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Research Paper

Changing behavioral pattern of Agrarians towards Agricultural investment in Malabar region - An area wise Analysis.

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ABSTRACT
Agriculture scenario in Kerala is undergoing through distress owing to the following factors: the continuous decline in the cultivable area, the low productivity, shortage of skilled agriculture labours, the occurrences of tiny and fragmented holdings. From these challenging environment, a review of the Changing behavioral pattern of Agrarians towards Agricultural investment in Malabar region has to be studied to give some exposures to emerging tendencies relates to the perceptions towards farmers based on locality. The present study focus on Changing behavioral pattern of Agrarians towards Agricultural investment in Malabar region - An area wise Analysis. The main objectives of the study is to study the effect of various locality on Agriculture Growth Perception of agrarians in the Malabar region of Kerala and to Suggest various strengthening measures for agriculture and allied sectors in Kerala.
KEY WORDS: *Agricultural , agricultural Investment and Agrarian society.*

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I. INTRODUCTION

Kerala state is the southernmost region in India; geographically, it is smoothed with the affluence resources such as backwaters, rivers and streams, pleasant sunshine and humidity, rainfall, and a right climate suitable for everyone and also a moderate weather throughout the year. The geographical area of Kerala spreads over the Western Ghats which is famous for its Flora and fauna diversity called and well known as the 'Biodiversity Paradise'. Also, the palm-fringed Arabian sea in the west, the majestic Western Ghats with in the east, lush green paddy fields, charming backwaters, year-round colorful festivals all make Kerala a paradise in the world. Such a topographical feature of the state helps the farmers to cultivate some of the important cash crops that are particularly apt for the soil quality of the state.

Kerala is one of the leading agricultural states in the country and also one of the largest producers of rubber, coconut, pepper and coir. As per 2016-17 budget, Government of Kerala had proposed an outlay of 116.74 million for the agriculture sector. In the very same budget allocation, government announced plans to invest 3.3 million for the expansion of the rubber industry in Kerala. As usual, in order to promote the agricultural practice in the state, both the Centre and State governments together have been offering tax incentives to the farmers. Kerala's traditional industries are handloom, cashew, coir and handicrafts. Kerala's GSDP in 2012 was 3.23.692.89 crores which contribute to 3.91 % of the total national GDP. Per capita GDP of Kerala is one among the highest in the country. Out of GSDP, Agriculture contributes 14 %, Industry contributes 22 % of income while the service sector contributes a massive 64% of the income between 2004-05 through 2015-16. The Gross State Domestic Product (GSDP) found to be expanding at a Compound Annual Growth Rate (CAGR) of 11.65 percent to 89.44 billion whereas the Net State Domestic Product (NSDP) expanded at a CAGR of 10.26 percent to 68.5 billion (FICCI Kerala, 2012).

Agriculture Scenario in Kerala

The agriculture sector in the state is undergoing through distress owing to the following factors: the continuous decline in the cultivable area, the low productivity, shortage of skilled agriculture labours, the occurrences of tiny and fragmented holdings.

The sector in Kerala has been passing through a terrible period. This scenario harmfully affected the economic development of the state.

The sector has been manifested with a negative growth rate from the mid-seventies to the mid-eighties. There was a gradual improvement in agricultural output till 1996-97. Afterwards, the sector started facing major crisis due to the stiff competition in the area of import and export of agricultural commodities like rubber, pepper, tea etc.

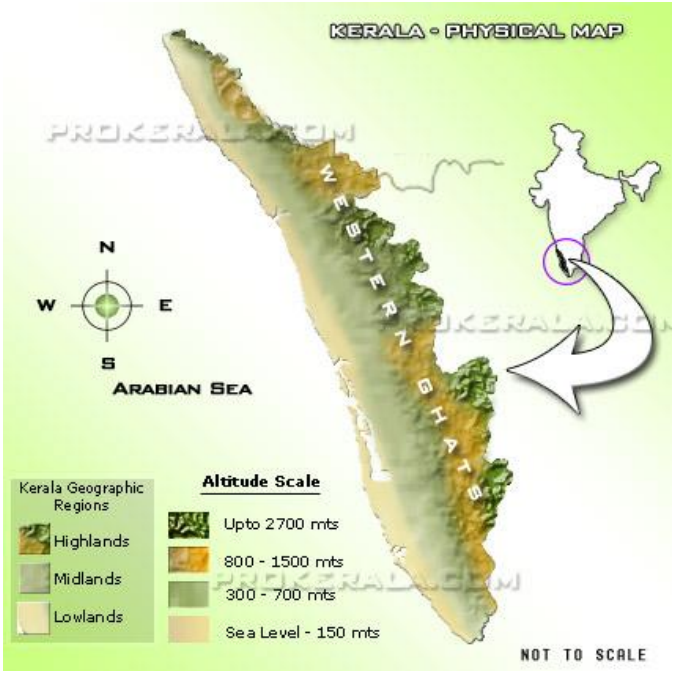
From these challenging environment, a review of the Changing behavioral pattern of Agrarians towards Agricultural investment in Malabar region has to be studied to give some exposures to emerging tendencies relates to the perceptions towards farmers based on locality

