



Government of Kerala

**REPORT OF
EVALUATION STUDY ON
AGRO SERVICE CENTRES
IN KERALA**

JULY 2016

MONITORING & EVALUATION DIVISION
DIRECTORATE OF AGRICULTURE DEVELOPMENT & FARMERS' WELFARE
THIRUVANANTHAPURAM

PREFACE

Agro Service Centres is a service delivery system established by the Department of Agriculture at Block level to cater to the needs of farmers in areas like hiring of machinery with operator, labour support, providing inputs, soil testing service support etc, on a pilot basis in selected Blocks. The main objective of this scheme is to facilitate integration of services like mechanisation, ATMA based extension, credit support, weather advisory services, soil testing support, marketing support etc. under the close supervision of Department of Agriculture.

The Monitoring & Evaluation Division in the Directorate of Agriculture was entrusted with the conduct of this evaluation study on Agro Service Centres during the year 2015-16 with the main objectives to assess the area brought back for cropping by the intervention of ASC, impact of agricultural mechanisation through ASC in service delivery, acceptability of the concept of ASC and the rate of adoption among farmers, operational issues, etc. The study covered all districts and 35 ASCs established during the year 2012-13.

The study has come out with many important findings, the details are incorporated in various chapters of the report. I appreciate the efforts taken by the Monitoring & Evaluation Division for undertaking an endeavor after a gap of 15 years and bringing out this report.

I hope this survey report will be found useful to planners, policy makers and implementing officers to make corrections in implementation of the scheme and thus for the development of agriculture in the State through the successful operation of Agro Service Centres.

Thiruvananthapuram,
30-07-2016.

Sunil Kumar A.M.
Director of Agriculture (i/c)

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Chapter 1

INTRODUCTION

Even though Kerala is blessed with all natural resources, Agriculture sector shows a steep decline. This is due to the fact that labour is costly, its availability is less and many a times the produce from the farm fetches non remunerative price. If Agriculture in Kerala is to be made profitable a concerted effort in the field of mechanisation, delivery of technical knowledge, availability of quality inputs and planting materials through a single window approach is to be promoted. With this objective a new scheme was launched in 2012-13 namely “Agro Service Centres and Service Delivery”.

Vide Government Order GO(Rt)No.1548/12/AD dated 30-07-2012 administrative sanction was accorded for an amount of Rs.19.5 crores under the head of account 2401-00-113-83 (Plan) for setting up of Agro Service Centres in Kerala as a new initiative for improving the service delivery of field officers of Agriculture Department subject to the following conditions.

1. Services shall be charged to generate income for the self sustainability of the centres. A committee shall decide the rate of fee of services according to the guidelines after consultation with stakeholders.
2. Entrepreneurs for running the centres shall be selected by inviting applications through advertisement. Those who are interested to invest 50% of the cost shall be given preference for the centres.
3. Funds shall be released according to the progress of setting up the centres. If the selected society is not utilizing the fund for the intended purpose, they shall be black listed and punitive action taken against them for recovery of the amount, if any, granted.
4. The possibility of tie up with banks or other institutions for handholding may be explored.

Agro Service Centres is a service delivery system established by the department of Agriculture attached with NGOs, Co-operative Society or public limited companies manage collectively and designed to cater to the needs of farmers in areas like hiring of machinery with operator, repairing, providing inputs, soil testing service support etc.

The Agro Service Centres are established at Block level on a pilot basis under the close supervision and guidance of the Department of Agriculture. The main objective of the scheme is to re-orient the functions of the field officer towards extension activities and service delivery for adoption of innovative and latest technologies in each stage of crop production. The labour shortage problem is managed by Agro machinery operation service group management in Agricultural mechanisation and hired farm operations.

Vide circular No.46696/12 dated 19-10-2012 of the Director of Agriculture, detailed guidelines for setting up of ASC were issued and 35 Agro Service Centres were started in selected Blocks in 2012-13 to facilitate integration of services like mechanisation, ATMA based extension, credit support, weather advisory services, soil testing support, marketing support etc. under the close supervision of Department of Agriculture. Assistance provided to each ASC is as follows.

Sl No	Item	Amount
1	Purchase of machinery	25 lakhs
2	Infrastructure support (setting up of office)	2 lakhs
3	Operational Expenses	2 lakhs
4	Revolving Fund (maintenance fund)	3 lakhs
	Total	32 lakhs

The item wise details are as follows.

1.1 Purchase of machinery

The selection of machinery will depend upon the requirements of the location with reference to the crops cultivated, labour shortage and funds available. The local bodies can also additionally provide as many types of machinery they can for the running of project from time to time.

1.2 Office infrastructure support

An office set up is to be made to keep the machinery and for proper management which can be with the Block Panchayat office or any other place identified suitable by the respective local bodies. If the ASC is taken up by any Service Co-operative Society, they may set up the office with all facilities required such as phone, furniture, computer, godown etc.

1.3 Operational expense

The amount provided under operational expense can be used for purchasing small transportation vehicles, for hiring skilled labour or appointing staff for the centres, meeting the hiring charges etc.

1.4 Maintenance fund (revolving fund)

This fund is provided for meeting the expenses at crucial point of interventions.

1.5 Man power

Each Agro Service Centre has trained working group (10 to 15 numbers) who are VHSE Certificate holders, ITC/ITI qualified persons, SSLC certificate holders. ASC also has an Office Secretary/Facilitator. The Office secretary is selected specially from among the retired Agricultural Officers with high leadership quality capable of assisting the Assistant

Director of Agriculture to run the ASC in a successful manner. Office secretary is the chief officer of the ASC, who keeps record of day to day activities of the ASC, Bank operation, and assets of ASC. All the working group members and facilitators are given extensive training in usage and repair of machines and other equipments, plant protection activities etc.

1.6 Training Programmes

Training and establishment of 14 model ASCs are under the auspicious of ARS Mannuthy.

The success of the Agro Service Centre depends on the management as well as operational skills imparted to the working group.

First level training: Twenty days training on the field operations, upkeep and maintenance of agro machinery are imparted to the Agro Service Delivery Executives. They are targeted how to form and run the ASC. After the training they form the main working groups of the ASC.

Second level training: A Second level training for 20 days are imparted to working group to run farm clinic and diagnostic centre, pest and disease identification, crop security, intelligence work. Training is given on necessary technologies to 5 VHSC (Agri) members of the ASC working group. Farm machinery repair and service training is given to ITC/ITI people to run repair service centre of farm machinery. The other five members are imparted skill upgradation training for the service they are offering in each locality.

1.6.1 Training for the Office Secretary / Facilitator

Office Secretary/ Facilitator are given training for 20 days to run the ASC in a successful manner and familiarize all the operations intended to be entrusted with the working group. All the training are conducted by Assistant Director of Agriculture and Assistant Executive Engineer (Agri), with the help of Kerala Agricultural University.

1.7 Governing Set up and Custodianship of ASC

ASC are registered under charitable societies Act 1955 with at least 7 members preferably who got training from any institution regarding the agricultural operations, agricultural machinery operation / repair and maintenance, plant protection operation, nursery management etc. The registered members elect President, Secretary, Treasurer etc. The day to day functioning of the ASC is managed by management committee comprising of

- 1) President and Secretary of the ASC
- 2) President or member of the service co-operative bank linked with ASC
- 3) The Assistant Director of Agriculture

4) Agricultural Officers of the area

The management committee may meet once in two months and deliberate on day to day functioning of the centre and make suitable decision in the day to day business and deliverance of service as per decision taken in management committee/high power committee /service center and also guidelines issued by governing body/govt.

Service personals may be organized into groups for the discharge of a particular type of work. The service calendar may be prepared in advance and assigned to service groups. All the service personals are to hold account in the bank. The service charges are collected and remitted to the bank and service personals are given their remuneration on weekly basis. A portion of service remuneration is to be deposited in the welfare fund of the member.

Constitution of High Power Committee

In order to guide and control the activities of the ASC, a high power committee is also constituted with following members.

- 1) President of the concerned Block Panchayat- Chairman
- 2) Assistant Director of Agriculture of the concerned Block- Convener
- 3) The Block Panchayat Member of the division in which ASC is located- Member
- 4) Grama Panchayat Presidents in the Block - Members
- 5) President and Secretary of ASC- Members
- 6) Agricultural Officers of Krishi Bhavans in the Block- Members
- 7) Conveners of Padasekhara samithies, crop clusters and other crop Samithies -Members
- 8) The representatives of banks of concerned Block- Members

The High Power Committee should meet at least once in six months and deliberate an effective functioning of Agro Service Centre. The meeting is convened by the Assistant Director of Agriculture chaired by Block Panchayat President. The service charges for each services and remuneration charges to service persons of Agro Service Centre will be approved by High Power Committee. Mode of functioning of the unit is decided in the High Power Committee, adhering to guidelines, if any, issued by Govt. from time to time.

1.8 Selection of Blocks for establishing ASC

The agency who are willing to provide a front office and machinery yard to hold farm machinery to run the ASC is given preference for establishing ASC. A minimum space of 25 square metre is required for the office and 200 square metre to hold the farm machinery.

1.9 Model Agro Service Centres

Out of the 35 ASCs established during the year 2012-13, 14 numbers are model ASCs, one in each district utilizing the expertise, guidelines and timely intervention of ARS, Mannuthy. Training and handholding to 14 centres will be provided by Kerala Agricultural University. The model ASC should have 25 numbers of working personnel. The machinery may also differ according to the need of the operation required in each locality. An amount of Rs.65 lakhs was set aside for the establishment of 14 numbers of Model ASC and the amount will be released to the Comptroller of KAU, Thrissur.

1.10 Monitoring

At the District level, the scheme is monitored and implemented by the Project Director (ATMA) in co-ordination with the Assistant Executive Engineer (Agri) under the overall supervision of the PAO. At the State level Additional Director of Agriculture (Extn) is monitoring the scheme with the co-ordination of State Agricultural Engineer.

1.11 Additional Services provided by ASC

In addition to the details mentioned above, ASCs are involved in Agricultural practices like land preparation of Padasekharams, plant protection measures, harvesting etc. They also undertake fallow land cultivation, preparation of land for school gardens, preparation of grow bags for terrace cultivation. ASC are also involved in portray seedlings preparation. Many of the ASCs have started bio pharmacy and nurseries so that quality plant protection measures and planting materials are made available in the block area itself. Bio pesticides and bio fertilizers are made available in the bio pharmacy. Some of the ASC has started soil testing labs also.

Chapter 2

OBJECTIVES AND METHODOLOGY OF STUDY

2.1 Objectives of study

Agro Service Centres have been established in selected Blocks during the year 2012-13 as a new initiative for improving the service delivery of field offices of the Department of Agriculture by providing labour and machinery support to farming activities. The effectiveness in implementation of the project as to how far the benefits have been reached to the farmers is proposed for the said study during the year 2014-15.

The following objectives are proposed for evaluation study on Agro Service Centres in Kerala established during the year 2012-13.

1. How far establishment of ASC has helped the farming community to manage the labour shortage problem
2. To assess the area brought back for cropping by the intervention of ASC
3. Impact of agricultural mechanisation through ASC in service delivery
4. To examine the extent of utilization of farm machinery purchased
5. To study the acceptability of concept of ASC and the rate of adoption among farmers
6. To examine the motivating factors behind successful ASC
7. To assess the employment generated by engaging service personnel in ASC
8. To examine the operational issues, if any, in ASC
9. Suggestions for improvement of the scheme
10. Scope of linkage of ASC with Karshika Karma Sena established at Panchayat level

2.2 Coverage and Methodology

All the 35 Agro Service Centres established in selected Blocks in Kerala during the financial year 2012-13 are covered for detailed study. Suitable questionnaires covering the objectives of study is prepared at directorate level and the field level data collection is done utilizing the service of Statistical staff posted in Principal Agricultural Offices in all districts except in Kasaragode and Pathanamthitta. In Pathanamthitta and Kasaragode districts, two Agricultural Assistants (two numbers in each district) were posted for field level data collection.

To assess the impact of establishment of ASC in all districts in selected Blocks, the data collection is done using two approaches.

Approach 1: In order to assess the problems, challenges, opportunities, threats, mode of functioning of ASC, adherence of guidelines issued from Govt and Department, motivational factors, success stories, additional assistance required etc of ASC, we have prepared a Type I

schedule intended for gathering the information directly from the office of ASC, through its Facilitator. If any of the details of purchase of machinery to any ASC are not available in its office, it was proposed to be collected from the concerned Assistant Executive Engineer's office through which the machinery were purchased.

Approach 2: For assessing the impact of services provided from ASC, a second type of schedule called Type II questionnaire was prepared and was canvassed from the beneficiaries who received assistance from ASC during last year 2014-15. Through this questionnaire, the area cultivated, shortage of agriculture labourers, services received and not received from ASC, problems and issues they are facing in agriculture operations, additional assistance required from ASC etc are studied.

The methodology proposed for the selection of samples for Type II schedule is selection of 10 beneficiaries from each ASC such a way that 5 samples from the list of farmers and 5 samples from the list of padasekhara samithies. In the event of not getting sufficient number of padasekhrams in any ASC, it will be compensated from the list of farmers so as to ensure that 10 beneficiaries are surveyed from each ASC.

Thus the sampling plan for the selection of beneficiaries who got assistance from ASC proposed is as follows.

Sl No	Beneficiary category	No. to be selected	No. obtained
1	Farmers	175	223
2	Padasekharams	175	109
	Total	350	332

Note: ASC Sl No.4, ASC Pathanapuram, Kollam District has stopped its functioning due to court cases. So majority of the field in the Type I questionnaire are left blank, and no ASC Type II data schedules. In ASC, Irikkur, Kannur district, where they are mainly engaged in stocking and distribution of fertilizers, only two padasekharams were obtained as beneficiaries for field survey. Hence there is a shortage of 18 schedules in Type II category.

Since there is a total numbers of 4956 registered farmers and padasekharams in all the 35 ASCs surveyed, the survey coverage for Type II schedule is about 7 percent.

Sufficient copies of questionnaires required for the field survey are printed at Government Press. A pilot study to examine the suitability of questionnaire was conducted in Parassala Model ASC before finalization of the survey schedules.

The district wise ASCs established during the year 2012-13 and covered for the evaluation study are the following. Of these, 14 ASCs are model centres and the remaining 21 are ordinary ones.

Sl. No.	District	Block	Assembly Constituency	Model / Ordinary
1	TVPM	Kazhakkootam	Nedumangadu	
2	TVPM	Parassala	Neyyatinkara	Model
3	KLM	Chadayamangalam	Chadayamangalam	
4	KLM	Pathanapuram	Pathanapuram	Model
5	PTA	Konni	Konni	Model
6	PTA	Ranni	Ranni	
7	ALPA	Chengannur	Chengannur	Model
8	ALPA	Muthukulam	Kayamkulam	
9	KTM	Pallam	Kottayam	Model
10	KTM	Uzhavoor	Kaduthuruthy	
11	IDY	Idukki	Idukki	Model
12	IDY	Thodupuzha	Thodupuzha	
13	EKLM	Alangadu	Kalamassery	
14	EKLM	Kothamangalam	Kothamangalam	
15	EKLM	Pambakuda	Piravam	Model
16	TSR	Iringalakuda	Iringalakuda	
17	TSR	Pazhayannur	Chelakkara	
18	TSR	Wadakkanchery	Wadakkanchery	Model
19	PKD	Malampuzha	Malampuzha	
20	PKD	Pattambi	Pattambi	Model
21	MPM	Kuttippuram	Kottakkal	Model
22	MPM	Perumbadappu	Ponnani	
23	MPM	Perinthalmanna	Perinthalmanna	
24	KKD	Koduvalli	Thiruvambady-Koduvalli	
25	KKD	Melady	Koyilandy	
26	KKD	Kunnamel	Nadapuram	
27	KKD	Perambra	Perambra	Model
28	WYD	Sulthanbathery	Sulthanbathery	
29	WYD	Kalpetta	Kalpetta	Model
30	WYD	Mananthavadi	Mananthavadi	
31	KNR	Irikkur	Irikkur	Model
32	KNR	Koothuparambu	Koothuparambu	
33	KNR	Payyannur	Payyannur	
34	KSD	Manjeswaram	Manjeswaram	Model
35	KSD	Neeleswaram	Thrikkarippur	

2.3 Period of study

The proposed study was conducted during the financial year 2014-15. The time taken for each activity is as follows.

1	Design of survey, preparation of questionnaire, pilot survey, schedule printing, training etc.	4 months
2	Data collection at field level (up to the receipt of schedules at Directorate)	3 months
3	Scrutiny and validation	2 months
4	Data entry, tabulation and report writing	3 months
5	Total time taken	12 months

Chapter 3

FUNCTIONING OF ASC

3.1 Registration of Agro Service Centres

As per the scheme guidelines, all ASCs have to be registered under Charitable Societies Registration Act 1955 under the District Registrar Office and the registration has to be renewed annually. So one of the important parameter we have studied is the registration of ASC. While compiling the information received from ASCs, it is found that 33 ASCs are registered under Charitable Societies Registration Act through State Registration Department. But ASC Thikkody in Kozhikode district and Model ASC, Cheruvanchery, Kannur district are not registered under Registration Act as their Nodal Agencies are Service Co-operative Societies.

3.2 Facilitator of ASC

As per the scheme guidelines, each ASC should be governed through its office Secretary called Facilitator, who may be preferably a retired Agricultural Officer with high leadership quality capable of assisting the Assistant Director of Agriculture in which the ASC is established to run the ASC in a successful manner. He has to keep all assets and records of the day to day transactions of the service centre. He also has to prepare operational calendar of ASC for its smooth and trouble free functioning and to ensure maximum services to its beneficiaries.

The survey revealed that 21 ASC are governed by retired AOs and the remaining is by retired teachers, retired Agricultural Field Officers etc. the details are given below.

Sl No	Qualification of facilitator	Number of ASC
1	Retired Agricultural Officer	21
2	Agri Field Officer (Non cadre)	1
3	Other than retired AO	13
	Total	35

Note: In ASC Malampuzha (Sl No 19), Palakkad, the post of Facilitator has been vacant for the last 9 months as on date of survey (held in November 2015)

3.3 Monthly salary of Facilitator

The scheme guideline does not specify the rate of monthly salary to be paid to the secretary/ Facilitator of ASC, but he shall be paid as decided by the management committee ASC. The Facilitator shall be paid initially for one year from scheme fund and thereafter from the business of ASC.

The study found that different ASCs are paying different amount to its Facilitator as his monthly salary. 68 percent of the centres are paying Rs.12000 per month as salary of Facilitator. 2 ASCs are paying Rs.15000 per month, 3 ASCs Rs.10000 pm and one ASC Rs.6000 pm. Facilitators of four ASC did not disclose this information. The details are given below.

SI No	Monthly salary amount	No. of ASCs
1	Rs.15000	2
2	Rs.12500	1
3	Rs.12000	24
4	Rs.10000	3
5	Rs.6000	1
6	Not reported	4

3.4 Separate Office Secretary in ASC

The scheme guideline gives flexibility in appointing separate office secretary in ASC with adequate computer literacy who can manage the business. Out of the 35 ASCs surveyed, 10 ASCs have appointed separate Office Secretary and the remaining 25 have no such post. Office Secretary is being paid at an amount ranging from Rs.5000 to Rs.8000 per month.

3.5 Meetings conducted in ASC

The day to day functioning of the ASC has to be overseen by a management committee and this committee has to be met once in every two months and deliberate the functioning of the centre and make suitable decision in the day to day business and deliverances of service as per decision taken in all committees, viz. High Power Committee, General Body, and the guidelines issued by the Govt.

In order to guide and control the activities of ASC and the working force constituted under this, a High Power Committee has to be constituted in every ASC and the constitution of this committee is explained in 2nd chapter. This committee has to be met at least once in six months.

In addition to the Management Committee and High Power Committee constituted, each ASC has a General Body as specified in the By Law of registration of ASC and this may be convened at least once in a year.

The survey revealed that the total number of meetings conducted by all the 35 ASCs during the year 2013-14 and 2014-15 are given below. During the year 2013-14, 341 meetings were conducted and in 2014-15 it was 359. The number of meetings of Management Committee held by each ASC per year is ranging from 2 to 10. The number meetings of High Power Committee convened by each ASC is ranging from 1 to 8 per year. Out of 35 ASCs surveyed, 6 ASCs have not convened General Body during 2013-14 and 2014-15. But some others have

convened up to a maximum of 8 times per year. The details of number of committees held during 2013-14 and 2014-15 are as follows.

Name of Committee	2013-14	2014-15
Management Committee	118	142
High Power committee	90	79
General Body	133	138
Total	341	359

3.6 Income and expenditure details of ASC

The aggregate of income generated and expenditure incurred by all the 35 ASCs during the year 2013-14 and 2014-15 are as follows. The net profit generated by all ASCs amounts to Rs.77.27 lakhs during the year 2014-15. While the profit generated was only 15.19 lakhs during the year 2013-14.

During the field survey, it was observed that some ASCs are facing difficulty in providing item wise income and expenditure due to poor maintenance of registers and records of their day to day operations.

Sl. No	Items of Incomes	2013-14	2014-15
1	Income from Application of machinery	7968283	18030771
2	Income from Inputs	3482828	20441926
3	Income from Agricultural practices on contract basis	563775	2952168
4	Income from rent by way of hiring	260570	365779
5	Other incomes	680511	3577131
	Total income	12955967	45367775

Sl. No	Items of Expenditure	2013-14	2014-15
1	Repairs and Service Charges of Machinery	1035968	422820
2	Spare Parts	211009	922248
3	Insurance	40626	126732
4	Fuel charges to Machines	1935315	3205249
5	Service charges to Service personnel	4062307	12161808
6	Other Expenses	4151025	16992551
	Total Expenses	11436250	37631408
	Net Profit	1519717	7736367

3.7 Audit of accounts

Third party auditing of financial accounts maintained in every ASC is inevitable to get an independent and unbiased check of transactions and accounting of income and expense under each business head. This may also play a role of corrective action in maintaining registers and posting of money transactions. During the survey it was found that only 14 ASCs have audited their receipt and payment accounts or income & expenditure statements for the year 2013-14 or 2014-15 and the remaining not seen audited.

3.8 Utilisation of revolving fund

Each ASC has been granted Rs.3 lakhs as revolving fund to meet the inevitable contingent expenditure at any crucial point of time. The survey found that 33 ASCs have utilized the one time revolving fund/ maintenance fund. The remaining three ASCs have never withdrawn any amount from revolving fund deposited in the bank account of ASC.

3.9 Purpose for which revolving fund utilized

The study found that the revolving fund provided to ASCs has withdrawn to meet the expenditure in connection with the following essential requirements. The purpose for which the maintenance fund utilized is varying in each ASC.

- Establishment of Infrastructure facilities, office furnishing etc.
- Repair and maintenance of machinery
- Land maintenance, parking yard repairing,
- Construction of green house
- For buying machines Purchase of machines viz. pick up van, tractor,
- Facilitator's salary
- Production of Grow bag, seeds, establishment of bio pharmacy
- Purchase of uniform, name board, publicity
- Establishing sales outlet, Vegetable farming, pepper nursery
- Tractor insurance, bio input centre
- Transplantation, construction of rain shelter

3.10 Recouping of maintenance fund

Since the maintenance fund given to ASC is for meeting the essential expenses at inevitable point of time, the fund withdrawn from the account in which revolving fund is deposited should be recouped immediately. But the survey found that out of the 33 ASCs utilized their revolving fund, only 17 numbers have recouped the amount fully, 2 ASCs partially recouped and the remaining 14 ASCs which have utilized their revolving fund have not recouped as on date of survey.

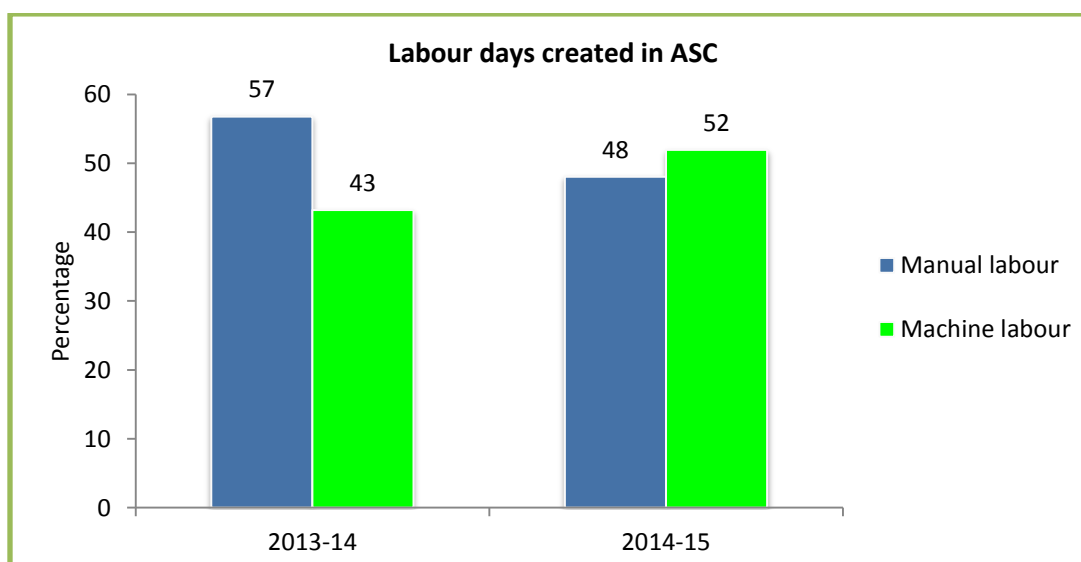
3.11 Bank loan availed

3 ASCs have availed bank loan for its operation and the remaining have not taken any kind of bank loan.

3.12 Labour days created through ASC

One of the main objectives of establishing ASC is to tackle the labour shortage problem in agricultural activities. The total number of labour days created in all 35 ASCs through various activities including application of machinery during the year 2013-14 and 2014-15 are given in the following table. During the year 2014-15, 21491 man days were created and in 2013-14, it was 19847. The category wise labour days created may not be correct as different ASC has furnished the details in different manner.

