and 10th plan. 12th plan had a thrust of improving the basic amenities and standard of living, quality of service delivery and improvement of traditional markets. 13th plan focused on enhancing people’s participation. during 12th plan working groups were directed to lead stakeholder discussions. Introduction of gramasabha portal had given the opportunity for citizens in different locations to attend and deliberate on gramasabha discussions. Ayalsabhas introduced during 12th plan had largely attracted people to gramasabhas. Subhiksha Keralam initiative was introduced in 13th plan period with massive people’s participation with food security and local self-reliance as main goals. Moreover, subsidy guidelines for planning were broadened to include more people as beneficiaries during 12th and 13th plan. An official was designated as gramasabha coordinator during 11th plan. Introduction of *Ayalsabhas* in 12th plan could attract more people to gramasabha. Special gramasabhas for the disabled, youth and old aged have promoted inclusiveness in the process. Moreover, earmarking 10% fund for women sector projects and 5% fund for the disabled, youth and old aged had given local governments opportunities for formulating development projects to enhance their participation and space in the grama sabha.

4.1.3.3. Measures to enhance transparency and accountability

During 11th plan, a good governance plan was proposed. During 12th plan strengthening of planning process with ICT backing was initiated. Participation in project approval camps was made mandatory responsibility for officials during 12th plan. Online project formulation and approval had increased transparency. Bill system was introduced from 1.4.2004 for effecting expenditure in decentralized planning.

During 10th plan systems of appropriation control register, register of income and expenditure, letter of allotment and authorization, requisition forms and proceedings systems of the implementing system in order to enhance accountability. Introduction of bill system, implementing officers requisition, president's authorization, system of official plan coordinator was measures for accountability during 10th plan. During the 13th plan, annual plan was linked with local body budget. Mandatory sectoral allocations prescribed make officials accountable and eliminate sectoral biases of elected representatives of people. Project approval was made through designated officers to enhance accountability. Project data entry in sulekha software could enhance transparency. Assigning of working groups to respective standing committees during 12th plan has developed the linkage between standing committee and working group and increased accountability.

4.1.3.4. Measures to enhance quality of projects and implementation

During 10th plan a system of five-year perspectives in planning was introduced. 11th plan stressed on involvement of professionals. 13th plan initiated early plan formulation and implementation. integrated watershed approach in planning focusing on integrated farming system. In addition, 13th plan adopted a mission approach with thrust on value addition, organic farming, strengthening of village markets, farming in fallow lands, orchards in homesteads and formation of FPOs. District plans were made by the DPC.

A window of opportunities to formulate innovative programs was opened for local bodies. Under the DPC, district resource centres were formed in each district for the involvement of professionals and research system. DPC also started consolidation of working group reports of panchayaths which also helped formation of quality joint projects by helping local bodies to identify missing links. introduction of ceiling on expenditure has eliminated the tendency of too much expenditure towards the end of financial year at the expense of quality of implementation. The decision to entrust only plan approval to the DPC considerably reduced delay in plan approval and more time for implementation.

Efficacy of decentralized planning in agriculture

This section discusses the efficacy of decentralized planning specifically in agriculture. This was observed to find out whether the procedures and protocols for decentralised planning are duly followed in formulating and implementing development projects in agriculture.

4.2.1. Perceived efficacy of dimensions of decentralized planning through LSGI

Perceived efficacy of the institutionalisation process by the actors of the process was the dependent variable of the study. Actors as respondents of this study included working group members and agricultural officers. The decentralised planning process at grass root level was conceived as a 15-stage process stipulated in the guidelines of the Government of Kerala as discussed in the methodology part. These stages were further categorised into three distinct phases as discussed below:

Table. 4.26. Efficacy of various phases and stages of decentralised planning perceived by working group members of LSGI

Phases	Stages involved	Efficacy score received	Average efficacy of the phase	Total Perception score of the phase	Maximum Score
Participatory need assessment	1.Need identification	14.63	14.17	70.88	100
	2.Formation of working group	14.96			
	3.Formation of Panchayath planning committee PPC	11.73			
	4.Holding of pre Gramasabha consultations with stakeholders	14.40			
	5. Holding of Gramasabha	15.16			
Plan formulation and resource allocation phase	1.Preparation of draft plan proposals by the working group	15.20			
	2.Discussion of draft plan in	15.12			

	development seminar		13.78	68.92	100
	3.Prioritization and resource allocation by the local governments	12.36			
	4. Preparation of detailed projects by the working group	15.16			
	5. Finalization of annual plan by the local government	11.08			
Plan appraisal, Integration and implementation phase	1.Vetting of plan and technical approval	14.28	13.15	65.77	100
	2.Approval of plans by the DPC and issue of proceedings	16.49			
	3. Consolidation of local body plans to a district plan by the DPC	11.62			
	4. Plan implementation	14.34			
	5. Integration of projects	9.04			

Out of the three phases, plan appraisal, integration and implementation phase had the least perceived efficacy, followed by the plan formulation and resource allocation phase. Among the stages, integration of projects had the lowest efficacy perception score followed by finalization of annual plan by the local government, consolidation of local body plans to a district plan by the DPC and formation of Panchayath planning committee PPC.

It can be seen that out of the 15 dimensions, dimensions like integration of projects, finalisation of annual plan by the local governments, formation of panchayath planning committee consolidation of local body plans to district plans and prioritisation and resource allocation by local bodies had received low scores compared to others

explaining that the efficacy of these dimensions needs to be improved. Dimensions having high scores were approval of plans by the DPC, preparation of detailed projects by the working group, holding of Gramasabha, preparation of draft plan proposals and discussion in the development seminar.


4.2.1.1. Perceived efficacy of sub dimensions of various stages of decentralised planning

Efficacy dimensions and the scores for each dimension are listed below.

Table.4. 27. Perceived efficacy of the sub dimensions of various stages in decentralised planning (n=160)

A. Participatory Need assessment phase

Sl No	Stage of planning process	Efficacy sub dimension	Mean sub dimensional Efficacy Perception Score	Mean of the dimension
1	Need identification	Analysis of sectoral data and preparation of status report by the working group	3.67	3.705
		DPC to provide guidelines to local governments in January every year based on District Plan priorities	3.29	
		DPC not to convene meeting of LGs to consolidate working group reports and deliberate on joint projects	3.35	
		Local bodies to prepare detailed development report		
2	Formation of working group	Working group members not to have expertise in farming	3.75	3.64
		Working group not to accept proposals from public on enhancing people's participation	3.84	
		Academic leadership of working group for stakeholder discussions, Gramasabha meetings and Development Seminar	3.39	

SI No	Stage of planning process	Efficacy sub dimension	Mean sub dimensional Efficacy Perception Score	Mean of the dimension
		Development Standing committee to ensure that Working Group on agriculture is periodically convened	3.57	
3	Formation of Panchayath planning committee PPC	Panchayath Planning Committee PPC not to find out additional resource pooling opportunities	2.58	2.93
		Conduct studies to increase the quality of plan formulated	2.93	
		Avoid spread of resources to ineffective small projects	2.97	
		PPC to coordinate plan formulation, implementation and monitoring	3.24	
4	Holding of pre Gramasabha consultations with stakeholders	Seek NRI opinion and cooperation in formulation and implementation through Gramasabha window of the Panchayath website	3.1	3.54
		An official to be designated as Gramasabha coordinator	4.29	
		Pre-Gramasabha multi-platform campaign to be organized with media, educational Institutions, People's organizations, Kudumbasree, etc.	3.48	
		Draft proposals not to be discussed in Neighborhood sabhas before the Gramasabha	3.3	
5	Holding of Gramasabha	Notice of the Gram Sabha showing the date, time, venue and agenda to be publicized at least a week before	3.36	3.76
		WG members not to lead sectoral discussions on draft proposals in Gramasabha	3.32	
		Gramasabha selects five representatives for the Panchayath Development seminar and	4.09	

Sl No	Stage of planning process	Efficacy sub dimension	Mean sub dimensional Efficacy Perception Score	Mean of the dimension
		minutes signed by 15 participants to reach the Secretary of Panchayath on the next working day		
		Beneficiaries of agricultural projects not selected through Gramasabha	4.26	

Mean stage score: 3.52

B. Plan formulation and resource allocation phase

6	Preparation of draft plan proposals by the working group	Updating the status report by the working Group	4.17	3.66
		Draft plan to fill the gaps identified in the working Group status report	3.73	
		WG to assess the logic, efficiency, feasibility, legality , environmental impact and prospects of each project	3.26	
		WG not to fix priority for project proposals based on Gramasabha decisions	3.46	
7	Discussion of draft plan in development seminar	WG members not to lead sectoral discussions in development seminar	3.78	3.69
		Development seminar to have a panchayath perspective in strategy setting rather than ward based considerations	3.36	
		All elected peoples representatives of three tier LSGDs , members of the Working groups, CDS members and officials of Panchayath to attend the development seminar	3.9	
		Development seminar to incorporate all project modifications suggested by Gramasabha	3.71	
8	Prioritization and resource allocation by the local governments	Standing committee to issue directions to respective working groups under them	3.92	3.27
		Linking central and State sponsored schemes and own fund realistically with the plan	2.39	
		Explore joint projects with other Panchayaths	3.38	
		Recommendations of development seminar not considered by LG while resources are allocated	3.38	

9	Preparation of detailed projects by the working group	WG to facilitate data entry of Panchayath approved projects in the Sulekha software	3.38	3.74
		Standing Committee not to finalise allocation based on mandatory sectoral allocations	4.39	
		Implementing officer to formulate only projects related to statutory responsibilities of Panchahayth	4.43	
		Multi-year projects to be preferred for activities to be continued over years	2.77	
10	Finalization of annual plan by the local government	PPC to convene the meeting of lead bank officials and bankers' committees	2.96	2.77
		Local government not to explore potentials of joint projects with Co-operative sector	2.83	
		Forward development seminar Project proposals to upper tiers and state Government	3.1	
		Identify Special projects to tap corporate social responsibility funds	2.21	

Mean stage score 3.43

C. Plan appraisal, Integration and implementation phase

11	Vetting of plan and technical approval	Vetting officers not to conduct project clinics to reduce delay in project approval	3.31	3.74
		Projects to be approved within seven days	4.36	
		District level monitoring committee to monitor Vetting Officers to reduce delay	3.71	
		Implementing officer of a project to be a member of the approval committee	3.59	
12	Approval of plans by the DPC and issue of proceedings	DPC to ascertain that projects are prepared as per the severity of problems in the status report	3.77	4.08
		DPC not to ascertain that mandatory minimum allocation to productive sector is safeguarded	4.54	
		Only Plan of Panchayath is approved by the DPC and projects by the designated officers	4.61	
		Performance audit wing to observe and report the Grama sabha fact report to DPC	3.41	
13	Consolidation of local body	Integrate LSG plans with state and central schemes	2.78	2.96

	plans to a district plan by the DPC	Special technical Committee to scrutinize innovative projects of Panchayaths	3.22	
		Local Governments not to prepare plans and projects based on priorities and perspectives of the District Plan	3.26	
		District plan facilitate projects for sharing of water, other natural resources and environmental protection among local governments.	2.57	
14	Plan implementation	During implementation the Working Group does not function as monitoring committee	4.43	3.83
		Implementation officer to make an implementation calendar with working group assistance	3.26	
		Maximum resources as beneficiary share to be mobilized through padasekharams, watershed committees , Resident Associations etc.	3.29	
		Implementing officer not to accept an approved project if it is beyond his technical expertise	4.34	
15	Integration of projects	Agricultural projects should not be formulated on a watershed basis	1.85	2.32
		Priority to organic farming, organic manure units and organic pesticides units	3.17	
		Agricultural projects to be integrated maximum with MGNREGA	2.22	
		Projects to promote procurement centres, value addition primary processing and marketing to be organized through Farmer organisations and FPOs	2.04	

Mean stage score : 3.39

4.2.1.2. Mean efficacy scores of different stages of the decentralised planning process

From the Table.4.28. it is evident that stages of formation of panchayath planning committee PPC, prioritization and resource allocation by the local governments, finalization of annual plan by the local government, integration of projects, finalization of annual plan by the local government, consolidation of local body plans to a district plan by the DPC obtained scores below the mean perception

scores demanding improvements in these processes. List of all items has been given in the annexure. Mean perception score of 60 items was 3.44. Out of the 60 items, 33 items had scores below the mean perception score of 3.44.

Table. 4.28. Mean efficacy scores of different stages of the decentralised planning process

SI No	Stage	Mean perception score
1	Need identification	3.70
2	Formation of working group	3.64
3	Formation of Panchayath planning committee PPC	2.93
4	Holding of pre Gramasabha consultations with stakeholders	3.54
5	Holding of Gramasabha	3.76
6	Preparation of draft plan proposals by the working group	3.66
7	Discussion of draft plan in development seminar	3.69
8	Prioritization and resource allocation by the local governments	3.27
9	Preparation of detailed projects by the working group	3.74
10	Finalization of annual plan by the local government	2.77
11	Vetting of plan and technical approval	3.74
12	Approval of plans by the DPC and issue of proceedings	4.08
13	Consolidation of local body plans to a district plan by the DPC	2.96
14	Plan implementation	3.83
15	Integration of projects	2.32

Mean score: 3.44

The relative importance of the perceived efficacy scores obtained by different stages is depicted in Fig. 15 given below.



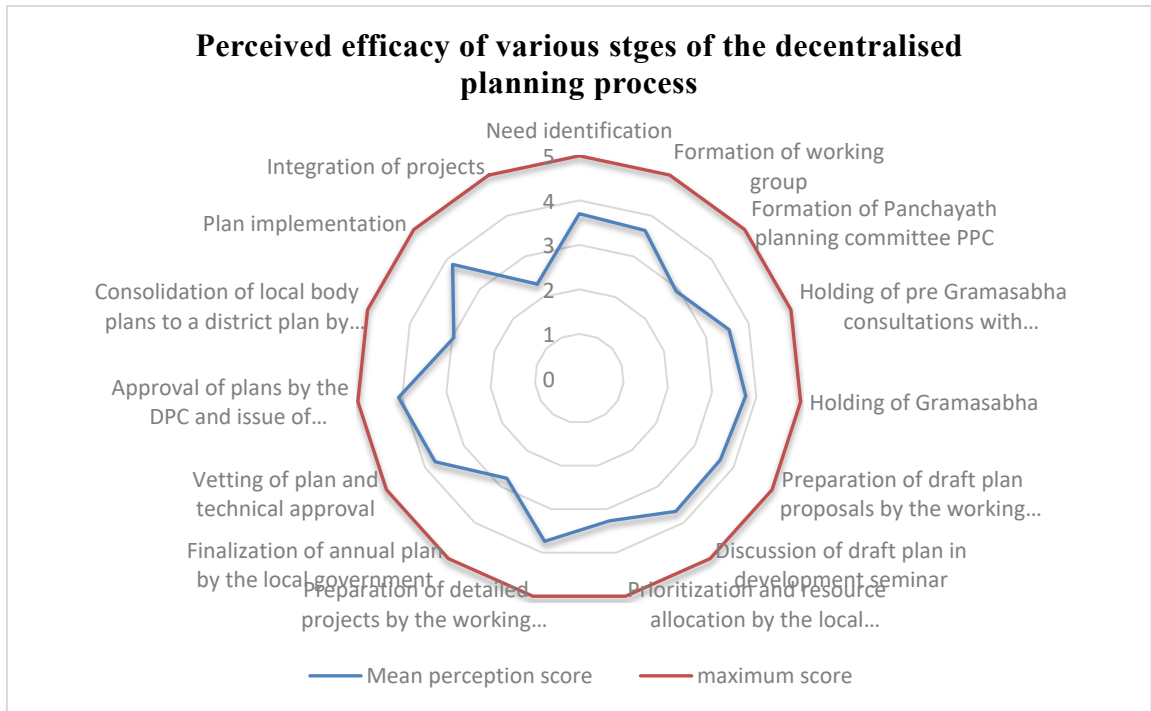


Figure .15. Efficacy of dimensions of decentralised planning as perceived by working group members (n=160)

A. Participatory need assessment

The participatory need assessment phase included stages such as need identification, formation of working group, formation of Panchayath planning committee PPC, holding of pre Gramasabha consultations with stakeholders and holding of Gramasabha.

All the dimensions relating to the panchayath Planning committee PPC were below the mean perception score, revealing that the performance in that line have to be improved. The dimensions of PPC finding out additional resource pooling opportunities (2.58), conducting studies to increase the quality of plan formulated (2.93), avoiding spread of resources to ineffective small projects (2.97), coordinating plan formulation, implementation and monitoring (3.24) have to be urgently improved.

Dimensions such as DPC to provide guidelines to local governments in January every year based on District Plan priorities (3.29), to convene meeting of LGs to consolidate working group reports and deliberate on joint projects (3.35), academic leadership of working group for stakeholder discussions, Gramasabha meetings and Development Seminar (3.39), draft proposals to be discussed in Neighbourhood sabhas

before the Gramasabha (3.3), notice of the Gram Sabha showing the date, time, venue and agenda to be publicized at least a week before (3.36) and working group members leading sectoral discussions on draft proposals in Gramasabha (3.32) received lesser scores than the mean perception score. It is revealed that the institutionalisation process has to give urgent thrust on better adherence to these dimensions by the LSGIs.

B. Plan formulation and resource allocation phase

This phase had stages such as preparation of draft plan proposals by the working group, discussion of draft plan in development seminar, prioritization and resource allocation by the local governments, preparation of detailed projects by the working group and finalization of annual plan by the local government.

The dimension, finalization of annual plan by the local government, coming under this phase had all the items below the mean perception score. These were PPC to convening the meeting of lead bank officials and bankers' committees by the PPC (2.96), exploring potentials of joint projects with Co-operative sector (2.83), forwarding development seminar Project proposals to upper tiers and state Government (3.1), identifying special projects to tap corporate social responsibility funds (2.21). The study thus revealed that there is much to improve on these dimensions to enhance the efficacy. The lowest value obtained for the item, tapping corporate responsibility funds revealed that local governments are yet to explore this opportunity.

Among Other items receiving lower perception scores by the actors, working group assessing the logic, efficiency, feasibility, legality, environmental impact and prospects of each project scored only 3.26 pointing out the need to focus on this important area of working group functioning. Other items needing improvement in efficacy were development seminar to have a panchayath perspective in strategy setting rather than ward based considerations (3.36), linking central and State sponsored schemes and own fund realistically with the plan (2.39), exploring joint projects with other Panchayaths (3.38), recommendations of development seminar to be considered by LG while resources are allocated (3.38), WG to facilitate data entry of Panchayath approved projects in the *Sulekha* software (3.38), multi-year projects to be preferred for activities to be continued over years (2.77)

3. Plan appraisal, integration and implementation phase

Under this phase there were five dimensions- vetting of plan and technical approval, approval of plans by the DPC and issue of proceedings, consolidation of local body plans to a district plan by the DPC, plan implementation and integration of projects.

This phase had two stages, consolidation of local body plans to a district plan and the integration of projects, which had all the dimensions below mean perception score. This points to the need to urgently focus on these dimensions to enhance efficacy of the institutionalisation process of the decentralised planning. Two crucial areas of consolidation by the DPC and integration are vital in the sustainability of the plan and in forming the district plan. Integrating LSG plans with state and central schemes (2.78), Special technical Committee to scrutinize innovative projects of Panchayaths (3.22), local Governments to prepare plans and projects based on priorities and perspectives of the District Plan (3.26) and district plan facilitating projects for sharing of water, other natural resources and environmental protection among local governments (2.57) were the dimensions needing urgent betterment.

Under the integration dimension, four items had very low perception scores such as agricultural projects to be formulated on a watershed basis (1.85), priority to organic farming, organic manure units and organic pesticides units (3.17), agricultural projects to be integrated maximum with MGNREGA (2.22), projects to promote procurement centres, value addition primary processing and marketing to be organized through Farmer organisations and FPOs (2.04). Project formulation on watershed basis was the item receiving the least efficacy perception score.

Other dimensions with less efficacy were vetting officers to conduct project clinics to reduce delay in project approval (3.31), performance audit wing to observe and report the grama sabha fact report to DPC (3.41), implementation officer to make an implementation calendar with working group assistance (3.26), maximum resources as beneficiary share to be mobilized through padasekharams, watershed committees, resident associations etc (3.29).

4.2.2. Determinants of the efficacy of decentralized planning as experienced by stakeholders

The study required to reveal various determinants of perceived efficacy in decentralised planning by the actors of the process. Hence the association between various independent variables of actors of the process and their perception of the efficacy of the decentralised planning process in the LSGIs of Kerala were studied. The study analysed the perception of the efficacy by the working group members and agricultural officers, their profile characteristics and the association among the variables.

4.2.2.1. Profile characteristics of agriculture working group members of LSGIs in decentralised planning

Data pertaining to profile characteristics of 120 working group members from 40 grama panchayats belonging to five zones were collected for the study. Distribution based on various profile characteristics have been given in Table. 4.29.

Table.4. 29. Profile characteristics of agriculture working group members of LSGIs in decentralised planning n=120

Sl No	Variable	Number	Percentage	Mean	Standard deviation
1	Age				
	Young up to 35	39	32.5	1.83	0.678
	Middle 35-50	62	51.66		
	Old 50 and above	19	15.83		
2	Experience in farming				
	Up to 5 years	0	0	2.78	0.791
	6-10 years	53	44.16		
	11-25 years	40	33.33		
	Above 25 years	27	22.5		
3	Land size				
	Marginal farmers Up to 2.50 acres	71	59.16	1.61	0.823
	Small farmers 2.51 – 5.00 acres	27	22.5		
	Medium farmers 5.01 – 10.00 acres	20	16.66		
	Big farmers More than 10.00 acres	2	1.69		
4	Formal education				
	Literate	0	0	4.02	0.820
	Primary	0	0		
	High School	39	32.5		

Sl No	Variable	Number	Percentage	Mean	Standard deviation
	Higher secondary	40	33.33		
	College and above	41	34.17		
5	Mass media exposure				
	Low	20	16.66	14.4 8	1.861
	Medium	83	69.16		
	High	17	14.16		
6	Leadership quality				
	Low	8	6.66	11.3 3	2.039
	Medium	103	85.83		
	High	9	7.5		
7	Social participation				
	Low	23	19.16	26.1 9	3.776
	Medium	73	60.83		
	High	24	20		
8	Sharing of responsibility				
	Low	13	10.83	15.2 3	1.891
	Medium	101	84.16		
	High	6	5		
9	Innovativeness				
	Low	13	10.83	20.1 0	2.364
	Medium	104	86.66		
	High	3	2.5		
10	Attitude towards Panchayathiraj				
	Low	15	12.50	48.7 7	5.83
	Medium	95	79.16		
	High	10	8.33		
11	Leadership propensity				
	Low	12	10	10.5 5	1.60
	Medium	93	77.5		
	High	15	12.50		
12	Attitude towards Participatory Planning				
	Low	16	13.30	59.0 1	7.11
	Medium	96	80		
	High	8	6.66		
13	Extension Agency Contact				
	Low	21	17.50	27.9 3	3.839
	Medium	79	65.83		
	High	20	16.66		
14	Accountability in planning and implementation				
	Low	28	23.33		

Sl No	Variable	Number	Percentage	Mean	Standard deviation
	Medium	79	65.83	7.39	1.17
	High	13	10.83		
15	Transparency within the group			6.52	1.01
	Low	18	15		
	Medium	86	71.67		
	High	16	13.33		
16	Sense of empowerment			61.58	8.38
	Low	15	12.5		
	Medium	89	74.16		
	High	16	13.33		
17	Participation in working group			73.85	11.03
	Low	27	22.50		
	Medium	76	63.30		
	High	17	14.16		
18	Efficacy of decentralised planning			67.49	6.92
	Low	21	17.50		
	Medium	90	75.0		
	High	9	7.50		

From the above table it can be seen that majority of working group members belonged to the middle-aged category (51.66%). With respect to experience in farming 44.16% belonged to 6-10 years while 33.33 % belonged to 11-25 years and 22.5% belonged to above 25 years' experience. Majority (59.16%) belonged to the marginal farmer category. With respect to education, 33.33 % had high secondary education while 34.17% had college and above. Majority of members (69.16%) had medium mass media exposure. With respect to leadership quality, 85.83% belonged to the medium category. Majority (60.83%) had medium social participation. 84.16% of members had medium sharing of responsibility. Majority fell in the medium category with respect to innovativeness (86.66%), attitude towards Panchayati raj (79.16%), leadership propensity (77.5%), attitude towards participatory planning (80%), extension agency contact (65.83%), accountability in planning and implementation (63.36%), transparency within the group (71.67%), sense of empowerment (74.16%), participation in working group (63.30%).