The percentage of the agriculture sector in the State Domestic Product showed a steep decline nearing more than 50%. Thus, it gives strong grounds to study the overall "agri-culture" of the State. Even then, a massive coverage of the study would not be possible. Hence, the study chose a few districts of Malabar (North Kerala) region.

Topography of Kerala

Kerala's topography is mostly an undulating structure. It means that each valley, slope, and ridge formation depict and characterises each small area of Kerala state. This arrangement is known as a 'topo sequence'; the tiniest unit of a landscape. The valleys can be broad, narrow, flat-bottomed or sloping. Location of Kerala is at the south-western tip of the Indian peninsula, and it is situated between 8° 18' and 12°48 minute Northern latitude and 74°52 minute and 77°22 minute eastern longitudes (MapsofIndia, 2018). The state shares a common border with the states of Karnataka in north and northeast, and Tamil Nadu in the east and south. The area constituting Kerala is a slight strip of land bordered east in the Western Ghats and West the Arabian Sea. The coastline measures roughly about 580 km while the width of the state varies from a minimum of 11 km to a maximum of 121km. Kerala's topography is diversified with three main natural regions, which form parallel belts running across the entire length of the State. These are the highland region, rich in tropical flora and fauna which slopes down from the Western Ghats and consists of 'extensive ravines, dense forests and tangled jungles'. The midland region is characterised by gentler ascents, widening valleys and luxuriant vegetation. The low-lying coastal area contains river deltas and backwaters and forms the lowland region (Balakrishnan, 1994). Another important physical feature of Kerala comprises its rivers and lakes. There are 44 rivers, of which, all except three flows from east to west into the Arabian Sea. It is also endowed with some beautiful lakes. Kerala enjoys the moderate climate. The temperatures are relatively uniform over the State, and there is only a small variation in the mean monthly temperatures throughout the year.

Natural Divisions of Kerala



The geographical division of Kerala comprising of the High land region, Midland region and Low land region founding a parallel belt transversely the length of the state.

Low Land

The low land region known as the Coastal Area bordering the Arabian Sea covers an area of almost 4000 sq.km with a spiral mechanism of sand and plentiful back water fabrications on the western frontier of the state. backwaters and seashores. This area is very fertile and suitable for the coconuts and rice.