Sl No	Category of work	2013-14	2014-15
1	Manual labour	11274	10330
2	Machine labour	8573	11161
	Total	19847	21491



3.13 Other services started in ASC

The working instructions issued for establishing Agro Service Centres have given freedom to establish other farmer supporting facilities such as bio pharmacy, soil testing lab, seed/seedling nursery, agri clinic etc under ASC to enhance the availability of quality seedlings, inputs etc for the enhanced production of agricultural products in the operational area of ASC.

The survey shows that soil testing facility has been started in 5 Blocks by ASCs, 20 ASCs have started bio pharmacy, 24 ASCs have started seedling nursery and 7 ASCs have formed agri clinics. The details are given below.

As far as the working satisfaction of these additional facilities established by ASC, the Facilitators of ASC has expressed different opinions. Out of the 24 numbers of nurseries started in 24 ASCs, one ASC has expressed complete satisfaction in its work and 20 expressed satisfaction. In the case of 7 numbers of agri clinics established in 7 ASCs, 3 have expressed complete satisfaction and 2 are satisfactory. The details are also seen in the table given below.

Name of Service	Number	Satisfaction Level			
		CS	S	NS	Not mentioned
Soil testing facility	5	-	3	-	1
Bio pharmacy	20	-	17	-	3
Nursery	24	1	20	1	2
Agri Clinic	7	3	2	1	1

Note: CS- Completely Satisfied, S- Satisfied, NS- Not Satisfied

3.14 Type of ASC building

The space for office building and machinery parking yard is another issue in the smooth functioning of ASC. We have collected the details on these aspects from all the ASCs surveyed. It is found that 8 ASCs are functioning in their own building, 6 on rent, 3 in building provided by the concerned Grama Panchayat, 1 in building provided by Dept of Agriculture and remaining 17 in building/ space provided by other interested agencies/ NGOs. The table given below shows the abstract.

Sl No	Type of building	Number of ASC
1	Own building	8
2	On rent	6
3	Panchayat building	3
4	Dept (of Agri) building	1
5	Others	17
	Total	35

3.15 Parking yard for machinery

Govt grant has been provided to all ASCs for establishing necessary parking facilities to keep and protect their agro machinery from rain and sun light. The survey found that out of the 35 ASCs established, 27 numbers have its own parking yard facility for parking of their agro machinery and keeping other agricultural implements.

3.16 Maintenance of Stock register and log book

The success of every establishment is vested in upkeep and maintenance of various accounts detailing the cash transactions etc. So every ASC has to maintain daily activity register, cash book, stock register, log book for machinery and transporting vehicles, if any, etc. the survey found that 28 ASCs has been maintaining stock register and log book, and 2 others maintaining stock register only.

Since the Type II schedule was canvassed form the randomly selected beneficiaries of ASC, the daily activity register containing the name and address of farmers and other beneficiaries were very necessary for preparing the list frame of farmers and padasekharams. But our survey investigators have faced problems in some ASCs in identifying the beneficiaries due to poor maintenance or non maintenance of activity registers.

	Category of register	No. of ASC
1	Stock Register & Log book	28
2	Stock register only	2
3	Not maintained	5

3.17 Repair & maintenance of machinery

The machinery used for agricultural operations requires proper repair and maintenance even at field and so the essential maintenance should be carried out with the help of working group members posted in agro service centres. In this context, ITI/ ITC holders are included in the service personnel category to cater the need of essential service requirement of agro machinery and equipments at field. While assessing this aspect, it is found that out of the 35 ASCs, 16 have reported that the ITI/ ITC holders in working group of ASC are capable for undertaking the essential maintenance and minor repair of machinery in ASC.

3.18 Involvement of ASC in government schemes

The following are the government schemes in which ASC have been actively involved in agricultural production and mechanisation in agricultural field operations.

- Development of paddy, banana, coconut and vegetable cultivation
- Paddy development schemes

- Coconut development schemes
- Vegetable development schemes
- Banana development schemes
- Spices development schemes
- Watershed development schemes
- VDP, SHM, ATMA, RKVY, LEADS, HADA
- Production and distribution of grow bag under VDP
- RKVY scheme- Coconut scheme, School vegetable garden
- Rain shelter, vegetable nursery, green house
- Trico derma, Water Shed
- Distribution of fertilizer, poly house
- Vegetable cluster, bio control agent
- Spice development, Fish culture
- School garden, distribution of bio pharmacy materials
- Production of tank compost, vermi compost
- Training for coconut climbing

3.19 Beneficiaries registered in ASC

The table given below shows the number of farmers, padasekhara samithies and other beneficiaries registered in all the 35 ASCs for getting various assistance.

SI No	Beneficiary category	Number	Percentage
1	Farmers	4732	69.1
2	Padasekharams	224	3.3
3	Others	1888	27.6
	Total	6844	100.0

3.20 Timely undertaking the requirements

In order to obtain continuous support from the farmers who approached the ASC for their agriculture related requirements, all the service queries received in ASC should be attended with priority and without delay. While studying this aspect, it is found that 18 ASCs could undertake all the requirements in time and the remaining 17 could not entertain all the requirements in time as requested by the beneficiaries.

3.20.1 Reason for not undertaking the requirements in time

The following are the reasons for not undertaking the job requirements in time as reported by the Facilitator of ASCs surveyed.

- Lack of sufficient experienced service personnel since the work nature is not permanent
- Lack of sufficient machinery and the available items are not heavy duty capacity
- Delay in major repair of machinery
- Non availability of machinery like tractor in sufficient number
- Climatic hindrance
- Lack of experience of service personnel in handling the machinery and other job
- Non availability of vehicles in ASC for transportation of machinery and agricultural implements to the work site

9 ASCs have reported that they could not undertake the works in time due to insufficient number of experience service personnel in ASC. 20 ASC informed that they want more service personnel to meet the requirements. 23 ASCs have reported the situation of not getting sufficient number of interested persons to be engaged as working group members in ASC.

3.21 Undertaking works from outside the Block/ Constituency

Even though ASC has been established to cater the need of agricultural operations in their respective CD Block or the Assembly Constituency, it can undertake the work requirements from outside the constituency/ Block subject to the approval of the high power committee. Since there are only 2 to 3 ASCs in each district, they have the flexibility to execute the jobs in their adjacent constituency/ Block without any conflict with the area of jurisdiction of the neighboring ASC. While studying this aspect, it is found that 27 ASC have been undertaking the works from outside their operational area and the remaining 8 are not.

Out of the 27 ASCs undertaking the works from outside the Block/ Constituency, 21 could satisfactorily complete the job in time. That means 60 percent of the ASCs could do the agricultural operations in addition to the works from within the Block.

3.22 Depending ASC for continued assistance

The success of establishment of ASC is to attract maximum number of farmers and other agencies such as Padasekhara Samithies, NGOs etc engaged in crop production by providing quality oriented services at comparatively low labour rate without delay. So if the proportion of number of farmers approached an ASC for further assistance is maximum, such ASC may be considered as a good ASC. On the contrary, the success of an establishment is depended up on

the quality of services provided by it. During the survey, it is found that 61 percent of the clients are further approaching ASC for its agricultural services. This rate is varying from ASC to ASC.

3.23 Quantum of work requirements from outside the constituency

The survey found that 20 percent of the total work requirements received in ASC is from outside the Block/ Constituency.

3.24 Grant for ASC from LSGD

Out of 35 ASCs, only 7 ASCs have received grant from Local Self Govt Institutions for acquiring new machinery and building other infrastructure.

3.25 Grant given to ASC and its expenditure

The following table shows the fund allotted to all the 35 ASCs, which were surveyed, during the year from 2012-13 to 2014-15 as per the details received from the implementing section of the Directorate of Agriculture. (Amount in Rs. Lakhs)

Sl. No.	Items	2012-13		2013-14		2014-15	
		Receipts	Expr	Receipts	Expr	Receipts	Expr
1	Establishment of ASC						
a)	Machinery	800.00	800.00	375.00	283.98	350.00	349.18
b)	Maintenance Fund (Revolving)	96.00	93.00	45.00	38.00	42.00	42.00
c)	Setting up of Office	64.00	64.00	30.00	30.00	28.00	26.36
d)	Operational Expenses	64.00	63.42	30.00	30.00	28.00	28.00
	Sub Total	1024.00	1020.42	480.00	381.98	448.00	445.54
2	Additional Support	0	0	0	0	0	0
a)	Training equipments	0	0	0	0	0	0
b)	Mobile repair service units	0	0	0	0	0	0
c)	infrastructure for seed production, pro tray seed production, other planting materials etc.	0	0	0	0	18.00	16.00
d)	Others	0	0	0	0	20.04	20.04

Sl. No.	Items	2012-13		2013-14		2014-15	
		Receipts	Expr	Receipts	Expr	Receipts	Expr
3	Training programmes	63.60	61.29	0	0	61.70	50.20
4	Software development and connectivity	44.55	41.87	0	0	0	0
a)	Connectivity & computers	0	0	0	0	0	0
b)	Library, kiosk, information supporting	0	0	0	0	0	0
5	Additional Assistance received during the subsequent years after assessing the performance for grading	0	0	0	0	0	0
6	Biopharmacy	0	0	0	0	36.00	33.03
7	Vehicle	0	0	0	0	84.00	76.00
8	Soil testing lab	0	0	0	0	38.00	36.09
	Grand Total	1132.15	1123.58	480.00	381.98	705.74	676.90

Source: TV section, Directorate of Agriculture Development & Farmers' Welfare

Chapter 4

SERVICE PERSONNEL IN ASC

All the works undertaken by the Agro Service Centre is executed through its working group members called service personnel. They are selected only from the specified Block area by a selection process through newspaper advertisement. Five member of the working group will be ITI/ ITC holders and 5 VHSE holders and 5 SSLC. The first group will form repair and service unit and training core. The second group will develop as the diagnostic and clinic field core. The third group may develop as service deliverance core.

Service personnel may be organized in to groups for the discharge of a particular type of work. All the service personnel will hold account in the bank. The service personnel will be given their remuneration on weekly basis through their bank account.

4.1 Service personnel in the working group of ASC

As per the scheme guidelines, all Model ASC can appoint 25 service personnel and the remaining ordinary ASCs can appoint 15 personnel for executing the agricultural operations. As per the details gathered in the survey conducted in 35 Agro Service Centres, the total number of service personnel working in all the 35 ASC is 545, out of this 148 persons have tractor driving license, the essential requirement for executing agriculture works using machinery operated with the help of tractor.

4.1.1 Proportion of Service personnel based on qualification

Survey revealed that 11.4% of service personnel are ITI/ ITC holders, 16% have VHSE/ PLUS 2 qualification and 58% have SSLC. The proportion of personnel below SSLC qualification is only 15 percent.

Qualification	Total	% to total
ITI/ ITC	62	11.4
VHSE/ PLUS 2	87	16.0
SSLC	314	57.6
OTHERS	82	15.0
TOTAL	545	100.0

4.1.2 Qualification wise sex wise service personnel in ASC

While considering the gender of service personnel, it is found that 44 percent of the total personnel are women members and this constitutes 240 numbers. In the VHSE/ Plus 2 qualified

group of service personnel, the women members have dominance over those of male members. But in ITI/ ITC group, only 5% are women.

Qualification	Male	Female	Total	% of women
ITI/ ITC	59	3	62	4.8
VHSE/ PLUS 2	31	56	87	64.4
SSLC	166	148	314	47.1
OTHERS	49	33	82	40.2
TOTAL	305	240	545	44.0

4.1.3 Qualification wise service personnel within and outside the constituency of ASC

Out of the total of 545 service personnel, 94 percent are from within the constituency and the remaining are selected from outside the constituency/ CD Block in which the ASC is situated. It is seen that 100% of ITI/ ITC qualified personnel are selected/ obtained from within the Block.

Qualification	Total	Within the Assembly/Block	Outside the Assembly/block	% of within the Block
ITI/ ITC	62	62	0	100.0
VHSE/ PLUS 2	87	75	12	86.2
SSLC	314	297	17	94.6
OTHERS	82	76	6	92.7
TOTAL	545	510	35	93.6

4.2 Training given to the service personnel in ASC

A total of 107 numbers of training programmes were arranged for the staff including service personnel engaged in the functioning of ASC (35 numbers established up to 2013-14) by various training agencies including the State Department of Agriculture. And the number of persons trained is 1248.

Sl. No	Name of Agency	No. of Trainings	No. of Trainees
1	Agriculture Engineering wing	32	329
2	ARS, Mannuthy, Thrissur	22	321
3	Krishi Vinjan Kendra	5	70
4	FTC	8	73
5	Agricultural University	7	74
6	Agricultural College	2	15
7	Mankombu Rice Research centre	1	15

Sl. No	Name of Agency	No. of Trainings	No. of Trainees
8	RATTC	12	148
9	Agriculture Department	9	113
10	ATMA	3	33
11	Others (RARS, RTC etc)	6	57
	TOTAL	107	1248

4.3 Work order given to Service personnel

For the effective use of labour force in ASC and to provide works to all the members, the job requirements must be prioritized and has to be distributed on rotation basis. The survey found that in 24 ASCs, the work order to service personnel is given on rotation basis of the service requirements.

4.4 Dismissed or resigned service personnel

During the period from the establishment of ASC and up to the date of conduct of survey, a total of 25 working group members were dismissed from service and 259 personnel were quit their job due to various reasons. The rate of dismissal is nearly 5% and that of resignation is 48%. The survey also found that out of the resigned 259 personnel, 131 have tractor driving license, which is about 50%.

4.4.1 Reason for dismissal or resignation of working group members

On enquiring about the cause of dismissal or quitting from service of the working group personnel, found the following as reasons.

Reasons for resignation or quitting the job

- For obtaining higher job
- For higher studies
- Lack of attractive salary
- Lack of interest in continuing the job

Reason for dismissal from service

- Bad behaviour
- Belonging to outside the Block
- Not interested in working based of the rules of ASC
- Not attending the job regularly

4.5 Insurance taken for service personnel

Since the working group members are engaged in the operation of agro machinery, there may be situations of getting injured and meeting accidents at the work site or during the course of engaging with them. They are also bound to do the works such as coconut climbing, application of pesticides etc. So, in order to protect their life from such accident, accidental insurance coverage has to be made available to all the service personnel. The survey revealed that out of the 35 ASCs, 10 ASCs have taken accidental insurance policies for their service personnel.

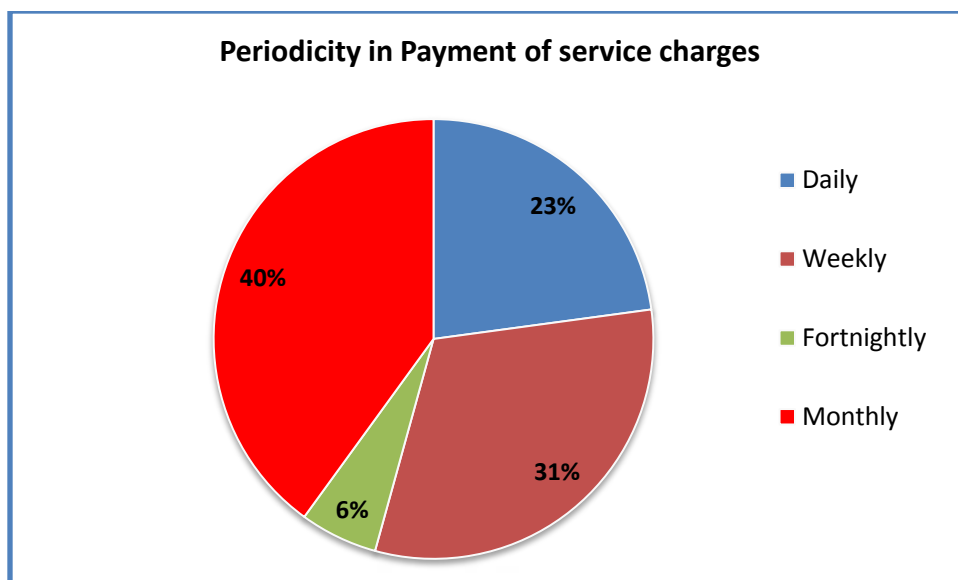
4.6 Distribution of service charges

According to the scheme guidelines, all the service personnel must have bank account and their remuneration has to be paid through their bank accounts. But the survey found that only 20 ASCs have distributed the service charges to the working group members through bank account and the remaining by cash.

4.7 Periodicity in distribution of service charges to working group

The working instruction of the scheme encourages the weekly payment of remuneration to the working group members. But in actual, the periodicity of distribution of remuneration is seen as daily, weekly, fortnightly and monthly. Only 31% of the total ASCs surveyed is paying remuneration on weekly basis and 40% on monthly basis. The details are as follows.

Sl No	Period	Number of ASC
1	Daily	8
2	Weekly	11
3	Fortnightly	2
4	Monthly	14



4.8 Distribution of bonus/ dividend to working group

In order to attract the work force of ASC in their present job, they may be provided with bonus or allowances at any suitable occasion/ occasions annually. This may also help to prevent from quitting the job due to unwillingness. The survey found that out of 35 ASCs, only 14 numbers have issued bonus/ dividend/ festival allowance to its working group members. The criteria adopted for issue of bonus/ allowance is as follows.

- Based on monthly attendance
- Based on work
- To all members, like festival allowance in Onam occasion etc.

Chapter 5

MECHANISATION

5.1 Availability of machinery in ASC

Out of the total grant of Rs.19.50 crores provided for the establishment of the 35 Agro Service Centres all over Kerala in selected Blocks during the year 2012-13, 11.2 crores were earmarked for purchase of machinery including its maintenance and operational expenses.

The data collected from ASCs revealed that machinery amounting a total of Rs.8.74 crores are available in the ASCs established during the year 2012-13. Out of this, 7.29 crores of items are power operated machinery, 1.04 crores of items are power driven equipments and the remaining 0.40 crores of items are hand operated machines. The details are given below.

SI No	Name of machinery	No.	Amount (in Rs.)
1	Power operated machines	657	72977183
2	Power driven equipments	173	10442385
3	Hand operated machines	457	4008929
	Grand Total	1287	87428497

5.1.1 Power operated machinery

The list of power operated machinery, number of machinery and its purchase value in all the 35 ASCs together are given below. (Amount in Rs.)

Code	Name of machinery	No.	Amount
1	Tractor	60	35805499
2	Power tiller	52	8089593
3	Power reaper	25	1992934
4	Garden tiller	55	3096721
5	Transplanter	51	8269925
6	Combined harvester	0	0
7	Harvester	0	0
8	Thrasher	15	646301
9	Thrasher with winnower	13	1446655
10	Winnower	8	236723
11	Brush cutter	146	3360255
12	Pump set	39	1212648
13	Power sprayer	97	1100953

Code	Name of machinery	No.	Amount
14	Lawn mover	2	22000
15	Chain saw/ power saw	37	1262003
16	Power washer	12	153979
17	Generator	1	166099
18	Mist blower/ duster	10	159000
19	Two wheeler	0	0
20	Three wheeler	0	0
21	Four wheeler	10	3669398
22	JCB	0	0
23	Other power operated machines	24	2286497
	Sub Total	657	72977183

5.1.2 Availability of power driven equipments in ASC

The details of power driven equipments available in all the 35 ASCs are as follows.

Code	Name of equipment	No.	Amount
24	Trailer	12	1423375
25	Rotovator	27	2536101
26	Cultivator	22	617523
27	Cage wheel	35	597114
28	Leveler	8	45925
29	Post hole digger/ auger	18	2454444
30	Ridger	5	98130
31	Bund former	5	186897
32	Disc plough	7	405863
33	Harrow	3	156000
34	Tailskid	4	3919
35	Bailer	6	1638166
36	Other power driven equipments	21	278928
	Total	173	10442385

5.1.3 Availability of hand operated machines

The list of available hand operated machinery in Agro Service Centres is given in the following table.

Code	Name of equipment	No.	Amount
37	Coconut climber	166	415320
38	Knapsack sprayer	47	98900
39	Rocker sprayer	64	370412
40	Backpack sprayer	20	57740
41	Telescopic tree pruner	25	628298
42	Thrusher	5	139000
43	Winnower	2	100000
44	Lawn mover	0	0
45	Jack fruit harvester	2	42300
46	Arecanut harvester	33	104200
47	Pepper dryer	2	46000
48	Coconut dryer	14	427690
49	Post hole digger/ auger	4	885125
50	Seed drill	2	11090
51	Cono weeder	33	120850
52	Tea harvester	0	0
53	Coffee harvester	5	50000
54	Tea pruner	4	161600
55	Other hand operated machinery	29	350404
	Total	457	4008929

5.2 Other Fixed Assets available in ASC

The details of fixed assets other than machinery created in ASCs are given below. Land is available for none of the centres and fixed assets costing a total amount of 35.14 lakhs is currently available in all ASCs altogether. The items such as UPS, computer software etc are included in others category. No kind of fixed assets are available in Uzhavoor ASC in Kottayam district and Vadakkanchery ASC in Thrissur district.

Sl. No	Machinery Name	No.	Amount (in Rs.)
1	Land & Building	-	Nil
2	Computer	33	1496627
3	Printer	17	77476
4	Fax machine	0	0
5	Scanner	3	6800
6	Photostat	10	419067
7	Furniture	369	1000362
8	Others	61	514234
	Total	493	3514566

5.3 List of Additional machinery requested by ASC

The list showing the number of additional machinery requested by ASC and its amount is given below. According to the local need of ASCs, machinery costing a total of 43.80 lakhs is additionally requested by all the 35 ASCs together.

Machinery Code	Name of machinery	No.	Amount
1	Tractor	16	4080000
2	Power tiller	8	1715000
3	Power reaper	4	3130000
4	Garden tiller	3	311236
5	Transplanter	8	3364000
6	Combined harvester	7	4840000
7	Harvester	3	2300000
8	Thresher	2	785000
11	Brush cutter	19	498250
12	Pump set	7	150000
14	Lawn mover	2	50000
15	Chain saw/ power saw	13	376000
16	Power washer	2	35000
17	Generator	1	60000
19	Two wheeler	1	60000
20	Three wheeler	1	175000
21	Four wheeler	7	3830000
22	JCB, Hittachi	11	9665000
23	Other power operated machines	5	2003000
	Power driven equipments		
25	Rotovator	2	240000
26	Cultivator	1	20000
27	Cage wheel	1	19000
28	Leveler	1	30000
29	Post hole digger/ auger	5	187000
31	Bund former	1	125000
35	Bailer	10	1950000
36	Other power driven equipments	3	110000
39	Rocker sprayer	7	25000
44	Lawn mover	2	17000
45	Jack fruit harvester	1	1500
51	Cono weeder	2	40000
55	Other hand operated machinery	8	474600
56	Welding Machine	5	55000
57	Drilling Machine	1	5000
58	Agricultural implements		3080000
	Total	175	43806586

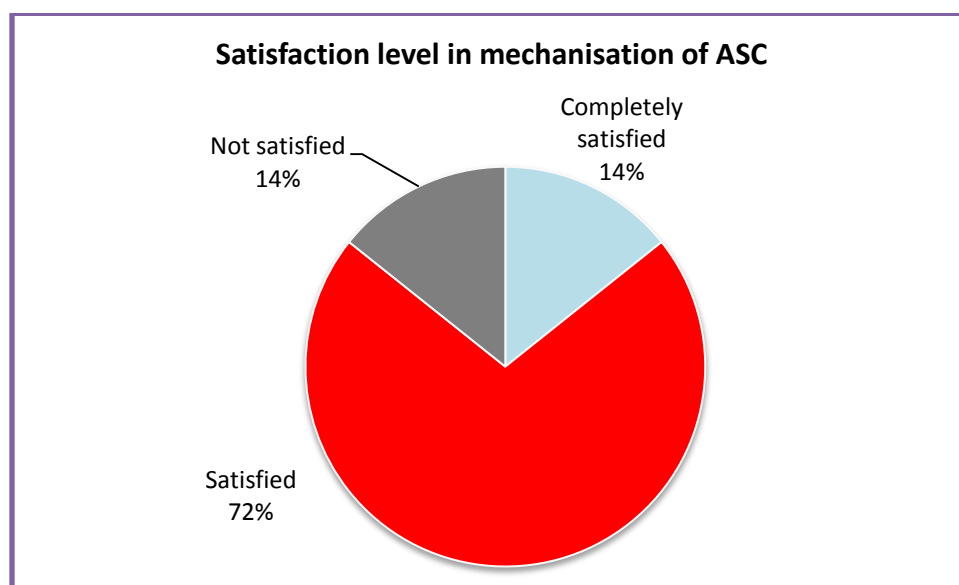
5.4 Renting of machinery in ASC

ASCs have the choice of rent out their agro machinery to other agencies during off seasons to increase their income, and the Management Committee can decide this. Our survey revealed that 17 ASCs are giving their machinery on rent to other agencies for agricultural operations.