4.2.2.1.1. Perceived efficacy of working group members on decentralized agricultural planning through Local Self Government Institutions LSGIs

As already discussed in the methodology chapter, the perceived efficacy of the institutionalisation of participatory planning was analysed in five agro climatic zones of Kerala. The respondents were classified in to three categories viz. low, medium and high based on their PEDP values. The results are depicted in Table. 4.30 .and Fig. 16

Table.4.30. Distribution of working group members according to their overall perceived efficacy index (n=120)

SI No	Categories of OPEI	Number	Percentage	Mean	Standard deviation
1	Low	21	17.50	67.49	6.92
2	Medium	90	75.0		
3	High	9	7.50		
	Total	120	100		

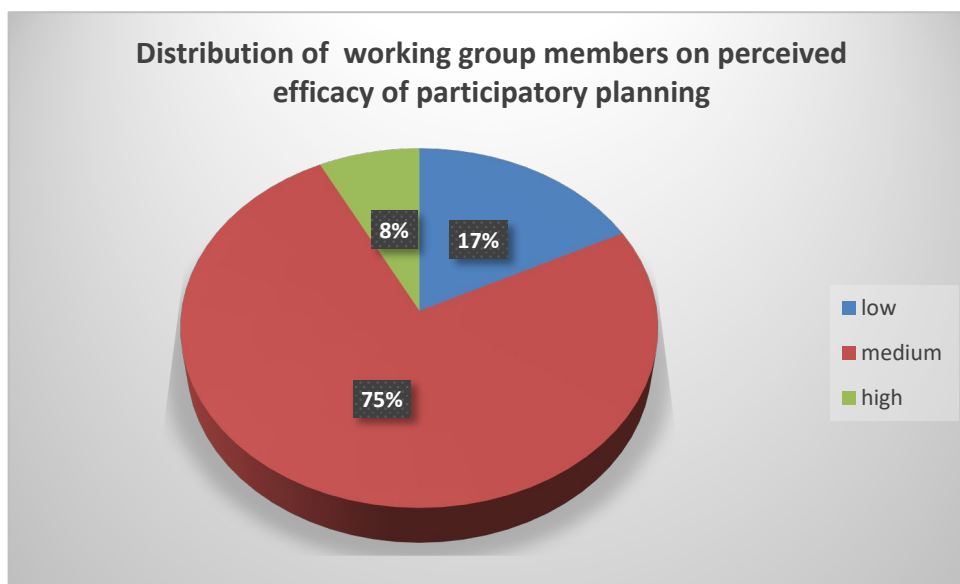


Fig.16. Distribution of respondents according to their PEDP

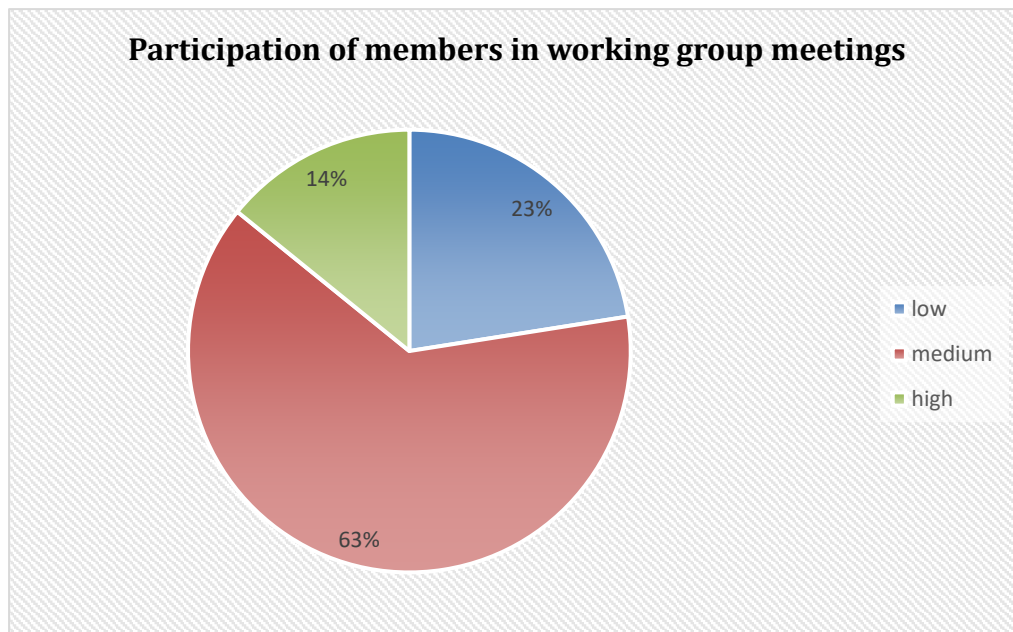


Figure.17. Participation of members in working group meetings

It could be observed from the Table No .4.30 and Figure .16. that 75 per cent of the working group members were found to have medium level of perceived efficacy followed by low (17.5%) and high (7.5%). Hence majority of the respondents were found to have medium level of PEDP.

4.2.2.1.2. Determinants of Perceived Efficacy of Working group members

The study required to reveal various determinants of perceived efficacy in decentralised planning by the actors of the process. Hence Spearman's correlation coefficient was used to study the association between various independent variables of the members of the working group and their perception of the efficacy of the decentralised planning process in the LSGIs of Kerala. \

Table: 4.31. Spearman's correlation coefficient of independent variables with efficacy of decentralized planning (n=120)

Sl No	Independent variable	Correlation Coefficient
1	Media exposure	0.571 **
2	Leadership quality	0.557 **
3	Social Participation	0.609**
4	Sharing of responsibility	0.600**
5	Innovativeness	0.408**
6	Attitude towards Panchayati Raj	0.731**
7	Leadership propensity	0.472**
8	Attitude towards participatory planning	0.609**
9	Extension agency contact	0.535**
10	Planning and implementation	0.476**
11	Sense of empowerment	0.572**
12	Participation in Working Group meeting	0.769**

** Significant at the 0.01 level

From the analysis it was found that all the independent variables media exposure, leadership quality, social participation, sharing of responsibility, innovativeness, attitude towards Panchayati Raj, leadership propensity, attitude towards participatory planning, extension agency contact, planning and implementation, sense of empowerment and participation in working group meeting were having positive and significant correlation with the perceived efficacy of the working group members on decentralized planning at 0.01 level of significance. Multi collinearity was observed in the data. The variation Inflation factor (VIF) in Table.4.32 in some variables are more than 10 and the tolerance value is less than 0.2 . This very explicitly pointed out multi collinearity in the data.

Table.4. 32. Collinearity statistics of the independent variables

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Age	.400	2.503
	Experience in farming	.353	2.834
	Land size	.404	2.475
	Education status	.450	2.221
	Mass media exposure	.284	3.515
	Leadership quality	.112	8.923
	Social participation	.130	7.677
	Sharing of responsibility	.077	12.907
	Innovativeness	.068	14.708
	Attitude towards Panchayati raj	.049	20.436
	Leadership Propensity	.273	3.662
	Attitude towards participatory planning	.058	17.181
	Extension agency contact	.121	8.235
	Accountability in planning and implementation	.401	2.491
	Transparency within the group	.351	2.852
	Sense of Empowerment	.126	7.936
Participation in working group	.107	9.333	

In order to overcome the multi collinearity, factor analysis was carried out to reduce the the influence of the variables. Principal Component Analysis PCA was done. Factor analysis through PCA thus helped to reduce the influence of variables to a few variables. The result of the factor analysis has been discussed below

4.2.2.1.3. Factor analysis of the variance of the variables of working group members

To check whether the sampling of values is adequate for conducting factor analysis Kaiser-Meyer-Olkm KMO test was done. Results in Table.4.33. proves that value obtained was greater than 0.7 and was significant. Bartlett's test is a check for identity matrix. A significance value of less than 0.05 indicated that the data is not an identity matrix. The data proved to be approximately multivariate normal and acceptable for factor analysis.

Table.4. 33. Result of the KMO and Bartlett's Test for sampling adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.793
Bartlett's Test of Sphericity	Approx. Chi-Square	2137.450
	df	136
	Sig.	.000

Table.4.34. Communalities of independent variables on factor analysis		
Independent variables	Initial	Extraction
Age	1.000	.823
Experience in farming	1.000	.746
Land size	1.000	.595
Education	1.000	.804
Mass media exposure	1.000	.589
Leadership Quality	1.000	.837
Social Participation	1.000	.840
Sharing of responsibility	1.000	.829
Innovativeness	1.000	.890
Attitude towards Panchayati Raj	1.000	.887
Leadership propensity	1.000	.676
Attitude towards participatory planning	1.000	.870
Extension Agency contact	1.000	.768
Accountability in Planning and Implementation	1.000	.641
Transparency	1.000	.632
Sense of empowerment	1.000	.864
Participation in Working group	1.000	.838
Extraction Method: Principal Component Analysis.		

Communality is the measure of the percentage of variable's variation, that is explained by the factors. In other words, it is the extent of variance a variable share with all other variables involved in factor analysis. A high communality depicts that that variable has much to share common with other variables. From the above table it is clear that variables social participation, Leadership quality, sharing of responsibility, innovativeness, attitude towards Panchayati raj, leadership propensity, attitude towards participatory planning, sense of empowerment and participation in working group were having relatively high communality scores.

Table.4. 35. Total Variance explained in factor analysis of variables of working group members

Component	Initial Eigen values			Rotation Sums of Squared Loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	8.549	50.289	50.289	7.658	45.049	45.049
2	1.870	11.002	61.291	2.148	12.633	57.681
3	1.594	9.377	70.668	1.720	10.118	67.800
4	1.114	6.552	77.220	1.601	9.421	77.220
5	.959	5.638	82.859			
6	.733	4.311	87.169			
7	.537	3.158	90.327			
8	.460	2.705	93.032			
9	.287	1.688	94.720			
10	.256	1.507	96.227			
11	.179	1.050	97.277			
12	.137	.805	98.082			
13	.099	.583	98.665			
14	.090	.529	99.194			
15	.072	.422	99.616			
16	.041	.242	99.858			
17	.024	.142	100.000			
Extraction Method: Principal Component Analysis						

It can be seen from the table 4.35 that out of the 17variables, four factors could explain 77% variance. These four variables obtained in factor analysis in PCA were used for subsequent multiple linear regression analysis. Components with Eigen values greater than one were only selected. tation maximized the loading of the variable on

one of the extracted factors while minimizing the loading in other factors. Scree plot depicting the delineated factors on the X axis and the corresponding Eigen values on the Y axis was used to extract the major determining factors (Figure .18).

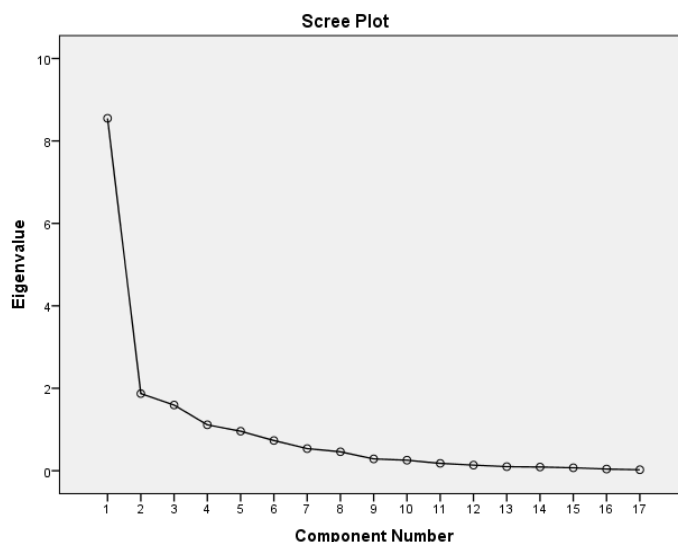


Fig.18. Factor scree plot of variance of variables of working group members in decentralized planning in LSGIs of Kerala

The extracted graph flattened off after the break of the inflexion and the four factors before the point were selected as the major determining factors. The major factors together explained 77.22 per cent of total variance.

Table.4.36. Rotated component matrix of factor analysis of variables of working group members in decentralised planning

Name of the variable	Component			
	1	2	3	4
Attitude towards Panchayati Raj	.915			
Sharing of responsibility	.904			
Extent of Participation in Working Groups	.904			
Social Participation	.875			
Attitude towards Participatory Planning	.856			
Innovativeness	.847			
Sense of Empowerment	.822			
Extension agency contact	.821			
Leadership Quality	.792			

Name of the variable	Component			
	1	2	3	4
Mass media Exposure	.729			
Transparency		.726		
Land Size		-.677		
Age			.880	
Accountability in Planning and Implementation			.655	
Experience in farming			.565	
Education				.853
Leadership Propensity				.558
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 6 iterations.				

The first component had the variables attitude towards Panchayati Raj, sharing of responsibility, extent of participation in working groups, social participation, attitude towards participatory planning, innovativeness, sense of empowerment, extension agency contact, leadership quality and mass media exposure. The second component had the variables transparency and land size. Age, accountability in planning and implementation and experience in farming formed the third factor, while education and leadership propensity together contributed to the fourth factor. Variables with loadings more than 0.50 were grouped under a factor. Factor analysis delineated four factors that affected the efficacy perception of the working group members of selected Panchayats. It was observed that these factors had significant influence on the perception of the efficacy and are independent of each other. Each factor was derived from a weighted linear combination of variables that accounted for the largest total variation in the data. These factors are given in the order of importance with respect to the proportion of the variance accounted by each factor. These four factors together explained a total variance of 77.22 per cent which implied high significance of the selected variables in the efficacy of institutionalization of decentralized planning in agriculture in Village Panchayats of Kerala.

Table.4.37. Factor loadings of variables of working group members of decentralised planning in Panchayats (n= 120)

Factor No	Items	Items extracted under factors	Factor loadings
Factor 1			
	1	Attitude towards Panchayati Raj	0.915
	2	Sharing of responsibility	0.904
	3	Extent of Participation in Working Groups	0.904
	4	Social Participation	0.875
	5	Attitude towards Participatory Planning	0.856
	6	Innovativeness	0.847
	7	Sense of Empowerment	0.822
	8	Extension agency contact	0.821
	9	Leadership Quality	0.792
	10	Mass media Exposure	0.729
Factor 2		Transparency within the group	0.726
		Land Size	-0.677
Factor 3		Age	0.880
		Accountability in Planning and Implementation	0.655
		Experience in farming	0.565
Factor 4		Education	0.853
		Leadership Propensity	0.558

The results of the rotated factor matrix for the items covered under each factor have been presented in Table.4.37. The results showed that Factor 1 comprised of 10 items with factor loadings ranging from 0.729 to 0.915. It also showed that Factor 2 had two factors with factor loadings ranging from 0.67 to 0.73, while Factor 3 had three items with factor loadings ranging of 0.880 to 0.655. Factor 4 had two items with factor loadings of 0.85 and 0.56. The uniformly high values of factor loadings indicated the significance of these variables in the delineated factors and the overall efficacy perception.

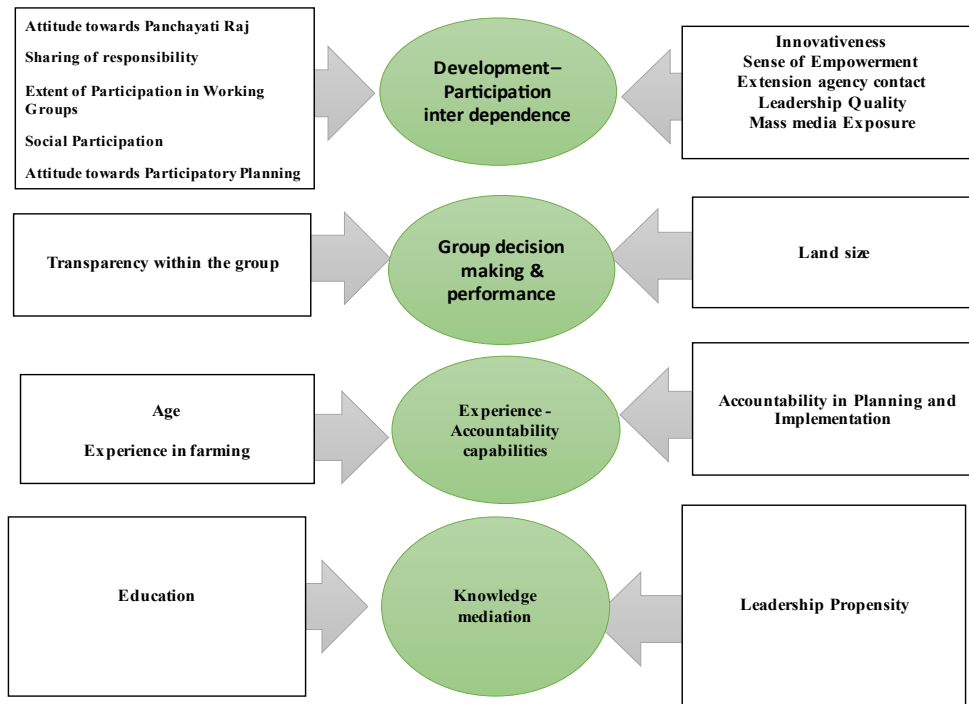


Fig.19. Diagrammatic representation of the variance explained by factors of working group members of LSGIs

Based on the items loaded under each factor, appropriate nomenclature was assigned and has been depicted as major factors in Fig.19. Accordingly, the major factors that have close relationship with the efficacy perception were identified as **Development-Participation Inter dependence, Group Decision making & performance, Experience -Accountability capabilities, and Knowledge mediation.** The Development-Participation Inter dependence factor alone could explain 45.05 % total variance.

Multi Linear Regression of the extracted factors with perceived efficacy of the decentralized planning at LSGIs

In order to determine the proportion of variance that can be explained by the independent variable the MLR was done. The model summary of the regression analysis has been given below.

Table.4. 38. Model summary of the Multi Linear Regression analysis

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.835 ^a	.697	.686	3.874	2.339
a. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1					
b. Dependent Variable: Efficacy					

The R² value (coefficient of determination) tells the proportion of variance. The adjusted R² value revealed that 68.6 % variance has been explained by the independent variable. From the ANOVA table it can be seen that the test is statistically significant.



Results of the ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3966.585	4	991.646	66.080	.000 ^b
	Residual	1725.785	115	15.007		
	Total	5692.370	119			

a. Dependent Variable: Efficacy

b. Predictors: (Constant), REGR factor score 4 for analysis 1, REGR factor score 3 for analysis 1, REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

Table.4.39. Estimated model coefficients on the MLR analysis of factors on perceived efficacy with respect to working group members

	Unstandardized Coefficients		Standardized Coefficients	t	Significance	Collinearity statistics VIF
	B	Std. Error	Beta			
(Constant)	67.486	.354		190.83	.000	1.000
REGR factor score 1 for analysis 1	5.392	.355	.780	15.18	.000	1.000
REGR factor score 2 for analysis 1	-.078	.355	-.011	-.22	.826	1.000
REGR factor score 3 for analysis 1	.949	.355	.137	2.67	.009	1.000
REGR factor score 4 for analysis 1	1.831	.355	.265	5.15	.000	1.000

It can be concluded from the MLR model that unit increase in factor 1 will produce 5.392 increase in the perceived efficacy of the decentralised planning by the members of the working group. Unit increase in third factor thus will produce 0.949 unit increase in efficiency perception. Likewise, unit increase of fourth factor will give 1.831 units increase in efficacy perception by actors of the planning process.

4.2.2.2. Perceived efficacy of the decentralised planning in LSGIs by Agricultural Officers

Efficacy of decentralised planning as perceived by Agricultural Officers is explained below. This was found to be influenced by certain personal characteristics of the officers, as seen from the review of literature.



Table.4.40. Profile characteristics of the agricultural officers of LSGIs in decentralised planning n=40

SI No	variable	Number	Percentage	Mean	Standard deviation
1	Leadership quality				
	Low	18	45	13.93	0.944
	Medium	22	55		
	High	0	0		
2	Sharing of responsibility				
	Low	16	40	17.6	0.496
	Medium	24	60		
	High	0	0		
3	Attitude towards panchayathiraj				
	Low	13	32.5	57.13	1.09
	Medium	25	62.5		
	High	2	5		
4	Leadership propensity				
	Low	9	22.5	13.73	0.554
	Medium	31	77.5		
	High	0	0		
5	Attitude towards participatory planning				
	Low	6	15	66.85	1.477
	Medium	25	62.5		
	High	9	22.5		
6	Accountability in planning and implementation				
	Low	2	5	7.95	0.221
	Medium	38	95		
	High	0	0		
7	Transparency within the group				
	Low	4	10	7.9	0.304
	Medium	36	90		
	High	0	0		
8	Sense of empowerment				
	Low	8	20	70.63	1.353
	Medium	20	50		
	High	12	30		
9	Participation in working group				
	Low	7	17.5	93.9	2.836
	Medium	23	57.5		
	High	10	25		
10	Role performance in decentralised planning				
	Low	6	15	66.84	4.39
	Medium	2	80		
	High	32	5		
11	Efficacy of decentralised planning				
	Low	4	10	71.663	2.09
	Medium	33	82.5		
	High	3	7.5		

A glimpse through the profile characteristics of agricultural officers reveals that with respect to leadership quality 55% belonged to the medium category and 45% to the low category. With regard to sharing of responsibility 60% belonged to the medium category and 40% belonged to the low category. Regarding attitude towards Panchayati raj 62.5% of the officers had medium attitude. Only 5% had the high attitude towards Panchayati raj. It was also found that 77.5% of officers had medium leadership propensity. With respect to the attitude towards participatory planning, 62.5% officers belonged to the medium category and 22.5 % belonged to the high category. Majority of officers belonged to the medium category with respect to accountability in planning and implementation (95%), transparency within the group (90%), participation in working group (57.5 %) and role performance (80%). With respect to the sense of empowerment only 50% belonged to medium category while 30% belonged to high. This points to the fact that agricultural officers are to be trained in leadership quality and sharing of responsibility.