Midland

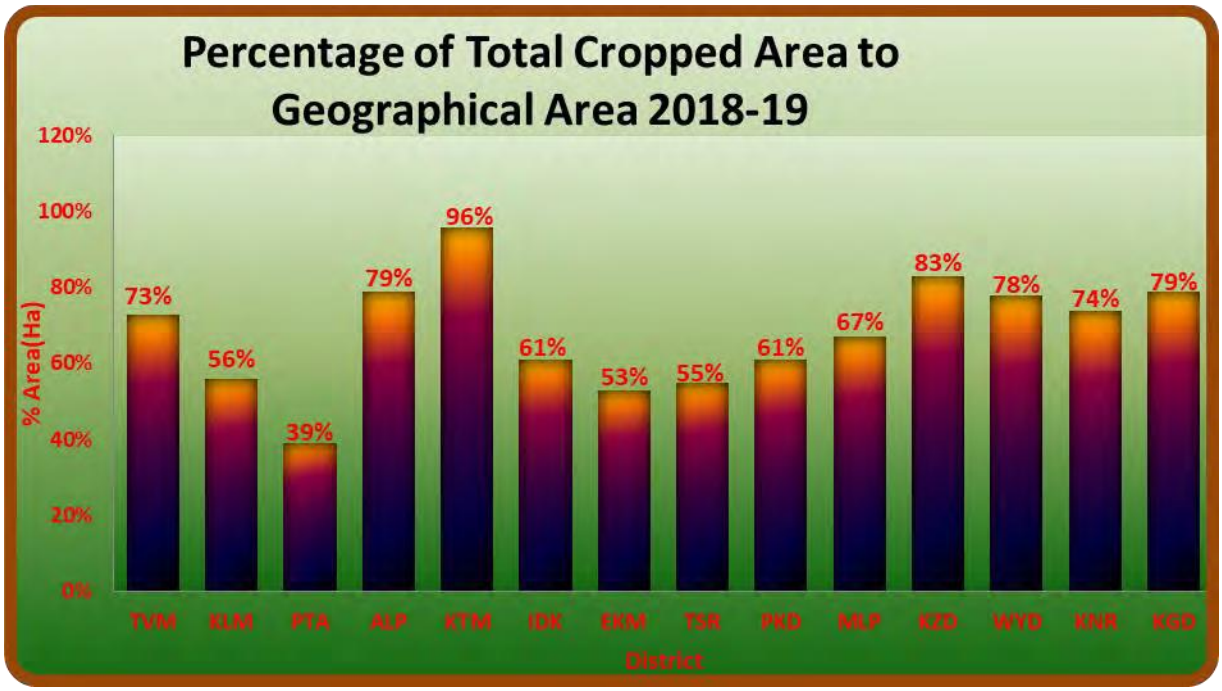
The midland region, lying between the mountains and the lowlands, is made up of undulating valleys and Hill areas are proferred a unique stripe of laterite soil split across the number of rivers. It is 16200 sq.km in the area which counts for 40 percent of the total land area of the state. It is suitable for a large variety of the crops like rice, coconut, areca nut, pepper, cashew, ginger, tapioca, rubber, banana and also different varieties of vegetables.

High Land

The high land region consists mainly of mountains covered by dense forests slope down from the Western Ghats also known as the Sahyadri. The area has an average height of 900m, with some peaks well over 1800 m in height and 18650 sq.km in the area and accounts for 48 percent of the total land area of Kerala. The major plantation crops like cardamom, tea, coffee, pepper, rubber and various spices are bred in this region. This area is often identified as the Cardamom Hills. Most of the rivers of Kerala begin from this Western Ghats

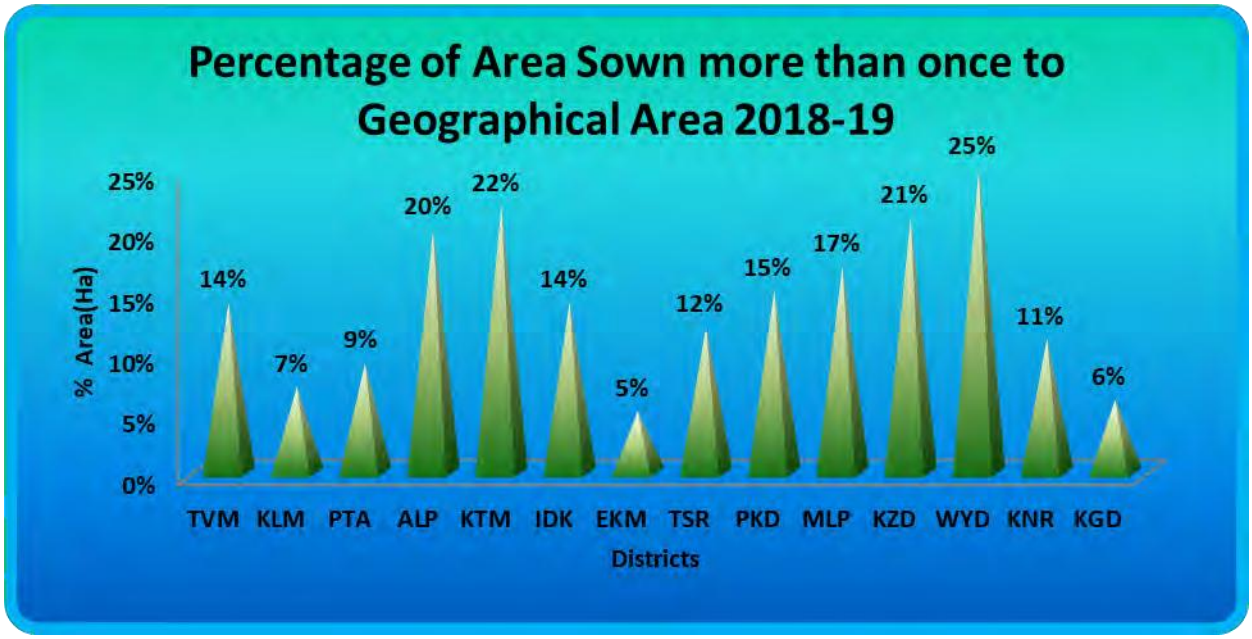
Total Cropped Area (Gross Area Sown)