5.5 Work satisfaction in mechanisation

To assess the performance of ASC in mechanisation of agricultural operations in their service areas, the work satisfaction of ASC has been collected from its Facilitators. The grading obtained is as follows.

Sl No	Grading category	Number of ASC
1	Completely satisfied	5
2	Satisfied	25
3	Not satisfied	5



5.6 Extent of area mechanized

It has been reported by the Facilitators of ASC that on an average 24 percentage of agricultural land under operational area of ASC has been mechanized with the intervention of all ASCs in the State.

5.7 High Power Committee Approved rate for machinery works from ASC

The following table shows the average of the rates approved by the High Power Committee of ASC for application of different machinery and other services provide by ASC. The type of services and the rates are different for different ASC. Here the average of all the 35 ASCs are provided.

Sl. No	Category of work	Unit	ASC rate (in Rs.)
1	Brush cutting	1 Hr	235
2	Tractor	1 Hr	670
3	Cultivator	1 Hr	600
4	Power tiller	1 Hr	398
5	Power sprayer	1 Hr	300
6	Power saw	1 Hr	425
7	Power Reaper	1 Hr	352
8	Cono weeder	1 Day	500
9	Coconut climbing	1 palm	29
10	Pump set	1 Day	800
11	Digger	1 pit	20
12	Garden driller	1 Hr	297
13	Ploughing	1 Hr	650
14	Lawn mover	1 Hr	250
15	Car washer	1 Hr	150
16	Combined Harvester	1 Hr	2250
17	Wheel barrow	1 Day	140
18	Bailer	1 bail	35
19	Rotovator	1 Hr	740
20	Weed cutter	1 Hr	214
21	Transplanter	1 Acre	3789
22	Mini tractor	1 Hr	483
23	Harvester	1 Hr	450
24	Knapsack sprayer	1 Day	81
25	Thresher	1 Hr	400
26	Chain saw	1 Hr	383
27	Rocker sprayer	1 Hr	110
28	Spraying pesticides	1 Day	750
29	Power sprayer	1 Hr	300
30	Post hole digger	1 Hr	600
31	Cage wheel	1 Hr	550
32	Copra drier	1 Day	100

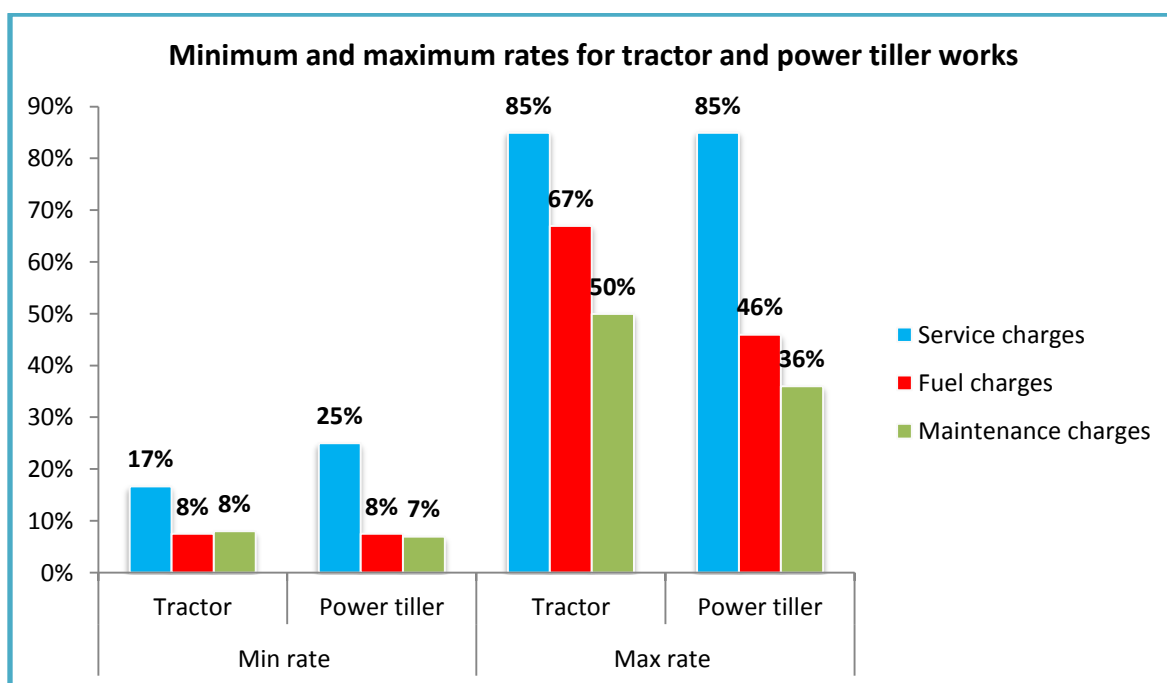
5.7.1 Appropriation of service rates to various heads

The rate fixed for paying service charges to service personnel, fuel charges to machines for power operated machinery and maintenance charges for machinery and equipments by each ASC by apportioning the rates collected from the clients are is given in the following table. The rate is varying for ach ASC. Since all ASCs have not furnished the distribution of service rates to various heads, only for those furnished are mentioned here.

Sl. No	Name of ASC	Category of work	Appropriation to various heads from the ASC rate (percent)		
			Service charges	Fuel charges	Maintenanc e charges
1	Parassala	All works	70%	10%	20%
2	Konni	Tractor	21%	46%	32%
		Power reaper	42%	33%	25%
3	Ranni	Tractor	17%	50%	33%
		Power tiller	38%	31%	31%
4	Chengannur	Tractor	25%	67%	8%
		Power tiller	38%	50%	12%
5	Muthukulam	Tractor	62%	15%	23%
		Power tiller	57%	21%	22%
6	Pallom	Tractor	40%	25%	35%
7	Uzhavoor	Tractor	25%	54%	21%
		Power tiller	38%	37%	25%
8	Idukki	Tractor	85%	7.5%	7.5%
		Power tiller	85%	7.5%	7.5%
9	Alangadu	Tractor	25%	42%	33%
		Power tiller	25%	50%	25%
10	Pambakkuda	Tractor	21%	50%	29%
11	Iringalakkuda	Tractor	70%	15%	15%
		Power tiller	70%	15%	15%
12	Pazhayannur	Tractor	42%	35%	23%
		All other works	75%	0%	25%
13	Wadakkanchery	Tractor	27%	43%	30%
		Power tiller	51%	19%	30%
14	Koduvally	Tractor	23%	46%	31%
		Power tiller	33%	39%	28%
15	Melady	Tractor	33%	17%	50%
		Power tiller	43%	26%	31%
16	Kunnummel	Tractor	38%	31%	31%
17	Sulthan Bethery	Harvester	50%	33%	17%

Sl. No	Name of ASC	Category of work	Appropriation to various heads from the ASC rate (percent)		
			Service charges	Fuel charges	Maintenance charges
18	Irikkur	Tractor	28%	46%	26%
		Power tiller	60%	33%	7%
19	Koothuparambu	Tractor	31%	46%	23%
20	Payyannur	Tractor	27%	50%	23%
		Power tiller	50%	20%	30%
21	Manjeswar	Tractor	52%	39%	9%
		Power tiller	63%	25%	12%
		Transplanter	79%	7%	14%
22	Neeleswaram	Tractor	22%	39%	39%
		Power tiller	43%	21%	36%

The lowest and highest proportion fixed for tractor and power tiller works for service charges to service personnel, fuel charges and maintenance charges are mentioned in the bar chart depicted below. The highest rate fixed for giving service charges to working group members is 85 percent of the service charges collected from the beneficiaries, while the lowest rate is 17 percent by some ASCs. Some ASCs are charging 50 percent of the service cost for maintenance of machinery, while some others taking only 8 percent.

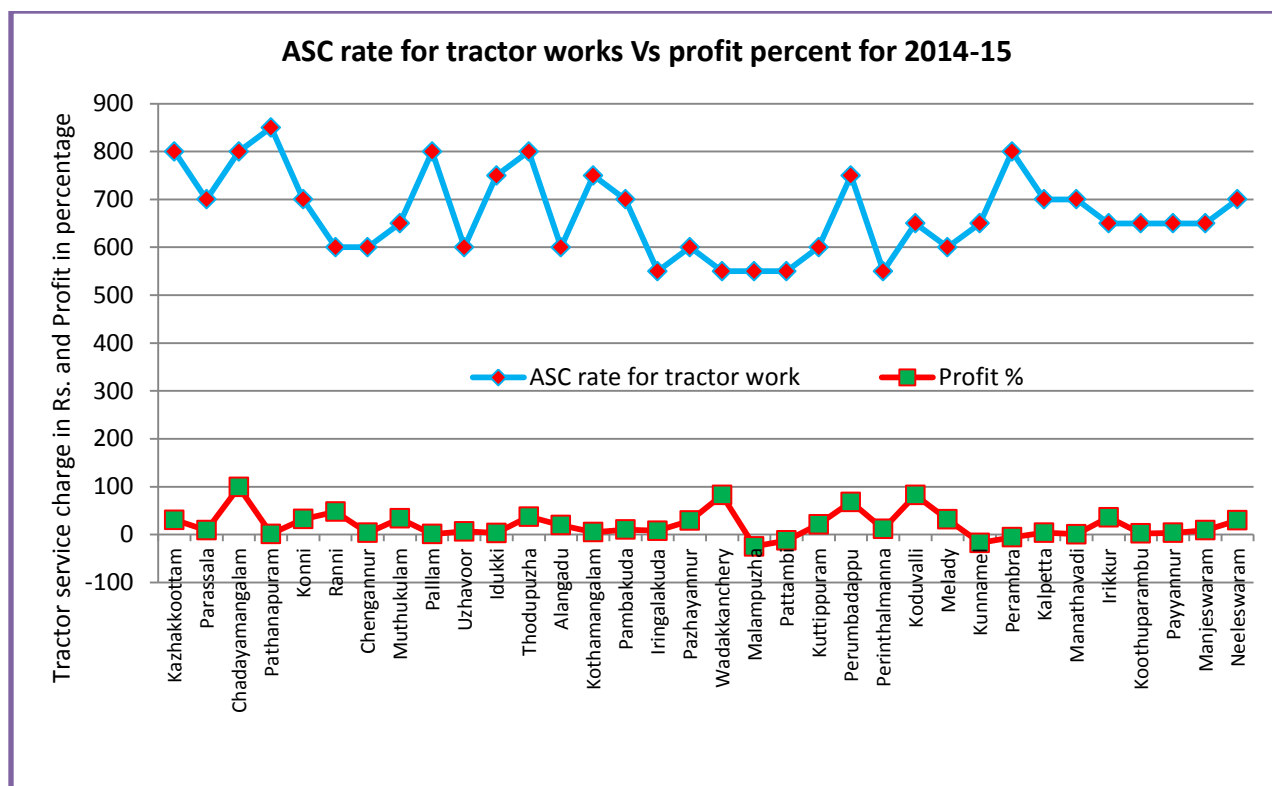


5.7.2 Variation in HPC rates

While examining rates of HPC provided by each ASC, it is found that there is huge difference between the lowest and highest rates for each activity. The unit is also varying from ASC to ASC. In some Blocks, machine rate is fixed for 1 hour, while in some other places; it is for 1 day or 1 acre. The lowest and highest rates of some activities are given below as example. The corresponding ASC Block name is also mentioned under each rate.

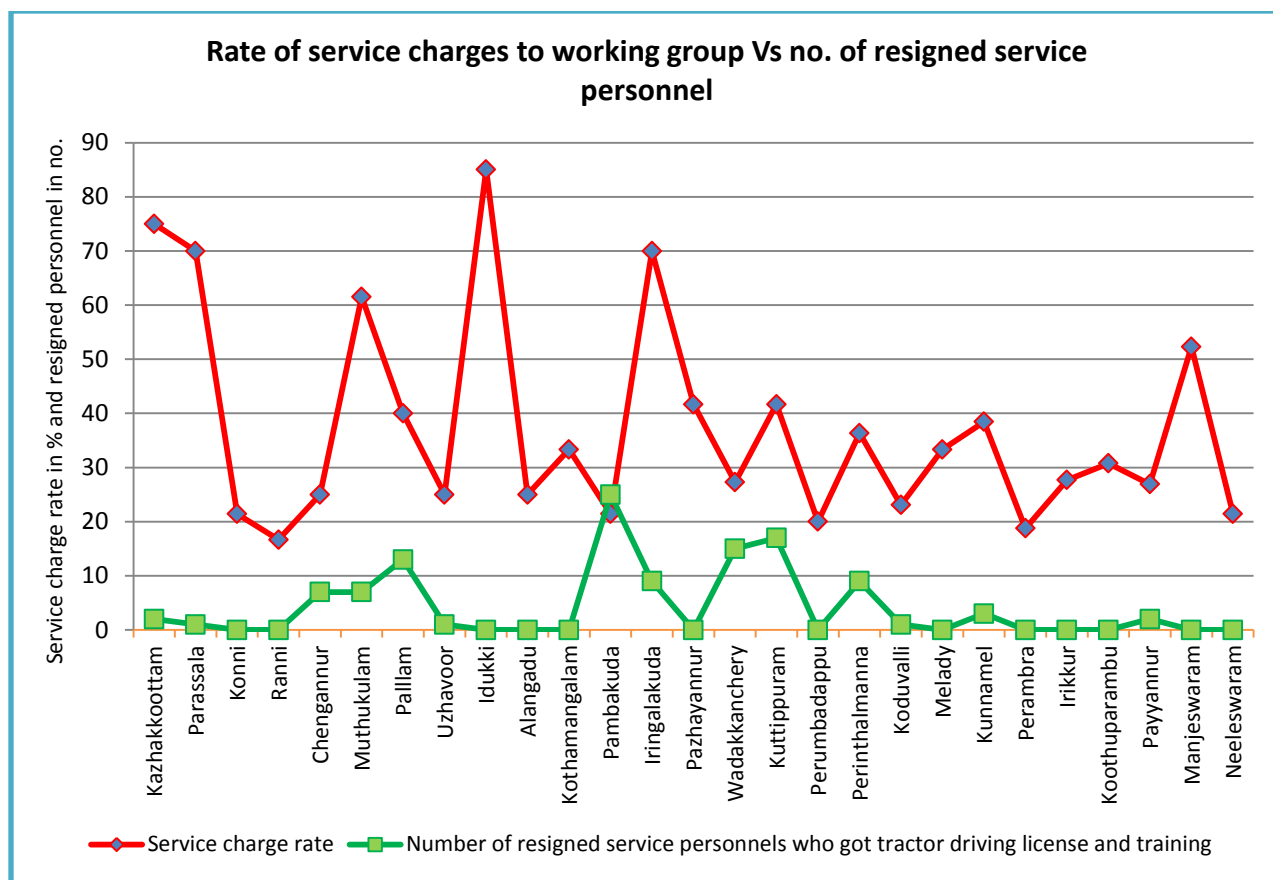
SI No	Activity	Unit	Lowest rate	Highest rate
1	Brush cutting	1 Hr	100 Neeleswaram	300 Kazhakootam (Pothencode), Chengannur & Muthukulam
2	Tractor	1 Hr	550 Irinjalakkuda, Wadakkanchery, Malampuzha, Pattambi & Perinthalmanna	850 Pathanapuram
3	Coconut climbing	1 palm	20 Perinthalmanna, Payyannur & Perumbadappu	40 Chengannur, Ranni & Pallom
4	Power tiller	1 Hr	300 Parassala, Irikkur & Manjeswaram	700 Muthukulam
5	Power reaper	1 Hr	275 Koduvally	500 Neelwswaram
6	Rotovator	1 Hr	650 Irinjalakkuda	850 Kuttipuram
7	Transplanter	1 Acre	3200 Printhalmanna	5000 Perambra
8	Thresher	1 Hr	300 Parassala	500 Perambra

If an ASC is fixing higher rate, it will get more income from this, consequently depending upon the rate of remuneration to service personnel, profit rate may be higher. Here we examine the relationship between the two parameters. The following chart shows the rate of tractor work fixed by each ASC and its profit percentage for the year 2014-15 for comparing the proportionality of the two.



From the above chart, it is seen that, for majority of the ASCs, which are charging higher rates, the profit rate is high. Also, some ASCs which are charging comparatively less amount for tractor work are running on loss.

While considering a particular item, tractor work, the rate of service charges given to service personnel is varying from 17% to 85% of the service rate fixed by High Power Committee for each ASC. That means, if the rate is higher the service personnel will get more remuneration. Which shows that the service personnel in ASCs who are getting higher rate are more satisfied than those getting less rate. This will motivate the working group members to continue in the present work in ASC as agricultural service personnel. Here we are analyzing the number of service personnel quit from the service in ASC during the previous years with the rate fixed by the High Power Committee for paying service charges to service personnel. The following chart depicts this aspect.



Form the above chart we can see that there is a small relation between the above two parameters. That means, the number of service personnel who got tractor driving license quit from service is increased with the decrease in service rate given to service personnel.

Chapter 6

INFLUENCE OF ASC IN AGRICULTURE DEVELOPMENT

The development of agriculture in the operational area covering the Panchayats in the Block in which the ASC is situated is analysed in this chapter. The data collected through field surveys both from the Facilitator ASC and from the randomly selected beneficiaries are considered to for doing this inference.

6.1 Area cultivated under various crops through the intervention of ASC

The following table shows the crop wise estimated agricultural area cultivated through the intervention of all the 35 ASCs surveyed. Only the major crops such as paddy, banana & plantain, tapioca, coconut and vegetables are considered for assessing this aspect. The remaining crops are included in the others category. (Area in Hectares)

Sl No	Crop	Farmers	Padasekharams	Total
1	Paddy	3681	4236	7917
2	Banana & Plantain	1361	343	1704
3	Tapioca	369	63	432
4	Coconut	1400	287	1687
5	Vegetables	510	505	1015
6	Other crops	2172	1280	3452
	Grand Total	9493	6714	16207
	Net Area	8504	5628	14132

An extent of 1670 hectares of fallow land was converted in to agricultural area with the intervention of ASC.

6.2 Formation of Karshika Karma Sena in Panchayats in operational area of ASC

Panchayats under 28 ASCs have formed Karshika Karma Sena for agricultural operations in their respective service areas. Out of this 28 ASCs, 13 are of the opinion that the Karma Sena is helpful to undertake the work requirements in ASC also.

6.3 Areas suitable for joint working with Karshika Karma Sena

The following are the agricultural activities currently undertaken both by the ASC and Karshika Karma Sena wherever both are functioning as reported by the Facilitators of ASCs.

- Cultivation of banana, vegetables and mushroom
- Grow bag distribution, Land preparation, seedling preparation
- Transplanting, Coconut climbing, paddy cultivation, paddy harvesting
- Weed cutting, Machines such as tractor, bailor etc operated works,
- Nursery Production, fish culture

Agricultural operations suitable for joint operation of ASC with Karshika Karma Sena could not be identified during the survey.

6.4 Modern agricultural practices implemented

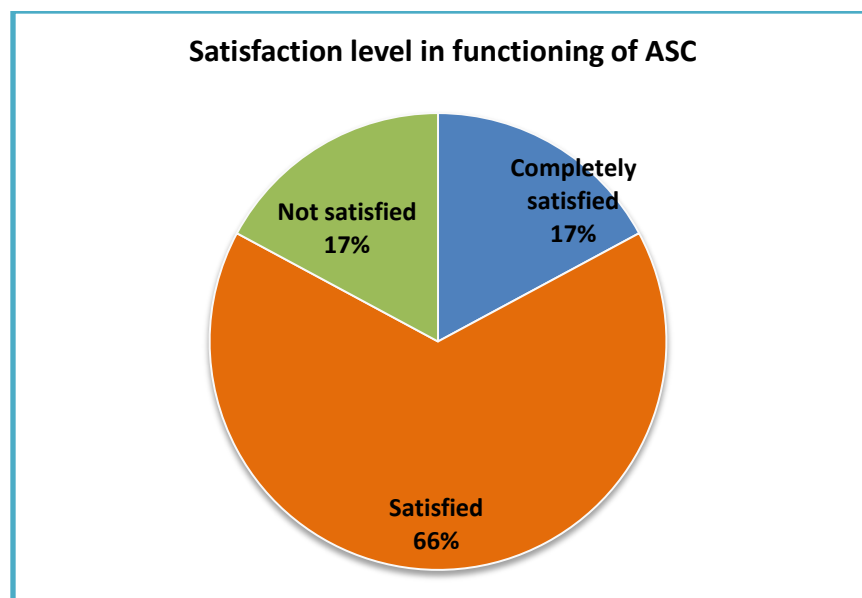
The following are the modern scientific agricultural practices implemented in the operational area of ASC with its intervention.

- Mat nursery preparation and mechanised transplanting
- Mechanised coconut harvesting
- Propagation of tissue culture plantlets
- Terrace grow bag vegetable cultivation
- Pot tray seedling production, HYV seedling preparation
- Spraying pesticides using power sprayer
- Rain shelter, micro irrigation, bio farming
- Promotion of mulching, bio pesticide, bio fertilizer etc.

6.5 Work satisfaction level in overall function of ASC

The work satisfaction is one of the important parameters from which we can grade an establishment on its functions and its intervention in satisfying its objectives. For assessing the overall performance of ASC, we have collected the opinion of the Facilitator of all the 35 ASCs surveyed. Only 6 out of 35 ASCs are completely satisfied in its work, 66 percent are satisfied (23 numbers) and the remaining 6 numbers are not satisfied.

Sl No	Grading category	Number of ASC
1	Completely satisfied	6
2	Satisfied	23
3	Not satisfied	6



6.6 Category of works for which beneficiaries approached ASC

An ASC has to be equipped to undertake all kinds of agricultural operations in addition to machinery operations. During the field survey conducted among sample farmers who got assistance from ASC, we found that they have approached the ASC for the following activities.

- Paddy cultivation- land preparation, transplanting, PPC operations, harvesting, winnowing etc.
- Tractor driven works
- Coconut climbing
- Mechanisation, Weed cutting, works using pump set, power tiller, garden tiller etc.
- Paddy cultivation- land preparation, transplanting, PPC operations, harvesting, winnowing etc.
- Rain shelter, grow bag cultivation, polyhouse cleaning

The sample padasekhara samithies approached the ASC for the following activities

- Land preparation, transplanting, PPC operations, weeding, harvesting, winnowing etc.
- Coconut climbing
- Nursery planting
- Other agricultural works, cleaning, weed cutting

6.7 Promptness in getting assistance from ASC

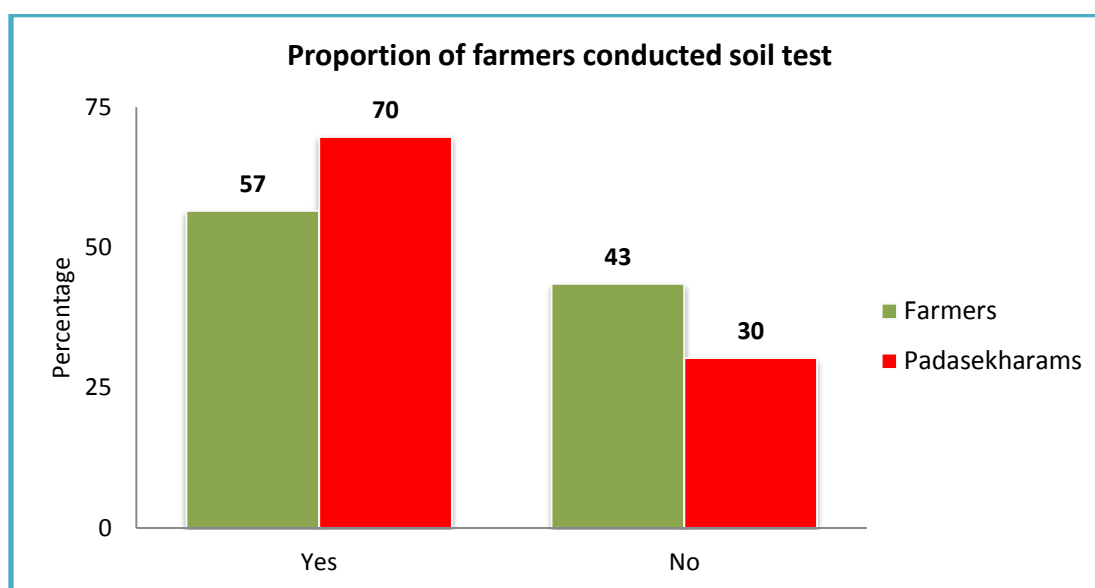
Out of 223 farmers surveyed, 193 numbers opined that they got assistance from ASC in time, that is 86 percent. While in the case of padasekharams, around 78 percent received assistance in time (that is 85 numbers out of the total of 109 padasekharams surveyed).

The failure of getting assistance in time, as reported by the beneficiary farmers and padasekharams surveyed, is that lacking availability of machines for the required agricultural operations. This may be due to purely non availability of such machines in ASC or the non availability of such machines on that particular day due to overload of requirements.