4.2.2.2.1. Perceived efficacy of agricultural officers on decentralized agricultural planning through Local Self Government Institutions LSGIs

As already discussed in the methodology chapter, the perceived efficacy of the institutionalisation of participatory planning was analysed in five agro climatic zones of Kerala. The respondents were classified in to three categories viz. low, medium and high based on their PEDP values. The results are depicted in Table.44 and Fig. 20.

Table 4.41. Distribution of agricultural officers according to their overall perceived efficacy index (n=40)

Sl No	Categories of OPEI	Number	Percentage	Mean	Standard deviation
1	Low	4	10	71.663	2.09
2	Medium	33	82.5		
3	High	3	7.5		
	Total	40	100		

It could be observed from the Table.4.41. and figure .20 that 82.5 per cent of the respondents were found to have medium level of perceived efficacy followed by

low (10%) and high (7.5%). Hence majority of the respondents were found to have medium level of PEDP.

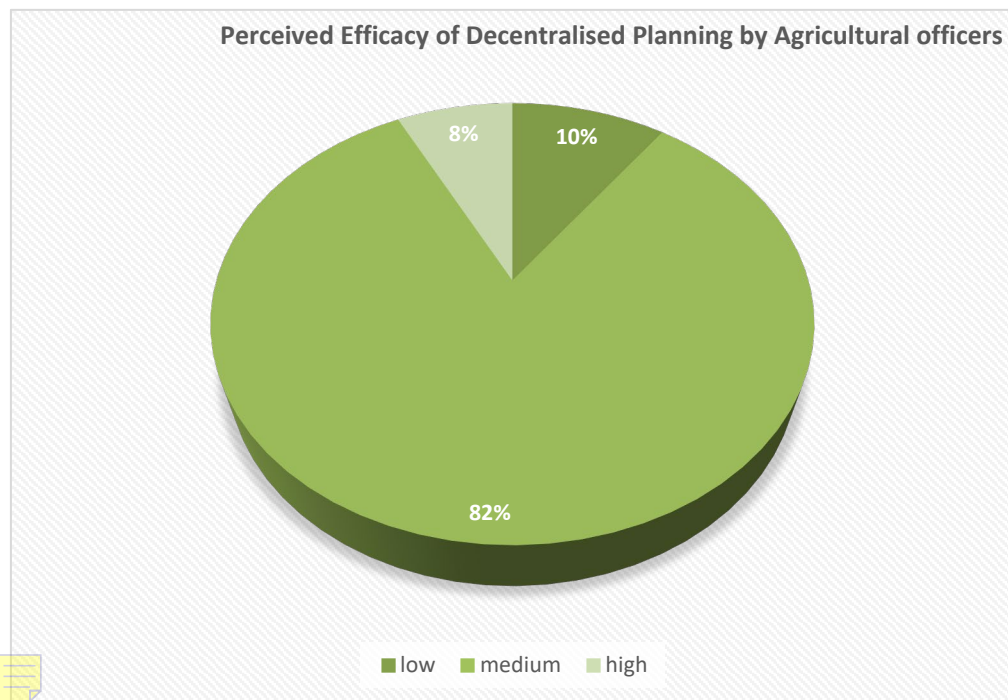


Fig.20. Distribution of agricultural officers according to their perceived efficacy of decentralised planning

4.2.2.2.2. Determinants of perceived efficacy scores obtained by Agricultural Officers

Perception of the agricultural officers on the efficacy of decentralised planning programme in agriculture is influenced by various personal characteristics. The relationship between the scores on perceived efficacy and selected socio- psychological traits of the officers is given in Table. No.4.42.

Table. 4.42. Relationship between perception on efficacy of decentralised planning in agriculture and socio- psychological attributes of Agricultural Officers (n=40)

Sl No	Independent variable	Correlation Coefficient
1	Leadership quality	0.497**
2	Attitude towards Panchayati Raj	0.591**
3	Attitude towards participatory planning	0.660**
4	Sense of empowerment	0.802**
5	Participation in Working Group meeting	0.849**
6	Role Performance	0.815**
7	Sharing of responsibility	0.374*

** Significant at the 0.01 level (*Pearson correlation*)

*. Correlation is significant at the 0.05 level (2-tailed).

Since there were only quantifiable variables, *Pearson* correlation coefficient was used to find the relationship between the dependent variables and their perception on the efficacy of decentralised planning. It was found that variables viz. leadership quality, attitude towards Panchayati Raj, attitude towards participatory planning, sense of empowerment, participation in Working Group meeting and role performance were significant at 0.01 level while sharing of responsibility was positively correlated at 0.05 level of significance.

Table. 4.43. Relationship between socio psychological attributes of Agricultural officers with perception on the efficacy of decentralized planning : Multi Linear Regression

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.943 ^a	.890	.852	.80378



Results of ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.664	10	15.166	23.475	.000 ^b
	Residual	18.736	29	.646		
	Total	170.400	39			

a. *Dependent Variable:* Perception on the efficacy of decentralised planning

b. *Predictors:* (Constant), Role performance, transparency within the group, leadership propensity, sharing of responsibility, accountability in planning and implementation, sense of empowerment, participation in working group, attitude towards panchayati raj, attitude towards participatory planning

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. deviation	N
Predicted Value	66.7509	76.7370	71.6333	1.97201	40
Residual	-.98244	2.13134	.00000	.69312	40
Std.Predicted Value	-2.476	2.588	.000	1.000	40
Std. Residual	-1.222	2.652	.000	.862	40

a. Dependent Variable: Efficacy

4.2.2.2.3. Factor analysis of the variance explained by selected personal attributes of Agricultural Officers in decentralised planning

Test of Sampling adequacy

To check whether the sampling of values is adequate for conducting factor analysis Kaiser-Meyer-Olkm KMO test was done. The value obtained was greater than 0.674 and was significant. Bartlett's test is a check for identity matrix. A significance value of less than 0.05 indicated that the data is not an identity matrix. The data proved to be approximately multivariate normal and acceptable for factor analysis.

Table.4. 44. Kaiser-Meyer-Olkin Measure of Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.674
Bartlett's Test of Sphericity	Approx. Chi-Square	288.957
	df	45
	Sig.	.000

Table.4. 45. Communalities of independent variables on factor analysis

Communalities		
Variables	Initial	Extraction
Leadership quality	1.000	.629
Sharing of responsibility	1.000	.532
Attitude towards Panchayatiraj	1.000	.826
Leadership propensity	1.000	.584
Attitude towards participatory planning	1.000	.735
Accountability in Planning and implementation	1.000	.773
Transparency	1.000	.742
Sense of Empowerment	1.000	.797
Participation in working group	1.000	.663
Role performance in decentralised planning	1.000	.676

Extraction method: PCA

Communality is the measure of the percentage of variable's variation, that is explained by the factors. In other words, it is the extent of variance a variable share with all other variables involved in factor analysis. A high communality depicts that that variable has much to share common with other variables. From the above table it is clear that variables leadership quality, attitude towards Panchayati raj, attitude towards participatory planning, accountability in planning and implementation, transparency within the group, sense of empowerment, participation in working group and role performance were having relatively high communality scores.

Table.4. 46. Total Variance explained in factor analysis of personal attributes of Agricultural Officers

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings	
	Total	% of Variance	Cumulative %	Total	% of Variance
1	4.721	47.210	47.210	4.721	47.210
2	2.236	22.362	69.572	2.236	22.362
3	.972	9.725	79.297		
4	.709	7.089	86.386		
5	.503	5.031	91.417		
6	.313	3.129	94.546		
7	.210	2.098	96.644		
8	.155	1.554	98.198		
9	.128	1.280	99.478		
10	.052	.522	100.000		

It can be seen from the above table that out of the 10 variables, two factors could explain 69.57 % variance. These two variables obtained in factor analysis in PCA were used for subsequent multiple linear regression analysis. Components with Eigen values greater than one were only selected.

Rotation maximized the loading of the variable on one of the extracted factors while minimizing the loading in other factors. Scree plot depicting the delineated factors on the X axis and the corresponding Eigen values on the Y axis was used to extract the major determining factors (Figure .21).

Table.4.47. Variance explained in factor analysis of the selected attributes of Agricultural Officers(n=40)

Total Variance Explained

Component	Extraction Sums of Squared Loadings	Rotation Sums of Squared Loadings		
	Cumulative %	Total	% of Variance	Cumulative %
1	47.210	4.693	46.929	46.929
2	69.572	2.264	22.643	69.572

Extraction Method: Principal Component Analysis

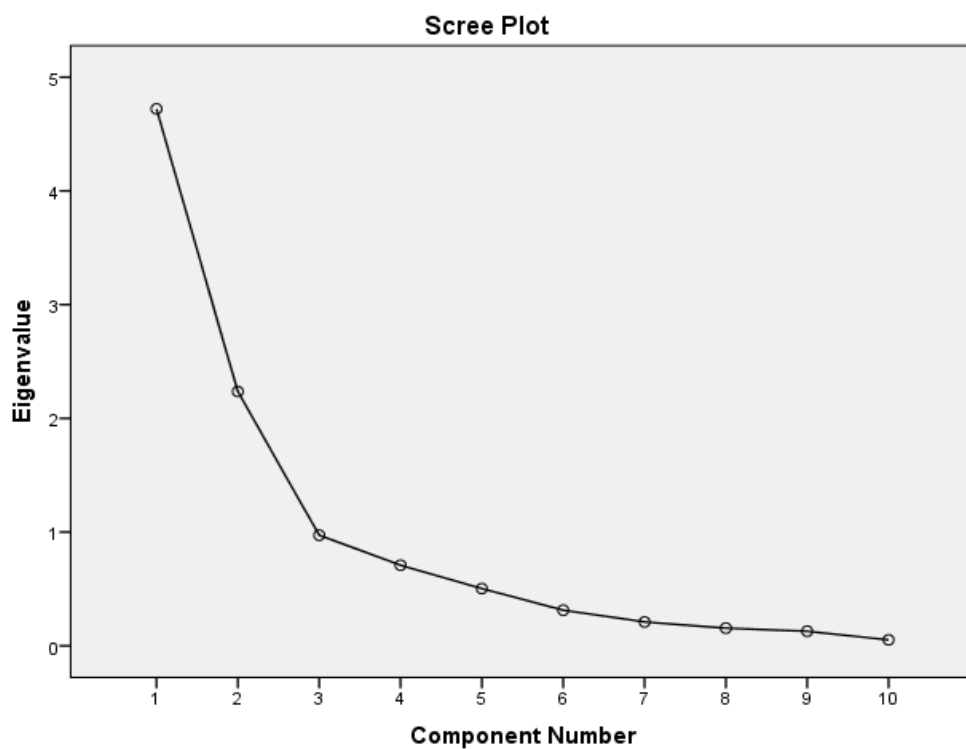


Fig.21. Factor scree plot of variance among selected attributes of Agricultural Officers that influence their perception on the efficacy of decentralized planning

The extracted graph flattened off after the break of the inflexion and the two factors before the point were selected as the major determining factors. The major factors together explained 69.57 per cent of total variance



Table.4. 48. Rotated component matrix of factor analysis of the attributes of Agricultural Officers that influence their perception on the efficacy of decentralized Planning

Name of the variable	Component	
	1	2
Attitude towards Panchayati Raj	0.895	
Sense of empowerment	0.880	
Attitude towards participatory planning	0.855	
Role performance	0.822	
Leadership quality	0.788	
Extent of participation in Working Groups	0.744	
Sharing of responsibility	0.716	
Accountability in planning and implementation		0.873
Transparency within the group		0.859
Leadership propensity		0.758

Extraction Method : Principal Component Analysis

Rotation method: Varimax with Kaiser normalization

The first component comprised of seven variables attitude towards Panchayati Raj, Sense of empowerment, attitude towards Participatory Planning, role Performance, leadership quality, extent of participation in working groups and sharing of responsibility.

The second factor extracted out of the principal component analysis had accountability in planning and implementation, transparency within the group and leadership propensity as the three variables in it. Variables with loadings more than 0.50 were grouped under a factor (See Table 4.48)

Table.4. 49. Factor loadings of attributes of agricultural officers in decentralised planning in Panchayats (n= 40)

Factor No	Items	Items extracted under factors	Factor loadings
Factor 1	1	Attitude towards Panchayati Raj	0.895
	2	Sense of Empowerment	0.880
	3	Attitude towards Participatory Planning	0.855
	4	Role Performance	0.822
	5	Leadership Quality	0.788
	6	Extent of Participation in Working Groups	0.744
	7	Sharing of responsibility	0.716
Factor 2		Accountability in planning and implementation	0.873
		Transparency within the group	0.859
		Leadership propensity	0.758

Factor analysis delineated two factors that affected the efficacy perception of Agricultural Officers of selected Panchayats. It was observed that these factors had significant influence on the perception of the efficacy and are independent of each other. Each factor was derived from a weighted linear combination of variables that accounted for the largest total variation in the data. These factors are given in the order of importance with respect to the proportion of the variance accounted by each factor. Two factors together explained a total variance of 69.57 per cent which implied high significance of the selected variables in the efficacy of institutionalization of decentralized planning in agriculture in Village Panchayats of Kerala.

The results of the rotated factor matrix for the items covered under each factor have been presented in Table.4.49.. The results showed that Factor 1 comprised of seven items with factor loadings ranging from 0.895 to 0.716. It also showed that Factor 2 had three factors with factor loadings of 0.873, 0.859 and 0.758. The uniformly high values of factor loadings indicated the significance of these variables in the delineated factors and the overall efficacy perception.

Based on the items loaded under each factor, appropriate nomenclature was assigned and has been depicted as major factors in Fig.22. Accordingly, the major factors that have close relationship with the efficacy perception were identified as **Participation-performance Interdependence** and **Decentralization- Development facilitation**. Participation-performance enabling factor alone could explain 46.93 % of the total variance while Transparency- Accountability factor explained 22.64 % total variance.

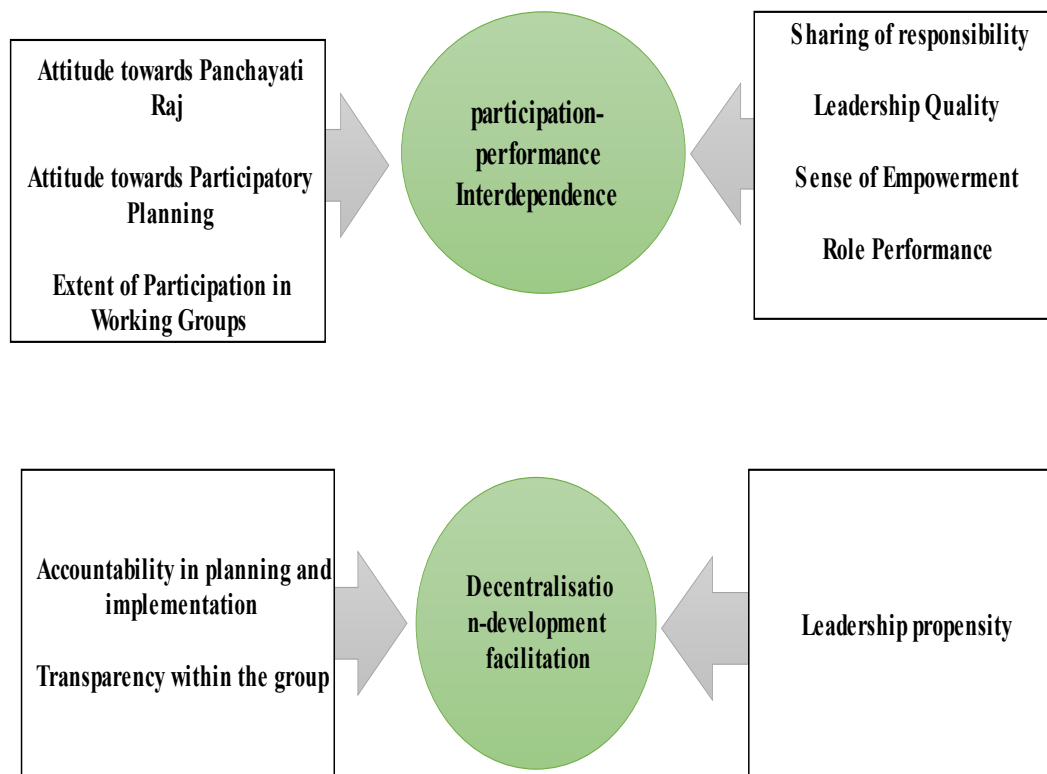


Fig.22. Diagrammatic representation of variance among factors of Agricultural Officers of LSGIs

Multi Linear Regression of the extracted factors (attributes) of Agricultural officers with perceived efficacy of decentralized planning at LSGIs

In order to determine the proportion of variance that can be explained by the independent variable the MLR was done. The model summary of the regression analysis has been given below

Table.4. 50. Model summary of the Multi Linear Regression analysis

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 ^a	.667	.649	1.23779

a. Predictors: (Constant), REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1

b. Dependent Variable: Efficacy

From the table 4.50 ,the R² value (coefficient of determination) tells the proportion of variance. The adjusted R² value revealed that 64.9 % variance has been explained by the independent variable. From the Anova table it can be seen that the test is statistically significant.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113.711	2	56.856	37.109	.000 ^b
	Residual	56.689	37	1.532		
	Total	170.400	39			
a. Dependent Variable: Efficacy						
b. Predictors: (Constant), REGR factor score 2 for analysis 1, REGR factor score 1 for analysis 1						

Estimated model Coefficients on the MLR analysis of factors on Perceived Efficacy has been given in Table.4.51. It can be concluded from the MLR model that unit increase in first factor; **Participation-performance interdependence** produced 1.667 increase in the perceived efficacy of the decentralised planning by Agricultural officers of the LSGIs. Similarly, unit increase in second factor, **Decentralisation-Development facilitation** produced 0.373 unit increase in efficiency perception.

Table.4. 51. Estimated model Coefficients on the MLR analysis of factors on Perceived Efficacy

Model	Unstandardized Coefficients		Standardized Coefficients	t	Significance	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	71.63	.196		366.01	.000		
1 REGR factor score 1 for analysis 1	1.66	.198	.797	8.406	.000	1.00	1.00
REGR factor score 2 for analysis 1	.373	.198	.179	1.884	.067	1.00	1.00
a. Dependent Variable: Perception on efficacy of decentralised planning							

4.2.3. Role performance of Agricultural Officers in Decentralized Planning

In order to analyze the role performance of agricultural officers various functions of Agricultural officers in six dimensions were collected based on the office management manual for Local Government Institutions and state Agricultural Policy of the Government of Kerala. 60 functions to be performed by agricultural officers thus were clustered in to six dimensions – **Planning, execution and implementation, financing and budgeting, administration and supervision, monitoring and evaluation and agricultural extension functions.** There were 10 functions related to role performance related to decentralized planning under each dimension. Distribution of agricultural officers based on role performance scores has been depicted in Fig. 23 below.

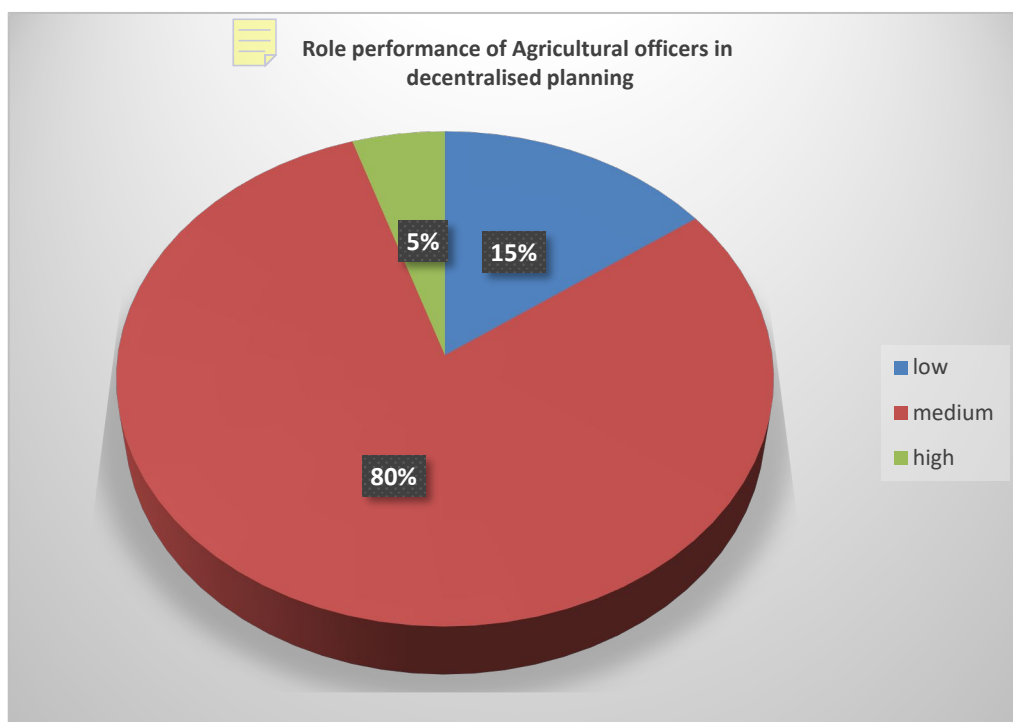


Fig. 23. Distribution of agricultural officers based on role performance score

It can be seen that majority of Agricultural officers (80%) had medium role performance with respect to different roles related to agricultural development at village panchayath. Only 5% had high role performance while 15% had low level of role performance.

4.2.3.1. Dimension wise analysis of role performance in decentralized planning

Dimension wise scores of role performance obtained by agricultural officers in decentralised planning have been given in Table.4.52 and Fig.24. It is clear from the data that Agricultural officers had high role performance in the financing and budgeting dimension, closely followed by planning and monitoring and evaluation. There was lowest performance level in the agricultural extension functions with a performance score percentage of 52.7 % followed by administration and supervision functions (57.5%).