The gross area sown represents the total area cultivated under all food and non-food crops including the area sown more than once during the year 2018-19. According to this concept the area under various crops in the same plot can be more than the actual area. The gross area sown during 2018-19 was 25,71,100.75 Ha against 25,79,699 Ha in 2017-18.Thegross swon area is slightly decreased by 0.33 % over the previous year.



Area Sown more than once

This represents the difference between the gross area sown under all crops and the net area sown during the agricultural year. The area sown more than once during 2018-19 is 5,37,470.08 Ha as against 5,39,284.44 Ha in 2017-18.



Being in the very same line, Kerala has also been undergoing through radical investment pattern changes; with no exceptions to agriculture. Being a consumer State, Kerala should certainly pay more attention to its agricultural output to help achieve self-reliance, though it is nearly impossible. Nonetheless, a meagre number of farmers are only still choosing to farm because of the alternative employment availability in the Gulf countries. Earlier, such farmers were used to relying on or cultivate hardly a single crop all through the year which could not necessarily yield the best. Here, there is an interesting side-line situation as the farming strategies have been changed to cultivate multiple crops in the same land to align with the suitable climate fluctuations. In the bottom line, household farmers are the ones who can experience and react to the changes in the sector in particular. Therefore, the study has considered taking household farmers' direct perception based on the locality.

II. REVIEW OF LITERATURE

Dev (2002) analysed the factors affecting the growth of the agriculture sector. The study also analysed the inactive progress in the agriculture sector and its downside impact on the rural employment. It also observed need to have a viable agriculture and strive with the other countries under the WTO scenario, and also the growth rate of agricultural credit for small and the marginal farmers come down in the 1990s as compared with the year 1980s. During this period, there was no such decline in credit growth for large farmers. The study signified that a shift in cropping pattern in favor of non-food and cash crops is needed..

Mahesh (2000) in his research elaborates the implementation of land reforms and states that the agriculture sector in Kerala has undergone extensive changes in farm size, cropping pattern, cultivation practices and productivity. There has been a phenomenal development in the number of agricultural holdings leading to the materialization of the immense number of small holdings. The study examined whether the increase in productivity of land can be described by the decrease in the size of holdings. It was verified through a sample survey conducted in a rural locality of Kerala. .

Thomas (1999) revealed that the changes in the cropping pattern and low growth rate in crop productivity were the two factors in the pattern of agricultural development in Kerala since early 1980s. A detailed examination of the major factors responsible for cropping pattern change was analyzed in the study using secondary data during the 80s and 90s. The study found that a low growth rate in the price of rice, shortage of farm labourers and a rapid increase in their daily wages, low price of land under food crops, paddy, and tapioca, migration of people to urban areas, the rational course of profit maximization were the main reasons for the conversion of land from cultivating

Eapen (1999) considered the pattern of agricultural Development with the 11 commercial crops to be a major determinant of rural diversification in Kerala. The growth of commercial crops resulted in relatively high levels of rural non-agricultural employment like agro-processing, trade and commerce, transport and other services. The study asserts that it was a process of commercialisation, which instigated a relatively high level of rural non-agricultural employment rather than rapid industrialisation or urbanisation.

Chand, Raju, & Pandey (2007) considered to study agriculture growth crisis; have discussed the trend in agricultural growth and factors underlying into the slowdown. They also discovered the ways and means to

produce acceleration in agricultural growth in India. It was observed that the initial years of reforms were rather favourable for agricultural growth but the post-WTO period seen a plunge in the growth rate of almost all sub-sectors and commodity groups in the farming sector.