6.8 Soil testing before agricultural operations

For improved production and productivity in cropping, effective application of soil ameliorant and soil nutrients is essential. This may be ensured through soil testing before sowing or starting a new crop. Agro Service Centres can help the farmers in soil testing by creating awareness on its importance. They can also start soil testing facility under their ASC. While collecting the feedback of farmers on the rate of conduct of soil test before cropping, we obtained the following data.

Sl No	Category of beneficiary	Total surveyed	Whether soil tested before cropping		Percentage	
			Yes	No	Yes	No
1	Farmers	223	126	97	56.5	43.5
2	Padasekharams	109	76	33	69.7	30.3
	Total	332	202	130	60.8	39.2

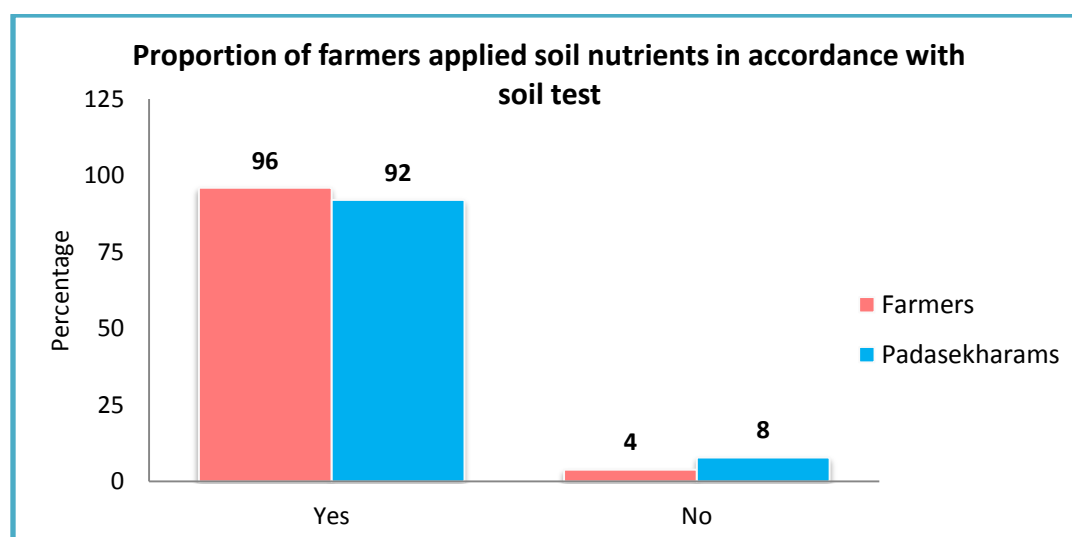


The survey revealed that only 57% of the farmers and 70% of the padasekharams are conducting soil test before starting a new crop.

6.9 Application of soil nutrients in accordance with soil test

Out of the 202 farmers who conducted soil test before agricultural operations, 191 are applying soil nutrients in accordance with the result of soil test, which is about 95 percent.

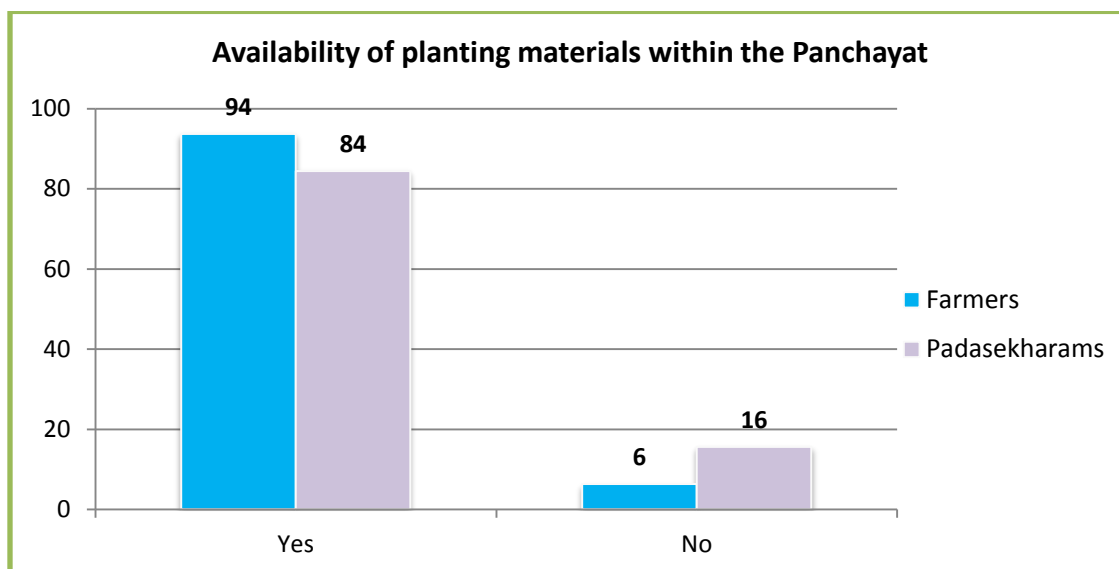
Sl No	Category of beneficiary	Total surveyed	Whether fertilizer applied in accordance with soil test?		Percentage	
			Yes	No	Yes	No
1	Farmers	126	121	5	96.0	4.0
2	Padasekharams	76	70	6	92.1	7.9
	Total	202	191	11	94.6	5.4



6.10 Availability of planting materials and inputs within the Panchayat

Agro Service Centres can start nursery units for the enhanced production of hybrid seedlings and to ensure its availability within in operational area. They can also give assistance in making available the seeds and planting materials at their Blocks and Panchayats. While studying this aspect through the beneficiaries of ASC surveyed, the data obtained is as follows. 91 percent of sample beneficiaries are of the opinion that planting materials are available within their Local Boby.

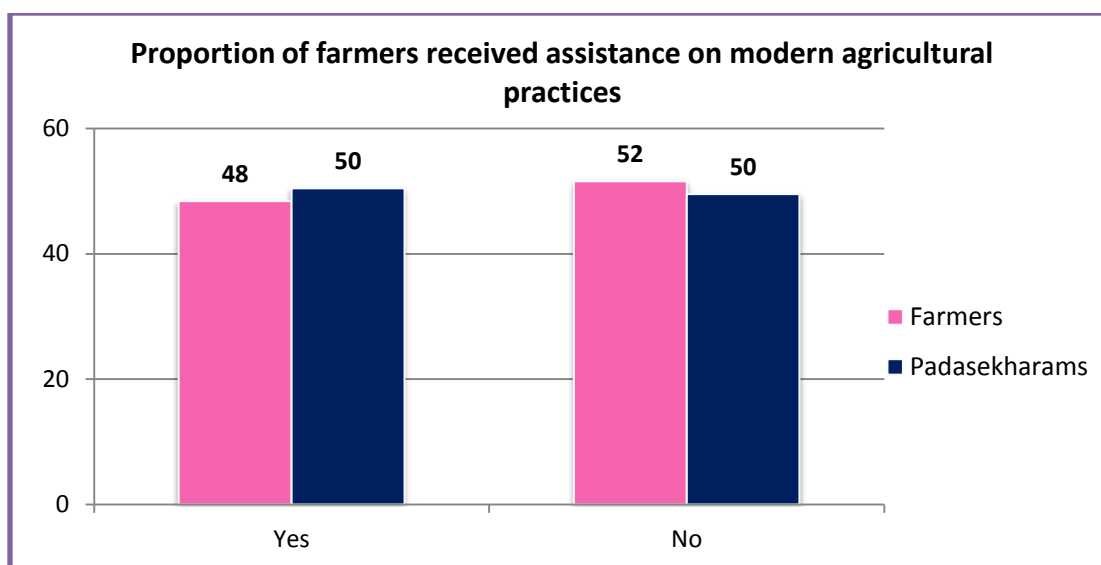
Sl No	Category of beneficiary	Total surveyed	Availability of planting materials and inputs within the Panchayat?		Percentage	
			Yes	No	Yes	No
1	Farmers	223	209	14	93.7	6.3
2	Padasekharams	109	92	17	84.4	15.6
	Total	332	301	31	90.7	9.3



6.11 Receiving assistance on modern agricultural practices from ASC

49 percent of the sample beneficiaries surveyed opined that they got assistance on modern scientific agriculture practices from the Agro Service Centres for enhancing production and to reduce the cost of cultivation. The details are given in the following table.

Sl No	Category of beneficiary	Total surveyed	Receiving information on modern agri practices from ASC		Percentage	
			Yes	No	Yes	No
1	Farmers	223	108	115	48.4	51.6
2	Padasekharams	109	55	54	50.5	49.5
	Total	332	163	169	49.1	50.9



6.12 New technologies adopted based on the assistance from ASC

The following are the new technologies practiced by farmers and padasekharams after getting assistance from ASC for their agricultural operations.

Farmers

1. Use of Brush cutter
2. Terrace farming
3. Rain shelter
4. Grow bag cultivation
5. Organic Vegetable cultivation
6. System of Rice Intensification
7. Method of Pesticide application
8. Mechanization from planting to harvest
9. Spraying pesticide in coconut trees

Padasekharams

1. System of Rice Intensification
2. Double Sucker planting in banana
3. Pulses cultivation in summer
4. Planting of seedlings with transplanter
5. Organic farming
6. Judicious methods of fertilizer application and PPC operations
7. Cultivation of tissue culture banana etc.

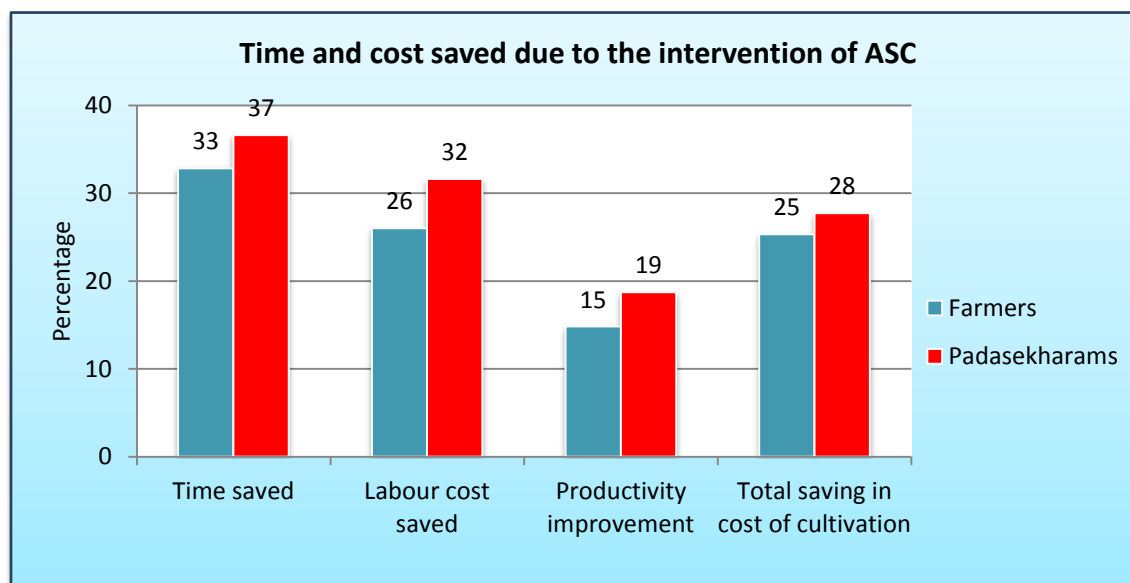
6.13 Advantages of using machinery and agricultural implements in farming

Since the Agro Service centres are established with the objective of improving the farm mechanisation, ATMA based extension, credit support, weather advisory services, soil testing support, marketing support etc. and thus to improve the production and productivity of crops and to motivate the farmers for continuing in the profession of agriculture, the rate of change in time spent, the benefit of saving time and cost of cultivation of various crops and productivity of crops cultivated by the sample beneficiaries were studied during the field survey.

The survey revealed that on the average about 26 percent of total cost of crop cultivation and other agricultural activities has saved as expressed by the sample beneficiaries. Time saving is 35 percent, labour cost saving is 29 percent and the productivity improvement is 17 percent.

SI No	Name of ASC	Farmers	Padasekharams	Total
1	Time saved	32.8	36.6	34.7
2	Labour cost saved	26.0	31.6	28.8
3	Productivity improvement	14.8	18.7	16.7
4	Total saving in cost of cultivation	25.3	27.7	26.5

The following chart shows the percentage improvement in time and cost due to application of machinery and productivity improvement due to right application of fertilizer, soil testing etc also with the intervention of ASC.



6.14 Other activities by Agro Service Centres

- Filling of grow bags, works of RKVY.
- Agro Service Centre vehicle is used for meeting farmers requirements on rent basis.
- Seedlings are produced in rain shelters and distributed.
- Free consultancy services on latest agricultural operations
- Vegetable cultivation (round the year) in poly houses.
- Vermicompost units (permanent).
- Imparting training on `modern agricultural practices.
- Production of drumstick, Curry leaf seedlings under HADA.
- Forming labour banks in each Panchayath.
- Service and repair of farmer's agricultural implements in each Krishi Bhavan area on fixed days.
- Preparation of biofertilizer like Trichoderma.
- Sowing of paddy seed.
- Conducting training classes for members of clubs, Kudumbasree, school students.
- Making available seeds and seedlings.

6.15 Productivity improvement

For assessing the area, production and productivity improvement of major crops mentioned in this report in the operational area of ASCs established across the State, the agriculture statistics published by the Department of Economics & Statistics is used. Since the ASCs are sanctioned during the year 2012-13, the agricultural development is expected to be happened in 2013-14 and 2014-15. So the latest available agricultural statistics of 2014-15 year is compared with those of 2012-13 and is taken for analyzing the area and production improvement and productivity increase.

Here, to analyze the inter Block variation in area, production and productivity of two major crops, viz paddy and banana, Thiruvananthapuram and Thrissur districts are chosen and the data pertaining to these Blocks are as follows.

6.15.1 Productivity increase of paddy in Thiruvananthapuram district

While comparing the productivity increase of paddy in all the 11 Blocks in Thiruvananthapuram district, we can see growth in all the cases of area, production and productivity in two Blocks Parassala and Kazhakkuttam (Pothencode), where two ASCs are functioning. The rate of increase in productivity of rice in Parassala Block is 4.4% and that in Pothencode Block is 13.1%. The following table shows the details of data pertaining to paddy in all Blocks in Thiruvananthapuram district.

l. No	Name of Block	Area (Ha)			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% of increase
1	Athiyanthoor	0.3	0.1	-76.0	0.6	0.1	-90	2452	1000	-59.2
2	Chirayinkeezhu	276	213	-23	704	554	-21	2547	2605	2.3
3	Kilimanoor	575	764	33	1037	2081	101	1805	2723	50.9
4	Nedumangad	13	8	-38	36	20	-44	2821	2525	-10.5
5	Nemom	18	26	44	45	48	8	2446	1838	-24.8
6	Parassala	286	329	15	701	843	20	2451	2559	4.4
7	Perumkadavila	44	31	-30	121	83	-31	2732	2696	-1.3
8	Pothencode	61	111	81	133	273	105	2184	2471	13.1
9	Vamanapuram	34	68	99	91	185	104	2662	2722	2.2
10	Varkala	457	470	3	1109	1290	16	2428	2743	13.0
11	Vellanad	9	16	85	13	39	213	1467	2492	69.9

Source: Department of Economics & Statistics, Kerala

6.15.2 Productivity increase of paddy in Thrissur district

For assessing the productivity increase in the middle of Kerala and for Block wise comparison, Thrissur district is chosen, and the data is shown in the following table. In Thrissur district, there are three ASCs, they are in Irinjalakkuda, Pazhayannur and Wadakkanchery Blocks. Here, Pazhayannur and Wadakkanchery are paddy potential areas and a productivity enhancement of 64% and 20.7% respectively is seen. But in Irinjalakkuda Block, even though the area and production of paddy has increased, the productivity shows a decreasing rate of -11.3%.

Sl. No	Name of Block	Area (Ha)			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% of increase
1	Chavakkad	186	529	184	636	1980	211	3409	3740	9.7
2	Mullassery	2102	1604	-24	7801	6706	-14	3711	4181	12.7
3	Thalikulam	2.6	23	769	1.8	0.37	-79	674	16	-97.6
4	Chalakudy	225	264	17	509	525	3	2262	1991	-12.0
5	Irinjalakuda	536	927	73	1677	2571	53	3127	2772	-11.3
6	Kodakara	1010	1314	30	2588	3386	31	2561	2576	0.6
7	Mala	743	793	7	1707	2153	26	2297	2714	18.2
8	Vellangallur	505	752	49	1313	1922	46	2601	2558	-1.7
9	Chowannur	2288	4134	81	6680	9111	36	2920	2204	-24.5
10	Pazhayannur	4349	2874	-34	10059	10893	8	2313	3790	63.9
11	Wadakkanchery	2224	2058	-7	5496	6138	12	2471	2983	20.7
12	Anthikad	2447	2669	9	9232	9612	4	3773	3602	-4.5
13	Cherpu	1470	1294	-12	5070	4561	-10	3450	3525	2.2
14	Ollukara	254	304	19	668	827	24	2627	2723	3.7
15	Puzhaka	2838	2681	-6	9183	9735	6	3236	3631	12.2
16	Mathilakam	39	18	-53	48	24	-50	1229	1325	7.8

Source: Department of Economics & Statistics, Kerala

6.15.3 Productivity increase of banana in Thiruvananthapuram district

The area, production and productivity of banana in Thiruvananthapuram district during the year 2012-13 and 2014-15 and its increase during the period are as follows. Parassala Block shows an area increase of 71% and productivity increase of 6.6%. While in the case of Pothencode Block, the area and productivity increase are respectively 7% and 27%.

Sl. No	Name of Block	Area (Ha)			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% of increase
1	Athiyanloor	164	133	-19	1495	1051	-30	9137	7899	-13.5
2	Chirayinkeezhu	83	60	-27	368	367	0	4446	6095	37.1
3	Kilimanoor	72	98	37	338	576	70	4732	5861	23.8
4	Nedumangad	120	144	20	755	870	15	6308	6061	-3.9
5	Nemom	555	453	-18	4978	3308	-34	8962	7305	-18.5
6	Parassala	278	475	71	1894	3453	82	6821	7269	6.6
7	Perumkadavila	1599	413	-74	11015	2773	-75	6888	6719	-2.5
8	Pothencode	40	42	7	218	292	34	5490	6898	25.7
9	Vamanapuram	175	187	7	1135	113	-90	6481	604	-90.7
10	Varkala	15	18	27	87	1112	1184	5967	60435	912.8
11	Vellanad	345	188	-45	1124	1265	13	3258	6719	106.3

6.15.4 Productivity improvement of banana in Thrissur district

While comparing the area and productivity of Blocks in Thrissur district, Wadakkanchery Block shows an increase of 66% and 15% respectively. But in the case of other two Blocks Irinjakkuda and Pazhayannur, all the three parameters are showing a decreasing trend.

Sl. No	Name of Block	Area (Ha)			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% of increase
1	Chavakkad	0.02	5	25650	0.3	24	7795	15200	4660	-69.3
2	Mullassery	6	11	73	38	59	54	6283	5603	-10.8
3	Thalikulam	1	1	107	6	9	41	8890	6040	-32.1
4	Chalakudy	439	429	-2	4384	3154	-28	9980	7349	-26.4
5	Irinjalakuda	45	21	-52	482	177	-63	10812	8337	-22.9
6	Kodakara	514	443	-14	5929	3466	-42	11526	7816	-32.2
7	Mala	179	230	28	1854	2464	33	10340	10703	3.5
8	Vellangallur	54	67	25	539	503	-7	10043	7475	-25.6
9	Chowannur	49	32	-35	396	269	-32	8106	8467	4.5
10	Pazhayannur	160	153	-4	1510	1284	-15	9467	8365	-11.6
11	Wadakkanchery	115	191	66	902	1718	90	7831	9009	15.0
12	Anthikad	11	14	32	96	98	2	8980	6950	-22.6
13	Cherpu	29	36	25	316	293	-7	10985	8137	-25.9
14	Ollukara	332	250	-25	2649	2197	-17	7968	8780	10.2
15	Puzhaka	152	277	82	1076	2090	94	7059	7557	7.1
16	Mathilakam	1	2	121	6	15	151	5868	6667	13.6

The above data tables show that we cannot arrive at a general conclusion that the area increase and productivity increase are due to the influence of Agro Service Centres only, because the both increase and decrease are seen in the rest of the Blocks in these two districts.

For area, production and productivity figures of major crops such as paddy, banana, plantain, coconut, tapioca, pepper and ginger in all the 35 Blocks in which ASCs are established, Annexure VIII to XIV may be referred.

Chapter 7

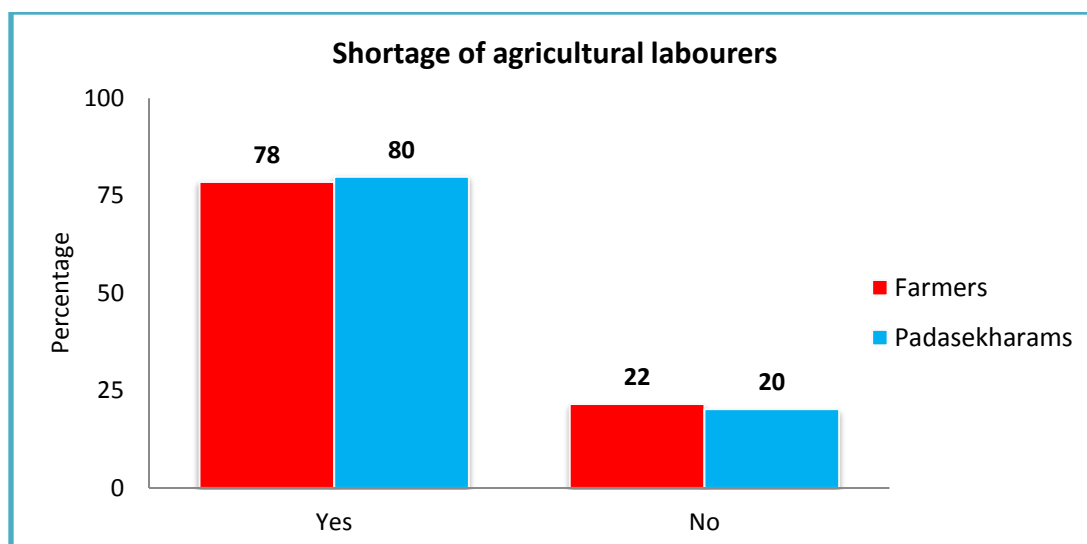
PROBLEMS AND CHALLENGES

7.1 Shortage of agricultural labourers

Shortage of agricultural labourers is the main issue in cropping faced by farmers and paddy growing padasekhara samithies across the State. So this is one of the main area we have studied in the case of ASC as it is established with the main objective of reducing the labour shortage and high wage rate among available labourers by promoting agricultural mechanisation. The following table shows the response of the sample beneficiaries of ASC on this aspect.

Sl No	Category of beneficiary	Total surveyed	Whether shortage of agri labourers	
			Yes	No
1	Farmers	223	175	48
2	Padasekharams	109	87	22
	Total	332	262	70

Around 78 percent of farmers surveyed were reported that they are facing labour shortage for operation of agricultural activities. As far as the Padasekhra Samithies are concerned, the percentage who admitted labour shortage is a little more than that of farmers, that is to the tune of 80 percent.



7.2 Areas in which labour shortage affected

On enquiring in to the areas of labour shortage, farmers reported that the following

- All operation of paddy cultivation especially weeding, spraying pesticides, harvesting, threshing etc.
- Planting and transplanting other crops
- Coconut climbing
- Rubber tapping
- Common agricultural works

Padasekhara samithies are of the opinion that they are facing labour crisis in the following agricultural operations.

- All stages of cultivation from ploughing to harvesting
- Post harvest activities such as threshing, winnowing etc.
- Nursery planting
- Land preparation and land protection (fencing)
- Coconut climbing
- Common other agricultural works

From the response of both the categories of samples, the problem of labour shortage is too severe in the case of paddy cultivation as it required skilled and experienced labour. The increase in the percentage of Padasekhara Samithies who reported labour shortage than that of farmers also reveal this fact, because Padasekharams are concentrated mainly on paddy cultivation.

7.3 Area kept as fallow due to shortage of labourers

The problem of labour shortage is reflected also by the fact that an estimated total area of 377 hectares has been kept as fallow land by all the beneficiaries in the jurisdiction of all the 35 ASCs during the last year (2014-15) due to the non availability of sufficient labourers for agricultural operations. Out of this, 148 hectares are by farmers and the remaining 229 hectares by Padasekhara Samithies.