Table.4. 52. Dimension wise scores of role performance of agricultural officers in decentralised planning n=40

Role Performance Dimensions	Mean dimensional score	Maximum obtainable score	Performance score (Percentage)
Planning	36.90	50	73.8
Execution and Implementation	33.42	50	66.85
Financing & Budgeting	39.1	50	78.2
Administration & Supervision	28.75	50	57.5
Monitoring & Evaluation	36	50	72
Agricultural Extension functions	26.35	50	52.7

Mean dimensional score: 3.34

Analysis of functions in different dimensions of the role performance

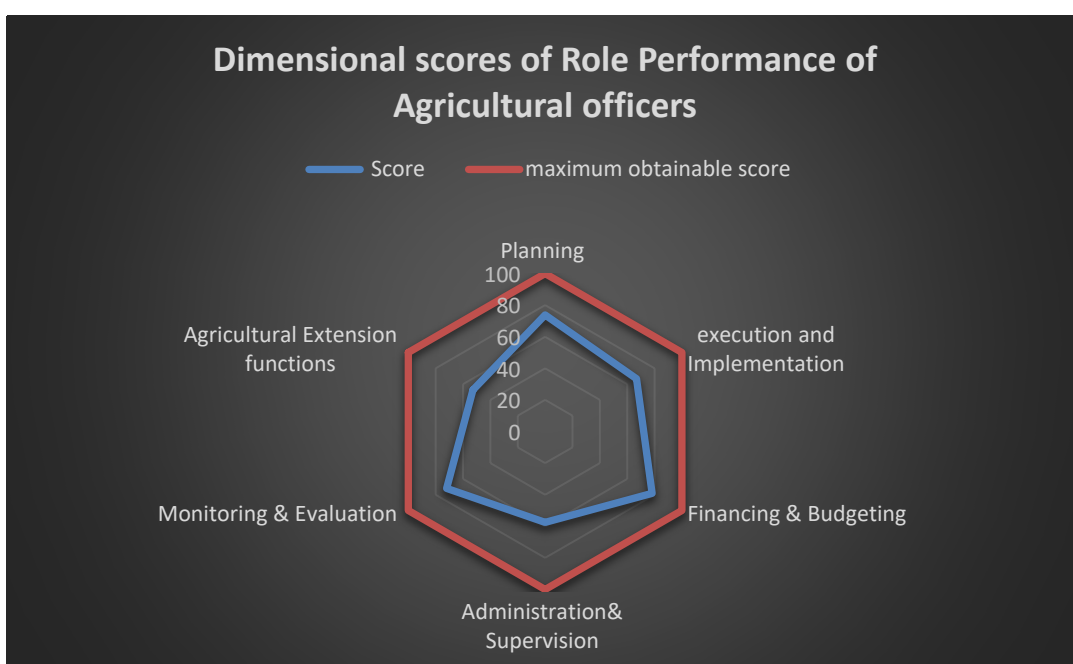


Fig.24. Dimensional scores of Agricultural Officers on role performance in decentralized planning

Since the agricultural officer has to focus primarily on production and productivity related interventions and related capacity building of farmers, the low scores obtained for the agricultural extension function assumes significance.

Administration and supervision function obtained the next low score. Hence there should be focused efforts to enhance capacities of agricultural officers with respect to these two functions.

4.2.3.2. Functions of the Agricultural Officers related to planning dimension

The functions under the planning dimension of agricultural officer were preparing development document, plan & projects, estimating village input requirement, fallow land identification, delineation of micro watersheds, integration of LSGI plans, enriching people's bio diversity register PBR, networking for custom hiring services, updating database at Panchayath, timely supply of seeds and quality planting materials and sourcing of farm technologies for the development of farming undertaken by various stakeholders.

Out of these, only two sub dimensions received scores below the mean dimensional score of 3.34. They were delineation of micro watersheds (2.53) and enriching people's bio diversity register PBR (3.23). All other sub dimensions received higher scores than mean showing that these functions are satisfactorily performed. Identification of fallow land, preparing development document, plan & projects, estimating village input requirement were the sub dimensions which received highest scores in this dimension. Though watershed master plans have been prepared during 10th, 11th plans and for MGNREGA programs, projects are not reportedly conceived based on this document. There is an urgent need to link agricultural projects on already delineated watersheds within the panchayath

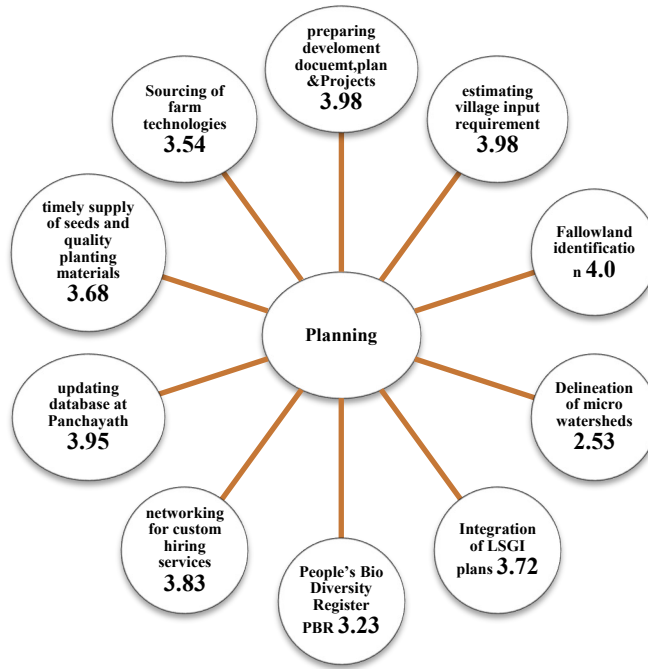


Figure: 25. Functions of Agricultural Officers under planning dimension and mean perception scores

4.2.3.3. Functions of the Agricultural Officers related to execution and implementation dimension

Various functions of agricultural officers under execution and implementation dimension were implementation of state and local self-Government agricultural development programmes ,participating in Gramasabha and development seminar meetings of participatory planning process, participation in the development standing committee meeting, organizing self help groups SHGs among farmers, organizing and strengthening Farmer Producer Organisations and Farmer Interest Groups , encourage systems of cooperative group farming\, implementation of income generation projects for women as ex-officio member of Kudumbasree CDS, providing platforms for marketing of farm produce, fixing eligibility and priority criteria for selection of beneficiaries for agricultural projects and preparation of calendar of agricultural activities of the Krishibhavan and ratification by Development Standing Committee. Out of these roles, functions like implementation of state and local self-Government agricultural development programmes(4.30),participating in Gramasabha and development seminar meetings of participatory planning process(4.15),providing platforms for marketing of farm produce(3-80) received the better role perception scores.

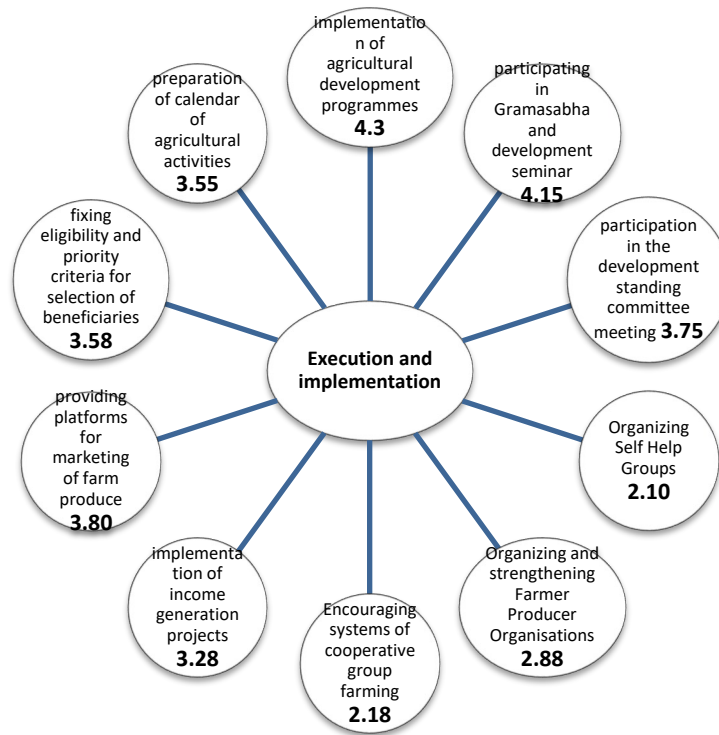


Fig:26. Functions and mean perception scores of the Agricultural officers under execution and implementation dimension

However, it can be seen that four subdimensions had scores below the average perception score of 3.34. Organizing self-help groups of farmers received the lowest score (2.10), followed by encouraging systems of cooperative group farming (2.18), organizing and strengthening Farmer Producer Organizations (2.88) and implementation of income generation projects (3.28). All these roles either pertain to social capital formation roles or promotion of enterprises for income generation and thus for livelihood. This points to the need of ill organized farmers and their weak networking to undertake group farming. Agricultural officers primarily engaged in crop production facilitation activities are not capable of giving emphasis on strengthening the organizational capacities of farmers. compared to the women NHGs of the *Kudumbasree* network, there are very few SHGs of farmers. The potentials of encouraging cooperative group farming systems also are less tapped. There should be special policy interventions to address these areas through ATMA .

4.2.3.4. Functions of the Agricultural Officers related to financing and budgeting dimension

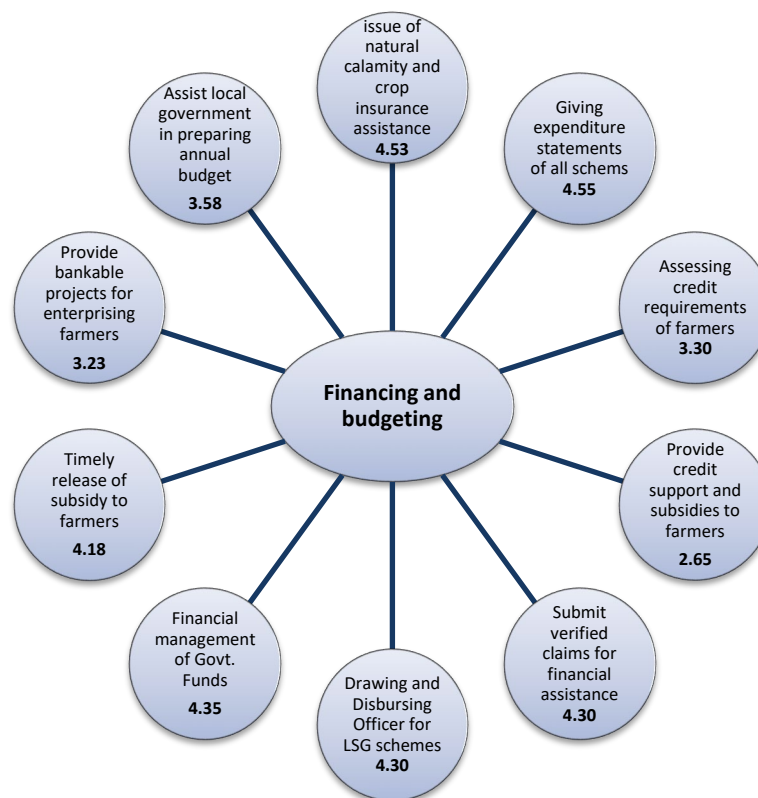


Figure:27. Functions and mean perception scores of the Agricultural Officers under financing and budgeting dimension

Various roles of agricultural officers under the financing and budgeting dimension were issue of natural calamity and crop insurance assistance (4.53), giving expenditure statements of all schemes (4.55), assessing credit requirements of farmers (3.30), providing credit support and subsidies to farmers (2.65), submitting verified claims for financial assistance (4.30), drawing and disbursing Officer for LSG schemes (4.30), financial management of Govt. funds (4.35), timely release of subsidy to farmers (4.18), providing bankable projects for enterprising farmers (3.23), assisting local government in preparing annual budget (3.58) .

However, it can be seen that three subdimensions had scores below the average perception score of 3.34. These are assessing credit requirements of farmers (3.30), providing credit support and subsidies to farmers (2.65) and providing bankable projects for enterprising farmers (3.23). it can be seen that all these functions pertain to pooling of credit to farming. This shows that linkage of agricultural officers with credit

institutions has to be widened. The existing block level bankers committee platform should be properly tapped through ATMA. Farmers venturing in to enterprises should be provided with bankable projects and the capabilities of agricultural officers in preparation of bankable projects should be enhanced through focused initiatives through ATMA

4.2.3.5. Functions of the agricultural Officers related to administration and supervision dimension

Different roles of agricultural officers under the administration and supervision function were convening the agriculture working group meetings (4.78), training the working group members on guidelines (3.40), allocation of estimated fallow lands to SHGs (2.45), convergence of MGNREGA with other agricultural programmes (2.88), maintenance of traditional water sources, waterways (2.03), sanctioning applications of farmers and farm labourers for availing pension (3.8), obtaining approval for the organic fertilizers produced by the Self Help Groups (2.05), uploading agenda note in the *Sakarma* Software of Panchayat meeting (2.0), convening staff meeting of the Krishibhavan with Development Standing Committee members (2.10) and convening meeting of the Agriculture Development Committee ADC (3.18).

However, it can be seen that out of the ten sub dimensions, seven subdimensions had scores below the average perception score of 3.34. This shows that there is critical deficiency prevailing in discharging the roles related to administration and supervision dimension.

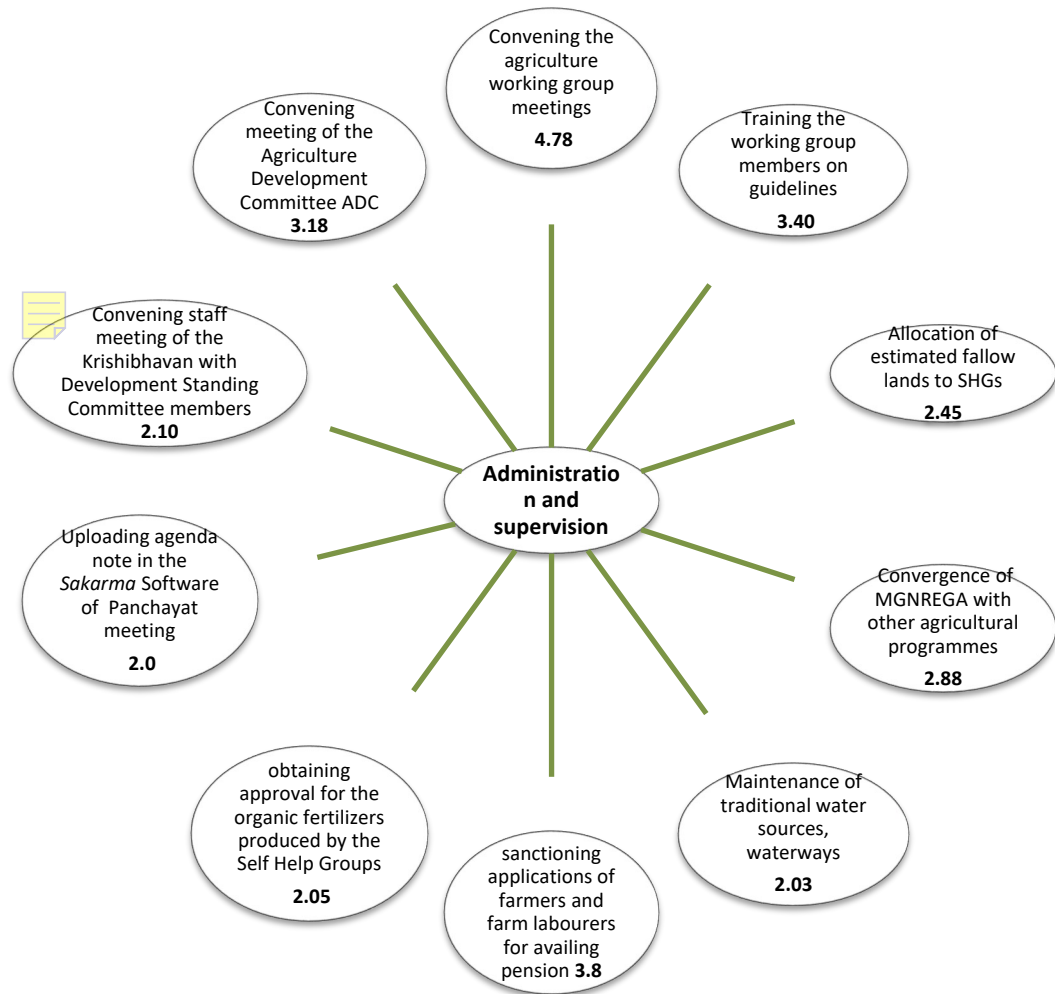


Figure: 28. Functions and mean perception scores of the Agricultural Officers under administration and supervision dimension

Roles that were performed satisfactorily were: convening the agriculture working group meetings (4.78), training the working group members on guidelines (3.40), and sanctioning applications of farmers and farm labourers for availing pension (3.8). Roles which received lesser scores were allocation of estimated fallow lands to SHGs (2.45), convergence of MGNREGA with other agricultural programmes (2.88), maintenance of traditional water sources, waterways (2.03), obtaining approval for the organic fertilizers produced by the Self Help Groups (2.05), uploading agenda note in the *Sakarma* Software of Panchayat meeting (2.0) and convening staff meeting of the Krishibhavan with Development Standing Committee members (2.10). Among these, maintenance of traditional water sources, waterways (2.03), obtaining approval for the organic fertilizers produced by the Self Help Groups (2.05), uploading agenda note in

the *Sakarma* Software of Panchayat meeting (2.0) and convening staff meeting of the Krishibhavan with Development Standing Committee members (2.10) are roles with least scores. This reveals that in spite of the potential linkages opened through MGNREGEA, there is urgent need for agricultural officers to evolve strategies to maintain the traditional water resources through active involvement of padasekharams. Also, there is a need to network initiatives for production of the organic manures locally and initiate processes to obtain approval for such units to strengthen local production of manures. It was also revealed that agricultural officers are not properly oriented to uploading agenda notes for Panchayath meeting through *Sakarma* software. There is a need to improve their visibility in this development decision making space through proper capacity building. Also, the linkage of staff of Krishi bhavan with development standing committee members should be widened.

4.2.3.6. Functions of the Agricultural Officers related to monitoring and evaluation dimension

Various roles of agricultural officers under the monitoring and evaluation dimension were diagnostic field visits to suggest remedies for pests, diseases and nutritional disorders, monitoring ward level Agro Clinics and farm field schools assigned to agricultural assistants, convening periodical meetings of the *padasekhara samithies, kera samithies* , farmers groups etc. and encourage their formation wherever feasible, acting as convener and reporting officer of the local level monitoring committee under Kerala paddy and wetland act 2008, working as middle level technocrat in passing on the researchable issues at field level to scientists and their feedback to farmers, initiate timely action to settle the objections in the Performance Audit, State Audit Department, AG Audit, preparing Five-Year Plan involving detailed master plan of the projects to be implemented in the agriculture sector of the Grama Panchayat for the next five years, rendering adequate division of workforce & co-ordination of efforts as convener and technical member of Agricultural Task Force of service providers, smoothening crop risk management among farmers through enrolment in crop insurance programs and providing crop management solutions to the farmers on the basis of soil test results.

Out of these roles, diagnostic visits (3.96), monitoring of agro clinics and FFSs (3.95), convening meeting of farmer groups (3.95), acting as wetland act-reporting

officer (3.80), feeding research system and back(4.55), replying to audit objections (3.78), preparing five year master plans for local govt (3.90) and providing crop insurance for risk management (3.53) received performance scores above the average perception score of 3.34. This implies that all these functions are very efficiently carried out by agricultural officers.

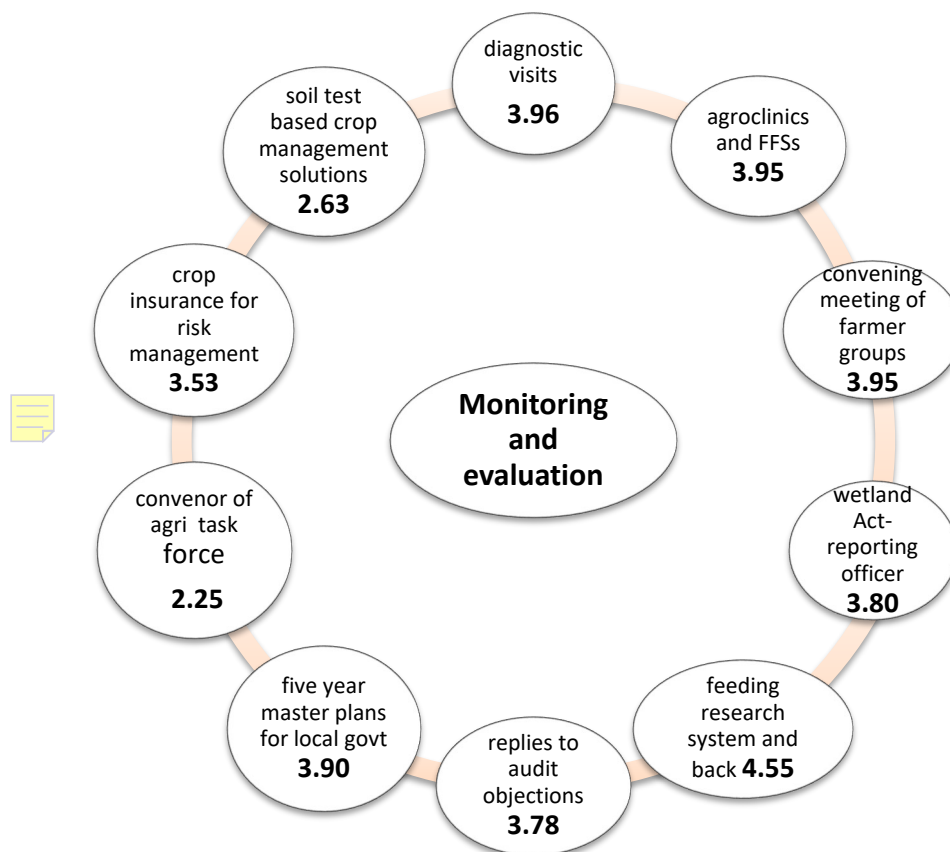


Figure: 29. Functions and mean perception scores of the Agricultural Officers Under Monitoring and Evaluation dimension

But providing crop management solutions to the farmers on the basis of soil test results (2.63) and coordination of service providers as convenor of agri task force (2.25) received low performance scores. This points to the fact that soil testing services along with proper follow up through provision of crop management solutions have to be improved in Krishi bhavans. Performance of agricultural officers in coordinating of service providers of agriculture task forces was also not effective. This may be either due to lack of adequate infrastructure at disposal of the Panchayath level service providers or the improper networking of the service providers with the farmer groups. Absence of group farming initiatives among farmers also limits coordination.

4.2.3.7. Functions of the Agricultural Officers related to Agricultural Extension dimension

There were ten roles of agricultural officers included under the agricultural extension function. These were providing technical advice and training to the farmers and field staff, participating and organizing agricultural exhibitions and seminars , spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms, use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce, adopting technologies for making farming system climate resilient, promotion of organic and safe to eat standards of food production, motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc., enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector, promoting self-reliance in organic manures and vegetables and promoting integrated farming system models with progressive farmers.

4.2.3.8. Analysis of the sub dimensions of the Agricultural Extension functions

All the sub dimensions under the agricultural extension function had received performance scores lower than the mean performance score of 3.34. Among all the functions, agricultural extension function had received the lowest role performance score. Roles such as promoting integrated farming system models with progressive farmers (3.05), use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce(2.95), promotion of organic and safe to eat standards of food production(2.95),enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector(2.95), participating and organizing agricultural exhibitions and seminars (2.87), providing technical advice and training to the farmers and field staff (2.85), promoting self-reliance in organic manures and vegetables(2.80) received comparatively better scores within the extension function.