After going through an extensive literature review, it has been found that there is insufficient study based on the Locality effectiveness of farmers focus on Malabar region. Most of the studies related to Kerala agriculture was undertaken were in the areas of the shift in cropping pattern and land utilization on agriculture. There is less number of ground level analysis by consulting the farmers itself. Farmers are the best go-to persons who can input the actual scenario existing in agriculture. Here arises the relevants of analysis of the attitudes towards agricultural investment based on the locality of Malabar region of kerala.

Definition of Key Terms

The researcher has predefined specific terms which form the fundamental conceptual ground for the research going forward; which will help the researcher and reader to delineate the study and to decode and will prompt further thinking on the research done.

Agriculture Investment: Agricultural investment is mainly involved with investing funds in agricultural and allied activities by government, public or private investors to generate incomes leading to capital formation in the sector.

Agrarian Society: An agrarian society (or agricultural society) is a group of people whose economy is based on producing and maintaining crops and farmland. In other words, is a society whose wealth and prosperity are primarily based on agriculture (Cervantes-Godoy & Dewbre, 2010). More than half of the people living in that society make their living by farming (Crossman, 2017).

Agriculture Growth Perception: The perception of investors or agrarians differs from different diverse factors like age, income, the experience of investing, investment objectives and individual social needs (Haritha & Uchil, 2016). The perception of individual elements concerning different macroeconomic variables seems to be disturbing the market behaviour (Dasgupta, n.d.).

Objectives of the Study

- To study the effect of various locality on Agriculture Growth Perception of agrarians in the Malabar region of Kerala.
- To Suggest various strengthening measures for agriculture and allied sectors in Kerala.

Hypotheses of the Study

H01: There is no significant difference in Agriculture Growth Perception across various localities of Agrarian society in the Malabar region of Kerala

III. RESEARCH DESIGN AND METHODOLOGY OF THE STUDY

As per the detailed literature review, the researcher identified one single dependent variable which is an agrarian growth perception (Ramakumar, 2006). Variables of the Study Through the initial observations into the problem, the investigator is mainly looking at the attitude or awareness of farmers about the agricultural income growth and its impact on their locality. To justify this study, first and foremost, the study has to pre-decide what all aspects are covered in the questions. Hence, a details variable analysis has been conducted. Thus, firstly, to make sure that the researcher has carried out the work adhering to the research ethics with no bias - the assumptions are laid down as there are no differences in the agriculture growth perception across the demographical aspects such as locality of the respondents. Secondly, independent variables identified are related to the dependent variable: agriculture growth perception. To put it clearly, the study will look through the impact of such independent or predictor variables on the dependent variables or outcome variables.

The study is taking various variables Therefore, the present study is an earnest attempt to analyse agricultural area, production and productivity and the growth trend of different crops in the state, also analyse various components which leads to positive changes on the increase in return on agricultural investment. The study also tries to suggest various strategies which help to strengthen the growth and development of the agriculture sector of the Kerala State, especially in the Malabar region.

Primary Data Based on the research questions generated out of the initial observations, a set of investigative questions are formulated that are to be filled out by the respondents (household farmers) during data collection. So, the primary data here, in this case, consisted of data collected through structured questionnaires which are administered to the target respondents. Data has been obtained from 10 out of 20 Taluks belonging to 4 districts which cover the major of the Malabar region. After the pilot study, some of the irrelevant variables from the demographic variables are dropped and went ahead with the rest of the variables defined.

Sampling Size Sampling Size for the study is 508 farmers distributed across four districts in the Northern region of Kerala . For the primary data research, the total population constitutes the entire registered and unregistered farmers living in four districts . As aforementioned, complete population coverage is

impossible, the researcher followed Cochran (1977) model to decide the sample size. Cochran had developed a formula for calculating the minimum sample size when the population size is found to be infinite.

This study is a sample survey of selected districts of northern region of Kerala, i.e. Malappuram, Kozhikode, Palghat and Wayanad, which are dominating in diferent Agriculture crops. In this study, an earnest attempt has been made to analyse the perception of agrarians in Kerala with particular reference to different locality of Malabar region.

However, the study still used the sample size of around 600 Questionnaires circulated to the farmers, out of these 540 farmers marked their responses and returned. But, out of which, 32 responses were found to be incomplete and not suitable for proper analysis. Hence, the researcher opted such responses out. Finally, the researcher ended up with 508 questionnaires which were found to be usable for further analysis.