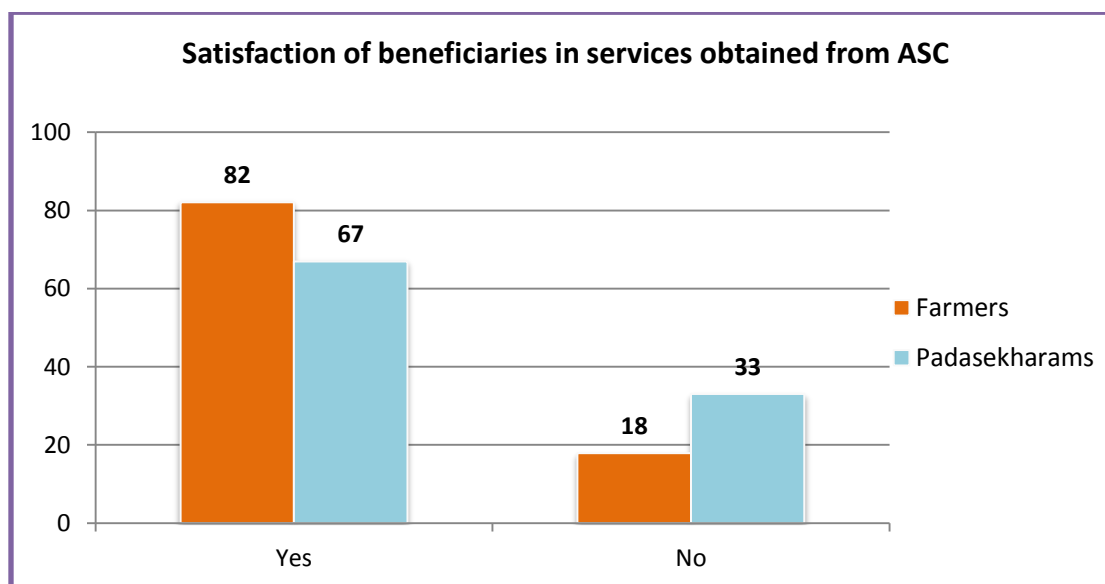
All these findings point to the fact that even though ASCs provide a force of trained service personnel to meet the labour requirements, the strength of the force is not up to the satisfactory level.

7.4 Satisfaction of beneficiaries in services received from ASC

The following table shows the satisfaction of farmers and Padasekharams in services they got from Agro Service Centres.

Sl No	Category of beneficiary	Total surveyed	Satisfaction in services obtained from ASC		Percentage	
			Yes	No	Yes	No
1	Farmers	223	183	40	82.1	17.9
2	Padasekharams	109	73	36	67.0	33.0
	Total	332	256	76	77.1	22.9

82 percent of the farmers and 67 percent of Padasekharams have expressed satisfaction in the serviced provided by the respective ASC. a total of 23 percent of beneficiaries are not satisfied with the services provided by Agro Service Centres. The bar chart given below depicts this.



7.5 Reason for non satisfaction

The sample farmers and padasekharams surveyed have expressed dissatisfaction in services received from ASC due to the fallowing reasons. The reasons are different for different beneficiary and ASC. These are the summary of them.

Farmers

1. Service from Agro Service Centre is not received when required.
2. Farmers are not fully aware of the working and objectives of Agro Service Centres.

3. Farmers find it difficult to get the service of Agro Service Centres for peak operations like planting and harvesting.
4. Machinery are not available at the right time.
5. Lack of punctuality in service
6. Poor response from ASC for repair and other service of machinery.
7. Lack of participation of ASC in all works

Padasekharams

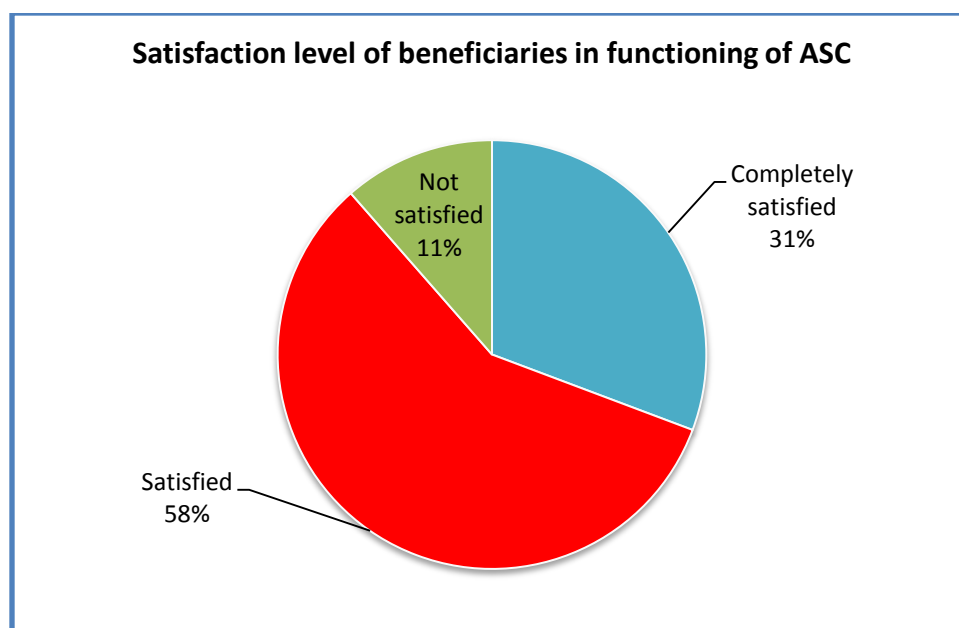
1. Farmers are not fully aware of the working and objective of Agro Service Centre
2. Service from Agro Service Centre is not received when required.
3. Intervention of Agro Service Centre experts is required at all critical stages of paddy.

7.6 Satisfaction level of beneficiaries in functioning of ASC

The three point level satisfaction in overall functioning of Agro Service Centres as expressed by the sample beneficiaries are given below. Here total means the total number of units surveyed.

CS- Completely Satisfied, S- Satisfied, NS- Not Satisfied

Sl No	Category of beneficiary	CS	S	NS	Total
1	Farmers	67	133	23	223
2	Padasekharams	35	59	15	109
	Total	102	192	38	332

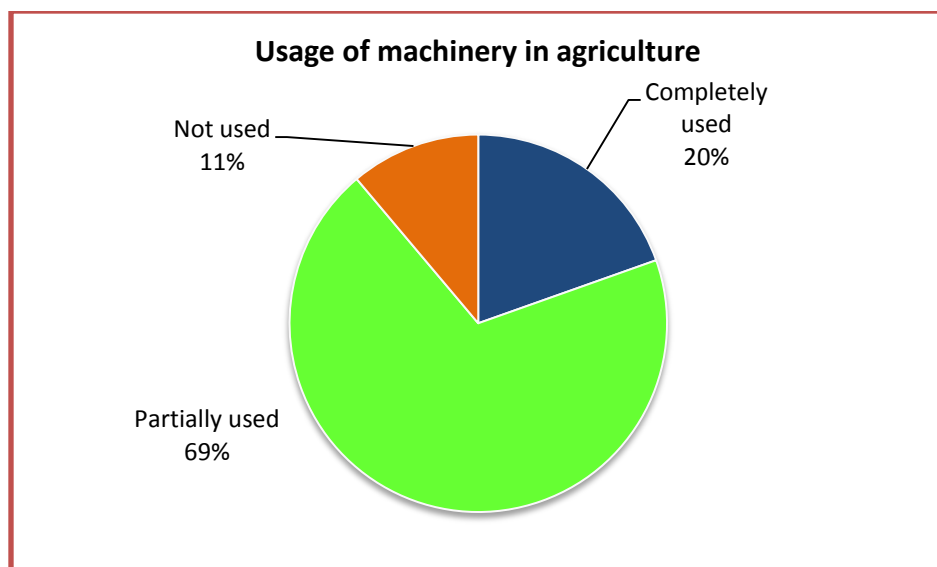


7.7 Farm mechanisation

The three point level application of farm machinery in agriculture practiced by the sample beneficiaries of ASC surveyed are as follows.

Sl No	Category of beneficiary	Completely used	Partially used	Not used	Total
1	Farmers	48	149	26	223
2	Padasekharams	17	81	11	109
	Total	65	230	37	332

20 percent of beneficiaries have fully practiced machinery works, 69 percent partially and the remaining 11 percent not used. The reasons for not availing machinery may be due to other kind of agricultural related works such as grow bag preparation, soil test and use of suitable fertilizer/ organic manure, irrigation, etc where use of farm machinery is not required.



7.8 Summary of Problems and Challenges

The following are the issues and challenges faced by Agro Service Centres in its operation, which are identified while analyzing the data collected from the field, both from the ASC and its beneficiaries. These issues may be varying for each ASC. The item wise problems are mentioned below. The suggestions and remedies to overcome these issues are described in the next chapter.

7.8.1 REGISTRATION OF ASC

- Only 18 ASCs have renewed their registration during the last year. As per the Charitable Societies Registration Act (Travancore Cochin Act 1955 in Tvpm to Thrissur and some regions of Palakkad district, and Malabar Act in rest of the northern districts) all registrations must be renewed every year and audited copy of its accounts of the previous year should be submitted along with application for renewal

7.8.2 FACILITATOR

- Many ASCs do not get the continuous service of Facilitator and this is affecting their smooth functioning
- Some ASCs are facing difficulty to get retired AO as its Facilitator

- In some Blocks, retired teachers are appointed as Facilitator, so the lack of experience in handling agricultural issues will adversely affect the successful functioning of ASC
- Salary of Facilitator- 91% of ASCs are paying Rs.12000 or below per month as salary. So many of the retired AOs are not willing to work with this pay option and to engage fully in its operations

7.8.3 GOVERNING BODY MEETINGS

- Many ASCs are not regularly holding the meetings of Management Committee, High Power Committee and General Body
- Many ASCs have not convened the meetings of Management Committee in every two months as stipulated in the guidelines
- Many ASCs have not convened High Power Committee in every six months as stipulated in the guidelines

7.8.4 WORKING GROUP PERSONNEL

- Frequent relieve of working group members is affecting the smooth functioning of ASC
- Even though the service personnel are trained by Agricultural University, often they could not undertake all the works efficiently up to the satisfaction of the beneficiaries
- They could not undertake all kinds of machinery operations
- Even though the service personnel are getting reasonable remuneration from ASC, since the profession of agriculture does not have reputation in society, they are often forced to quit seeking higher employment, especially the youth category
- Lack of getting enough number of people having tractor driving license
- Scheme guideline necessitates appointing 5 ITI/ITC holders, 5 VHSE/ Plus 2 holders and 5 SSLC holders in the working group of ASC. But in many ASCs, there is shortage of service personnel in technically qualified category. The survey found only 11% is in ITI/ITC category. This is adversely affecting to undertake all machinery works especially in peak seasons. Hence the beneficiaries may be forced to depend other available service group or keep the land as fallow
- Lack of getting enough number of qualified service personnel in some Blocks
- Lack of attractive salary of service personnel
- Lack of interest in continuing the profession as service personnel
- Some working group members are not attending the job regularly. This will lead to delay in providing service

- Lack of insurance protection to the machines operated works and other risky works such as coconut climbing, spraying pesticide etc.
- Since the accounts of ASCs are not audited by a third party, they face difficulty to estimate profit and distribute bonus to their service personnel. It leads to lack of motivation.

7.8.5 MAINTENANCE OF ACCOUNTS AND REGISTERS

- Most of ASCs are not maintaining the registers such as daily activity register, cash register/ cash book, receipts and vouchers etc
- Some ASCs are not conducting audit of accounts every year. Only 40 percent of ASCs have conducted audit during the previous year (2014-15)
- The stock register of machines, equipments, agricultural implements and other fixed assets such as furniture, computer, Photostat machine etc. are maintained in only in 80% of ASCs.
- Register of name and address of beneficiaries, the services provided and the amount collected are not maintained in some ASCs

7.8.6 REVOLVING FUND

- All ASCs are not punctual in recouping the amount withdrawn from its revolving fund. Only 51% of the ASCs utilized the revolving fund have recouped in their account.
- The guidelines of ASC does not stipulate the purpose of utilization of revolving fund

7.8.7 UNDERTAKING WORKS

- All ASCs could not undertake the work requirements in time due to shortage of working group members or due to work load during peak seasons. Only 80% of ASCs could undertake works in time.
- The rates fixed by the High Power Committee for each agricultural operations are varying from ASC to ASC

7.8.8 AGRICULTURAL MACHINERY

- Lack of heavy duty machinery to undertake large volume of work in less time
- Delay in repair and maintenance of machinery cause delay in satisfying the requirements
- Non availability of a four wheeler for transportation of machinery and equipments to distant locations

- Lack of facility for parking agro machinery
- Lack of sufficient space for keeping agricultural equipments and agricultural implements

7.8.9 RATES FIXED BY ASC FOR MACHINERY WORKS

- The service rates fixed by the High Power Committee (HPC) for machinery and other kind of works offered by each ASC are not uniform and there is huge variation between the rates. Usually, farmers are not willing to agree with the higher rates for doing their agricultural needs.
- For tractor operations, 5 ASCs in Malabar region are charging Rs.550 for one hour, while Pathanapuram ASC is charging Rs.850, so the variation is about 55%. Even though these ASCs are belonging to two different regions (Middle and North), the variation is not justifiable.
- For transplanting one acres of paddy, Rs.3200 is charged by Perinthalmanna (Malappuram district) but Rs.5000 by Parassala ASC (Thiruvananthapuram district). Here the variation is 56%.
- For one hour power tiller work, Parassala, Irikkur and Manjeswaram ASCs are charging Rs.300, while Muthukulam ASC (Alappuzha district) is charging Rs.700 for the same work. Here the variation is 133%.
- So there is no standardization in rates fixed by HPC
- The apportioning of service charges to various heads viz. remuneration to service personnel, fuel charges of machinery and maintenance charges are also not uniform. This may be ultimately resulted in variation of remuneration paid to working group personnel and income generated in ASC.

7.8.10 ISSUES RAISED BY FACILITATOR OF ASC

- ASC is not getting all departmental works
- Service personnel are not getting stipend
- Availability of labourers from other states at cheap wage rate
- Location of Agro Service Centres - In most cases centres are far from Block, Nursery etc.
- Lack of conveyance facilities, financial problems, scarcity of agricultural implements, delay in the repair and maintenance of agricultural implements
- Some machinery are not suited to the topography in certain areas. Poor quality of machinery also creating problems
- Members of Agro Service Centres discontinue and opt other jobs. Since no permanent job or salary can be ensured in ASCs

- Panchayat level labour armies (Karshika Karma Sena), Block level MKSSP, use of machines by individual farmers are threat to ASC
- Farmers demand services to be done at lower rate
- Difficulty in opening outlets in urban areas
- Agro Service Centres are not able to meet all the requirements of farmers in time
- Assistant Directors of Agriculture are not in a position to put full attention to the functioning of Agro Service Centres now
- Paid vouchers (bills) cannot be issued as accounts are not settled daily
- Facilitators find it difficult to manage office administration and field work simultaneously
- Agricultural officers are engaged with office and field work connected with Krishi Bhavans and hence they cannot pay full attention in the working of Agro Service Centres

7.8.11 ISSUES RAISED BY SAMPLE FARMERS

- Lack of trained persons for operating power tiller.
- Non availability of machinery like lawn mower and hand sprayer.
- Lack of transplanting machine, combined harvester, garden tiller.
- Lack of sufficient skilled labourers.
- Difficulty in transportation of machinery to the field.
- Lack of machinery suited to the topography of high ranges

7.8.12 ISSUES RAISED BY SAMPLE PADASEKHARAMS

- Lack of trained service personnel in ASC
- Lack of skilled agricultural labourers in their local area
- Transportation of machinery to the field is as issue in some remote areas

Chapter 8

SUGGESTIONS FOR IMPROVEMENT

The suggestions to overcome the issues mentioned in the previous chapter are explained in detail item wise. These include those proposed by the Facilitators of ASC, the sample beneficiaries surveyed and identified after analyzing the data collected at field level.

8.1 ADMINISTRATION

- A monitoring committee may be constituted in every district under Principal Agricultural Officer as Chairman, and the ADAs of the Blocks in which ASC situated, Facilitators and Chairman of ASC and Agricultural officers of concerned Panchayats as members. This committee may be held atleast once in every quarter to assess the problems and to suggest remedies and also to coordinate the work of ASCs in the district.

8.2 REGISTRATION

- All ASCs should make renewal of registration with audited balance sheet and other documents prescribed by the Registration Department

8.3 SERVICE PERSONNEL

- All the working group members may be insured to get protection from accidents of machines operated works and other risky agricultural practices such as coconut climbing, spraying pesticide etc.
- The dignity of agricultural workers and farmers should be enhanced so that the agricultural profession becomes an accepted one in the society and to attract the new generation
- The work orders received in ASC must be arranged on rotation basis among its service personnel so that to distribute the entire works equally
- More machinery training should be given to service group
- Orientation training on use of advanced machinery must be given
- To undertake the minor repair of agro machinery, more training may be given to technical group
- The working group members may be provided with bonus/ dividend according to the quantum of work done by them. This may be done in accordance with the annual profit earned by the ASC

8.4 MAINTENANCE OF ACCOUNTS AND REGISTERS

- All ASCs should maintain daily activity register, work register, log book, cash book, stock register etc.
- A specific format may be prescribed for the regular maintenance of books (registers, log book etc) and accounts in ASC
- Many of the ASCs are not aware of the well maintenance of registers, so proper training may be imparted to the Facilitators working group members
- Internal audit- The Assistant Director of Agriculture of the concerned Block may conduct internal audit of books and accounts of ASC
- External audit- All ASCs should conduct external audit of its books and accounts annually by a reputed third party

8.5 REVOLVING FUND

- Proper guidelines should be given to ASCs regarding the purpose for which the revolving fund/ maintenance fund can be utilized
- Revolving fund must be utilized for meeting the essential contingency requirements only.
- The amount withdrawn from the revolving fund must be deposited in the same financial year, and this should be mentioned in the guidelines

8.6 UNDERTAKING WORKS

- The work requirements in ASC may be distributed among all service personnel on rotation basis
- ASCs may be given freedom to undertake more works from outside the Block/ Constituency so as to ensure maximum works to their service personnel and to avoid voluntary quitting from service

8.7 MACHINERY

- ASCs must be provided with heavy duty machinery such as tractor, harvester , combined harvester, power tiller etc
- The survey found that only 24% of the agricultural land in the operational area of ASCs has been mechanized with the intervention of ASC. So awareness programmes may be conducted among farmers to enhance the utilization of machines in agriculture
- Log Book for machinery and vehicle must be maintained regularly
- More machinery, especially heavy duty machinery are to be supplied according to the local requirements of ASC

- Vehicle for transportation of machinery to the work site should be provided
- For ensuring the major maintenance of machinery without causing delay, the coordination of Engineering Wing of the Department of Agriculture, Agro Industries Corporation, Block Level Assistant Director Office should be ensured
- All kind of departmental scheme works involving the need of agro machinery may be entrusted with the nearest ASC as far as possible

8.8 RATES FIXED BY ASC FOR MACHINERY WORKS

- The service rates fixed by High Power Committee for various works offered by each ASC must have a standardization and the current huge variation needs to be reduced
- The rate at which the remuneration paid to service personnel of ASC for each machinery work and the rate at which amount collected from service charges set apart for fuel charges and maintenance charges also must be standardized so as to reduce the current huge variation from ASC to ASC
- Effective and reasonable fixing of service charges and apportioning it to various heads will lead to generate more income to ASC and to attract more personal to enroll as service personnel. This will also help to prevent voluntary quitting of working group members due to less remuneration.

8.9. MONITORING

- Proper monitoring has to be ensured by the ADA of Blocks and other higher officials as it is a new scheme implemented

8.10 AWARENESS AND COMMUNICATION

- Awareness programme may be conducted to farmers and other beneficiaries about the services available in ASC, and the practices followed in there and its benefit in crop production
- Effective communication may be provided to farmers regarding other facilities such as Bio Pharmacy, soil testing facility, organic manure unit, hybrid seed/ seedlings, organic pesticide etc available in ASC and its importance in productivity improvement
- Farmers may also be made aware through ASC about the latest scientific agricultural practices available

8.11 SUGGESTIONS OF FACILITATORS OF ASC

- Purchase and distribution of seed, seedlings and manure may be done without inviting quotations
- Agricultural schemes should be implemented through Agro Service Centres
- More attention is needed from Assistant Director of Agriculture of the concerned Blocks
- Attention and continued support of Agricultural Officer of the concerned Krishi Bhavans is required for the efficient functioning of ASC
- Supervision by Assistant Director of Agriculture in the concerned Block as a Nodal Officer
- Agricultural operation work in the jurisdiction of Assistant Director of Agriculture may be assigned to Agro Service centres in the concerned areas
- Increase the pay of facilitators
- Stipend for members
- Provide garden tiller, harvester etc
- Co-ordination of Agricultural department and Local bodies (three tier system)
- Qualities like knowledge, teamwork, interest and sincerity from all the stake holders
- Members may be selected based on sincerity, efficiency, etc. over and above the educational qualification
- Insurance coverage for members
- Monitoring of committees of ASC
- Media support for reaching the activities of ASCs to farmers
- Provide bonus to service personnel
- Provide new technologies
- Ensure service of labourers according to the requirements of beneficiaries
- Cooperation from Project Director (ATMA), Deputy Project Director etc
- Guidance and Assistance from Principal Agricultural Officers

8.12 SUGGESTIONS RECEIVED FROM FARMERS

- Include members who are capable of doing agricultural (farming) operation
- Provide all machinery at right time
- Make available pump sets, etc
- More machinery to be supplied
- All kind of machinery are to be made available to farmers

- Make available machinery like transplanter, weeder, combined harvester etc
- Make available machinery which can be operated even in waterlogged conditions.
- Hire charges of machinery may be reduced
- Skilled labourers may be engaged offering more wages
- Encouragement from officers for promoting agriculture is essential
- Display board exhibiting public participation activities should be erected
- The link between ASC and farmers should be strengthened so as to practice organic vegetable cultivation in fallow land. Assistance to farmers may be given only after the field verification by officials of Department of Agriculture
- In Kozhikode one Agro Service Centre may be started in Thamarassery or Puthupady. It will be easier for transportation of machinery from these places to other parts of the district
- Farmers of the locality may be included in the ASC committee
- Service of Agro Service Centres can be improved by including more VHSE certificate holders
- Establishment of Biofertiliser production centers under ASC
- Facilitate Soil testing in ASC
- Encourage cultivation in grow bag
- The farmers who avail the service of ASC may be politely treated
- Labour scarcity can be solved by engaging women labourers of MNREGS
- Ensure timely supply of seed, fertilizer and chemicals through Agro Service Centres
- Good quality machinery should be provided
- Infrastructure facilities (machinery) to be provided in all stages of paddy cultivation.
- Make available machinery like Bailer, Harvester, Rotovator, Tractor etc. wherever not available
- Need assistance for establishing rain shelter
- Make available all types of agricultural machinery
- Agriclincs may be started

8.13 Modifications suggested in the guidelines of ASC

During the evaluation survey conducted at field level, the Facilitators of some ASCs have proposed some suggestions in the guidelines of ASC, which include additions and modifications, for providing better and trouble free services to the customers so that to enhance its efficiency.

The following are the modifications suggested.

- Review meeting to be held on monthly basis
- Selection of members based on work experience, efficiency rather than educational qualification
- Should enhance the esteem of agriculture and its acceptance
- Training to service personnel on a continuous basis
- The age limit of labourers may be enhanced to sixty
- Training may be imparted to members and facilitators on related subjects
- Prescribed norms for membership may not be insisted
- Associated agencies of ASC, like Biopharmacy and nurseries should be exempted from license
- All members of ASC may be given uniform and stipend
- Revolving fund may be enhanced
- Permission may be given for engaging labourers even from outside the Block area
- Technical audit may be conducted for Agro Service Centres and the revenue received

Chapter 9

PERFORMANCE INDEX

For analyzing the bottlenecks, challenges and success factors in functioning of ASC, the data pertaining to many parameters were collected from the Facilitators of ASC and from the beneficiaries. Since the issues and challenges are varying for each ASC, the performance cannot be fixed based on any particular parameter. It is a general thing that if one unit shows good result in one parameter, the same will exhibit weakness in some other parameter. Hence it is better to find out an index, which is a composite of all the parameters to be assessed and rank the units according to the index.

9.1 Methodology

Here the following 16 parameters are considered for analyzing the performance of ASC and to prepare performance index. The strategy suggested to grade each ASC according to its performance in each parameter is mentioned against them. Since all the parameters not have equal priority, appropriate weightage is given to each so that the total comes to 100.