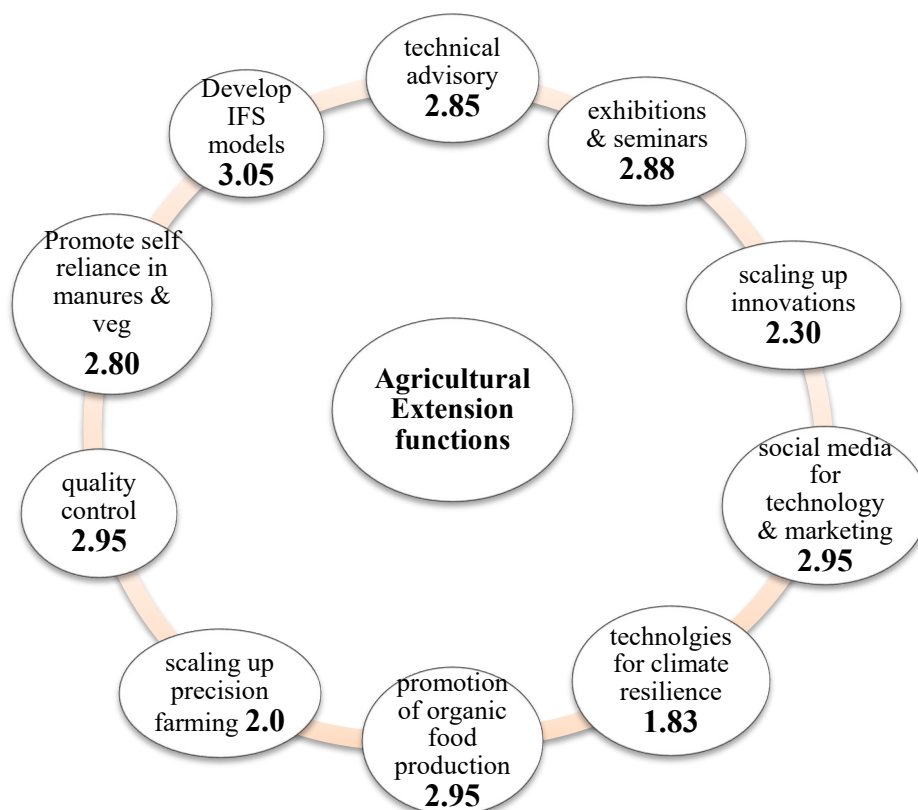


Figure: 30. Functions of the Agricultural Officers related to Agricultural Extension Dimension

But very low performance score was observed in the roles such as spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms(2.30), motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc.(2) and adopting technologies for making farming system climate resilient (1.83). At a time, the grass root level agriculture is threatened by the vagaries of climate change, agricultural officers have to discharge this crucial function. The research system should focus on backstopping them with suitable strategies. More over various technologies making cropping systems climate resilient also was demanded by most of the officers.

Motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches and greenhouses is a crucial function helping to scale up water productivity in farming. Farmers are increasingly adopting open precision farming in summer fallows. Many rain shelters and poly houses in the state are underutilized for want of proper technical backing of farmers and fertigation

schedule and techniques. In this background, the capabilities of the agricultural officers in this subdimension have to be urgently enhanced.

Table.4. 53. Sub dimensions of the Agricultural Extension functions of Agricultural Officers (n-40)

Sl No	Item	Mean subdimension score
1	Promote Integrated Farming System models with progressive farmers	3.05
2	Use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce	2.95
3	Promotion of organic and safe to eat standards of food production	2.95
4	Enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector	2.95
5	Participating and organizing agricultural exhibitions and seminars	2.87
6	Providing technical advice and training to the farmers and field staff	2.85
7	Promoting self-reliance in organic manures and vegetables	2.8
8	Spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms	2.3
9	Motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc.	2
10	Adopting technologies for making farming system climate resilient	1.83

Spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms was the next sub dimension obtaining low score. Agriculture at grass roots has contributed lot of breakthrough innovations. Many innovations developed by farmers remain unrevealed and documented for want of appropriate platforms and networking of actors to support farmers on this innovation eco system. Agricultural officers should have skills to lead farmers and an awareness

of the interactions among stakeholders in the platform. Also the rich stream of traditional knowledge in rural areas demands appropriate technical leadership to strengthen farmers to claim benefit sharing in cases of bio prospecting. In the light of the above all agricultural officers have to be urgently trained to improve their performance on this sub dimension.

Sub dimension of promoting integrated farming system models with progressive farmers obtained highest performance score proving that agricultural officers are satisfactorily discharging this function. The *subhiksha Keralam* initiative also have considerably helped them in broadening their technical base. Use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce obtained the next high score. This is a positive signal , giving a leadership to farmers in addressing the digital divide. Promotion of organic and safe to eat standards of food production, enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector, participating and organizing agricultural exhibitions and seminars , providing technical advice and training to the farmers and field staff and promoting self-reliance in organic manures and vegetables received satisfactory score levels.

4.3. Accomplishments in the agriculture sector under the decentralized planning paradigm

Accomplishments of decentralized planning in agriculture were quantified in terms of assets created, financial achievements and other parameters of agricultural development based on availability of benchmark data. The following data on accomplishment were collected:

4.3.1. Physical and financial accomplishments in agricultural sector under decentralized planning programme in different zones

Gross accomplishments in agricultural sector in selected Panchayaths have been given in Table.4.54. Various accomplishments were analysed in schemes meant for rice development, assistance to labour cost, coconut development, intercropping in homesteads, assistance to banana farmers, production of vegetables, tuber crops promotion, spices development, medicinal plants promotion, pulses production,

development of agro enterprises, projects for market promotion, custom hiring of farm machinery and biogas and composting units

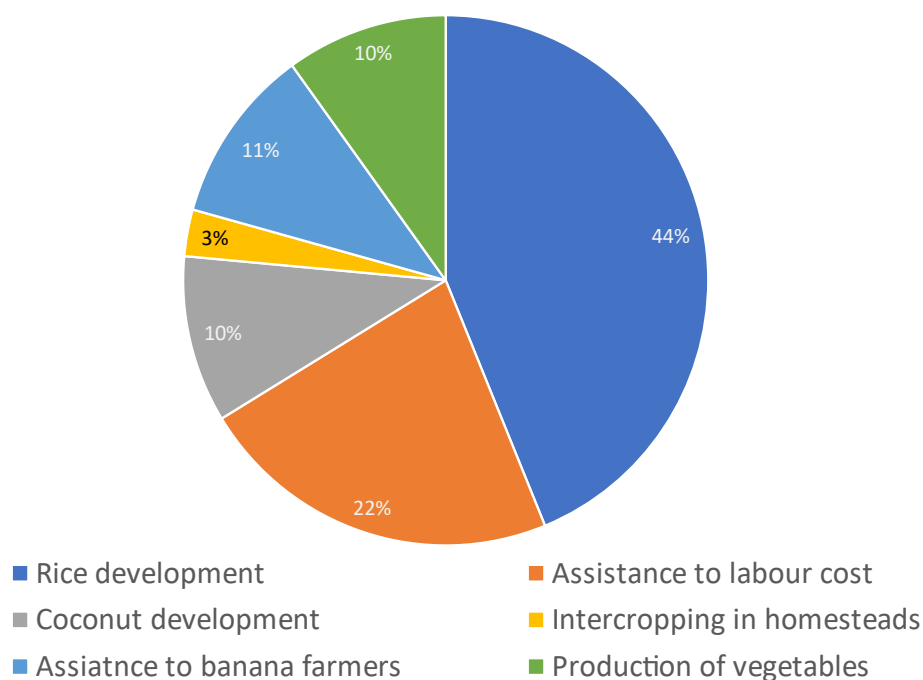
Table. 4.54. Gross accomplishments of selected panchayaths in agricultural sector under decentralised planning

Component	No of projects implemented	Physical achievement Ha/Nos	Financial achievement Rs.Lakhs	No of beneficiaries
Rice development	246	36301	1818.97	17774
Assistance to labour cost	126	15524	931.54	14367
Coconut development	134	655	422.84	3329
Intercropping in homesteads	54	737.17	118.05	7264
Assistance to banana farmers	126	195.51	445.82	12390
Production of vegetables	193*	4099	413.14	15424
Tuber crops promotion	38	470	50.59	5588
Spices development	48	265	131.36	2630
Medicinal plants promotion	2	4.5	1.2	110
Pulses production	19	964	13.91	1739
Development of agro enterprises	16	340	16.29	340
Projects for market promotion	8	8	18.55	920
Custom hiring of farm machinery	25	27 power tillers 192 weed cutters	64.33	1380
Biogas and composting units	7+5	450+ 68	9.1+ 11.09	450+68

There were 246 projects implemented for rice development covering an area of 36301ha with a financial achievement of 1818.97 lakhs, benefitting 17774 farmers. There were 134 projects for coconut development in an area of 655 ha with an allocation of 422.84 lakhs benefitting 3329 farmers.

A glimpse through the physical and financial allocations revealed that local bodies had not paid required attention for promotion of medicinal plants, market promotion and development of agro enterprises. Compared to other crops, the attention paid to tuber crops and spices development was less. There were 25 projects implemented for custom hiring of farm machinery with a financial allocation of 64.33 lakhs. But farm machinery interventions were confined to supply of weed cutters and power tillers. Assistance to labour cost for rice farmers was the second sub sector with regard to amount spent (931.54 lakhs) covering 15524 ha of area benefitting 14364 farmers.

Comparison of financial achievements in major financial allocations



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Fig. 31. Comparison of financial achievements in major financial allocations in selected panchayaths

It can be seen from Fig.30 that out of the total allocations of the panchayaths from 2012 to 2018, 44% was expended for rice development. For providing labour

assistance for rice farmers 22 % of the plan allocation was used by LSGIs. The amount spent for coconut development was just 10% and for promotion of intercropping only 3% of the allocation was expended. This proves that the home stead farming system with coconut as main crop has not received the needed attention in the decentralized planning. For providing assistance to banana farmers and vegetable farmers local bodies have spent 11% and 10% respectively. These gaps have to be strategically addressed in the decentralized planning.

4.3.2. Comparison of accomplishments in major crop development initiatives in various zones

The accomplishments in the agricultural sector under decentralised planning in the five zones selected for the study are presented in Table.4.55. given below

Table.4.55. Comparison of accomplishments in major crop development initiatives in various zones

Sl No		Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
1	Increasing rice productivity						
	No of projects implemented	49	35	67	48	47	246
	Physical achievement (Ha)	2116	8898	13100	6986	5201	36301
	Financial achievement (Lakhs)	105.8	444.9	658.89	349.32	260.06	1818.97
	No. of beneficiaries	2645	3110	6549	3210	2260	17774
2	Assistance to paddy labour cost						
	No of projects implemented	12	13	49	15	37	126
	Physical achievement (Ha)	213	733	6110	1464	7004	15524
	Financial achievement (Lakhs)	12.78	43.98	366.65	87.88	420.25	931.54
	No. of beneficiaries	532	860	5091	1464	6420	14367
3	Coconut development						
	No of projects implemented	31	34	15	41	13	134
	Physical achievement (Ha)	179	23	104	285	64	655
	Financial achievement (Lakhs)	62.89	121.2	55.07	149.96	33.72	422.84
	No. of beneficiaries	1257	120	212	1420	320	3329

Sl No		Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
4	Intercropping in homesteads						
	No of projects implemented	18	11	4	16	5	54
	Physical achievement (Ha)	114	103	310	188	22.17	737.17
	Financial achievement (Lakhs)	14.34	32.33	5.8	58.65	6.93	118.05
	No. of beneficiaries	2868	1293	390	2436	277	7264
5	Assistance to banana farmers						
	No of projects implemented	47	26	17	33	3	126
	Physical achievement (Ha)	84	33	15	60.72	2.79	195.51
	Financial achievement (Lakhs)	168.7	80.72	37.6	151.81	6.99	445.82
	No. of beneficiaries	5100	1614	2500	3036	140	12390
6	Production of vegetables						
	No of projects implemented	42	38	39	49	25	193
	Physical achievement (Ha)	590	1100	511	1158	740	4099
	Financial achievement (Lakhs)	59.13	109	50.85	115.88	78.28	413.14
	No. of beneficiaries	912	5720	1533	5794	1465	15424

The study attempted to compare the major crop development initiatives, zone wise. Among the different zones, central zone (Palakkad) had the highest financial achievement (36.19%) followed by problem area zone(Thrissur-24.42%). In the projects for assistance to paddy labour cost, high range zone (Wayanad) had the highest share of expenditure (45.11%) followed by central zone (39.31%).

With regard to coconut development, north zone(Malappuram) had the highest share of financial achievement (35.46%) followed by problem area zone(28.67%). Highest share for intercropping in homesteads was in north zone(49.6%) followed by problem area zone (27.39%). Central zone has a share below 1% suggesting that intercropping in homesteads has to be strategically promoted in this zone. Out of the financial achievement for banana major share (37.75%) was from southern zone followed by northern zone (34%). With regard to production of vegetables,28% of the share of achievement as from northern zone followed by Thrissur. (26.33%).

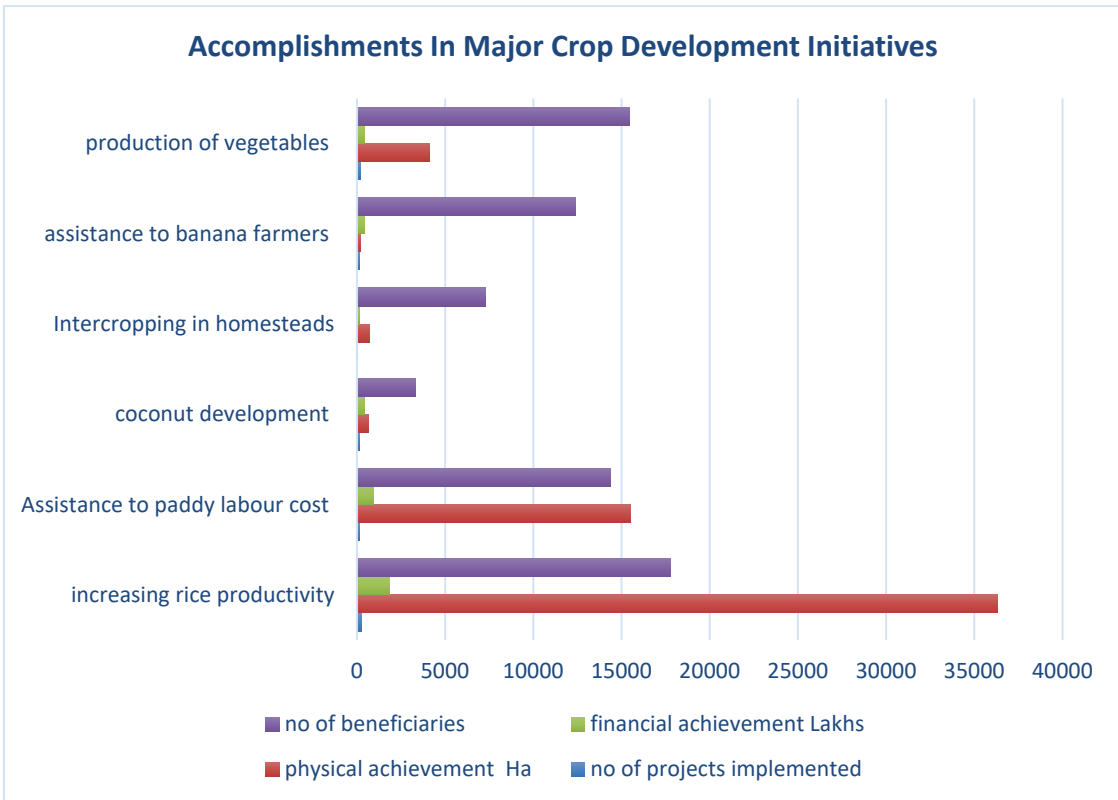


Fig. 32. Accomplishments in major crop development initiatives in selected panchayaths

Apart from major crop development initiatives, the study explored various accomplishments under minor crops interventions in different zones.

4.3.3. Accomplishments under development programmes for minor crops in different zones

Accomplishment of the development projects on minor crops in different agro climatic zones are presented in Table. 4.56.

Table.4. 56. Accomplishments in development prorgammes for minor crops in different zones

SI No	Components	Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
1	Tuber crops promotion						
	No of projects implemented	7	5	6	15	5	38
	Physical achievement (Ha)	101	28	55	199	87	470
	Financial achievement (Lakhs)	10.15	3.18	5	22.4	9.86	50.59
	No. of beneficiaries	1110	353	520	2510	1095	5588
2	Spices development						
	No of projects implemented	13	11	0	6	18	48
	Physical achievement	26	25	0	26	188	265
	Financial achievement	11.73	12.5	0	13	94.13	131.36
	No of beneficiaries	234	250	0	260	1886	2630
3	Medicinal plants promotion						
	No of projects implemented	1	0	1	0	0	2
	Physical achievement	2.8	0	1.7	0	0	4.5
	Financial achievement	0.7	0	0.5	0	0	1.2
	No of beneficiaries	70	0	40	0	0	110
4	Areca nut development						
	No of projects implemented	0	3	8	4	0	15
	Physical achievement	0	3.14	5.7	2.2	0	11.04
	Financial achievement	0	4.48	7.5	1.1	0	13.08
	No of beneficiaries	0	210	160	70	0	440
5	Pulses production						
	No of projects implemented	2	0	4	1	12	19
	Physical achievement	77	0	577	70	240	964
	Financial achievement	1.54	0	7.7	1	3.67	13.91
	No of beneficiaries	194	0	962	125	458	1739
6	Cashew development						
	No of projects implemented	1	2	0	0	0	3
	Physical achievement	1	2	0	0	0	3
	Financial achievement	0.25	0.5	0	0	0	0.75
	No of beneficiaries	25	50	0	0	0	75

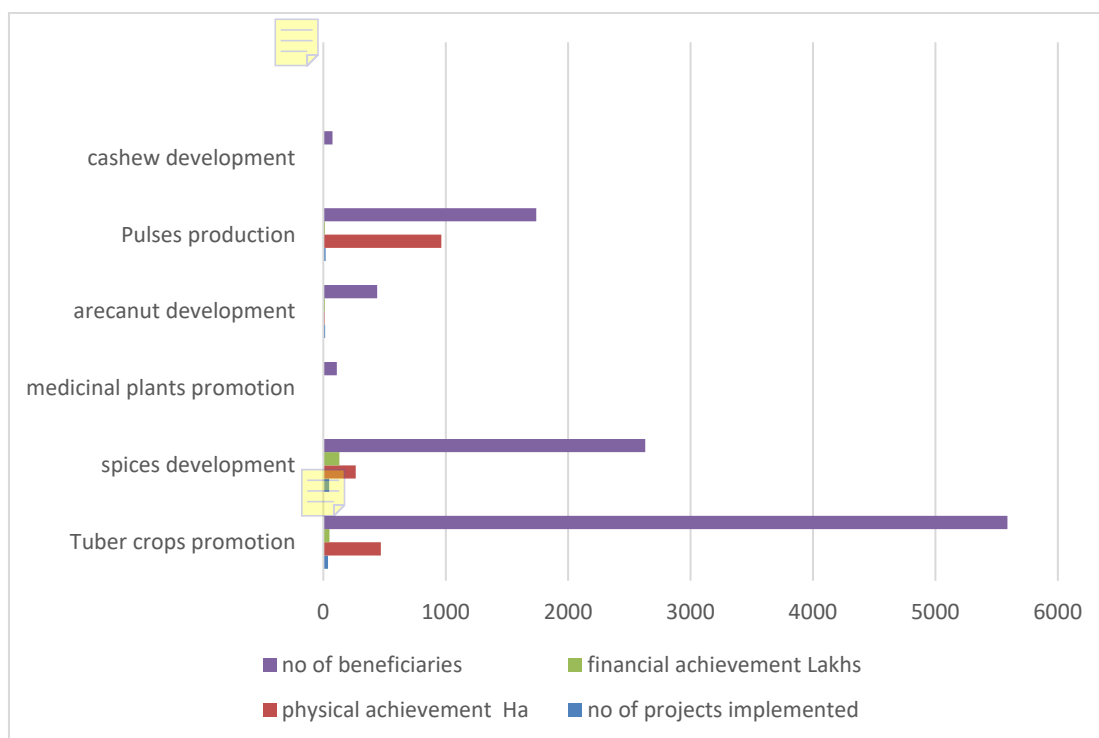


Fig. 33. Accomplishments of development programmes on minor crops under decentralised planning

Out of the total 38 projects for the tuber crops promotion ,39% were from northern zone. From the central zone there were no programs for spices development, 71% of the achievement from the high range zone. All other zones need to be developed with respect to spices initiatives. Regarding medicinal plants development, north zone, high range zone and problem area zone had not conceived any project. There were only two projects for medicinal plants development during the entire study period with a meagre allocation of 1.2 lakhs from the southern and central zone. There were no projects for arecanut development in southern and high range zone. Another worth mentioning observation was the less attention paid to pulses production. Out of the achievement in the pulses sector, 60 % was from the central zone and 31% from the high range. In problem area zone, there were no projects for pulses development. Cashew being a hardy crop for waste lands did not find any place in north, central and high range zones. Northern zone, where cashew is grown predominantly lacked promotional efforts for cashew which has to be strategically revived.

4.3.4. Comparison of the initiatives for sustainable agricultural production under decentralised planning in different zones

Various initiatives undertaken to promote sustainability of agricultural development were included under the sustainability initiatives. They included projects such as organic farming initiatives, promotion of group farming, development of agro enterprises, watershed management and data base generation for planning

Table.4. 57. Comparison of the accomplishments of the initiatives for sustainable agricultural production

SI No	Components	Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
1	Organic farming initiatives						
	No of projects implemented	24	2	0	0	5	31
	Physical achievement (Ha)	725	38	0	0	140	903
	Financial achievement (Lakhs)	72.51	3.8	0	0	14	90.31
	No. of beneficiaries	2700	133	0	0	525	3358
2	Promotion of group farming						
	No of projects implemented	0	0	0	0	10	10
	Physical achievement (Ha)	0	0	0	0	204	204
	Financial achievement (Lakhs)	0	0	0	0	20.44	20.44
	No. of beneficiaries	0	0	0	0	301	301
3	Development of agro enterprises						
	No of projects implemented	4	4	0	0	8	16
	Physical achievement (Ha)	94	20	0	0	226	340
	Financial achievement (Lakhs)	4.69	0.3	0	0	11.3	16.29
	No. of beneficiaries	94	20	0	0	226	340
4	Watershed management						
	No of projects implemented	10	0	1	0	3	14
	Physical achievement (Ha)	350	0	190	0	96	636
	Financial achievement (Lakhs)	27.36	0	13.7	0	6.36	47.42
	No. of beneficiaries	547	0	272	0	127	946
5	Data base generation for planning						
	No of projects implemented	5	3	4	5	0	17
	Physical achievement (Ha)	6	3	4	3	0	16
	Financial achievement (Lakhs)	4.03	1.5	2.2	4.2	0	11.93
	No. of beneficiaries	NA	NA	NA	NA	0	

There were organic farming initiatives under the decentralised planning in central zone and northern zone. Of the total initiatives, 80.29 % were from the southern zone. Only the high range zone was having group farming promotion initiatives. All other zones lacked organic farming initiatives. High range zone had 69% of the total 16 projects with 16.29 lakhs meant for promotion of agro enterprises. Though southern and problem area zone had some initiatives for agro enterprises, central and southern zones did not initiate any projects during the study period. Out of the total 14 projects for watershed management, 10 projects were from the southern zone with 57.6% of the total financial achievement. Central zone contributed 29% of the financial achievement. Problem area zone and northern zone didn't conceive any watershed management programs during the study period. Except high range zone, all other zones had given thrust for data base generation for planning.