Sampling Frame The sample frame comprises of the farmers from the select districts of the northern region of Kerala (Palakkad, Malappuram, Kozhikode, and Wayanad) who are engaged primarily in agricultural activities for livelihood. First, the Judgemental sampling method is used to select the district based on the agriculture performance. Secondly, a convenience sampling technique is used to select the Taluk of each 2 Malabar region is the compilation of whole or part of six districts in Northern Kerala. They are Northern Palakkad, Malappuram, Kozhikode, Wayanad, Kannur, and Kasaragod district. For the administrative set, each district has been divided into certain taluks and it incorporated the various corporation, municipality, and panchayat aligned under the area of study.

Data Analysis and Interpretations

The information gathered through the questionnaire from the respondents was processed and analysed by using the Statistical Package for Social Science (SPSS Version 22). The relationship of agriculture growth perception of household farmers has to be checked out with different determinants or variables which would make a severe impact on it. The hypotheses testing is related to the statistical comparison of means by using One-Way Analysis of Variance (ANOVA). The primary data collected and collated using questionnaire from household farmers has been processed, analysed and conclusions were drawn by the application of statistical techniques with the help of IBM – SPSS & AMOS. This section is exclusively devoted for the simple frequency, pie chart, and Histogram presentation of categorical variable considered under the study.

H01: There is no significant difference in Agriculture Growth Perception across Localities of Agrarian society in the Malabar region of Kerala

This hypothesis enquires to see if there is any significant difference in the mean of AGP among the household farmers or agrarians of various localities of Malabar region.

Table No: 1

Descriptive Statistics of AGP Vs Locality of Respondents

Locality Category	N	Mean	Std. Deviation	Std. Error	95% Confidence	
					Lower Bound	Upper Bound
Panchayath	344	3.7407	.32301	.01742	3.7064	3.7749
Municipality	124	3.6351	.50128	.04502	3.5460	3.7242
Corporation	40	3.6273	.50929	.08053	3.4644	3.7902
Total	508	3.7060	.39247	.01741	3.6718	3.7402

Table No 2

Test of Homogenity of Varience

Levene Statistic	df1	df2	Sig.
5.143	2	505	.006

The above Table 2 shows that there has been a significant variance of responses across different localities of the respondent when they live in. Thus, in order to ensure that the testing is satisfying the homogeneity of variance assumption, mean's equality or Welch's ANOVA has been used to the differences.

Table No: 3

One Way ANOVA on AGP across Various Localities of Household Farmers in the Malabar Region

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.285	2	.643	4.226	.015
Within Groups	76.811	505	.152		
Total	78.096	507			

Table No: 4 Robust Tests of Equality of Means

Test	Statistics (a)	df1	df2	Sig.
Welch	3.106	2	88.957	.049

a. Asymptotically F distributed.

Table No: 5 Post-Hoc Multiple Comparisons
Dependent Variable: AG_Comb

Games-Howell

(i)Locality	*(j) locality*	*Mean Difference (I-J)*	*Std. Error*	*Sig.*	95% Confidence Level	
					Lower bound	Upper bound
Panchayath	Municipality	.10560	.04827	.076	-.0086	.2198
	Corporation	.11341	.08239	.362	-.0866	.3134
Municipality	Panchayath	-.10560	.04827	.076	-.2198	.0086
	Corporation	.00781	.09225	.996	-.2135	.2291
Corporation	Panchayath	-.11341	.08239	.362	-.3134	.0866
	Municipality	-.00781	.09225	.996	-.2291	.2135

The above Tables 3 and 4 & 5 explain the output of One-way ANOVA performed at 5% significance level. The Welch's ANOVA's p-value is found to be 0.049 which is less than 0.05, implies that there is a statistically significant difference in the mean of AGP across various localities of the respondents, $F(2,505) = 4.226$, $p < 0.05$, $n2 = 0.016$. Games-Howell post-hoc testing exposed a borderline significant difference between the pairs of localities with other localities. Panchayath having the most number of responses ($M = 3.74$, $SD = 0.32$), Municipality ($M = 3.63$, $SD = 0.50$), and the least of the respondents are from Corporation ($M = 3.62$, $SD = 0.50$. The effect size is considerably low as eta-squared (n2) is less than 0.2.