Sl. No.	Parameter	Weight (Wi)	Score (Si)
1	Whether work order is given on rotation basis to service personnel?	5	If Yes, then 100, other wise 0
2	Whether accidental insurance taken for service personnel?	5	If Yes, then 100, other wise 0
3	Whether parking yard for machinery available? (Y/N)	5	If Yes, then 100, other wise 0
4	Whether stock register and log book maintained for Machinery and other equipments?	10	If Yes, then 100, other wise 0
5	Whether Annual accounts audited?	5	If Yes, then 100, other wise 0
6	Whether used maintenance fund is recouped?	5	If Yes, then 100, other wise 0
7	Whether the service charges to service personnel is given through bank?	5	If Yes, then 100, other wise 0
8	Whether ASC could undertake all requirements of farmers in time?	5	If Yes, then 100, other wise 0
9	Whether ASC's work is satisfactory for mechanisation in agriculture?	10	Completely Satisfied- 100, Satisfied- 60, Not Satisfied- 30
10	Percentage of registered farmers who depend ASC for further assistance	5	If percentage ≥ 90 , 100; 70 to 90- 80; 50 to 70- 60, 30 to 50- 40, 10 to 30- 20, <10 - 0
11	Work satisfaction level of ASC according to Facilitator (CS/S/NS)	10	Completely Satisfied- 100, Satisfied- 60, Not Satisfied- 30

Sl. No.	Parameter	Weight (Wi)	Score (Si)
12	Profit during the year 2014-15	10	If profit percentage ≥ 80 - 80; 60 to 80- 60; 40 to 60- 40; 20 to 40- 20; >0 - 10, otherwise 0
13	Management Committee meeting held	4	If No. of meetings ≥ 6 - 100, 5- 80, 4- 60, 3- 40, 2- 30, 1- 20, otherwise 0
14	High Power committee meeting held	4	If No. of meetings ≥ 2 - 100, 1- 60, otherwise 0
15	General Body meeting held	2	If No. of meetings ≥ 1 - 100, otherwise 0
16	Farmer's satisfaction on services received from ASC (% of famers expressed satisfaction)	10	If percentage ≥ 100 , 100; 60 to 80- 80; 40 to 60- 50; 20 to 40- 30; otherwise 10
	Total Index	100	

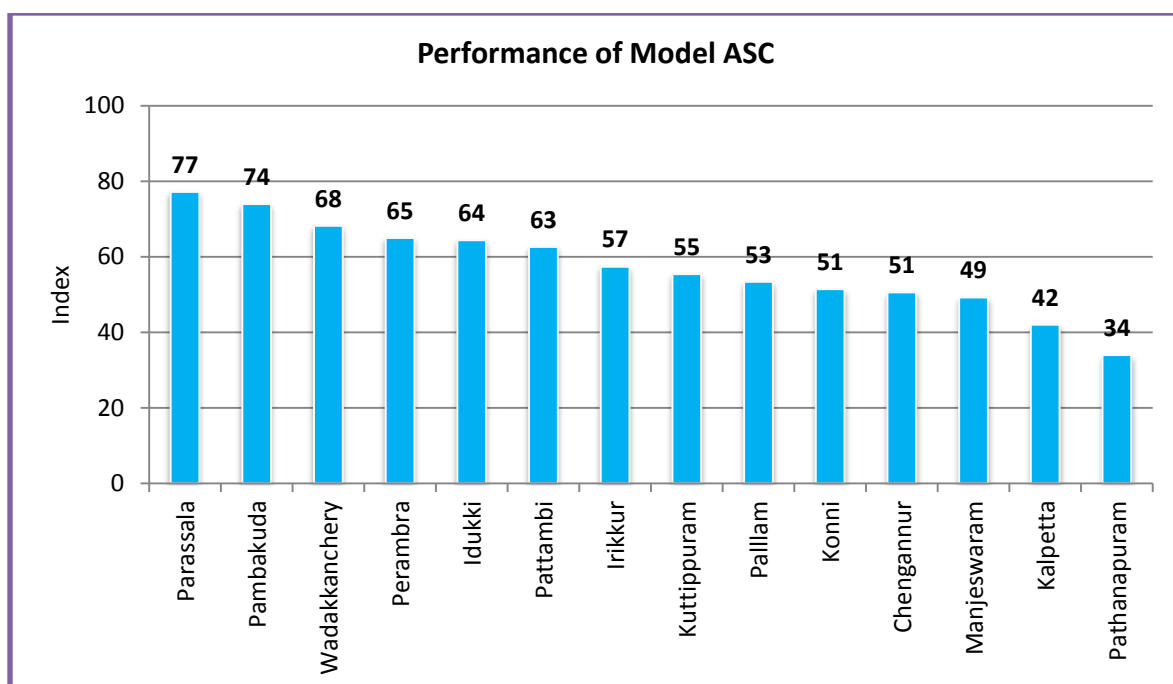
Now the performance index is a composite of the weight multiplied by the score and is obtained by the formula

$$\text{Performance Index} = \frac{\sum WiSi}{\sum Wi}$$

9.2 Performance Index of Model ASCs

Now, on the basis of the survey results, as detailed in the previous chapters and mentioned in Annexures, the performance index of Model ASCs in all the 14 districts obtained is given below.

Sl. No.	District	Block	INDEX
1	Thiruvananthapuram	Parassala	77.2
2	Kollam	Pathanapuram	34.0
3	Pathanamthitta	Konni	51.4
4	Alappuzha	Chengannur	50.6
5	Kottayam	Pallam	53.4
6	Idukki	Idukki	64.4
7	Ernakulam	Pambakuda	74.0
8	Thrissur	Wadakkanchery	68.2
9	Palakkad	Pattambi	62.6
10	Malappuram	Kuttippuram	55.4
11	Kozhikkode	Perambra	65.0
12	Wayanad	Kalpetta	42.0
13	Kannur	Irikkur	57.4
14	Kasaragode	Manjeswaram	49.2

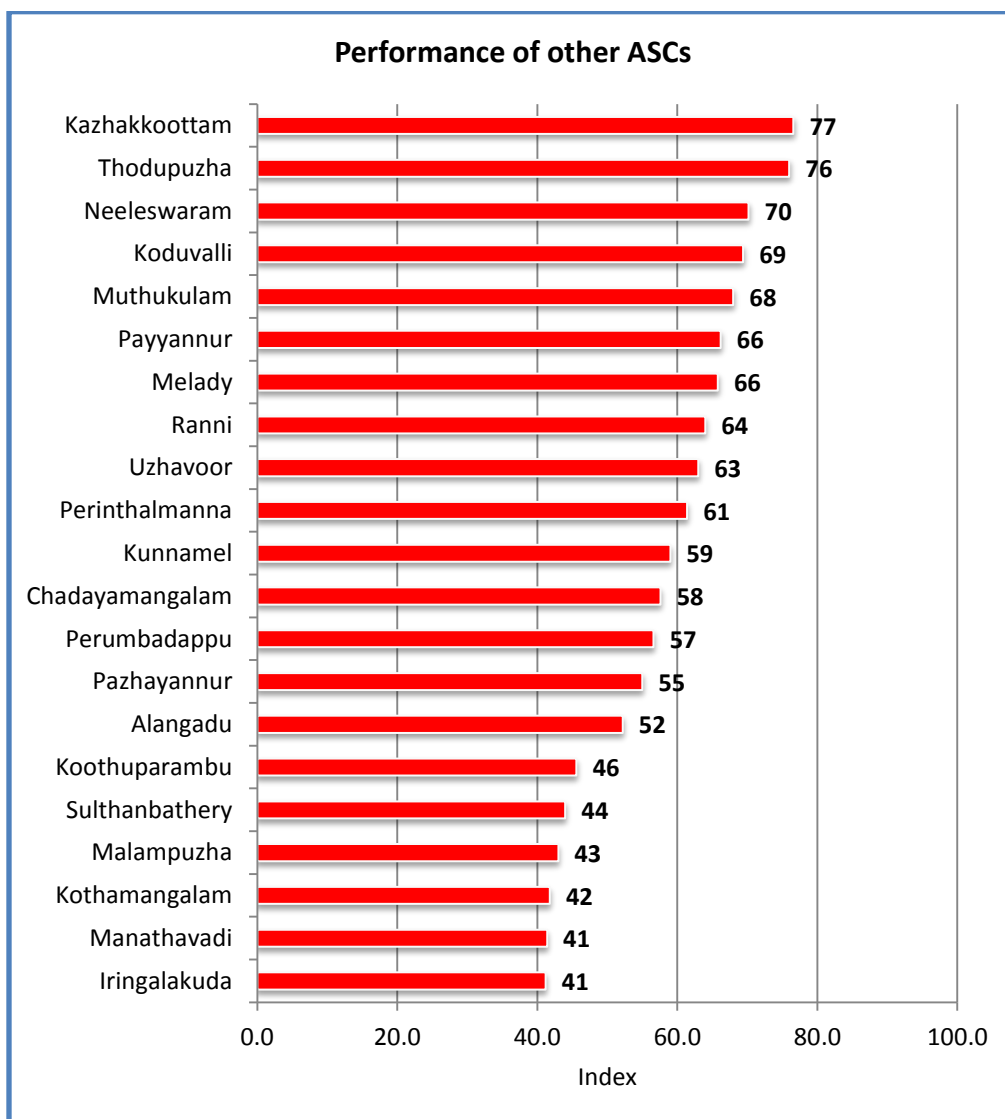


9.3 Performance Index of other ASCs

The performance index of the remaining 21 ASCs surveyed is shown in the following table according to the descending order of index, that is ranked from 1 to 21.

Sl No	District	Block	INDEX
1	Thiruvananthapuram	Kazhakkootam	76.6
2	Kollam	Chadayamangalam	57.6
3	Pathanamthitta	Ranni	64.0
4	Alappuzha	Muthukulam	68.0
5	Kottayam	Uzhavoor	63.0
6	Idukki	Thodupuzha	76.0
7	Ernakulam	Kothamangalam	41.8
8	Ernakulam	Alangadu	52.2
9	Thrissur	Iringalakuda	41.2
10	Thrissur	Pazhayannur	55.0
11	Palakkkad	Malampuzha	43.0
12	Malappuram	Perumbadappu	56.6
13	Malappuram	Perinthalmanna	61.4
14	Kozhikkode	Kunnamel	59.0
15	Kozhikkode	Melady	65.8
16	Kozhikkode	Koduvalli	69.4
17	Wayanad	Manathavadi	41.4

SI No	District	Block	INDEX
18	Wayanad	Sulthanbathery	44.0
19	Kannur	Koothuparambu	45.6
20	Kannur	Payyannur	66.2
21	Kasaragode	Neeleswaram	70.2



ANNEXURES

Annexure I - Basic details of Agro Service Centres

ASC Sl. No.	District	Block	Model / Ordinary	Assembly Constituency	Registered Name of ASC	Registration No.	Registration renewed date	Year of allotment	Date of commencement
1	TVPM	Kazhakkootam		Kazhakkootam, Nedumangadu, Chirayankeezh	Samithy for Agricultural Agro machinery services	TVM/TC/543/2013		2013-14	24-04-2013
2	TVPM	Parassala	Model	Neyyatinkara	Samithy for Agro machinery services	TVM/TC/656/2013		2013-2014	07-08-2013
3	KLM	Chadayamangalam		Chadayamangalam	Thrikkannapuram Chadayamangalam Agro Service Centre	KLM/TC/174/2013		2013	31-07-2013
4	KLM	Pathanapuram	Model	Pathanapuram	Piravathoor Model Agro Service Centre	563/2013		2013-14	21-02-2014
5	PTA	Konni	Model	Konni	Karshaka suraksha karmasena, Konni	PTM/TC/111/2013	31/1/2014	2013-14	1-11-2013
6	PTA	Ranni		Ranni	Agro Service Centre , Ranni	PTM/TC/134/2013	24/6/2015	2013	5/10/2013
7	ALPA	Chengannur	Model	Chengannur	Krishimithra model ASC	ALP/TC/213/2013	09-04-2013	2013	09-04-2013
8	ALPA	Muthukulam		Kayamkulam	Agro Srevice centre, Muthukulam	ALP/PC/279/2013		3/6/2013	21/2/2014
9	KTM	Pallam	Model	Kottayam	Panachikadu ASC Paruthumpara,	KTM/TC/739/2013		2013	30-12-2013
10	KTM	Uzhavoor		Kaduthuruthy	Agro service centre ,Kuruppanthara	K.232/2003		2014	26/2/2014
11	IDKY	Idukki	Model	Idukki	Idukki Harithasena Karshika sevana kendra	IDK /TC/97/2013		2012	8/6/2013
12	IDKY	Thodupuzha		Thodupuzha	ASC , Thodupuzha	IDK/PC/141/2014	9/12/2015	2012	1/3/2013
13	EKLM	Alangadu		Kalamassery	ASC , Alangadu Block Panchayath	EKM/TC/163/2013	17/7/2015	2013-2014	24-04-2013
14	EKLM	Kothamangalam		Kothamangalam	ASC, Kothamangalam	EKM / TC/202/2013		2012-2013	21-03-2013

Basic details of ASC...

AS C Sl. No.	District	Block	Model / Ordinary	Assembly Constituency	Registered Name of ASC	Registration No.	Registration renewed date	Year of allotment	Date of commen cement
15	EKLM	Pambakuda	Model	Piravam	Pambakuda Block Agro service sangam	EKM/TC/108/2013	12/8/2015	2012/2013	26/7/2013
16	TSR	Iringalakuda		Iringalakuda	ASC Iringalakuda	TSR /TC/76/2013	22/7/2015	2013	2014 July
17	TSR	Pazhayannur		Chelakkara	ASC Pazhayannur Block	TSR /TC/217/2013	30/12/2015	2012- 2013	19/8/2013
18	TSR	Wadakkanchery	Model	Wadakkanchery	Model ASC	TSR/TC/273/2013		2012- 2013	24/8/2013
19	PKD	Malampuzha		Malampuzha	ASC Puthupariyaram	PKD/CA/79/13	1/7/2015	2012- 2013	27/2/2012
20	PKD	Pattambi	Model	Pattambi	Nithya Haritha ASC	PKD/CA/75/2013	10-06-2015	2012- 2013	01-04- 2013
21	MPM	Kuttippuram	Model	Kottakkal	Malabar Agro Army Kuttipuram Block	298/2013	2014 Dec	2013	7/6/2013
22	MPM	Perumbadappu		Ponnani	ASC Perumbadappu Block	183/2013	27/8/2014	2012- 2013	2013 Dec
23	MPM	Perinthalmanna		Perinthalmanna	ASC Angadipuram	237/2013	12/2014	2012	6/7/2013
24	KKD	Koduvalli		Thiruvambady- Koduvalli	ASC Thiruvambadi	KKD/CA/869/2014	11-02-2015	2013	24-12- 2013
25	KKD	Melady		Koyilandy	ASC Thikkody	SCB is the Nodal Agency. (No separate Regn.)		2012- 2013	15-03- 2014
26	KKD	Kunnamel		Nadapuram	ASC Chathamkottu Nada	D-2963		2013	1-9-2013
27	KKD	Perambra	Model	Perambra	Haritha model ASC	KKD/CA/458/2013	12-5-2014, 14-05-2015	2012-13	19-12- 2013

Basic details of ASC...

AS C Sl. No.	District	Block	Model / Ordinary	Assembly Constituency	Registered Name of ASC	Registration No.	Registration renewed date	Year of allotment	Date of commencement
28	WYD	Sulthanbathery		Sulthanbathery	Sulthanbathery Agro Service Karshaka Sangam	WYD/CA/165/2013		2013	2-1-2014
29	WYD	Kalpetta	Model	Kalpetta	Model ASC,Charitable Society,Kalpetta	WYD/CA/183/2013	22/2/2015	2013	22-10-2013
30	WYD	Manathavadi		Manathavadi	Manathavadi Block ASC	WYD/CA/88/2013		2013	1-07-2014
31	KNR	Irikkur	Model	Irikkur	Irikkur Block ASC Society LTD	KNR/CA/77/2013		2013-2014	22-10-2013
32	KNR	Koothuparambu		Koothuparambu	Model ASC Cheruvanchery	Cheruvanchery Karshaka Employee Sahakarana Sangam (No separate Regn.)		2012	16/6/2013
33	KNR	Payyannur		Payyannur	ASC, Kankol	KNR/CA/327/13	2015 Oct	2012-2013	13-09-2013
34	KSD	Manjeswaram	Model	Manjeswaram	Tulunad Agro Army Karshika Yanthra Sevana Kendram	KSR/CA/501/2013		2013	24-10-2013
35	KSD	Neeleswaram		Thrikkarippur	Neeleswaram Block ASC	251/13		2013-14	7/2013

Annexure II - Bank Account details of ASC

ASC Sl. No.	Block	Type of Bank Account	Account Number	Name of Bank and Branch	Whether Joint Account or Not (Yes/No)	If Yes parties of Account Holders
1	Kazhakkootam	Current Account	A/C No. 216202000000179	IOB Kaniyapuram, TVM	Yes	President, Secretary, Facilitator
2	Parassala	Savings bank Account	A/C No.10564	SCB Chenkal	Yes	President, Treasurer, Facilitator
3	Chadayamangalam	Savings Bank Account	A/c No.31330	SCB Kadakkal	Yes	President and Secretary
4	Pathanapuram	Savings Bank Account	A/c No. 6374	SCB Piravanthoor	Yes	Facilitator, Assistant Director (Agriculture)
5	Konni	Savings Bank Account	A/c No.8441	VSCB Vakayar	Yes	President, Secretary, Facilitator
6	Ranni	Savings	A/c No. 04180	Venkurunji Service Sahakarana Bank, Vechoochira	Yes	Society Secretary, President ,Agricultural Officer
7	Chengannur	Savings Bank Account	A/C No. 3238	Puliyoor Co-operative Bank No. A.109	Yes	President, Secretary, Facilitator
8	Muthukulam	Savings Bank Account	A/C No.010-100-10078	Pathiyur Farmers Service Co-operative Bank Ltd.1282	Yes	President, Secretary, Facilitator
9	Pallam	Savings Bank Account	A/C No. 4216101002179	Canara Bank, Parathumpara	Yes	President , Facilitator
10	Uzhavoor	Current Account	CA/e-5	SCB Manjoor Branch Kuruppanthara Kavala	Yes	President ,Agricultural Officer, Facilitator
11	Idukki	Current	0123053000036346, 0123053000036731, 67208852294	SIB Idukki, SBT Moolamattam	Yes	President , Facilitator, Secretary
12	Thodupuzha	Savings	338002010020899	UBI Thodupuzha	Yes	President , Facilitator, Secretary
13	Alangadu	Savings	51AB	Urban Co operative Bank Alangadu	yes	President , Treasurer, Secretary

Bank Account details of ASC...

ASC Sl. No.	Block	Type of Bank Account	Account Number	Name of Bank and Branch	Whether Joint Account or Not (Yes/No)	If Yes parties of Account Holders
14	Kothamangalam	Savings	605/ C	Oonnukal SCB Nellimattam	Yes	President , Facilitator, Secretary
15	Pambakuda	Savings	AC No.10506, AC No. 67307648129, AC No 18490200000464	Sahakarana Bank, Kakkoor, No.163, SBT Kakkoor , Federal Bank Panmbakuda	Yes	President , Facilitator, Secretary (A/c 1 &2) , ADA, Facilitator, Secretary
16	Iringalakuda	Savings	8195	KSCB Karuvannur	Yes	President , Secretary, AO Poruthussery
17	Pazhayannur	Savings & Current	A/C -34552986580, SB AC -2268	SCB Panjal, SBI Panjal	Yes	Working Group President, Office Secretary
18	Wadakkanchery	Savings	AC No. 67288179898	SBI Punnamparambu	Yes	President , Secretary, Treasurer, Facilitator
19	Malampuzha	Savings	32910298867	SBI Puthupariyaram	yes	President ,Treasurer
20	Pattambi	Current	0660073000000041	SIB Pattambi Branch	Yes	President ,Treasurer
21	Kuttippuram	Savings	1794	Marakkara Service Sahakarana Bank, Kadambuzha Branch	Yes	President , Secretary, Agricultural Officer
22	Perumbadappu	Savings	9615	Changaramkulam Service Sahakarana Bank	Yes	President , Secretary, Agricultural Officer
23	Perinthalmanna	Savings	67221921070	SBT Angadipuram	Yes	President ,Secretary, Agricultural Officer
24	Koduvalli	Savings	40329101009682	Kerala Gramina Bank Thiruvambadi	Yes	President , Secretary, Agricultural Officer
25	Melady	Savings	4956	Thikkodi service Sahakarana Bank	Yes	Nodal Agency, President, Facilitator

Bank Account details of ASC...

ASC Sl. No.	Block	Type of Bank Account	Account Number	Name of Bank and Branch	Whether Joint Account or Not (Yes/No)	If Yes parties of Account Holders
26	Kunnamel	Savings	301	Chathamkottu agri: co operative society	Yes	President, Secretary, Facilitator, ADA
27	Perambra	Savings	44122200038313	Syndicate Bank Cheruvannoor Branch	Yes	President , Secretary, Agricultural Officer
28	Sulthanbathery	Savings	192	Ambalavayal Service Co-op Bank, Ambalavayal	Yes	ADA, President, Secretary
29	Kalpetta	Savings	67231139272	SBT	Yes	ADA, President, Secretary
30	Manathavadi	Savings	130201201020001	WYD District Co-op Bank, Manathavady	Yes	ADA, President, Secretary
31	Irikkur	Savings	42222210013193	Syndicate Bank Sreekandapuram	Yes	AO,KB,SKPM, Secretary
32	Koothuparambu	Savings	261	CKK SB	Yes	Secretary, Facilitator
33	Payyannur	Savings, Current	SB AC -10597, CA AC -35289166581	Service saharana Bank Kankol, CA SBI	Yes	Secretary, Facilitator
34	Manjeswaram	Savings	6289	Vorkady Service Co -Op bank Ltd. Vorkady	Yes	President, Facilitator, Treasurer
35	Neeleswaram	Savings	076605300000316	SIB Neeleswaram	Yes	ADA, Facilitator

Annexure III- Operational area of ASC- Panchayats covered

ASC SI No	Name of ASC	Blocks	Panchayaths
1	Samithy for Agricultural Machinery Service	Pothenkode (Kazhakootam)	Sreekaryam, Ulloor, Attipra, Kazhakkootam, Pothankodu, Kadinamkulam, Andoorkonam, Mangalapuram
2	Samithy for Agro Machinery Service	Parassala	Parassala, Kulathur, Thirupuram, Chenkal, Karod, Poovar
3	Thrikkannapuram Chadayamangalam Agro service Centre	Chadayamangalam	Kummil, Kadakkal, Chithara, Ittiva, Nilamel, Chadayamangalam, Velinallur
		Anchal	Ilamattu, Idamulakkal,
		Kilimanoor	Kilimanoor, Attingal, Pallikkal
4	Piravanthoor Model Agro Service Centre	Pathanapuram	Pattazhy
5	Karshaka Suraksha Karmasena Konni	Konni	Konni, Aruvapulam, Malayalapuzha, Mylapra, Thannithode, Vallicode, Pramadam
6	Agro Service centre Ranni	Ranni	Angadi, Pazhavangadi, Vechuchira, Naranammoozhy, Perunadu, Chittar, Vadaserikkara, Seethathode
7	Krishimithra Model Agro Service Centre	Mavelikkara	Mavelikkara, Chettikulangara, Chennithala, Nooranad, Thekkekara, Thazhakkara
		Chengannur	Pandanadu, Thiruvandoor, Venmony, Mulakkuzha, Ala, Cheriyanadu, Chengannur, Mannar, Budhanoor, Puliyoor
		Bharanikkavu	Nooranadu
8	Agro Service centre Muthukulam	Muthukulam	Muthukulam, Arattupuzha, Devikulangara, Kundallur, Krishnapuram, Kayamkulam (M), Pathiyur, Cheppadu
9	PAnachikkad Agro Service centre Paruthumpara	Pallam	Panachikkad, Puthupalli, Vijayapuram, Kumaranellur, Kottayam, Nattakam, Ayarkunnam
10	Agro Service centre Kuruppamthara	Uzhavur	Manjoor, Kuravilangadu, Kadaplamattam, Marangadupalli, Veliyannoor, Uzhavur
		Vaikkom	Vykkam, Kallara, Velloor
		Ettumanur	Athirampuzha, Ettumanur, Neendoor,
11	Idukki Harithasena Agro Service centre	Idukki	Vazhathoppu, Mariyapuram, Kamakshi, Vathikudi, Kanjikuzhy, Arakkulam
12	Agro Service centre Thodupuzha	Thodupuzha	Manakkad, Karimkunnam, Muttom, Purappuzha
		Ilamdesam	Kodikkulam, Alakkod, Udumbannur

Operational area of ASC- Panchayats covered...

ASC SI No	Name of ASC	Blocks	Panchayaths
13	Agro Service centre Alangadu	Alangad	Aluva, Alangad, Karumalur, Eloor, Kadungallur, Varappuzha,
		Paravur	Kottuvalli, Ezhikkara
		Parakkadavu	Kunnukkara, Puthenvelikkara, Parakkadavu, S rimoolanagaram
		Vazhakkulam	Keezhmadu
14	Agro Service centre Kothamangalam	Kothamangalam	Perumbavur, Muvattupuzha, Kuramangalam, Vannapuram
15	Agro Service centre Pambakuda	Pambakkuda	Thirumaradi, Pambakuda, Ramamangalam, Ilanji, Piravam, Koothattukulam, Palakkuzha
16	Agro Service centre Irinjalakuda	Irinjalakuda	Muriyad, Kattoor, Karalam, Parappukkara, Irinjalakkuda, Porathissery
17	Agro Service centre Pazhayannur	Pazhayannur	Vallathole Nagar, Panjal, Chelakkara, Kondazhy, Pazhayannur, Thiruvillamala
18	Model Agro Service centre	Wadakkanchery	Desamangalam, Erumappetty, Mullurkkara, Mundathikkode, Thekkumkara, Varavur, Wadakkanchery
19	Agro Service centre Puthupariyaram	Malampuzha	Puthupariyaram, Malampuzha, Akathethara, Marutharoad, Kodumbu, Puthussery, Polpulli
20	Nithya Haritha Agro Service centre	Pattambi	Pattambi, Ongallur, Kulukkallur, Muthukala, Paruthur, Thiruvegapura, Vilayur, Koppam
21	Malabar Agro Army Kuttipuram	Kuttipuram	Marakkara, Edakkal, Kuttipuram, Valancheri
		Thirur	Vettam, Mangalam, Thirur
		Thavannur	Ponnani, Kalady, Ezhuvathuruthy
22	Agro Service centre Perumbadappu	Perumbadappu	Allamkode, Nannammukku, Maranchery, Veliyalakkad, Perumbadappu
23	Agro Service centre Angadippuram	Perinthalmanna	Angadippuram, Perinthalmanna, Elamkulam, Pulamanthol, Thazhekad, Melattur, Kezhattur, Vettathur
24	Agro Service centre Thiruvambadi	Koduvalli	Omassery, Kizhakkoth, Puthuppadi, Thamarassery, Kattippara, Madavur, Koduvalli, Thiruvambadi, Koodarangi, Kodenchery
25	Agro Service centre Thikkodi	Melady	Thikkodi, Meppayur, Payyoli, Thurayur, Keezhariyur
26	Agro Service centre Chathamkottunada	Kunnummel	Kavilumpara, Kayakodi, Velam, Kuttyadi, Naripatta, Kunnummel

Operational area of ASC- Panchayats covered...