4.3.5. Initiatives for organic recycling in various zones:

Local governments had implemented projects for compost units and biogas plants under the decentralised planning program and these components were considered under the accomplishments of the initiatives for organic recycling in various zones and has been given in Table. 4.58. For compost units high range zone had 7 projects with 9.1 lakhs, constituting 93% of the total amount spent during the study period for composting units. North zone, problem area zone and southern zone lacked projects for composting units. Projects for biogas plants were not conceived in problem area and north zones. High range zone had 44% of the total amount spent for biogas plants promotion.

Panchayats in problem area zone and north zone had neither project for compost units nor for biogas promotion. High range zone demonstrated comparatively better orientation towards organic recycling in farms.

Table. 4.58. Accomplishments of the initiatives for organic recycling in various zones

Sl No		Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
1	Compost units						
	No of projects implemented			2		7	9
	Physical achievement (Ha)			10		450	460
	Financial achievement (Lakhs)			0.6		9.1	9.7
	No. of beneficiaries			10		450	460
2	Promotion of biogas plants						
	No of projects implemented	5		5		5	15
	Physical achievement (Ha)	47		78		68	193
	Financial achievement (Lakhs)	3.72		9.45		11.09	25.07
	No. of beneficiaries	47		78		68	193

4.3.6. Comparison of achievements in major supporting approaches in various zones

Major supporting approaches for agriculture were better service delivery, projects for market promotion, custom hiring of farm machinery, small farm mechanisation, supply of quality materials and strengthening Krishi bhavan infrastructure. Coverage of projects under these initiatives in different LSGIs have been listed in Table.4.59.

All had projects for better service delivery with southern zone having comparatively higher allocation. Northern zone did not conceive any project for market promotion. Central zone had 50% of the total achievement across zones in market promotion. Of the total 64.33 lakhs spent for custom hiring centres, 62.5% was achieved by high range zone followed by problem area zone (17%). With respect to small farm mechanization, high range zone had 52% of the financial achievement across all zones. Southern and central zones had no projects for supply of quality planting materials during the study period. Projects for quality planting materials were more in high range zone (56.7%) and northern zone (41.2%). All the zones had projects for strengthening of Krishi bhavans.

Table 4.59. Comparison of achievements in major supporting approaches in various zones

Sl No	Components	South ern Zone	Problem Area Zone	Central Zone	North zone	High range zone	Total
1	Better service delivery						
	No of projects implemented	4	3	3	3	2	15
	Physical achievement (Ha)	4	3	3	3	2	15
	Financial achievement (Lakhs)	8	5.64	5.6	1.2	2.25	22.6 9
	No. of beneficiaries	420	390	360	90	210	1470
2	Projects for market promotion						
	No of projects implemented	1	4	2	0	1	8
	Physical achievement (Ha)	1	4	2	0	1	8
	Financial achievement (Lakhs)	0.5	6.05	9	0	3	18.5 5
	No. of beneficiaries	120	280	310	0	210	920
3	Custom hiring of farm machinery						
	No of projects implemented	3	8	1	3	10	25
	Physical achievement (Ha)						
	Power tillers	3	8	4	3	12	27
	Weed cutters					192	192
	Financial achievement (Lakhs)	4.6	11.48	5	2.28	40.9 7	64.3 3
	No. of beneficiaries	130	410	170	120	550	1380
4	Small farm mechanisation						
	No of projects implemented	2	6	13	8	22	51
	Physical achievement (Ha)	19	128	294	140	392	973
	Financial achievement (Lakhs)	0.7 5	19.2	14.7	7	43.1 3	84.7 8
	No. of beneficiaries	19	128	294	140	392	973
5	Supply of quality materials						
	No of projects implemented	0	1	0	10	5	16
	Physical achievement (Ha)	0	1.2	0	27	37.2	65.4
	Financial achievement (Lakhs)	0	0.6	0	13.5 5	18.6	32.7 5
	No. of beneficiaries	0	30	0	677	930	1637
6	Strengthening Krishibhavan infrastructure						
	No of projects implemented	14	6	3	12	11	46
	Physical achievement (Ha)	8	6	3	8	8	33
	Financial achievement (Lakhs)	11. 3	8.2	5.6	9.6	13.9	48.6
	No. of beneficiaries	NA	NA	360	NA	NA	

4.3.7. Achievements in development initiatives for promotion of region-specific crops in different zones

Local self-governments have undertaken projects for the development of region-specific crops. Accomplishments of the development initiatives for promotion of regionally important crops are given in Table 4.61.

Table. 4. 60. Achievements in development initiatives for promotion of regional agricultural products in different zones

SI No	Components	Southern Zone	Problem Area Zone	Central Zone	North Zone	High Range Zone	Total
1	Millets promotion						
	No of projects implemented			1			
	Physical achievement (Ha)			3.8			
	Financial achievement (Lakhs)			0.95			
	No. of beneficiaries			19			
2	Precision farming						
	No of projects implemented			1			
	Physical achievement (Ha)			5			
	Financial achievement (Lakhs)			0.5			
	No. of beneficiaries			5			
3	Passion fruit clusters						
	No of projects implemented					2	
	Physical achievement (Ha)					3.24	
	Financial achievement (Lakhs)					2.7	
	No. of beneficiaries					54	
4	Coffee production						
	No of projects implemented					9	
	Physical achievement (Ha)					96	
	Financial achievement (Lakhs)					31.6	
	No. of beneficiaries					280	
5	Betel vine clusters development						
	No of projects implemented				9		
	Physical achievement (Ha)				10.7		
	Financial achievement (Lakhs)				6		
	No. of beneficiaries				6.74		
					269		

Southern zone and problem area zone were not having any regional crop-based initiatives under decentralized planning. Central zone had special project for millet promotion covering 3.8 ha and 19 beneficiaries. Central zone was the only zone having implemented precision farming in decentralised planning. North zone had nine projects for betelvine development with 6.74 lakhs expended. High range zone had 2 projects for passion fruit clusters and 9 projects for coffee development with an expenditure of 31.65 lakhs.

4.4.1. Constraint analysis of the decentralized planning process in LSGIs

Various constraints that prevent effective institutionalization of decentralized planning, emerged at various stages of the process were outlined through interviews with working group members and officials, brainstorming, focused group discussions, expert interactions and review of literature. These were rank ordered with Kendall's Coefficient of Concordance by all the actors of the process.

Table.4. 61. Analysis of the constraint in decentralized planning process in agriculture by LSGIs

Sl no	Name of constraint	Mean rank	Ratio	Mean value	Standard deviation
1	Poor marketing infrastructure	18.98	99.75	4.99	0.11145
2	weak coordination among sectoral working groups	18.18	97.75	4.89	0.38831
3	Lack of convergence among departments	18.02	97.37	4.87	0.33873
4	Less propagation of technologies in projects	17.13	94.75	4.74	0.61927
5	Less expertise of working group members	16.91	94.5	4.73	0.44792
6	Less farmer participation in planning	16.91	94.5	4.73	0.44792
7	Project preparation as official job	16.16	92.37	4.62	0.54797
8	Weak service provider network for farmers	12.04	81.75	4.09	0.46767
9	Lack of reliable local data base for planning	11.33	78.38	3.99	0.45553
10	Poor technical support base	11.2	73.25	3.97	0.50094
11	Poor mobilisation of local resources	11.16	76.87	3.96	0.70351
12	Lack of participation opportunity in planning	11.13	79.13	3.96	0.54191

Sl no	Name of constraint	Mean rank	Ratio	Mean value	Standard deviation
13	Gramasabha priority toppled	11.06	76.38	3.96	0.37904
14	Unaware of project objectives	10.88	78.75	3.94	0.48483
15	Lack of adequate publicity for Gramasabha	9.8	75	3.75	0.6143
16	Guidelines restricting innovative program initiatives	9.24	74.12	3.71	0.48366
17	Dual control limiting performance	8.68	72	3.6	0.60605
18	No annual accounts in Grama Sabha	7.68	66.25	3.31	1.01676
19	untimely funds and delayed implementation	5.34	60.12	3.02	0.73968
20	Unaware of Grama sabha rights	4.79	59.6	2.98	0.5197
21	less transparency in planning process	4.52	57.63	2.88	0.57595
22	Biased beneficiary selection process	1.88	40.75	2.04	0.58156

Test Statistics	
N	160
Kendall's W ^a	.657
Chi-Square	2208.462
df	21
Asymp. Sig.	0.000
a. Kendall's Coefficient of Concordance	

Kendall's W statistic, called the Coefficient of Concordance was used to assess the agreement between different raters on the constraints listed. Kendall's W statistic ranges from 0 to 1. A value of zero shows there is absolutely no agreement between raters, while 1 shows perfect agreement. The higher the value of Kendall's W, the stronger is the association. Usually, Kendall's coefficients of 0.9 or higher are considered very good. The result of the statistical analysis is given in Table. 4.61. Here the value obtained for coefficient of concordance was 0.657 and the test statistic was significant.

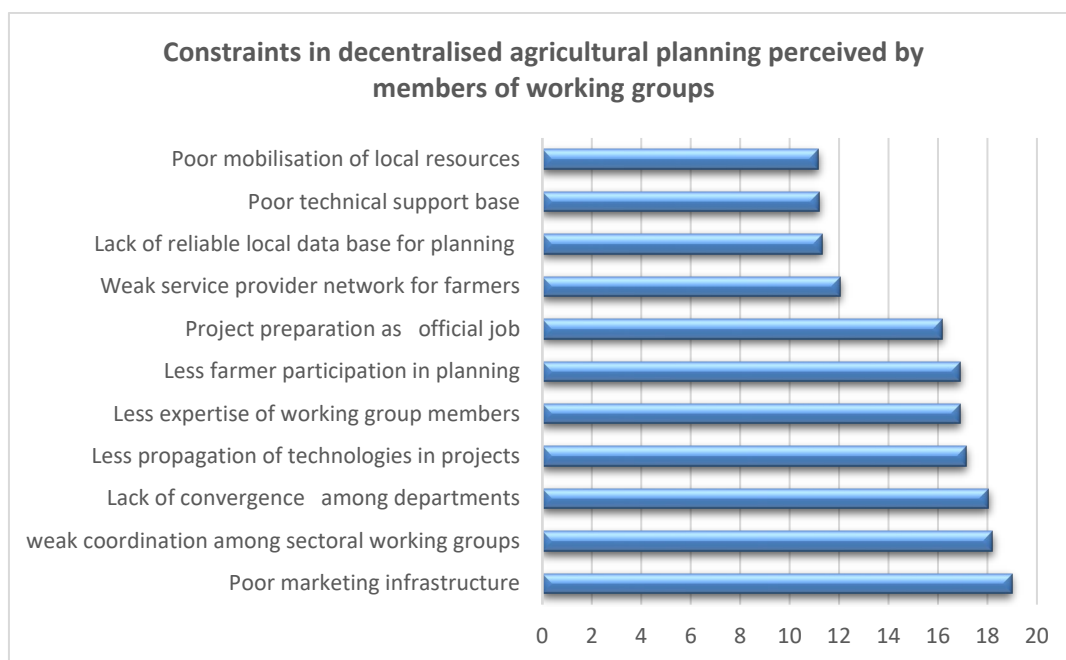


Figure. 34. Constraints in decentralized agricultural planning as perceived by members of working groups

There was high degree of concordance among the respondents to rank the main constraints as poor marketing infrastructure, weak coordination among sectoral working groups ,lack of convergence among departments ,less propagation of technologies in projects, less expertise of working group members, less farmer participation in planning, project preparation as official job, weak service provider network for farmers, lack of reliable local data base for planning, poor technical support base, poor mobilisation of local resources and lack of participation opportunity in planning. These rankings are in line with the findings of Parvathy (2000),Sudhakaran (2006), Aiyar(2009) Kumar(2011) and Harilal(2013).

Constraints like lack of participation opportunity in planning, gramasabha priority toppled, unawareness of project objectives, lack of adequate publicity for Gramasabha, guidelines restricting innovative program initiatives, dual control of officials limiting performance, no annual accounts presented in Grama Sabha, untimely funds and delayed implementation, unaware of Grama sabha rights, less transparency in planning process and biased beneficiary selection process received comparatively lesser ranks indicating that these dimensions pertaining to the efficacy of institutionalisation of decentralised planning have been addressed to a relatively better satisfaction of the actors of the process.

In the light of the above constraints and deficiencies outlined in various processes, to enhance the efficiency of the service delivery and efficacy of the institutionalization process, the following policy support has been suggested out of the study.

4.4.2 Policy imperatives of the study

The policy imperatives have been suggested as a 15-point strategy to bring out the potentials of the decentralized planning with massive people's participation and optimizing various institutional structures initiated in connection with decentralized planning process.

4.4.2.1. Strategies for enhancing efficacy

The study analysed the perceived efficacy of 15 stages involved in the decentralised planning process. Mean perception score of 60 items related to the institutionalisation process was 3.44 and 33 items had scores below the mean perception score of 3.44. It was revealed that 75 per cent of the working group members and 82.5 per cent of agricultural officers had medium level of perception on efficacy. Stages of formation of panchayath planning committee (PPC), prioritization and resource allocation by the local governments, finalization of annual plan by the local government, integration of projects, consolidation of local body plans to a district plan by the DPC obtained scores below the mean perception scores demanding improvement in the efficacy of these processes.

The institutionalisation process has to give urgent thrust on *better performance of PPC, finding out additional resource pooling opportunities, conducting studies to increase the quality of plan formulated, avoiding spread of resources to ineffective small projects, coordinating plan formulation, implementation and monitoring*. Other functions such as *DPC providing guidelines for local bodies based on district priorities, convening meeting of LGs to consolidate working group reports and joint projects, academic leadership of working group for stakeholder discussions, gramasabha meetings and development seminar, discussion of draft proposals in neighbourhood sabhas before the gramasabha, one week advance notice of the Gram Sabha* were perceived to have less efficacy, which warrant further improvement of such processes.

Functions of the PPC such as *convening meeting of lead bank officials and bankers' committees, exploring potentials of joint projects with Co-operative sector, forwarding development seminar project proposals to upper tiers and state Government, identifying special projects to tap corporate social responsibility funds* also received low perception scores. The lowest value obtained for the item, tapping corporate responsibility funds revealed that local governments are yet to explore this opportunity.

Under the integration dimension, items such as *agricultural projects to be formulated on a watershed basis, priority to organic farming, organic manure units and organic pesticides units, agricultural projects to be integrated maximum with MGNREGA, projects to promote procurement centres, value addition primary processing and marketing to be organized through Farmer organisations and FPOs* received least efficacy perception score.

4.4.2.2. Role performance of agricultural officers in decentralised planning

Since the agricultural officer has to focus primarily on production and productivity related interventions and related capacity building of farmers, the low scores obtained for the agricultural extension function assumes significance. Administration and supervision function obtained the next low score. Hence there should be focused efforts to enhance capacities of agricultural officers with respect to these two functions. Functions such as *delineation of micro watersheds, enriching people's bio diversity register PBR and Organizing self-help groups of farmers* received the lowest score, followed by *encouraging systems of cooperative group farming, organizing and strengthening Farmer Producer Organizations and implementation of income generation projects*. All these roles either pertain to social capital formation roles or promotion of enterprises for income generation and thus for livelihood. Agricultural officers primarily engaged in crop production facilitation activities are not capable of giving emphasis on strengthening the organizational capacities of farmers. compared to the women NHGs of the *Kudumbasree* network, there are very few SHGs of farmers. The potentials of encouraging cooperative group farming systems also are less tapped. There should be special policy interventions to address these areas through ATMA.

Providing crop management solutions to the farmers on the basis of soil test results and coordination of service providers as convenor of agri task force also received low performance scores. This points to the fact that soil testing services along with proper follow up through provision of crop management solutions have to be improved in Krishi bhavans. Performance of agricultural officers in coordinating of service providers of agriculture task forces was also not effective. This may be either due to lack of adequate infrastructure at disposal of the Panchayath level service providers or the improper networking of the service providers with the farmer groups. Absence of group farming initiatives among farmers also limits coordination.

Spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms, motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc and adopting technologies for making farming system climate resilient also received low performance scores. At a time, the grass root level agriculture is threatened by the vagaries of climate change, agricultural officers have to discharge this crucial function. The research system should focus on backstopping them with suitable strategies. More over various technologies making cropping systems climate resilient also was demanded by most of the officers.

Among all the functions, agricultural extension function had received the lowest role performance score. Roles such as *promoting integrated farming system models with progressive farmers, use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce, promotion of organic and safe to eat standards of food production, enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector, participating and organizing agricultural exhibitions and seminars, providing technical advice and training to the farmers and field staff, promoting self-reliance in organic manures and vegetables* received comparatively better scores within the extension function.

4.4.2.3. Zone wise differences in thrusts in agricultural planning sector

It was observed that efficiency of utilization of fund meant for agriculture in high range zone and central zone needs improvement. Southern Kerala had the least mean zone allocation and mean zone percentage of expenditure revealing that the

attention paid to productive sector allocations and expenditure incurred have to be improved strategically in the southern zone.

4.4.2.4. Deficiencies in project thrust areas

It was observed that during the last years of the 12th five year plans some panchayats selected for study had conceived only projects for providing labour cost for paddy for some years continuously without opting any other sectors of agriculture. This suggests to a need of intra sectoral ceiling among agricultural components. There can be a sub sectoral ceiling for various initiatives with in agriculture. There were cases in some panchayath spending the whole allocation exclusively for paddy labour cost without projectising for any other essential agricultural areas. Even though specific guidelines for formulating joint projects and muti year projects were issued, local bodies are not venturing such projects. There should be a motivational measure to promote undertaking of joint projects by local bodies.

There were 246 projects implemented for rice development covering an area of 36301ha with a financial achievement of 1818.97 lakhs, benefitting 17774 farmers. There were 134 projects for coconut development in an area of 655 ha with an allocation of 422.84 lakhs benefitting 3329 farmers. A glimpse through the physical and financial allocations will reveal that local bodies have not paid required attention for promotion of medicinal plants, market promotion and development of agro enterprises. Project for the marketing development, primary processing and value addition occupied only 2% of the expenditure and 1% of the total number of project. Hence quality of projects in this area should be improved. Compared to other crops, the attention paid to tuber crops and spices development was less.

There were 25 projects implemented for custom hiring of farm machinery with a financial allocation of 64.33 lakhs. But farm machinery interventions were confined to supply of weed cutters and power tillers. Assistance to labour cost for rice farmers was the second sub sector with regard to amount spent (931.54 lakhs) covering 15524 ha of area benefitting 14364 farmers. The amount spent for coconut development was just 10% and for promotion of intercropping only 3% of the allocation was expended. This proves that the home stead farming system with coconut as main crop has not received the needed attention in the decentralized planning.

Out of the total 38 projects for the tuber crops promotion ,39% were from northern zone. Except for high range zone, all other zones need to be developed with respect to spices initiatives. Regarding medicinal plants development, north zone, high range zone and problem area zone had not conceived any project. Another worth mentioning observation was the less attention paid to pulses production. Out of the achievement in the pulses sector, 60 % was from the central zone and 31% from the high range. In problem area zone, there were no projects for pulses development. Cashew being a hardy crop for waste lands did not find any place in north, central and high range zones. Except a few projects in southern and problem area zone. Northern zone, where cashew is grown predominantly lacked promotional efforts for cashew which has to be strategically revived. Southern and central zones had no projects for supply of quality planting materials during the study period. There were no projects for decentralized nurseries in coconut.

4.4.2.5.Promote integration:

The data revealed that out of the 40 Panchayaths in various zones only 5 Panchayaths had integrated state sponsored schemes to the decentralised plan and only 10.23% expenditure was incurred. High Range zone and northern zone had not integrated even a single state sponsored scheme to the decentralised plan during the study period. Panchayats need to be motivated for integrating own fund and state sponsored schemes allocated to them to the decentralised plan prepared through people's participation through Grama Sabha. Further, quality agricultural projects need to be designed for 10% fund for women sector projects and 5% fund for the disabled, youth and old aged. Opportunities for projectization for their upliftment thus to enhance their participation and space in the grama sabha through agricultural diversification should be explored.

Compared to the advantage decentralized initiatives have in ensuring forward and backward linkages, due to weak coordination among sectoral working groups, integrated projects are not properly formulated. Before plan formulation in the development seminar, the Panchayath Planning Committee should ensure that the working groups collectively discuss their sectoral reports for developing shared vision. This will foster convergence among the functions of various officials transferred to the Grama panchayath.

4.4.2.6.To enhance people’s participation

Planning committees as an institutional innovation supporting decentralised planning were formed in all the LGs to help them in plan formulation, implementation, and monitoring, ensuring participation of volunteers and experts. The institutional structures in panchayath such as working group and Panchayath Planning Committee should conduct maximum stakeholder consultations on a campaign mode before Grama Sabha. Consequent to online project formulation and uploading, unlike in earlier plan periods, farmers have no visible roles in project formulations. Hence implementing officers and panchayath Planning Committee should conduct maximum farmer consultations to formulate project proposals linking Farmer Interest Groups and FPOs. Use of the *gramasabha* portal to receive the views of public also should be encouraged. There should be focused efforts to strengthen the ward development committees and *Ayalsabhas* to enhance peoples participation. There should be more farmer gramasabhas to increase farmer participation. Farmers should be motivated to contribute ideas through gramasabha portals of LSGD and the idea hunt of the Kerala state planning board

4.4.2.7.Decentralization and Gramasabha literacy for youth:

To enhance participation of youth in gramasabha a drive on decentralization and gramasabha literacy for youth should be initiated. Relevance of gramasabha and the need to be part of it should be a part of school and college syllabus.

4.4.2.8.Technology backstopping for LSGIs to enhance quality of projects

Technological backstopping of the agricultural planning process is quite necessary for the sustainability of the initiatives. Apart from the distribution of manures, fertilisers , seeds , irrigation pump sets and incentives towards labour cost, projects scaling up innovations in farming and improved varieties are meagre and badly lacking. KVKs should actively support decentralised planning initiatives of local self-governments of the district. There should be a KVK-Research-LSGD linkage to resolve the issues of less propagation of technologies in projects and less expertise of working group members.

4.4.2.9.Capacity building of working groups and PPCs

Selection of members to the working group and PPC have to be based on their capabilities adjudged based on a state wide criteria. The factor analysis studies of this study throw light in to it. Central research stations and State Agricultural Universities and KVKs should strategically backstop the working groups and Panchayath Planning Committees constituted at Panchayat level through focused capacity building initiatives for getting their technologies projectized. This will address the issues of less expertise of working group members. While nominating members to the working group, the local body should give priority for innovative farmers having integrated farming system, with proven track records. Panchayath planning committee should evolve strategies for additional resources pooling. They should collaborate with academic institutions to enhance quality of projects. Spread of resources to ineffective project should be avoided. Prospects of collaborating with cooperate social responsibility initiatives should be explored. Joint projects with cooperative sector were not at all tapped in any panchayath. This also can be explored.