These numbers furnished above tells that the agriculture growth perception differs from one place to another. This also enables the researcher to infer that the locality of the household farmers matters to constitute a perceptive agriculture growth. Therefore, the null hypothesis (H01.4): There is no significant difference in Agriculture Growth Perception across Localities of Agrarian society in the Malabar region of Kerala is **Rejected.**

Findings of the Study

On the basis of the findings emerging from the testing of hypotheses through data analysis in.

Demographic Characteristics of Household farmers (Locality) Demographic variables also show the locality of the respondent. Majority of the respondent was hailing from the panchayat category that represents 343 (67.7%), and 125 (25%) farmers in the sample size included in the category of municipality. Only a small part of the farmers is under the category of the corporation area. It represents only (40), 8% of the total respondents. The researcher finds out the reason behind the significant representation that is the area of Wayanad and Malappuram are entirely under the panchayat and municipality set up. In the case of Kozhikode district, there is only one corporation, but the people living there are not much interested in engaging in agricultural activities. Majority of the respondents from Palakkad district are included in the locality category of municipality.

While testing if there is any significant difference in perceptive agriculture growth among respondents from the various group, it was found that there is a considerable difference in agriculture growth perception according to the native. This is because of the physical, economic and political factors which form the overall agriculture growth perception explored.

Suggestions to Household Farmers

- Practice the best available cropping methods by the soil quality, seasonal fluctuation and natural calamity vulnerability.
- Make use of all the financial aids, hands-on training, distribution centres offered by the government or government tied-up institutions.
- Household farmers can walk-in to the agriculture research institutes nearby to discuss the actual problem existing in their locality.
- Farmers must consider agriculture as the full-time dedicated job rather than as a parallel income source.

Suggestions to state and central Government

- Promote hi-tech agriculture.
- Identification and conversion of fallow lands into cultivable lands.
- The government must strictly restrict the conversion of fertile land into other non-agriculture farmers by recommending suitable and profitable cropping.
- The government may provide for assistance in farm activities
- Promote R&D to know the apt farming method to be adopted in a particular locality.
- There must be a remotely accessible help desk for a fast commencement of farming.
- Promote zonal/region-wise crop specific strategies.
- Loans and subsidies provided to the farmers must be observed.

REFERENCES

[1]. Government of Kerala. (2016). Agricultural Statistics 2015-16.Thiruvananthapuram
[2]. Government of Kerala. (2017). Agricultural Statistics 2016-17. Thiruvananthapuram
[3]. Government of Kerala. (2016). Agricultural Statistics 2017-18.Thiruvananthapuram
[4]. Government of Kerala. (2017). Agricultural Statistics 2018-19. Thiruvananthapuram
[5]. Haritha, P., & Uchil, R. (2016). Conceptual framework on market factors affecting investor's sentiments and the effect of behavioral pitfalls on investment decision making. Journal of Economics and Finance, 29–34.
[6]. Field, A. (2013). Discovering Statistics Using IBM SPSS Statistics. (M. Carmichael, Ed.) (4th ed.). New Delhi: Sage Publications
[7]. Gaskin, J. (2018a). SEM Boot Camp 2018: Exploratory Factor Analysis [Video File].
[8]. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297–334. Cronbach, L. J. (1971). Test Validation. (R. L. Thorndike, Ed.), Educational
[9]. Measurement. Washington, D.C: American Council on Education.
[10]. Crossman, A. (2017). What Is an Agrarian Society ? Retrieved June 9, 2017, from https://www.thoughtco.com/agrarian-society-definition-3026047
[11]. Department of Economics & Statistics, G. (2015). Agricultural Statistics 2013-14. Trivandrum, Kerala. Deshpande, T. (2017). State of Agriculture in India. New Delhi.
[12]. Domar, E. D. (1946). Capital Expansion, Rate of Growth, and Employment. Econometrica, 14(2), 137–147.
[13]. Exim Bank, I. (2007). Export Potential of Indian Plantation Sector: Prospects and Challenges. (S. Bhaskaran & K. Kumaraval, Eds.) (First). Hyderabad: ICFAI University Press.
[14]. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297–334
[15]. Field, A. (2009). Discovering Statistics Using SPSS Statistics (3rd ed.). London: Sage Publications.
[16]. Danghi, H. K., & Dewen, S. (2016). Business Research Methods (1st ed.). Delhi: Cengage Learning India Private Limited.
[17]. Dasgupta, T. (n.d.). A study on the Investment Preferences in the business Capital of Nagarland. International Journal of Scientific Research and Management Studies, 2(3), 143–149.