ASC SI No	Name of ASC	Blocks	Panchayaths
27	Harithamodel Agro service centre	Perambra	Cheruvannur, Neyyadu, Kayanna, Chakkittapara, Perambra, Changarothu, Kuthali, Meppayur
28	Sulthanbathery Agro Service Karshaka sangam Ambalavayal	Sulthanbathery	Sulthanbathery , Ambalavayal, Meenagadi, Nenmeni, Noolpuzha
29	Model Agro Service centre & charitable society Kalpatta	Kalpatta	Kalpatta, Mooppanadu, Padinjarethara, Muttill
		Panamaram	Kaniyambetta
30	Agro Service centre Mananthavadi	Mananthavadi	Mananthavadi, Edavaka, Thondernadu, Vellamunda, Thirunelli, Thavinjal
31	Agro Service centre Society Ltd Irikkur Block	Irikkur	Sreekandapuram, Malappattam, Payyavur, Padiyur, Eruvessy, Irikkur
32	Model Agro Service centre Cheruvanchery	Koothuparambu	Kuntrothuparambu, Trippangotur, Pattiam, Chittariparambu, Mangattidam
		Thalassery	Vengadu, Pinarayi, Dharmadam
		Panoor	Panoor, Mokeri
33	Agro Service centre Kankole	Payyannur	Kankole- Alappadambu, Karivellur- Peralam, Payyannur, Kunhimangalam, Ramathali, Peringom- Vayakkara, Cherupuzha, Eramam-Kuttur
34	Thulunadu Agro Army Karshika Yanthra Sevana Kendram	Manjeswaram	Vorkady, Meenja, Paivalike, Mangalpady, Manjeswaram, Puthige, Enmakaje
35	Neeleswaram Block Agro Service Centre	Neeleswaram	Kayyur- Cheemeni, Thrikkaripur, Padanna, Peelikkodu, Valiyaparambu, Cheruvathur,
		Kanjangadu	Pullur- Periya, Kanjangadu (M)

Annexure IV- Income and expenditure details of ASC (in Rs.)

ASC SI No	ASC Block	2013-14				2014-15				% increase in profit
		Income	Expenditure	Profit	Profit %	Income	Expenditure	Profit	Profit %	
1	Kazhakkootam	406963	318780	88183	21.7	663155	459615	203540	30.7	130.8
2	Parassala	646937	646937	0	0.0	4447817	4047817	400000	9.0	
3	Chadayamangalam	477930	385000	92930	19.4	573092	5150	567942	99.1	511.2
4	Pathanapuram	0	0	0		364898	360287	4611	1.3	
5	Konni	326830	323372	3458	1.1	1242498	839467	403031	32.4	11555.0
6	Ranni	136750	98627	38123	27.9	1170195	613536	556659	47.6	1360.2
7	Chengannur	208675	177780	30895	14.8	657139	632285	24854	3.8	-19.6
8	Muthukulam	1042799	1017701	25098	2.4	26770	17736	9034	33.7	-64.0
9	Pallam	65030	64565	465	0.7	182405	180416	1989	1.1	327.7
10	Uzhavoor	0	0	0		1012810	947334	65476	6.5	
11	Idukki	111748	102592	9156	8.2	1986328	1919368	66960	3.4	631.3
12	Thodupuzha	608000	400750	207250	34.1	372000	233000	139000	37.4	-32.9
13	Alangadu	256233	219966	36267	14.2	375293	301046	74247	19.8	104.7
14	Kothamangalam	54400	53000	1400	2.6	877000	834571	42429	4.8	2930.6
15	Pambakuda	432357	428845	3512	0.8	3159708	2834827	324881	10.3	9150.6
16	Iringalakuda	0	0	0		2520957	2317457	203500	8.1	
17	Pazhayannur	353350	351266	2084	0.6	2052609	1456260	596349	29.1	28515.6
18	Wadakkanchery	505329	200562	304767	60.3	2399404	418270	1981134	82.6	550.0
19	Malampuzha	864958	332607	532351	61.5	109818	136907	-27089	-24.7	-105.1
20	Pattambi	682340	702362	-20022	-2.9	1401542	1576077	-174535	-12.5	771.7
21	Kuttippuram	1841261	1789789	51472	2.8	925518	728768	196750	21.3	282.2
22	Perumbadappu	415675	102998	312677	75.2	643184	204987	438197	68.1	40.1

Income and expenditure details of ASC...

ASC SI No	ASC Block	2013-14				2014-15				% increase in profit
		Income	Expenditure	Profit	Profit %	Income	Expenditure	Profit	Profit %	
23	Perinthalmanna	179053	220961	-41908	-23.4	5086193	4490948	595245	11.7	-1520.4
24	Koduvalli	7553	14150	-6598	-87.4	167468	29476	137992	82.4	-2191.6
25	Melady	14365	8785	5580	38.8	294795	201065	93730	31.8	1579.7
26	Kunnamel	204502	159572	44930	22.0	1381402	1622140	-240738	-17.4	-635.8
27	Perambra	300481	298071	2410	0.8	304065	321263	-17198	-5.7	-813.6
28	Sulthanbathery	0	0	0		130917	123417	7500	5.7	
29	Kalpetta	465994	692365	-226371	-48.6	656196	630861	25335	3.9	-111.2
30	Manathavadi	0	0	0		1396000	1388933	7067	0.5	
31	Irikkur	14028	197059	-183031	-1304.8	1108606	707683	400923	36.2	-319.0
32	Koothuparambu	1397989	1359224	38765	2.8	4928880	4812597	116283	2.4	200.0
33	Payyannur	387768	301373	86395	22.3	916205	882465	33740	3.7	-60.9
34	Manjeswaram	212446	184549	27897	13.1	327681	298371	29310	8.9	5.1
35	Neeleswaram	334223	282642	51581	15.4	1505227	1057008	448219	29.8	769.0
	Total	12955967	11436250	1519717	11.7	45367775	37631408	7736367	17.1	409.1

Annexure V- Other details showing the performance of ASC

Sl No	Category of item	No. of ASC	Sl No of ASC as in Annexure I
1	ASC having retired AO as Facilitator	21	1,2,4,5,7,8,14,16,17,18,20,21,23,24,25,26,27,31,32,33,35
2	Monthly salary of Facilitator Rs.15000 pm	2	16,17
	Rs.12500 pm	1	24
	Rs.12000 pm	24	1,2,3,5,6,7,8,9,10,11,12,13,14,15,18,20,21,23,26,27,32,34,35
	Rs.10000 pm	3	22,25,28
	Rs.6000 pm	1	31
	Not reported	4	4,19,29,30
3	ASC having separate Office Secretary appointed	10	6,7,8,18,28,29,30,31,32,35
4	Monthly salary of Office Secretary		Ranges from Rs.5000 to 8000 pm
5	ASCs giving work order to service personnel on rotation basis	23	1,2,3,5,7,8,9,10,11,12,13,15,16,19,24,25,26,27,29,30,33,34,35
6	ASCs dismissed service personnel	6	7,15,17,20,21,26
7	ASCs from where the service personnel resigned	5	All ASCs except 4,11,22,30,31
8	ASCs from which tractor driving license holders in working group members resigned	18	1,2,3,7,8,9,10,12,15,16,18,19,20,21,23,24,26,33
9	Accidental insurance taken for service personnel	10	5,6,10,18,20,23,24,25,33,35
10	Type of office building of ASC own building	8	3,14,17,21,22,23,27,35
	Panchayat building	3	9,10,12
	Dept of Agri building	1	6
	On rent	6	5,19,25,26,31,32
	Others	16	1,2,4,7,8,11,13,15,16,18,20,24,28,29,30,33,34
11	Parking yard for machinery available	27	Except 1,2,3,5,19,20,25,29

Other details showing the performance of ASC...

Sl No	Category of item	No. of ASC	Sl No of ASC as in Annexure I
12	ASCs maintaining Stock Register and Log Book	28	1,2,4,6,7,8,9,10,11,12,13,14,15,17,18,19,20,21,23,24,25,26,27,28,31,33,34,35
	Stock register only	2	16,22
	Not maintaining	5	3,5,29,30,32
13	ASCs in which ITI/ITC holders are capable for undertaking repair and maintenance of machinery	13	1,2,3,7,10,16,17,22,24,25,26,28,35
14	Annual accounts audited	14	1,2,6,11,12,13,15,17,20,22,25,27,32,33
15	ASCs utilized revolving fund	33	All ASCs except 4,30
16	ASCs recouped revolving fund fully	17	1,2,5,7,8,12,15,17,18,19,20,21,23,27,31,35
	Partially recouped	2	3,14
17	ASCs availed bank loan	3	5,6,26
18	ASCs giving service charges to service personnel through bank account	20	1,2,3,5,6,8,10,11,12,15,20,23,24,25,26,27,30,31,32,33
19	Periodicity of distribution of service charges to service personnel	14	1,2,3,5,8,10,16,18,19,23,25,26,29,31
	Monthly		
	Fortnightly	2	32,33
	Weekly	11	6,7,9,11,12,15,17,20,24,34,35
	Daily	8	4,13,14,21,22,27,28,30
20	ASCs giving bonus/ dividend/ festival allowance	14	2,5,7,9,15,17,18,20,21,23,26,32,33,35
21	ASCs that could undertake all requirements in time as promised	18	1,2,3,9,11,12,15,16,17,18,19,22,25,26,29,31,32,25
22	ASCs facing the situation of not giving sufficient works to their service personnel due to insufficient requirements (not in all days)	23	1,2,3,7,8,9,10,11,12,13,15,18,19,20,22,23,25,26,31,32,33,34

Other details showing the performance of ASC...

Sl No	Category of item	No. of ASC	Sl No of ASC as in Annexure I
23	ASC requiring more service personnel	20	5,6,8,9,10,13,14,15,18,19,21,23,24,25,26,27,31,32,34,35
24	ASCs facing situation of not getting enough number of willful service personnel	23	1,5,9,10,11,12,13,14,15,18,19,21,22,23,24,25,26,27,30,32,33, 34,35
25	ASCs undertaking works from outside the constituency/ Block	27	Except 4,9,18,22,23,28,30,34
26	ASCs could completely do the works undertaken from outside the Block/ Constituency	20	1,2,3,6,8,10,11,12,13,14,15,16,17,23,24,25,27,29,32,33
27	Proportion of works requirement from outside the Block (to the total enquiries of work) Above 40%	3	2,29,32
	Greater than or equal to 20% but below 40%	14	1,3,5,7,8,10,13,14,15,21,22,24,30,35
	Below 20%	10	9,11,12,20,23,25,26,27,28,33
	Not reported	8	4,6,16,17,18,19,31,34
28	Karshika Karma Sena formed in Panchayats in the operational area of ASC	28	Except 1,5,6,9,11,12,22
29	Karshika Karma Sena helpful to undertake the works of ASC	13	2,4,10,14,15,18,19,20,24,26,27,29,34
30	ASCs giving machineries for rent	17	4,9,10,15,16,17,18,19,21,22,25,26,27,31,32,33,35
31	Satisfaction of ASC in mechanisation of agriculture in the operational area Completely Satisfied	5	1,2,8,29,30
	Satisfied	25	3,4,5,6,9,10,11,12,13,15,16,17,18,19,20,21,22,23,24,25,28,31, 32,34,35
	Not Satisfied	5	7,14,26,27,33

Other details showing the performance of ASC...

Sl No	Category of item	No. of ASC	Sl No of ASC as in Annexure I
32	Dependence of farmers for further assistance from ASC Greater than or equal to 80%	13	1,3,6,10,12,13,14,20,28,29,30,33,35
	Greater than or equal to 60% but below 80%	6	2,17,24,25,32,24
	Greater than or equal to 40% but below 60%	5	7,15,22,26,27
	Greater than or equal to 20% but below 40%	4	8,9,23,31
	Less than 20%	4	5,18,19,21
	Not reported	3	4,11,16
33	ASCs obtained grant from Local Body	7	6,9,16,23,27,33,35
34	Work satisfaction level of ASC as per the opinion of Facilitator Completely Satisfied	6	1,2,3,6,18,21
	Satisfied	23	5,8,9,10,11,12,13,15,16,17,20,22,23,24,25,26,27,28,29,31,32,33,35
	Not Satisfied	6	4,7,14,19,30,34

Annexure VI- Satisfaction level of beneficiaries in working of Agro Service Centres

Sl. No.	Name of ASC	Completely satisfied		Satisfied		Not satisfied		Total	
		Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams
1	TVM Kazhakkottam	3	5	2				5	5
2	TVM Paarasaala	5	5					5	5
3	KLM Chadayamangalam	1	1	4	4			5	5
4	KLM Pathanapuram								
5	PTA Konni			9	1			9	1
6	PTA Ranni	9	1					9	1
7	ALP Chengannur	2	2	4	1	1		7	3
8	ALP Muthukulam	1		9				10	0
9	KTM Pallam	7		1		2		10	0
10	KTM Uzhavur	10						10	0
11	IDK	3		7				10	0
12	IDK Thodupuzha	3		4		3		10	0
13	EKM Alangaad			6	4			6	4
14	EKM Kothamangalam	3		3	3	1		7	3
15	EKM Pampakkuda	2	5	3				5	5
16	TSR Iringalakkuda	1	2	4	3			5	5
17	TSR Pazhayannur		1	3	2	2	2	5	5
18	TSR Vadakkanchery	3	5	2				5	5
19	PKD Malampuzha			10				10	0
20	PKD Pattambi	1		4	5			5	5
21	MPM Kuttipuram		3	4	2	1		5	5
22	MPM Perumpadappu			8	2			8	2
23	MPM Perinthalmanna	4	2		3	1		5	5

Satisfaction level of beneficiaries...

Sl. No.	Name of ASC	Completely satisfied		Satisfied		Not satisfied		Total	
		Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams
24	KKD Koduvally			7	1	1	1	8	2
25	KKD Meladi Thikkodi	1	1	3	2	3		7	3
26	KKD Nadapuram Kunnummel	3		4	2		1	7	3
27	KKD Perambra			5	4		1	5	5
28	WYD Sulthanbathery			2	2	3	3	5	5
29	WYD Kalpetta		1	3	3	2	1	5	5
30	WYD Mananthavady			2	1	3	4	5	5
31	KNR Irikkur				2			0	2
32	KNR koothuparambu		1	5	4			5	5
33	KNR Payyannur			5	3		2	5	5
34	KSD Manjeswaram	5		5				10	
35	KSD Neeleswaram			5	5			5	5
	Total	67	35	133	59	23	15	223	109

Annexure VII- Advantages of using machineries and adopting latest techniques in agriculture with the intervention of ASC- opinion of farmers expressed in percentage

Sl. No.	Name of ASC	Time saved		labour cost		productivity		Total cost of cultivation	
		Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams
1	TVPM Kazhakkootam	21	24	12	10				
2	TVPM Parrassala	10	8	8	7	8	6	10	8
3	KLM Chadayamangalam	75	75	70	70	75	75	50	50
4	KLM Pathanapuram								
5	PTA Konni	33	50	25	50	21	25	32	30
6	PTA Rannii	37	50	32	60	31	50	43	50
7	ALP Chengannur	35	25	14	20	24	7	26	22
8	ALP Muthukulam	28		9.5		14		17.7	
9	KTM pallam	30		27.5		6		10	
10	KTM Uzhavoor	56.5		50.5		14.5		32	
11	IDK Idukki	25		22		3.5		8	
12	IDK Thodupuzha	40		26		26		30.5	
13	EKM Alangaad	13	18	10	13			23	30
14	EKM Kothamangalam	16	30	10	10			26	37
15	EKM Pambaakkada	17	12	9	10			24	22
16	TSR Irinjalakkuda	16	15	22	24	8	10	29	32
17	TSR Pazhayannur								
18	TSR Vadakkanchery	53	65	50	57	12	11	18	20
19	PKD Malambuzha	16		5		1		5	
20	PKD Pattambi	18	23	13	10	4	6	8	10
21	MPM Kuttipuram	32	10	32	13	22	13	32	12
22	MPM Perumbadappu	21	25	20	15	1.25		20	20
23	MPM Perinthalmanna	42	44	42	45	28	30	41	36

Advantages of using machineries and adopting latest techniques in agriculture...

Sl. No.	Name of ASC	Time saved		labour cost		productivity		Total cost of cultivation	
		Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams	Farmers	Padase kharams
24	KKD Koduvalli	38	50	33	50	1	0	33	35
25	KKD Meladi	34	43	31	43	1		34	43
26	KKD Kunnummal	19	10	16	15	16	17	19	13
27	KKD Perambra	17	19	19	18	9	19	15	18
28	WYD Sulthanbathery	50	50	30	30	10	10	17	20
29	WYD Kalpatta	39	40	24	24	18	26	20	20
30	WYD Mananthavady	42	50	26	30	9	12	17	20
31	KNR Irikkur		55		55		13		
32	KNR Koothuparambu	58	67	52	69	8	14	51	53
33	KNR Payyannur	50	46	50	50			50	50
34	KSD Manjeswaram	24		28		21		29	
35	KSD Neeleswaram	44	48	14	23	7	11	14	13
	Average	32.8	36.6	26.0	31.6	14.8	18.7	25.3	27.7

Note:

- 1) For ASC Pathanapuram and Pazhayannur, the data for arriving this rate was not obtained.
- 2) In rest of the ASCs, where Farmers/ Padasekarams not obtained for survey, the relevant column left blank
- 3) This rate is calculated by comparing the time, cost and productivity before the use of agro machineries and latest practices in agriculture

Annexure VIII- Area, Production and Productivity changes of paddy in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	61	111	81.6	133	273	105.5	2184	2471	13.1
2	TVM Paarasaala	286	329	15.1	701	843	20.2	2450	2559	4.5
3	KLM Chadayamangalam	118	147	24.4	215	401	86.7	1816	2725	50.1
4	KLM Pathanapuram	70	74	5.8	172	183	6.6	2450	2467	0.7
5	PTA Konni	70	200	184.5	159	602	278.6	2262	3010	33.1
6	PTA Ranni	Nil	Nil	NA	Nil	Nil	NA	NA	NA	NA
7	ALP Chengannur	874	1142	30.7	2701	3560	31.8	3091	3118	0.8
8	ALP Muthukulam	159	220	38.7	196	499	154.6	1233	2264	83.6
9	KTM Pallam	625	668	7.0	1816	1177	-35.2	2906	1761	-39.4
10	KTM Uzhavur	348	387	11.4	975	953	-2.3	2805	2460	-12.3
11	IDK Idukki	37	38	2.4	90	104	14.6	2447	2738	11.9
12	IDK Thodupuzha	179	84	-52.9	398	206	-48.1	2225	2451	10.2
13	EKM Alangaad	207	263	27.3	554	523	-5.6	2679	1987	-25.8
14	EKM Kothamangalam	330	447	35.3	688	994	44.5	2083	2225	6.8
15	EKM Pampakkuda	388	533	37.3	972	1207	24.2	2502	2262	-9.6
16	TSR Iringalakkuda	536	927	72.9	1677	2571	53.3	3126	2772	-11.3
17	TSR Pazhayannur	4349	2874	-33.9	10059	10893	8.3	2313	3790	63.9
18	TSR Vadakkanchery	2224	2058	-7.5	5496	6138	11.7	2471	2983	20.7
19	PKD Malampuzha	3876	5410	39.6	8563	12845	50.0	2209	2374	7.5
20	PKD Pattambi	2297	2321	1.0	5074	6307	24.3	2209	2718	23.1
21	MPM Kutippuram	626	1091	74.2	1401	2615	86.7	2237	2398	7.2
22	MPM Perumpadappu	1061	1096	3.3	3388	4237	25.1	3194	3867	21.0
23	MPM Perinthalmanna	583	743	27.5	1425	1991	39.8	2446	2681	9.6

Area, Production and Productivity changes of paddy in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	318	130	-59.2	588	248	-57.8	1847	1911	3.4
25	KKD Melady Thikkodi	204	157	-23.2	293	262	-10.8	1435	1668	16.2
26	KKD Nadapuram Kunnummel	288	181	-37.2	542	291	-46.3	1881	1609	-14.5
27	KKD Perambra	761	5659	644.0	1311	797	-39.2	1724	141	-91.8
28	WYD Ambalavayal	3937	3426	-13.0	10891	9761	-10.4	2767	2849	3.0
29	WYD Kalppetta	944	1191	26.2	2683	3167	18.0	2844	2659	-6.5
30	WYD Mananthavady	2392	2402	0.4	5938	5583	-6.0	2482	2324	-6.4
31	KNR Irikkur	804	3426	326.4	1834	2067	12.7	2283	603	-73.6
32	KNR Koothuparamba	204	109	-46.4	417	206	-50.7	2048	1885	-7.9
33	KNR Payyannur	1163	688	-40.9	2477	1479	-40.3	2130	2151	1.0
34	KSD Manjeswaram	625	531	-15.0	1515	1284	-15.3	2424	2418	-0.3
35	KSD Neeleswaram	745	627	-15.9	1576	1389	-11.9	2117	2217	4.7

Source: Department of Economics & Statistics, Kerala

Annexure IX- Area, Production and Productivity changes of banana in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	39.7	42.33	6.6	217	292	34.6	5466	6898	26.2
2	TVM Paarasaala	277	475	71.5	1893	3453	82.4	6834	7269	6.4
3	KLM Chadayamangalam	379.4	383	1.0	2685	2850	6.2	7077	7441	5.1
4	KLM Pathanapuram	127	210.5	65.8	1316	1533	16.5	10362	7283	-29.7
5	PTA Konni	194	341	75.8	1919	2465	28.5	9892	7229	-26.9
6	PTA Ranni	385	386	0.3	2890	1779	-38.4	7506	4609	-38.6
7	ALP Chengannur	344	267.6	-22.2	3415	2339	-31.5	9927	8741	-12.0
8	ALP Muthukulam	0.9	1.41	56.7	5.89	8	35.8	6544	5674	-13.3
9	KTM Pallam	135	207.6	53.8	982	1619	64.9	7274	7799	7.2
10	KTM Uzhavur	542	566.3	4.5	5120	5654	10.4	9446	9984	5.7
11	IDK Idukki	586	652.5	11.4	5822	5986	2.8	9935	9174	-7.7
12	IDK Thodupuzha	142.7	238.2	66.9	1163	2015	73.3	8150	8459	3.8
13	EKM Alangaad	114	183.7	61.1	1202	2231	85.6	10544	12145	15.2
14	EKM Kothamangalam	713	665	-6.7	6354	5678	-10.6	8912	8538	-4.2
15	EKM Pampakkuda	300	157.7	-47.4	2324	1312	-43.6	7747	8320	7.4
16	TSR Iringalakkuda	44.6	21.2	-52.5	482	177	-63.3	10807	8349	-22.7
17	TSR Pazhayannur	159	153.5	-3.5	1510	1284	-15.0	9497	8365	-11.9
18	TSR Vadakkanchery	115	190.7	65.8	901	718	-20.3	7835	3765	-51.9
19	PKD Malampuzha	225	71.2	-68.4	1950	741	-62.0	8667	10407	20.1
20	PKD Pattambi	488	667.9	36.9	3851	5835	51.5	7891	8736	10.7
21	MPM Kutippuram	61	78.6	28.9	445	550	23.6	7295	6997	-4.1
22	MPM Perumpadappu	3.8	3.4	-10.5	38.3	24	-37.3	10079	7059	-30.0
23	MPM Perinthalmanna	1714	1939	13.1	13889	12828	-7.6	8103	6616	-18.4

Area, Production and Productivity changes of banana in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Ha		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	344	287.2	-16.5	3068	2231	-27.3	8919	7768	-12.9
25	KKD Melady Thikkodi	49.6	34	-31.5	274	288	5.1	5524	8471	53.3
26	KKD Nadapuram Kunnummel	143	112	-21.7	1361	992	-27.1	9517	8857	-6.9
27	KKD Perambra	111	204.2	84.0	796	1322	66.1	7171	6474	-9.7
28	WYD Ambalavayal	2991	2053	-31.4	19861	17772	-10.5	6640	8657	30.4
29	WYD Kalpetta	2689	2622	-2.5	25503	25061	-1.7	9484	9558	0.8
30	WYD Mananthavady	4263	3849	-9.7	33094	36251	9.5	7763	9418	21.3
31	KNR Irikkur	202	229.6	13.7	1509	1515	0.4	7470	6598	-11.7
32	KNR Koothuparamba	348	537	54.3	3148	4318	37.2	9046	8041	-11.1
33	KNR Payyannur	90	81	-10.0	718	625	-13.0	7978	7716	-3.3
34	KSD Manjeswaram	3.6	11.2	211.1	17.3	72	316.2	4806	6429	33.8
35	KSD Neeleswaram	24.5	34.8	42.0	169	267	58.0	6898	7672	11.2