4.4.2.10. Capacity of agricultural officers

The low scores obtained for the agricultural extension function and administration and supervision function assume significance. There should be focused efforts to enhance capacities of agricultural officers on these functions as enlisted in the study. Since Agricultural extension function and supervision function received low performance score, effective policies have to be initiated to broaden the base of carrying out there functions. Agricultural officers should be technically backed of climate resilience and precision farming technologies, More over their innovation platform skills should be diversified. Functioning of biodiversity management committees have to be linked with Krishibhavan

4.4.2.11.Promotion of agricultural enterprises and marketing initiatives

Weekly markets may be established at Grama Panchayat level. Besides, a chain of agro super bazars and eco shops can also be facilitated. Creating an E-portal and linking farmer collectives with states following GAP can also be taken up. Efforts may be made for the required software development networking for the effective management of the portal.

4.4.2.12 Resurgence of traditional markets

The perception of poor marketing infrastructure was the most ranked among various constraints analysed. Though development of rural market infrastructure is a mandatory function of the local government, compared to other sectors of agriculture, there are meagre initiatives for the development of markets and supporting networks.

4.4.2.13 Data base support to local planning

The panchayath level data base for planning has to be updated through massive farmer participation. The Peoples' Bio Diversity Register formulated through Bio Diversity Management Committees and the watershed master plan have to be updated. This will foster the opportunities for local resource mobilization.

4.4.2.14. Projects to bridge skill gaps in farming

Agriculture in Kerala villages has low extent of farm mechanisation and non-availability of skilled labour adversely affects crop production. For improved service delivery, the existing Agro service centres (ASC) at block level and Farmer Service Centres should be networked for mechanisation, labour support, bio pharmacy and planting materials, soil testing support and other technology based services . The service delivery to farmers for farm mechanisation, crop management, crop protection and marketing has to be institutionalised through supporting projects from decentralized plan allocations.

4.4.2.15. Promoting traditional wisdom

Traditional wisdom is quite vital at grass roots for offering climate resilience. In this context, conservation of traditional varieties and climate related indigenous knowledge with active participation of local farming community has been the need of the hour. Assistance for cultivation and multiplication of local germplasm, traditional seed reserves by local farmer clusters, community seed banks and seed growers' networks have to be initiated and the subsidies have to be broadened to include such initiatives.

5. SUMMARY

Kerala has successfully evolved a paradigm of decentralized planning by utilizing the provisions of the 73rd and 74th amendments of the constitution. Local governments have been transformed as effective instruments for formulating and implementing development programmes through people's participation. They are meaningfully empowered to discharge such functions through strategic devolution of functions, functionaries and funds. In spite of many institutionalized frameworks for participatory planning, several bottle necks related to local governance and farmer capacity affect farmer participation and process efficacy. It was in this backdrop the present study was conducted in selected 40 panchayaths of five districts, such as Thiruvananthapuram (Northern Kerala), Palakkad (central zone), Malappuram (Northern Kerala), Wayanad (High range zone) and Thrissur (Problem Area Zone). Responses based on structured schedule collected from 160 respondents comprising of agricultural officers, panchayat presidents and members of the agricultural working group constituted for participatory planning were used to pursue the major objectives of describing the process of institutionalization, transitions in the administrative framework and policy environment, determinants of the efficacy along with the accomplishments and policy imperatives of the decentralised planning in agriculture. The objectives of the study were:

- To describe the process of institutionalization of decentralized planning in agriculture in Kerala.
- Transitions in the administrative framework and policy environment of decentralized planning.
- The determinants of the efficacy of decentralized planning in agriculture
- The nature of their influence as experienced by major actors of the process.
- The accomplishments in the agricultural sector since institutionalization of decentralized planning.
- policy imperatives of the experiences of institutionalization

The state government plan allocation to local self-governments has been on a decreasing trend over the period. While local self-government institutions LSGIs had a plan allocation of 5464 crores in 9th plan (29.29 % of state plan), they were allotted 21728 cores and 33385 crores in 12th and 13th FYP period which were 22.9% and

24.21% of the total plan of Kerala. Though the allocation amount has increased, the percentage is low when compared to the ninth and tenth five-year plan period.

The expenditure of local bodies has ranged from 74.81 to 105.25 % during this period. The above figures depict that the local self-governments have performed fairly well in utilizing the amount allotted to them from the State government. The sectoral ceilings for productive sector enforced in various plans have succeeded in bringing accountability and transparency in village panchayat in their sub sectoral allocations, thus enabling each implementing officer and working group to get a minimum plan share for projectization. However, it was revealed that compared to the advantage decentralized initiatives have in ensuring forward and backward linkages, due to weak coordination among sectoral working groups, integrated projects are not properly formulated. This strongly necessitates the Panchayath Planning Committee effectively integrating working group sectoral reports for developing shared vision. This will foster convergence among the functions of various officials transferred to the grama panchayath. There were very few attempts to integrate state and central schemes to the decentralised plan.

Many institutional innovations initiated to foster people's participation in planning need supporting directives. The perceived efficacy studies have revealed the need to strengthen ward development committees and *Ayalsabhas*. The Panchayath planning committees PPCs initiated to enhance people's participation should initiate strategies for additional resource pooling, collaborate with academic institutions to enhance quality of projects and to avoid spread of resources to ineffective projects, formulating agricultural projects collaborating with corporate social responsibility initiatives and with the cooperative sector, integrating central and state schemes with the decentralized plan. There was a strong need to formulate projects for market development, primary processing and value addition with strengthened service provider network for farmers.

The study developed a scale to measure the perceived efficacy of the institutionalisation process by the actors of the process, the dependent variable of the study. The decentralised planning process at grass root level was conceived as a 15-stage process stipulated in the guidelines of the Government of Kerala which were further categorised in to three distinct phase, Out of the three phases, plan appraisal,

integration and implementation phase had the least perceived efficacy, followed by the plan formulation and resource allocation phase. Among the various stages, integration of projects had the lowest efficacy perception score followed by finalization of annual plan by the local government, consolidation of local body plans to a district plan by the DPC and formation of Panchayath planning committee PPC, explaining that the efficacy of these dimensions needs to be improved. Dimensions having high scores were approval of plans by the DPC, preparation of detailed projects by the working group, holding of Gramasabha, preparation of draft plan proposals and discussion in the development seminar.

Factor analysis has revealed four major factors explaining 77.22 % variance among the variables selected for the study. The factors were identified as development-participation inter-dependence, group decision making & performance, experience - accountability capabilities, and knowledge mediation. The development-participation inter dependence factor alone could explain 45.05 % total variance. The factors altogether had 68.6 % variance in the perceived efficacy of the working group members. It was found that 82.5 % of agricultural officers were found to have medium level of perceived efficacy. Participation-performance interdependence factor and decentralization- development facilitation factor of Agricultural officers were significant in their perception of efficacy with explaining 64.9 % variance. Role performance of agricultural officers was analysed in planning, execution and implementation, financing and budgeting, administration and supervision, monitoring and evaluation and agricultural extension functions. Agricultural officers had high role performance in the financing and budgeting dimension, closely followed by planning and monitoring & evaluation. There was lowest performance level in the agricultural extension functions followed by administration and supervision functions.

Accomplishments of decentralized planning in agriculture were quantified in terms physical targets, financial achievements and other parameters of agricultural development. But projects to abridge skill gaps in farming are badly lacking. The service delivery to farmers for farm mechanisation, crop management, crop protection and marketing have to be institutionalised through supporting projects from decentralized plan allocations along with required guidelines. The study has revealed various deficiencies in the institutionalisation process necessitating improvements in

institutional frameworks and policy support. Consequent to online project formulation and uploading, unlike in earlier plan periods, farmers have no visible roles in project formulations. Hence implementing officers and panchayath Planning Committee should conduct maximum farmer consultations to formulate project proposals linking Farmer Interest Groups and FPOs. Use of the *gramasabha* portal to receive the views of public also should be encouraged. There should be deliberate efforts for technology backstopping of LSGIs to enhance quality of projects which has emerged as a challenge of participatory planning.

There should be focused efforts for enhancing the capacities of working groups and PPCs. Central research stations and State Agricultural Universities and KVKs should strategically backstop the working groups and PPCs constituted at Panchayat level through focused capacity building initiatives for getting their technologies projectized. This will address the issues of less expertise of working group members. While nominating members to the working group, the local body should give priority for innovative farmers having integrated farming system, with proven track records. The panchayath level data base for planning has to be updated through massive farmer participation. The Peoples' Bio Diversity Register formulated through Bio Diversity Management Committees and the watershed master plans have to be updated. This will foster the opportunities for local resource mobilization.

In the light of the above constraints and deficiencies outlined in various processes, to enhance the efficiency of the service delivery and efficacy of the institutionalization process, the following policy support has been suggested out of the study.

POLICY RECOMMENDATIONS

The policy imperatives have been suggested as a 15-point strategy to bring out the potentials of the decentralized planning with massive people's participation and optimizing various institutional structures.

1. Strategies for enhancing efficacy

The study analysed perceived efficacy of 15 stages of the decentralised planning process. Stages of formation of panchayath planning committee PPC, prioritization and resource allocation by the local governments, finalization of annual plan by the local government, integration of projects, consolidation of local body plans to a district plan

by the DPC obtained scores below the mean perception scores demanding improvements in these sub dimensions of these processes. The institutionalisation process has to give urgent thrust on better performance of Panchayath Planning committee PPC, finding out additional resource pooling opportunities, conducting studies to increase the quality of plan formulated, avoiding spread of resources to ineffective small projects, coordinating plan formulation, implementation and monitoring have to be urgently improved. Functions of the PPC such as convening meeting of lead bank officials and bankers' committees, exploring potentials of joint projects with co-operative sector, forwarding development seminar project proposals to upper tiers and state Government, identifying special projects to tap corporate social responsibility funds also received low perception scores. The lowest value obtained for the item, tapping corporate responsibility funds revealed that local governments are yet to explore this opportunity.

2. Role performance of agricultural officers in decentralised planning

Since the agricultural officer has to focus primarily on production and productivity related interventions and related capacity building of farmers, the low scores obtained for the agricultural extension function assumes significance. Administration and supervision function obtained the next low score. Hence there should be focused efforts to enhance capacities of agricultural officers with respect to these two functions

Spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms, motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc and adopting technologies for making farming system climate resilient also received low performance scores. At a time, the grass root level agriculture is threatened by the vagaries of climate change, agricultural officers have to discharge this crucial function. The research system should focus on backstopping them with suitable strategies. More over various technologies making cropping systems climate resilient also was demanded by most of the officers.

3. Zone wise differences in thrusts in agricultural planning sector

It was observed that efficiency of utilization of fund meant for agriculture in high range zone and central zone needs improvement. Southern Kerala had the least mean zone allocation and mean zone percentage of expenditure revealing that the attention paid to productive sector allocations and expenditure incurred have to be improved strategically in the southern zone.

4. Deficiencies in project thrust areas

It was observed that during the last years of the 12th five year plans some panchayats selected for study had conceived only projects for providing labour cost for paddy for some years continuously without opting any other sectors of agriculture. This suggests to a need of intra sectoral ceiling among agricultural components. There can be a sub sectoral ceiling for various initiatives with in agriculture. Even though specific guidelines for formulating joint projects and muti year projects were issued, local bodies are not venturing such projects. There should be a motivational measure to promote undertaking of joint projects by local bodies.

Project for the marketing development, primary processing and value addition occupied only 2% of the expenditure and 1% of the total number of projects. Hence quality of projects in this area should be improved. Compared to other crops, the attention paid to tuber crops and spices development was less. The amount spent for coconut development was just 10% and for promotion of intercropping only 3% of the allocation was expended. This proves that the home stead farming system with coconut as main crop has not received the needed attention in the decentralized planning. Local bodies have given less thrust for tuber crops and spices. There were no projects for decentralized nurseries in coconut.

5. Promote integration:

Very few Panchayaths had integrated state sponsored schemes to the decentralised plan and only 10.23% expenditure was incurred. Compared to the advantage decentralized initiatives have in ensuring forward and backward linkages, due to weak coordination among sectoral working groups, integrated projects are not properly formulated. Before plan formulation in the development seminar, the

Panchayath Planning Committee should ensure that the working groups collectively discuss their sectoral reports for developing shared vision.

6. To enhance people's participation

Planning committees as an institutional innovation supporting decentralised planning were formed in all the LGs to help them in plan formulation, implementation, and monitoring, ensuring participation of volunteers and experts. The institutional structures in panchayath such as working group and Panchayath Planning Committee should conduct maximum stakeholder consultations on a campaign mode before Grama Sabha. Use of the *gramasabha* portal to receive the views of public also should be encouraged. There should be focused efforts to strengthen the ward development committees and *Ayalsabhas* to enhance people's participation. There should be more farmer gramasabhas to increase farmer participation. Farmers should be motivated to contribute ideas through gramasabha portals of LSGD and the idea hunt of the Kerala state planning board

7. Decentralization and Gramasabha literacy for youth:

To enhance participation of youth in gramasabha a drive on decentralization and gramasabha literacy for youth should be initiated. Relevance of gramasabha and the need to be part of it should be a part of school and college syllabus.

8. Technology backstopping of LSGIs to enhance quality of projects

Technological backstopping of the agricultural planning process is quite necessary for the sustainability of the initiatives. Apart from the distribution of manures, fertilisers, seeds, irrigation pump sets and incentives towards labour cost, projects scaling up innovations in farming and improved varieties are meagre and badly lacking. KVKs should actively support decentralised planning initiatives of local self-governments of the district. There should be a KVK-Research-LSGD linkage to resolve the issues of less propagation of technologies in projects and less expertise of working group members.

9. Capacity building of working groups and PPCs

Selection of members to the working group and PPC have to be based on their capabilities adjudged based on a state wide criteria. The factor analysis studies of this study throws light in to it. Central research stations and State Agricultural Universities

and KVKs should strategically backstop the working groups and Panchayath Planning Committees constituted at Panchayat level through focused capacity building initiatives for getting their technologies projectized. This will address the issues of less expertise of working group members.

10. Capacity building of agricultural officers

The low scores obtained for the agricultural extension function and administration and supervision function assume significance. There should be focused efforts to enhance capacities of agricultural officers on these functions as enlisted in the study.

11. Promotion of agricultural enterprises and marketing initiatives

Weekly markets may be established at Grama Panchayat level. Besides, a chain of agro super bazars and eco shops can also be facilitated. Creating an E-portal and linking farmer collectives with states following GAP can also be taken up. Efforts may be made for the required software development networking for the effective management of the portal.

12. Resurgence of traditional markets

The perception of poor marketing infrastructure was the most ranked among various constraints analysed. Though development of rural market infrastructure is a mandatory function of the local government, compared to other sectors of agriculture, there are meagre initiatives for the development of markets and supporting networks.

13. Data base support to local planning

The panchayath level data base for planning has to be updated through massive farmer participation. The Peoples' Bio Diversity Register formulated through Bio Diversity Management Committees and the watershed master plan have to be updated. This will foster the opportunities for local resource mobilization.

14. Projects to abridge skill gaps in farming

Agriculture in Kerala villages has low extent of farm mechanisation and non-availability of skilled labour adversely affects crop production. For improved service delivery, the existing Agro service centres (ASC) at block level and Farmer Service Centres should be networked for mechanisation, labour support, bio pharmacy and planting materials, soil testing support and other technology based services . The

service delivery to farmers for farm mechanisation, crop management, crop protection and marketing has to be institutionalised through supporting projects from decentralized plan allocations.

15. Promoting traditional wisdom

Traditional wisdom is quite vital at grass roots for offering climate resilience. In this context, conservation of traditional varieties and climate related indigenous knowledge with active participation of local farming community has been the need of the hour. Assistance for cultivation and multiplication of local germplasm, traditional seed reserves by local farmer clusters, community seed banks and seed growers' networks have to be initiated and the subsidies have to be broadened to include such initiatives.

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**INSTITUTIONALIZATION OF DECENTRALIZED
PLANNING IN AGRICULTURE IN KERALA: TRENDS,
DETERMINANTS AND POLICY IMPERATIVES**

by

ABDUL JABBAR, P.K.

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ABSTRACT

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DEPARTMENT OF AGRICULTURAL EXTENSION

COLLEGE OF AGRICULTURE

VELLANIKKARA, THRISSUR - 680 656

KERALA, INDIA

2022

Institutionalization of Decentralized Planning in Agriculture in Kerala: Trends, Determinants and Policy Imperatives

Abstract

Kerala has successfully evolved a paradigm of decentralized planning by utilizing the provisions of the 73rd and 74th amendments of the constitution. Local governments have been transformed as effective instruments for formulating and implementing development programmes through people's participation. They are empowered to discharge such functions through strategic devolution of functions, functionaries and funds. Though a robust framework has been evolved over time to make decentralized planning operational, several bottle necks related to local governance affect the efficacy of planning and implementation processes at the grassroots level. This is evident in the productive sector in general and agriculture in particular. It was in this backdrop the present study was conducted. The study was primarily intended to describe the process of institutionalization of decentralized planning in agriculture in Kerala. In this connection, transitions in the administrative framework and policy environment of decentralized planning were also explored. The determinants of the efficacy of decentralized planning in agriculture and the nature of their influence as experienced by major actors of the process were also identified. The study also explored the accomplishments in the agricultural sector since institutionalization of decentralized planning. Alongside, policy imperatives of the experiences of institutionalization were delineated.

The sample consisted of 160 respondents comprising of agricultural officers, panchayat presidents and members of the agricultural working group of various development sectors. Respondents were drawn from 40 grama panchayaths selected from five districts representing the five major agroclimatic regions.

The study has revealed that there are 15 distinct processes of decentralized planning in the productive sector at the LSGI level. They have evolved over a period of three five-year plans through various iterative processes and drawing lessons from diverse field experiences. The state government plan allocation to local self-governments showed decreasing trend from Ninth Five Year Plan onwards. While local

self-government institutions (LSGIs) had been provided with 29.29 per cent of state plan fund allocation, it was reduced to 22.9 per cent and 24.2 per cent in the tenth and eleventh five-year plans respectively. Plan expenditure of LSGIs was found to range from 74.81 per cent to 105.25 per cent during this period. It could also be observed that the mandatory sectoral ceilings for productive sector enforced in various plans have succeeded in ensuring investment in various sub sectors of agriculture.

Many institutional innovations were initiated to foster people's participation in planning. Introduction of ward development committees and *Ayalsabhas* was a major step towards this direction. However, attempts towards additional resource pooling, collaboration with academic institutions to enhance quality of projects and attempts to avoid thin spread of resources were found to be ineffective. Formulating agricultural projects with the assistance of cooperative sector and integrating central and state schemes were also not effective. In spite of the guidelines for formulating joint projects and multi year projects, local bodies were not venturing to such projects, suggesting that a motivational measure to promote joint projects among local bodies be introduced. Moreover, selection of members to the working group and PPC have to be according to their capabilities adjudged based on a state wide criteria. Employing modern technologies for primary processing and value addition, better provision of services, networking of producers and efficient marketing were not adequately mainstreamed by LSGIs in their plans.

The efficacy of processes involved in decentralised planning was perceived differently by different categories of actors. Out of the 15 processes, plan appraisal, integration and implementation were perceived to have low efficacy. Plan formulation and resource allocation were also found to have low efficacy. Integration of projects had the lowest efficacy perception score. However, approval of plans by the District Planning Committee, preparation of detailed projects by the working group, holding of Gramasabha, preparation of draft plan proposals and discussion in the development seminar were reported to have high efficacy.

Analysis of the attributes of the actors which contributed to their perception on the efficacy of decentralized planning process revealed that four major factors viz. participation, group decision making, experience and knowledge mediation could explain 77.22 per cent variance. Majority of agricultural officers had medium level of

perceived efficacy, significantly influenced by their participation-performance interdependence factor and decentralization- development facilitation factors.

Role performance of Agricultural Officers in decentralised planning was found to be high. They had performed their roles actively in budgeting of project proposals, planning, monitoring and evaluation, in the order of involvement. Lowest performance level of Agricultural Officers was found to be in functions related to agricultural extension.

Accomplishments of decentralized planning in agriculture were quantified in terms physical targets and financial achievements. Plan fund allocation in the productive sector was found to be the highest in the high range zone, followed by problem zone. Plan expenditure in the districts selected from high range zone, northern region and problem zone was higher than 80 per cent. Projects on various aspects of rice, vegetables and banana had received more funds than other sub sectors during the reference period. With regard to the allocations spent, assistance to labour cost for rice farmers was the major intervention while those for coconut development and promotion of intercropping were less than 10% and 3% of respectively. Compared to other crops, the attention paid by local bodies to development of tuber crops, spices and pulses was less. Cashew being a hardy crop for waste lands did not find any place in decentralized plans of north, central and high range zones.

Several deficiencies were found in the process of decentralised planning. Most importantly, there should be focused efforts for enhancing the capacities of working groups and Planning Committees. Integration of development interventions by various agencies at the local level have to be ensured through better coordination. Collective deliberations on sectoral working group reports coordinated by panchayath planning committee will foster shared vision and convergence among functions of various officials transferred to the Grama panchayath. The panchayath level data base, Peoples' Bio Diversity Register formulated through Bio Diversity Management Committees and the watershed master plan have to be updated through massive farmer participation to ensure data base support to local planning and foster the opportunities for local resource mobilization.

Further, assistance for conservation and multiplication of local germplasm, traditional seed reserves by local farmer clusters, community seed banks and seed growers' networks have to be initiated and the subsidy guidelines have to be broadened to include such initiatives. The perception of poor marketing infrastructure was the most ranked among various constraints analyzed. With regard to projects to bridge the skill gaps in farming and improved service delivery, the existing Agro Service Centres (ASC) at block level and Farmer Service Centres should be networked for technology-based services with supporting projects from decentralized plan allocations. A KVK-ATMA- LSGD linkage will resolve the issues of less propagation of technologies in projects and less expertise of working group members. To enhance participation of youth in gramasabha a drive on decentralization, gramasabha literacy and the need to participate for youth was suggested as part of school and college syllabus.