Source: Department of Economics & Statistics, Kerala

Annexure X- Area, Production and Productivity changes of plantain in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkoottam)	194	271	39.7	1330	2964.2	122.9	6856	10938	59.5
2	TVM Paarasaala	583	432	-25.9	2532	6917.5	173.2	4343	16013	268.7
3	KLM Chadayamangalam	621	862	38.8	4481	9464	111.2	7216	10979	52.2
4	KLM Pathanapuram	224	230	2.7	1449	2213	52.7	6469	9622	48.7
5	PTA Konni	181	193	6.6	2020	1514.5	-25.0	11160	7847	-29.7
6	PTA Ranni	242	280	15.7	2689	1910	-29.0	11112	6821	-38.6
7	ALP Chengannur	170	194	14.1	1752	2370.5	35.3	10306	12219	18.6
8	ALP Muthukulam	177	130.2	-26.4	563	641.4	13.9	3181	4926	54.9
9	KTM Pallam	246	260	5.7	2116	2957.7	39.8	8602	11376	32.3
10	KTM Uzhavur	260	260	0.0	1493	1860	24.6	5742	7154	24.6
11	IDK Idukki	510	533	4.5	6099	4819	-21.0	11959	9041	-24.4
12	IDK Thodupuzha	150	189.6	26.4	1273	2277.7	78.9	8487	12013	41.6
13	EKM Alangaad	155	122	-21.3	1752	462	-73.6	11303	3787	-66.5
14	EKM Kothamangalam	303	395	30.4	2744	3844.7	40.1	9056	9733	7.5
15	EKM Pampakkuda	269	198	-26.4	2220	2110.8	-4.9	8253	10661	29.2
16	TSR Iringalakkuda	110	119.5	8.6	435	741.4	70.4	3955	6204	56.9
17	TSR Pazhayannur	584	502.6	-13.9	3948	5701	44.4	6760	11343	67.8
18	TSR Vadakkanchery	360.6	338	-6.3	1781	4801.6	169.6	4939	14206	187.6
19	PKD Malampuzha	227	211.1	-7.0	3590	1836.4	-48.9	15815	8699	-45.0
20	PKD Pattambi	376	413.2	9.9	1798	2775.6	54.4	4782	6717	40.5
21	MPM Kutippuram	226	295	30.5	1421	1770	24.6	6288	6000	-4.6
22	MPM Perumpadappu	138.8	138.7	-0.1	988	906.9	-8.2	7118	6539	-8.1
23	MPM Perinthalmanna	299	505	68.9	2020	4006.4	98.3	6756	7933	17.4

Area, Production and Productivity changes of plantain in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	415	489.6	18.0	2140	3033	41.7	5157	6195	20.1
25	KKD Melady Thikkodi	138	158.5	14.9	272	526.5	93.6	1971	3322	68.5
26	KKD Nadapuram Kunnummel	282	2328	725.5	1600	1171.1	-26.8	5674	503	-91.1
27	KKD Perambra	240	225.6	-6.0	1508	1824	21.0	6283	8085	28.7
28	WYD Ambalavayal	272	316.4	16.3	1757	3011	71.4	6460	9516	47.3
29	WYD Kalppetta	314	312.9	-0.4	1581	2865.9	81.3	5035	9159	81.9
30	WYD Mananthavady	321	346.3	7.9	1885	2685.2	42.5	5872	7754	32.0
31	KNR Irikkur	393	341	-13.2	1568	1593.3	1.6	3990	4672	17.1
32	KNR Koothuparamba	260	298.3	14.7	932	1032.9	10.8	3585	3463	-3.4
33	KNR Payyannur	305	279.3	-8.4	1117	1292.7	15.7	3662	4628	26.4
34	KSD Manjeswaram	451	480.6	6.6	1137	2877.3	153.1	2521	5987	137.5
35	KSD Neeleswaram	213	200	-6.1	1298	913.2	-29.7	6094	4566	-25.1

Source: Department of Economics & Statistics, Kerala

Annexure XI- Area, Production and Productivity changes of tapioca in ASC Blocks

Sl. No	Name of Block	Area (Ha)			Production in Tonnes			Productivity		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	757.8	709	-6.4	22260	26068	17.1	29375	36767	25.2
2	TVM Paarasaala	703.2	866	23.2	24904	34646	39.1	35415	40007	13.0
3	KLM Chadayamangalam	2070.6	2589	25.0	80029	93806	17.2	38650	36233	-6.3
4	KLM Pathanapuram	1572.8	1649	4.8	62598	73071	16.7	39800	44312	11.3
5	PTA Konni	467.3	528.7	13.1	17582	25444	44.7	37625	48126	27.9
6	PTA Ranni	565.9	610.4	7.9	23978	29542	23.2	42371	48398	14.2
7	ALP Chengannur	561.5	763	35.9	24689	28514	15.5	43970	37371	-15.0
8	ALP Muthukulam	330.6	200.7	-39.3	6984	3826	-45.2	21125	19063	-9.8
9	KTM Pallam	428.2	456.5	6.6	11460	14409	25.7	26763	31564	17.9
10	KTM Uzhavur	1185.4	1097	-7.5	48897	46344	-5.2	41249	42246	2.4
11	IDK Idukki	687	940.5	36.9	37804	43349	14.7	55028	46091	-16.2
12	IDK Thodupuzha	383	397.6	3.8	22620	21720	-4.0	59060	54628	-7.5
13	EKM Alangaad	76	89.5	17.8	3309	3578	8.1	43539	39978	-8.2
14	EKM Kothamangalam	876.7	895	2.1	36109	39999	10.8	41187	44692	8.5
15	EKM Pampakkuda	456	439	-3.7	25822	18712	-27.5	56627	42624	-24.7
16	TSR Iringalakkuda	17.4	19.5	12.1	439	682.5	55.5	25230	35000	38.7
17	TSR Pazhayannur	110	135	22.7	3659	5122.7	40.0	33264	37946	14.1
18	TSR Vadakkanchery	96.2	92	-4.4	3110	2660	-14.5	32328	28913	-10.6
19	PKD Malampuzha	42	59.3	41.2	1169	1970.1	68.5	27833	33223	19.4
20	PKD Pattambi	204	145	-28.9	4568	4353	-4.7	22392	30021	34.1
21	MPM Kutippuram	152.4	292.7	92.1	3333	8170	145.1	21870	27913	27.6
22	MPM Perumpadappu	9.7	9.1	-6.2	228	211	-7.5	23505	23187	-1.4
23	MPM Perinthalmanna	763	1293	69.5	26740	47521	77.7	35046	36753	4.9

Area, Production and Productivity changes of tapioca in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	364.6	469.3	28.7	8682	13843	59.4	23812	29497	23.9
25	KKD Melady Thikkodi	37.9	31	-18.2	933	621	-33.4	24617	20032	-18.6
26	KKD Nadapuram Kunnummel	159.5	189.5	18.8	5677	4892	-13.8	35592	25815	-27.5
27	KKD Perambra	347.4	213	-38.7	7773	7052	-9.3	22375	33108	48.0
28	WYD Ambalavayal	404	451.7	11.8	19280	24564	27.4	47723	54381	14.0
29	WYD Kalpetta	515.6	623	20.8	21766	26295	20.8	42215	42207	0.0
30	WYD Mananthavady	496.3	638.3	28.6	21834	21023	-3.7	43994	32936	-25.1
31	KNR Irikkur	216.5	371	71.4	8404	14479	72.3	38818	39027	0.5
32	KNR Koothuparamba	183.7	243	32.3	7761	10277	32.4	42248	42292	0.1
33	KNR Payyannur	86	70	-18.6	1934	2372	22.7	22488	33886	50.7
34	KSD Manjeswaram	0.17	1.95	1047.1	5.42	73	1246.9	31882	37436	17.4
35	KSD Neeleswaram	9	23.7	163.3	182	761.6	318.5	20222	32135	58.9

Source: Department of Economics & Statistics, Kerala

Annexure XII- Area, Production and Productivity changes of coconut in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Million nuts			Productivity in Nuts/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	5072	5598	10.4	44.5	58	30.3	8774	10361	18.1
2	TVM Paarasaala	4511	5342	18.4	27.6	37	34.1	6118	6926	13.2
3	KLM Chadayamangalam	4770	4423	-7.3	24.7	27	9.3	5178	6104	17.9
4	KLM Pathanapuram	1988	1982	-0.3	9.9	12	21.2	4980	6054	21.6
5	PTA Konni	1790.8	1753	-2.1	14	11	-21.4	7818	6275	-19.7
6	PTA Ranni	1914	2065	7.9	11.63	9	-22.6	6076	4358	-28.3
7	ALP Chengannur	1853.7	1794.8	-3.2	19.04	15	-21.2	10271	8357	-18.6
8	ALP Muthukulam	5295	4629.4	-12.6	38.4	38	-1.0	7252	8208	13.2
9	KTM Pallam	1941.9	1864	-4.0	7.6	10	31.6	3914	5365	37.1
10	KTM Uzhavur	2738	2700	-1.4	13	16	23.1	4748	5926	24.8
11	IDK Idukki	3501	3178.2	-9.2	20.6	16	-22.3	5884	5034	-14.4
12	IDK Thodupuzha	1386	1430	3.2	5.8	6	3.5	4185	4196	0.3
13	EKM Alangaad	1209	1001	-17.2	5.7	5	-12.3	4715	4995	5.9
14	EKM Kothamangalam	4258	4277	0.5	24.7	23	-6.9	5801	5378	-7.3
15	EKM Pampakkuda	1787	1955	9.4	7.7	11	42.9	4309	5627	30.6
16	TSR Iringalakkuda	2757	2713	-1.6	22.5	19	-15.6	8161	7003	-14.2
17	TSR Pazhayannur	5502	5352	-2.7	37.7	34	-9.8	6852	6353	-7.3
18	TSR Vadakkanchery	4210	4235	0.6	25	25	0.0	5938	5903	-0.6
19	PKD Malampuzha	3419	3048.6	-10.8	25.9	25	-3.5	7575	8200	8.3
20	PKD Pattambi	3871	4003	3.4	21.4	29	35.5	5528	7245	31.0
21	MPM Kutippuram	10029	10592	5.6	115.2	91	-21.0	11487	8591	-25.2
22	MPM Perumpadappu	4978	4359	-12.4	47.4	34	-28.3	9522	7800	-18.1
23	MPM Perinthalmanna	8521	8450	-0.8	103	107	3.9	12088	12663	4.8

Area, Production and Productivity changes of coconut in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Million nuts			Productivity in Nuts/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	16557	17303	4.5	96	129	34.4	5798	7455	28.6
25	KKD Melady Thikkodi	5927	5698	-3.9	50	43	-14.0	8436	7547	-10.5
26	KKD Nadapuram Kunnummel	10954	10832	-1.1	75	75	0.0	6847	6924	1.1
27	KKD Perambra	12053	11326	-6.0	109	95	-12.8	9043	8388	-7.2
28	WYD Ambalavayal	1903	2122	11.5	9	13	44.4	4729	6126	29.5
29	WYD Kalppetta	2369	2306	-2.7	10	14	40.0	4221	6071	43.8
30	WYD Mananthavady	2353	2342	-0.5	8	11	37.5	3400	4697	38.1
31	KNR Irikkur	8174	9275	13.5	52	57	9.6	6362	6146	-3.4
32	KNR Koothuparamba	10025	9676	-3.5	57.2	69	20.6	5706	7131	25.0
33	KNR Payyannur	8551	7324	-14.4	63	43	-31.8	7368	5871	-20.3
34	KSD Manjeswaram	9570	10214	6.7	74	135	82.4	7732	13217	70.9
35	KSD Neeleswaram	7474	8199	9.7	65.7	82	24.8	8790	10001	13.8

Source: Department of Economics & Statistics, Kerala

Annexure XIII- Area, Production and Productivity changes of pepper in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	76	82.9	9.1	28	36	28.6	368	434	17.9
2	TVM Paarasaala	114.5	109.4	-4.5	16.5	24	45.5	144	219	52.2
3	KLM Chadayamangalam	598.6	470.5	-21.4	236.4	184	-22.2	395	391	-1.0
4	KLM Pathanapuram	202.3	206.6	2.1	64	61	-4.7	316	295	-6.7
5	PTA Konni	234	234.8	0.3	112.8	87	-22.9	482	371	-23.1
6	PTA Ranni	425	400	-5.9	169	134.8	-20.2	398	337	-15.3
7	ALP Chengannur	69.4	79	13.8	27	34.5	27.8	389	437	12.3
8	ALP Muthukulam	123.5	91.2	-26.2	34.6	21.5	-37.9	280	236	-15.9
9	KTM Pallam	225.3	244.6	8.6	73	83	13.7	324	339	4.7
10	KTM Uzhavur	368	342.5	-6.9	190	144.9	-23.7	516	423	-18.1
11	IDK Idukki	5965	6059	1.6	2738	2926	6.9	459	483	5.2
12	IDK Thodupuzha	130.9	154.3	17.9	49	48.6	-0.8	374	315	-15.9
13	EKM Alangaad	39	39.3	0.8	7	6.3	-10.0	179	160	-10.7
14	EKM Kothamangalam	228.2	207.9	-8.9	92	104.4	13.5	403	502	24.6
15	EKM Pampakkuda	159	111.7	-29.8	69	40	-42.0	434	358	-17.5
16	TSR Iringalakkuda	99.4	84.4	-15.1	17.5	27.1	54.9	176	321	82.4
17	TSR Pazhayannur	241.2	166.3	-31.1	47.5	66	39.0	197	397	101.5
18	TSR Vadakkanchery	121	104.2	-13.9	44.7	41	-8.3	369	393	6.5
19	PKD Malampuzha	44.7	38.2	-14.5	9	11	22.2	201	288	43.0
20	PKD Pattambi	222	209.3	-5.7	51	72.6	42.4	230	347	51.0
21	MPM Kutippuram	243.7	277	13.7	50.7	77.3	52.5	208	279	34.1
22	MPM Perumpadappu	82.4	85.9	4.3	24	18	-25.0	291	210	-28.1
23	MPM Perinthalmanna	233	257.9	10.7	91.6	58.3	-36.4	393	226	-42.5

Area, Production and Productivity changes of pepper in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	357	387.9	8.7	74	79	6.8	207	204	-1.7
25	KKD Melady Thikkodi	114.9	115.6	0.6	35	32	-8.6	305	277	-9.1
26	KKD Nadapuram Kunnummel	345	352.6	2.2	245	107	-56.3	710	303	-57.3
27	KKD Perambra	418.8	390	-6.9	89	113.9	28.0	213	292	37.4
28	WYD Ambalavayal	1859	2056	10.6	608	990	62.8	327	482	47.2
29	WYD Kalppetta	1406	1445	2.8	402	775	92.8	286	536	87.6
30	WYD Mananthavady	2624	2633.9	0.4	1273	1390.6	9.2	485	528	8.8
31	KNR Irikkur	623	616	-1.1	246.8	301.9	22.3	396	490	23.7
32	KNR Koothuparamba	429	389.2	-9.3	447.8	282.5	-36.9	1044	726	-30.5
33	KNR Payyannur	684	600.6	-12.2	308	303	-1.6	450	504	12.0
34	KSD Manjeswaram	503	485	-3.6	249	275.5	10.6	495	568	14.7
35	KSD Neeleswaram	182.3	128.7	-29.4	68	46.3	-31.9	373	360	-3.6

Source: Department of Economics & Statistics, Kerala

Annexure XIV- Area, Production and Productivity changes of ginger in ASC Blocks

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
1	TVM Pothencode (Kazhakkootam)	2.2	3.2	45.5	5.4	11	103.7	2455	3438	40.0
2	TVM Paarasaala	1.6	1.8	12.5	3.8	4.7	23.7	2375	2611	9.9
3	KLM Chadayamangalam	55	58.4	6.2	728	136	-81.3	13236	2329	-82.4
4	KLM Pathanapuram	16	28.03	75.2	93.3	83.5	-10.5	5831	2979	-48.9
5	PTA Konni	45.5	49.7	9.2	114	197.4	73.2	2505	3972	58.5
6	PTA Ranni	37	35.2	-4.9	159	142	-10.7	4297	4034	-6.1
7	ALP Chengannur	36.7	36.5	-0.5	151.9	171	12.6	4139	4685	13.2
8	ALP Muthukulam	6.7	1.3	-80.6	8.9	1.9	-78.7	1328	1462	10.0
9	KTM Pallam	5	5.2	4.0	16.63	23.7	42.5	3326	4558	37.0
10	KTM Uzhavur	36.4	60.7	66.8	114	209	83.3	3132	3443	9.9
11	IDK Idukki	116	101	-12.9	829.8	638.5	-23.1	7153	6322	-11.6
12	IDK Thodupuzha	7	7	0.0	42.3	47.2	11.6	6043	6743	11.6
13	EKM Alangaad	0.12	0.11	-8.3	0.38	0.27	-29.0	3167	2455	-22.5
14	EKM Kothamangalam	27.8	22.5	-19.1	96.6	72.7	-24.7	3475	3231	-7.0
15	EKM Pampakkuda	13	3.6	-72.3	41.9	18.9	-54.9	3223	5250	62.9
16	TSR Iringalakkuda	1.2	1.4	16.7	3.38	4.4	30.2	2817	3143	11.6
17	TSR Pazhayannur	4.8	4.6	-4.2	12.8	10.4	-18.8	2667	2261	-15.2
18	TSR Vadakkanchery	7.5	3.7	-50.7	15.9	8	-49.7	2120	2162	2.0
19	PKD Malampuzha	11.9	8.6	-27.7	65.5	56	-14.5	5504	6512	18.3
20	PKD Pattambi	8	10	25.0	23	28.2	22.6	2875	2820	-1.9
21	MPM Kutippuram	4.4	4.9	11.4	7.5	9	20.0	1705	1837	7.8
22	MPM Perumpadappu	0.6	0.5	-16.7	0.58	0.45	-22.4	967	900	-6.9
23	MPM Perinthalmanna	9	9	0.0	13.3	43.4	226.3	1478	4822	226.3

Area, Production and Productivity changes of ginger in ASC Blocks...

Sl. No	Name of Block	Area in Hect			Production in Tonnes			Productivity in Kg/ Hect		
		2012-13	2014-15	% of increase	2012-13	2014-15	% of increase	2012-13	2014-15	% increase
24	KKD Koduvally	20.9	16.4	-21.5	71	59	-16.9	3397	3598	5.9
25	KKD Melady Thikkodi	3	1.5	-50.0	7.8	4.5	-42.3	2600	3000	15.4
26	KKD Nadapuram Kunnummel	5	2.4	-52.0	18.4	9.3	-49.5	3680	3875	5.3
27	KKD Perambra	10	5.1	-49.0	27.8	20.5	-26.3	2780	4020	44.6
28	WYD Ambalavayal	709	931	31.3	5030	5843	16.2	7094	6276	-11.5
29	WYD Kalppetta	183.4	210	14.5	750	1090.6	45.4	4089	5193	27.0
30	WYD Mananthavady	359.2	240	-33.2	2112	1210	-42.7	5880	5042	-14.3
31	KNR Irikkur	9	10.5	16.7	42.1	51.6	22.6	4678	4914	5.1
32	KNR Koothuparamba	1.4	1.8	28.6	6	9.8	63.3	4286	5444	27.0
33	KNR Payyannur	9.8	2.8	-71.4	41	13	-68.3	4184	4643	11.0
34	KSD Manjeswaram	Nil	Nil	NA	Nil	Nil	NA	NA	NA	NA
35	KSD Neeleswaram	0.7	0.34	-51.4	0.79	1.1	39.2	1129	3235	186.7

Source: Department of Economics & Statistics, Kerala

Annexure XV- Parameter wise performance index of all ASCs...

Sl. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
ASC No.	Whether work order is given on rotation basis to service personnel?	Whether accidental insurance taken for service personnel?	Whether parking yard for machinery available? (Y/N)	Whether stock register and log book maintained?	Whether Annual accounts audited?	Whether used maintenance fund is recouped?	Whether the service charges to service personnel is given through bank?	Whether ASC could undertake all requirements of farmers in time?	Whether ASC's work is satisfactory for mechanisation in agriculture?	Percentage of registered farmers who depend ASC for further assistance	Work satisfaction level of ASC (CS/S/NS)	Profit during 2014-15	No. of meetings of Management Committee	No. of meetings of High Power committee	No. of meetings of General Body	Farmer Satisfaction on services received from ASC	INDEX
Weight	5	5	5	10	5	5	5	5	10	5	10	10	4	4	2	10	100
ASC -1	5	0	0	10	5	5	5	5	10	4	10	2	1.6	4	2	8	76.6
ASC -2	5	0	0	10	5	5	5	5	10	4	10	1	1.2	4	2	10	77.2
ASC -3	5	0	0	0	0	0	5	5	6	5	10	8	1.6	4	0	8	57.6
ASC -4	0	0	5	10	0	0	0	0	6	0	3	1	4	4	0	1	34
ASC -5	5	5	0	0	0	5	5	0	6	1	6	2	2.4	4	2	8	51.4
ASC -6	0	5	5	10	5	0	5	0	6	4	10	4	0	0	0	10	64
ASC -7	5	0	5	10	0	5	0	0	3	3	3	1	1.6	4	2	8	50.6
ASC -8	5	0	5	10	0	5	5	0	10	2	6	2	4	4	2	8	68
ASC -9	5	0	5	10	0	0	0	5	6	1	6	1	2.4	4	0	8	53.4
ASC -10	5	5	5	10	0	0	5	0	6	4	6	1	1.6	2.4	2	10	63
ASC -11	5	0	5	10	5	0	5	5	6	0	6	1	2.4	4	2	8	64.4
ASC -12	5	0	5	10	5	5	5	5	6	4	6	2	4	4	2	8	76
ASC -13	5	0	5	10	5	0	0	0	6	4	6	1	1.2	4	0	5	52.2
ASC -14	0	0	5	10	0	0	0	0	3	5	3	1	0.8	4	2	8	41.8
ASC -15	5	0	5	10	5	5	5	5	6	3	6	1	4	4	2	8	74
ASC -16	5	0	5	0	0	0	0	5	6	0	6	1	0.8	2.4	2	8	41.2
ASC -17	0	0	5	10	5	5	0	5	6	4	6	2	0	0	2	5	55
ASC -18	0	5	5	10	0	5	0	5	6	1	10	8	0.8	2.4	2	8	68.2

Parameter wise performance index of all ASCs...

Sl. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
ASC No.	Whether work order is given on rotation basis to service personnel?	Whether accidental insurance taken for service personnel?	Whether parking yard for machinery available? (Y/N)	Whether stock register and log book maintained?	Whether Annual accounts audited?	Whether used maintenance fund is recouped?	Whether the service charges to service personnel is given through bank?	Whether ASC could undertake all requirements of farmers in time?	Whether ASC's work is satisfactory for mechanisation in agriculture?	Percentage of registered farmers who depend ASC for further assistance	Work satisfaction level of ASC (CS/S/NS)	Profit during 2014-15	No. of meetings of Management Committee	No. of meetings of High Power committee	No. of meetings of General Body	Farmer Satisfaction on services received from ASC	INDEX
ASC -19	5	0	0	10	0	5	0	5	6	1	3	0	0	0	0	8	43
ASC -20	0	5	0	10	5	5	5	0	6	5	6	0	3.2	2.4	2	8	62.6
ASC -21	0	0	5	10	0	5	0	0	6	1	10	2	4	2.4	2	8	55.4
ASC -22	0	0	5	0	5	5	0	5	6	3	6	6	1.6	4	2	8	56.6
ASC -23	0	5	5	10	0	5	5	0	6	2	6	1	4	2.4	2	8	61.4
ASC -24	5	5	5	10	0	0	5	0	6	3	6	8	2.4	4	2	8	69.4
ASC -25	5	5	0	10	5	0	5	5	6	4	6	2	0.8	4	0	8	65.8
ASC -26	5	0	5	10	0	0	5	5	3	2	6	0	4	4	2	8	59
ASC -27	5	0	5	10	5	5	5	0	3	3	6	0	4	4	2	8	65
ASC -28	0	0	5	10	0	0	0	0	6	5	6	1	0	4	2	5	44
ASC -29	5	0	0	0	0	0	0	5	10	5	6	1	0	0	2	8	42
ASC -30	5	0	5	0	0	0	5	0	10	5	3	1	0	2.4	2	3	41.4
ASC -31	0	0	5	10	0	5	5	5	6	1	6	2	0	2.4	2	8	57.4
ASC -32	0	0	5	0	5	0	5	5	6	3	6	1	1.6	0	0	8	45.6
ASC -33	5	5	5	10	5	0	5	0	3	4	6	1	3.2	4	2	8	66.2
ASC -34	5	0	5	10	0	0	0	0	6	4	3	1	1.2	4	2	8	49.2
ASC -35	5	5	5	10	0	5	0	5	6	4	6	2	3.2	4	2	8	70.2
Average	3.3	1.4	3.9	8.0	2.0	2.4	2.9	2.6	6.1	3.0	6.2	2.0	1.9	3.1	1.5	7.6	57.8

Note: For name of ASC, Annexure I may be referred