APPENDIX I

Kerala Agricultural University

Department of Agricultural extension, College of Agriculture, Vellanikkara

Interview schedule

**Institutionalization of Decentralized Planning in Agriculture in Kerala: Trends,
Determinants and Policy Imperatives**

Respondent No:

1. Name of the respondent :

2. Address :

(a)House No :

(b)Name of the village

(c)Name of the Panchayath

3. Age : -----years

4. Experience in farming (completed years) :years

5. Land size (Farm size) :-----cents

6. Formal Education

Sl no	Category	Educational status	Family educational status			
			1.	2.	3.	4.
1	Illiterate					
2	Can read only					
3	Can read and write					
4	Primary school					
5	Middle school					
6	High school					
7	Higher secondary					
8	Graduation					
9	Post-graduation and above					

7. Mass media exposure:

Please indicate the response with which you read or listen to the following

S.No	Items	Responses		
		Regularly 2	Rarely 1	Never 0
1	Listening to agricultural programmes in radio			
2	Reading or listening to reading of agricultural news in newspaper			
3	Reading or listening to reading of agricultural news in magazines and bulletins			
4	Viewing of agricultural programmes in television.			
5	Viewing of agricultural films			
6	Participation in agricultural demonstrations and field days			
7	Social media			

8. Leadership quality

Sl No	Statements	Always	Sometimes	Never
1	Do you think you can change the attitude of others			
2	Do you guide and influence the behaviour of others in taking decisions			
3	Do you feel others are convinced by you			
4	Are you available to others at any time to extend necessary help to them?			
5	Do you identify the social problems and take it up with others for resolving			

9. Innovativeness

Sl.No	Statements	Response pattern				
		SA	A	UD	DA	SDA
1.	You would feel restless unless you try out an innovative method you have come across					
2.	You are cautious about trying new practices					
3.	You like to keep up-to-date information on the subjects that interest you					
4.	You would prefer to wait for others to try out new practices first					
5.	You opt for the traditional ways of doing things than going in for newer methods					

10. Social participation

1.	Leadership competency
1	Where will you place yourself in the leadership continuum with regard to your leadership attributes? Very low low medium high very high 1 2 3 4 5
	How do you utilize your level of competency of leadership in the welfare of society? Most often often seldom rare very rare 5 4 3 2 1
2.	Prosocial behaviour (Prosocial behaviour can be operationally defined as involvement in desirable activities for the welfare of community and society)
	How frequently do you participate in social/community functions (marriage, funeral, festivals in temples, church etc.,) Most often often seldom rare very rare 5 4 3 2 1
	Do you think you have the ability to understand the problem of others? Most often often seldom rare very rare 5 4 3 2 1
	How often you intervene in resolving the problems of others? Most often often seldom rare very rare 5 4 3 2 1
3.	Involvement in public speaking skills
	Where will you place yourself in the public communication skill continuum with regard to your public speaking skill? Excellent good fair poor very poor 5 4 3 2 1
	How often do you involve in public speaking? Most often often seldom rare very rare 5 4 3 2 1
4.	Interpersonal skills
	Where will you place yourself in the interpersonal communication skill continuum with regard to your capability in interpersonal communication as well as you in making interpersonal relationships? Excellent good fair poor very poor 5 4 3 2 1

11. Sharing of responsibility

Please indicate the extent of your agreement or disagreement to the following statements

Sl.No.	Statements	SA	A	UD	DA	ADA
1)	A member should be ready to accept any responsibility entrusted to him by the group					
2)	A member should voluntarily come forward to accept the responsibility in implementing group discussions.					
3)	Sub groups are to be formed for execution of decisions in the group					
4)	A member should try to keep away from taking responsibility in implementing group decisions by persuading other to do it.					
5)	Members of the group should be willing to accept joint liability by sharing risk, cost and benefits of the group activities.					

12. Attitude toward Panchayati Raj

Please indicate your agreement or disagreement with the following statements by putting tick mark in the relevant column.

Sl.No.	Statements	Disagree	Undecided	Agree
1.	I believe that there is not enough of awareness campaign on Panchayati Raj			
2.	I feel, true representatives of people will not get elected under Panchayati Raj			
3.	Panchayati Raj ensures transparent functioning of the government mechanisms			
4.	Monitoring and evaluation of projects are effectively carried out under panchayati Raj			
5.	Infrastructure development is satisfactory under Panchayati raj			
6.	I think Pachayati raj ensures decentralized governance at grass-root level			
7.	Now there is need support for testing appropriate technologies in the field			
8.	There is not much group action while implementing projects under Panchayath raj			
9.	Panchayati raj has created a group of more responsible local leaders			
10.	People are empowered to plan more realistic projects for themselves			

11.	There has been much collective thinking to solve common problems under panchayati raj			
12.	Panchayati raj does not ensure development with social justice			
13.	Panchayati raj has improved the marketing avenues of various produces			
14.	It enhances the social commitment of the officials of the development departments			
15.	Panchayati raj does not ensure proper management and utilization of common property resources			
16.	Beneficiary selection is not fair under Panchayati raj			
17.	Agri-business enterprises get importance under Panchayati raj			
18.	Panchayati raj has strengthened the rural economy			
19.	I feel that there has been considerable uncertainty in funding various projects under Panchayati raj			
20.	Lack of viable projects has resulted in people's lack of faith in Panchayati raj			

13. Leadership propensity

Sl no	Statement	Never	Sometimes	Always
1	Do you lead group meetings and discussions?			
2	Are you available to group members at any time to extend necessary help to them?			
3	Do you guide and influence the group members in taking decisions?			
4	Do you feel that other members in the group are convinced by you?			
5	Do you think that you can change the attitude of others in the group?			

14. Attitude towards Participatory Planning Programme

Following are the statements that reflect an individual's degree of agreement/disagreement with the ideals and importance of participatory planning programme, under way in Kerala. Encircle the number in the column against each statement. Remember to record your response to all the statements.

	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly Disagree
1.	Participatory planning programme is the only possible way to find out a permanent solution to the problems faced by common people.					
2.	Participation of people in planning is a bogus idea. That can be implemented.					
3.	Participatory planning programme in Kerala is a unique experience that has to be necessarily followed by other states.					
4.	Participation planning programme has a faulty design and hence cannot be implemented effectively.					
5.	Participatory planning and implementation is the best possible way to ensure responsibility of government officers and people's elected representatives.					
6.	Participatory planning programme would create a host of administrative problems that would be difficult to solve					
7.	Participatory planning programme would help government officials and local level politicians amass money and thus increase corruption.					

8.	Participatory planning programme would make the functioning of government officials and political more transparent and accountable.					
9.	One need not go to the state secretariat or the district collectorate for his/her requirement once participatory programme becomes fully functional.					
10.	Participatory planning programme can woo only the illiterate and people, not the people with good financial background.					
11.	Participatory planning programme can accelerate the agricultural and industrial development of Kerala.					
12.	Participatory planning programme is nothing but a political gimmick wisely designed by the ruling front.					
13.	Participatory planning programme would fail ultimately, as it would be difficult to gather the support of majority of the people and sustain it.					
14.	Participatory planning programme is the ultimate step a government can take towards democratic decentralisation and it will help Kerala development rapidly.					

15. Extension agency contact:

Indicate the frequency and purpose of contacting various extension agencies by putting a tick mark.

Sl. No.	Extension Personnel	Frequency of contact			Purpose of contact		
		Often (2)	Occasionally (1)	Never (0)	Agricultural (3)	Non Agricultural (1)	Both (2)
1	Asst.Agrl.Officer						
2	Agri.Officer/A						
3	DO						
4	Asst.Dir.of Agriculture						
5	KVK technical staff						
6	University scientists						
7	Official from banks and coop.						
8	NGOs involved in extension work						
	Others (specify)						

16. Accountability in Planning & Implementation

Sl no	Statements	Always	Sometimes	never
1	Are the working group members bound to implement the group activities?			
2	Whether any action can be taken against the members who do not implement group decision?			
3	Whether detailed report on subcommittees achievements will be presented in the group for discussion?			
4	Do you have any procedure /system to monitor the group and sub group activities?			
5	Do you have a system, to audit the accounts by external agency?			

17. Transparency

Sl no	Statements	Always	Sometimes	never
1	Whether the working group members have a clear idea about the activities of the group?			
2				

3	Whether the group members can have the full access over the records, reports and accounts of the group?			
4	Whether the group publishes the item wise details of receipts and expenditure? Whether the members have full knowledge regarding the procedure followed in planning, execution, monitoring and evaluation of the group activities?			

18. Sense of empowerment

The following inventory consists of 15 statements that represent your own dominant thoughts/ tendencies and your experience from time to time whether at your work place in the field or at home. Read each statement carefully and judge whether the statement is in argument with your tendency. The responses vary from strongly agree to strongly disagree with numbers representing each response. Tick mark your response against each statement

Sl no.	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1.	I feel much more comfortable when I work with clear cut instructions.					
2.	I enjoy doing something new where results are not always known and where there may be some possibility of failure of monetary loss or some such either unfavorable result.					
3.	I have a habit of thinking over my various tasks; examine the various possibilities and theirs likely consequences. Such a habit helps me to improve my performances					
4.	Whenever I undertake any activity, may be in some project or in the office, or in farming or in the field, I generally think I am going to do					

	well and achieve some good results					
5	It is so difficult for me to work on my own. Generally I wait persons to dedicate what and how I should do.					
6.	I like to do things in somewhat different ways and experience with new ideas and methods.					
7.	I tend to work hard, even when I may be tried when some extra payment/compensations assured.					
8.	I like to do things in the same way as my elder and senior have been doing.					
9.	I generally tend to think what can I do? After all I am only a subordinate.					
10.	I try to please the boss/or superiors/or the elders and make them happy by working hard on the given task.					
11.	I have a habit of postponing problems thinking that such problems would be solved automatically as the time passes.					
12.	In my various tasks whether in the office or in the field. I like good instead of just finished the task anyhow.					
13.	I tend to think I am unproductive and not a able workers because I am lazy and good for nothing.					
14.	I am generally interested in completing					

	the job as quickly as possible rather than spending time in trying for good quality and performance.					
15.	Routine work does not generally interest me. I like such jobs where I can use my skill and ideas.					

19. Nature and Extent of Participation of working Group Members in Participatory Panning

Sl.No.	Activities	Frequency of participation			Nature of participation		
		Often (2)	All times (1)	Never (0)	Most involved (3)	Some what involved (2)	Least involved (1)
1	Ensuring farmers participation in participatory planning						
2	Participation in Working group general body of the panchayat						
3	Assisting in Preparation of revised development report						
4	Compilation of benefit and expenditure report of previous year agri projects						
5	Helping extension personel in Preparation of sectoral status report for draft projects						
6	Representation of development gaps in agriculture to be taken up with higher tier plans						

7	Updating knowledge on sectoral plan guidelines released from time to time						
8	Lead sectoral group discussions in Gramasabha						
9	Compilation and presentation of draft report of farmers felt needs in Gramasabh						
10	Analyzing the felt needs of farmers through field visits and transect walk with extension personnel						
11	Assisting extension personnel in Preparation of shared vision report through stakeholder discussions						
12	Participation in annual development seminar for project finalization						
13	Assisiting in Preparation of final projects for vetting						
14	Fixing eligibility and prioritization criteria for beneficiary selection						
15	Interaction discussion with the development standing committee						

16	Identification of other sources of funding than the local body plan fund						
17	Preparation of reform plan preparation in the farming sector						
18	Conducting concurrent monitoring of assigned projects with the implementing officer						
19	Identification of spill over projects for continuance in succeeding year						
20	Preparation of water shed based development plan						

PART B

Constraints faced by working group members in participatory planning process

Indicate the importance of the following statement:

No.	Statement	Most Important 5	Important 4	Undecided 3	Less important 2	Not important 1
1.	Prioritization assigned by grama sabha toppled down at Panchayath					
2.	Majority of farmers still unaware of the rights and responsibilities of gramasabha					
3.	Non transparency in beneficiary selection					
4.	Unaware of the aim and objective of project					
5.	Non-co-operation of panchayat officials					
6.	Non availability of fund in time					
7.	Political influence dominate grama sabha proceedings					
8.	Lack of opportunity for participation					
9.	Lack of prior publicity of panchayat meetings					
10.	Grama sabha are not					

	conducted on schedule					
11.	Lack of free time for participation					
12	Beneficiary are selected as per personal interests					
13.	Inadequate publicity for gramasabha meetings					
14.	Project preparation has become an official job					
15.	Only the ideas of influentials are being considered for implementation of projects					
16	Lack of co-ordination between different departments					
17	Participation of farmers is low					
18	Annual accounts not Discussed in grama sabha					
19	Non availability of opportunities to participate					
20	Any other					

PART C

Accomplishments in the last five years under decentralized agricultural planning in the Panchayath			
Sl No	Type of accomplishment	Unit of achievement	Quantity
1	Expenditure in the agricultural sector	Rs.	
2	No of projects implemented in agricultural sector	No.	
3	No of beneficiaries of the projects	No	
4	Special agricultural projects for women empowerment as women component plan (10% of plan allocation)	No	
	Allocation for the project		
	Physical achievement		
5	Special agricultural projects implemented for SC farmers		
	Allocation for the project		
	Physical achievement		
6	Increase in the area of paddy	Ha	
7	Area left fallow brought under cultivation	Ha	
8	Increase in irrigation infrastructure	Nos	
9	Organic manure production units	No	
10	Agro based enterprises initiated	Nos	
11	Additional crops introduced in summer fallows	Ha	
12	Increasing cropping intensity in homestead farming system		
13	Initiatives for better service delivery to farmers		
14	Strengthening local marketing networks		
15	Promotion of FPOs		
16	Convergence of DP with state and central schemes		
17	Special diagnostic services & facilities at Krishibhavan		
i18	farm machinery and labour diversification initiatives		
19	No of programmes for building the local skilled capacity		
20	Promotion of group farming		
21	Seed production programmes		
22	Credit linked programmes		

Appendix II- Items of the efficacy scale

EFFICACY OF DECENTRALIZED AGRICULTURAL PLANNING IN GRAMA PANCHAYATH

SI no	Efficacy dimensions in different stages	Mostly	Often adopt	Occasionally	Rarely	Not
1	Need identification					
	Analysis of sectoral data and preparation of status report by the working group					
	Based on District Plan priorities ,DPC to provide guidelines to local governments in January every year					
	DPC to convene meeting of LGs to consolidate working group reports and deliberate on joint projects					
	Local bodies to prepare detailed development report					
2	Formation of working group					
	Working group members to have expertise in farming					
	Working group to accept proposals from public on enhancing people's participation					
	Academic leadership of working group for stakeholder discussions, Gramasabha meetings and Development Seminar					
	Development Standing committee to ensure that Working Group on agriculture is periodically convened					
3	Formation of Panchayath planning committee PPC					
	Panchayath Planning Committee PPC to find out additional resource pooling opportunities					
	Conduct studies to increase the quality of plan formulated					
	Avoid spread of resources to ineffective small projects					
	PPC to coordinate plan formulation, implementation and monitoring					
4	Holding of pre Gramasabha consultations with stakeholders					
	Seek NRI opinion and cooperation in formulation and implementation through Gramasabha window of the Panchayath website					
	An official to be designated as Gramasabha coordinator					
	Pre-Gramasabha multi-platform campaign to be organized with media, educational Institutions , People's organizations , Kudumbasree, etc.					

	Draft proposals to be discussed in Neighborhood sabhas before the Gramasabha					
5	Holding of Gramasabha					
	Notice of the Gram Sabha showing the date, time, venue and agenda to be publicized at least a week before					
	WG members leading sectoral discussions on draft proposals in <i>Gramasabha</i>					
	Beneficiaries of agricultural projects selected through Gramasabha					
	<i>Gramasabha</i> selects five representatives for the Panchayath Development seminar and minutes signed by 15 participants to reach the Secretary of Panchayath on the next working day					
6	Preparation of draft plan proposals by the working group					
	Updating the status report by the working Group					
	Draft plan to fill the gaps identified in the working Group status report					
	WG to assess the logic, efficiency, feasibility, legality , environmental impact and prospects of each project					
	WG to fix priority for project proposals based on Gramasabha decisions					
7	Discussion of draft plan in development seminar					
	WG members leading sectoral discussions in development seminar					
	Development seminar to have a panchayath perspective in strategy setting rather than ward based considerations					
	All elected peoples representatives of three tier LSGDs , members of the Working groups, CDS members and officials of Panchayath to attend the development seminar					
	Development seminar to incorporate all project modifications suggested by Gramasabha					
8	Prioritization and resource allocation by the local governments					
	Standing committee to issue directions to respective working groups under them					
	Linking central and State sponsored schemes and own fund realistically with the plan					
	Explore joint projects with other Panchayaths					
	Recommendations of development seminar to be considered by LG while resources are allocated					
9	Preparation of detailed projects by the working group					
	WG to facilitate data entry of Panchayath approved projects in the <i>Sulekha</i> software					

	Standing Committee to finalise allocation based on mandatory sectoral allocations					
	Implementing officer to formulate only projects related to statutory responsibilities of Panchahayth					
	Multi year projects to be preferred for activities to be continued over years					
10	Finalization of annual plan by the local government					
	PPC to convene the meeting of lead bank officials and bankers committees					
	Explore potentials of joint projects with Co-operative sector					
	Forward development seminar Project proposals to upper tiers and state Government					
	Identify Special projects to tap corporate social responsibility funds					
11	Vetting of plan and technical approval					
	Vetting officers to conduct project clinics to reduce delay in project approval					
	Projects to be approved within seven days					
	District level monitoring committee to monitor Vetting Officers to reduce delay					
	Implementing officer of a project not to be a member of the approval committee					
12	Approval of plans by the DPC and issue of proceedings					
	DPC to ascertain that projects are prepared as per the severity of problems in the status report					
	To ascertain that mandatory minimum allocation to productive sector is safeguarded					
	Only Plan of Panchayath is approved by the DPC and projects by the designated officers					
	Performance audit wing to observe and report the Grama sabha fact report to DPC					
13	Consolidation of local body plans to a district plan by the DPC					
	Integrate LSG plans with state and central schemes					
	Special technical Committee to scrutinize innovative projects of Panchayaths					
	Local Governments to prepare plans and projects based on priorities and perspectives of the District Plan					
	District plan facilitate projects for sharing of water, other natural resources and environmental protection among local governments.					

14	Plan implementation					
	During implementation the Working Group to function as monitoring committee					
	Implementation officer to make an implementation calendar with working group assistance					
	Maximum resources as beneficiary share to be mobilized through padasekharams, watershed committees , Resident Associations etc.					
	Implementing officer not to accept an approved project if it is beyond his technical expertise					
15	Integration of projects					
	Agricultural projects to be formulated on a watershed basis					
	Priority to organic farming, organic manure units and organic pesticides units					
	Agricultural projects to be integrated maximum with MGNREGA					
	Projects to promote procurement centres, value addition primary processing and marketing to be organized through Farmer organisations and FPOs					

Appendix III- Items of the role performance scale

Role performance of Agricultural Officers in Decentralised Agricultural planning

Check your response in any one of the columns from 1 to 5 to indicate how you are performing these duties

Items of Role Performance of Agricultural officers in Decentralised Planning		Role performance				
		Very Good	Good	Average	Poor	Very poor
I	Planning					
1	Preparing the vision document, development plan and projects for decentralized agricultural planning					
2	Estimating input requirement of the village agriculture					
3	Identification of fallow land in association with agricultural development committee ADC					
4	Delineation of micro watersheds and preparation of watershed-based master plan					
5	Integration of LSGI plans with state and central programs of agricultural development					
6	Enlist ITKs and local varieties in People's Bio Diversity Register PBR					
7	Networking for custom hiring services of farm machinery					
8	Collection and updating of essential database at Panchayath level					
9	Adopt measures for ensuring timely supply of seeds and quality planting materials					
10	Sourcing of farm technologies for young entrepreneurs					
II	Execution and implementation					
11	Implementation of state and local self-Government agricultural development programmes					
12	Participating in Gramasabha and development seminar meetings of participatory planning process					
13	Participate in the development standing committee meeting					
14	Organize Self Help Groups SHGs among farmers					

15	Organizing and strengthening Farmer Producer Organisations and Farmer Interest Groups					
16	Encourage systems of cooperative group farming					
17	Implementation of income generation projects for women as ex-officio member of Kudumbasree CDS					
18	Providing platforms for marketing of farm produce					
19	Fixing eligibility and priority criteria for selection of beneficiaries for agricultural projects					
20	Preparation of calendar of agricultural activities of the <i>Krishibhavan</i> and ratification by Development Standing Committee					
III	Financing and budgeting					
21	Verification and issue of natural calamity and crop insurance assistance to farmers					
22	Giving expenditure statements of all schemes to the controlling officer and Grama Panchayat					
23	Assessing credit requirements of farmers and submit to financing agencies					
24	Provide credit through banks and subsidies linked to farmers					
25	Submit verified claims for financial assistance under various schemes/ projects to higher officials					
26	Drawing and Disbursing Officer for LSG schemes under decentralized planning					
27	Financial management of Govt. Funds and custodian of connected registers & records					
28	Timely release of subsidy to farmers during each cropping season					
29	Provide bankable projects for enterprising farmers					
30	Assist local government in preparing annual budget and plan document					
IV	Administration and supervision					
31	Convening the agriculture working group meetings for participatory planning process					
32	Training the working group members on guidelines for annual plan formulation					
33	Allocation of estimated fallow lands to SHGs					

34	Convergence of national rural employment program MGNREGA with other agricultural programmes					
35	Maintenance of traditional water sources, waterways and canals under the control of Grama Panchayath					
36	Verifying and sanctioning applications of farmers and farm labourers for availing pension					
37	Initiate steps for obtaining Government approval for the organic fertilizers produced on large scale by the Self Help Groups of farmers and farm women					
38	Enter preferred agenda note in the <i>Sakarma</i> Meeting Management Software and presenting opinions on the topic at Panchayat meeting					
39	Convening staff meeting of the Krishibhavan involving the Development Standing Committee members after the Grama Panchayat Level Evaluation and Planning meeting.					
40	Convening meeting of the Agriculture Development Committee ADC at the Krishibhavan every 3rd Saturday of the month					
V	Monitoring and evaluation					
41	Diagnostic field visits to suggest remedies for pests, diseases and nutritional disorders					
42	Monitoring ward level Agro Clinics and farm field schools assigned to agricultural assistants					
43	Convening periodical meetings of the Padasekhara Smithies, Kera samithies , Farmers Groups etc. and encourage their formation wherever feasible.					
44	Acting as convener and reporting officer of the local level monitoring committee under Kerala paddy and wetland act 2008					
45	Work as middle level technocrat in passing on the researchable issues at field level to scientists and their feedback to farmers.					
46	Initiate timely action to settle the objections in the Performance Audit, State Audit Department, AG Audit					
47	Preparing Five-Year Plan involving detailed master plan of the projects to be implemented in the agriculture sector of the Grama Panchayat for the next five years.					

48	Rendering adequate division of workforce & co-ordination of efforts as convener and technical member of Agricultural Task Force of service providers					
49	Smoothening crop risk management among farmers through enrolment in crop insurance programs					
50	Provide crop management solutions to the farmers on the basis of soil test results					
VI	Agricultural extension functions					
51	Providing technical advice and training to the farmers and field staff					
52	Participating and organizing agricultural exhibitions and seminars					
53	Spreading the innovations in agriculture by scaling up of innovation capacity and forming appropriate platforms					
54	Use of social media for showcasing farm technologies, success stories and networking for marketing of farm produce					
55	Adopting technologies for making farming system climate resilient					
56	Promotion of organic and safe to eat standards of food production					
57	Motivating farmers to adopt precision farming practices like drip irrigation, fertigation, Shade nets, plastic mulches, green houses etc.					
58	Enforcing quality control of fertilizer and pesticides as fertilizer and Insecticide inspector					
59	Promoting self-reliance in organic manures and vegetables					
60	Promote Integrated Farming System models with progressive farmers					