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ENTREPRENEURSHIP DEVELOPMENT BY AGRO-BASED FARM IN ASSAM: OPTIMISM AND OPPORTUNITIES (WITH SPECIAL REFERENCE BY MUGA, ERI, AND MULBERRY SILK ENTREPRENEUR)

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ABSTRACT

In sericulture activities involve the rearing of silkworms and the production of raw silk. Its obtained out of cocoons spun by certain species of insects. Sericulture major contain food-plant cultivation and to feed the silkworms which called spin silk cocoons. The reeling of the cocoons for unwinding the silk filament for the value-added benefits like processing and weaving activities.

This study presented the location of the Sivsagar district who has contributed 98 % production of Assam. In different localities, three types of silkworms are considered viz., Eri, Muga, and Mulberry -which are being reared by Seri farmers in the Sivsagar district. Because Assam is one of the industrially developed states, so, the consideration of silk practice as entrepreneurship is felt very important at the present juncture in the Sivsagar district. Therefore, the researcher has undertaken to study the title - "Growth of Entrepreneurship Development in Assam by Agro-based activities with special reference Muga, Eri and Mulberry farms".

INTRODUCTION

Sericulture is one of the most important agro-based industries. In sericulture activities involves the rearing of silkworms for the production of raw silk, which is the yarn obtained out of cocoons spun by certain species of insects. Sericulture major comprise of food-plant cultivation to feed the silkworms which spin silk cocoons. The reeling of the cocoons for unwinding the silk filament for the value-added benefits like processing and weaving activities.

In India, Assam is one of the North-Eastern regions' parts which is particularly the natural abode of sericulture-based activities especially the golden Muga silk, Eri silk, and mulberry silk. The Sericulture industry constitutes an important aspect and holds a unique position in the economy of Assam. In Assam, sericulture is an Agro-based activity as well as a commercial activity that plays a significant part in the cultural heritage of the Assamese people.

Assam is the largest producer of silk in the world who contributes the economic progress. Silk Worms are reared in almost all districts of Brahmaputra valley. According to Assam Government records, about more than 2625 hectares of land are utilized for the production of Muga, 2993 hectares of land are utilized for Eri, and 2300 hectares of land are utilized for Mulberry Silk. About 30,000 Assamese households are related to Muga Silk production, 1.28 lakh families are in Eri silk production and about 40,000 families are in Mulberry silk production. Due to the region having a traditional and strong base of weaving on handlooms and also to support the silk sector. Almost one-third of the handloom weavers residing in these areas- especially districts of lower Assam like Kamrup, Goalpara, Udalguri, Kokrajhar, and in upper Assam- Tinsukia, Dibrugarh, Sivsagar, Jorhat, Golaghat, Lakhimpur & Dhemaji. Silk weaving is an important household activity in these areas and also all over the region providing economic support by almost 30 lakhs weavers.

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Among all the sericulture producing districts of Assam, Sivsagar district is the largest producer of commercial cocoons. Sericulture activity's contribution to entrepreneurship development is significant as commercialization and production at a large scale in an organized manner has been considered one of the important contributions yet. The present location of this study i.e., Sivsagar district who has contributed 98 % production of Assam. Sivasagar is a major sericulture practicing district of upper Assam. In different localities three types of silkworms, viz., Muga, Eri, and Mulberry are being reared by seri farmers. Out of these three silkworms, Eri and Mulberry Silkworms are reared by indoor methods and Muga silkworm is reared on its food plants in the outdoor method.

Due to the demand for silk fabrics of Assam, the researcher has been considered the Sivsagar district one of the important contributions growing trend. So, the present study felt very important and the researcher has undertaken to study "**Entrepreneurship Development by Agro-based Farm in Assam: Optimism and Opportunities with special reference by Muga, Eri, and Mulberry farms".**

SCOPE OF THE STUDY:

From the macroeconomic point of view, entrepreneurship and economic development, both are closely interrelated. Economic development itself enjoys a situation for engagement of unemployed youth and solve the unemployment problem. In this point of view, Agro-based activities play a vital role and important processes to build entrepreneurial development. Though earlier this sector is not considered as an entrepreneurial activity, nowadays government and other non-government agencies provide various schemes and programs for extension of entrepreneur's awareness. They also have been conducting various entrepreneurial development programs at the district level as well as the state level for proper utilization of the resources and they're necessary. By promoting entrepreneurship amongst our unemployed youths, we can develop an entrepreneurial society to utilize resources as well as generate employment.

LIMITATION OF THE STUDY:

In every activity, the result has been depending on their geographical, demographical, and environmental situation. It's also considered an implementation of the activities with industrial motivation for optimum utilization of manpower and installation of modernized techniques etc. In this study, the researcher has been considered Agro-based industries-especially the Muga, Eri, and Mulberry silk industry in Sivsagar District of Assam. Since out of 33 districts, only one district has been presented, therefore, the study could not make on overall factors influencing all locations of Assam.

So, this study's result has considered of Agro-based activities have emerged as economically viable industrial activities in the Sivsagar district only.

RESEARCH OBJECTIVES:

The objectives of the present study

- To study of Sivsagar district agro-based industries profile and selected sample profile which considered for research studies.
- To determine the socio-economic background of Muga, Eri, and Mulberry rearing entrepreneurs.
- To examine the problem and prospect of entrepreneurship based on agro-based activities.
- To study governmental and non-governmental assistance for the agro farmer.
- To suggest measures based on findings of the research study.

RESEARCH METHODOLOGY:

The present study involves both types of work -descriptive and analytical. Primary data collected from field study and secondary data collected from various web- sites and journals and newspapers etc.

PRIMARY DATA:

SOURCES OF DATA:

A list of entrepreneurs the primary data collected from Assistant Director of Sericulture, Sivasagar District Office which in Joysagar, Assam and also some data collected from Department of Handloom, Textile & Sericulture, Govt. of Assam which situated in Khanapara- Guwahati, Assam. The sources of primary data are collected for a period of two

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years from 2018-19 to 2019-20 and five years from 2014-15 to 2019-20 respectively.

SAMPLING DESIGN AND TECHNIQUE:
A questionnaire has been framed specially for this purpose because of exploratory in nature. The first kind, a pilot test of the questionnaire is framed and data are based on field survey and personal interviews with the Muga, Eri, and Mulberry practitioner /rearer. After the information and data are collected, its tabulated and analyzed with the help of simple statistical tools like bar diagrams, pie charts, and also find out significance by non-parametric test X^2 and R^2 test.

SAMPLING SIZE:
In the Sivsagar district, the number of Muga, Eri,and Mulberry rearing villages having more than 473 villages with two sub-divisions, viz., Sivasagar and Nazira, which adopted sericultural activities. These villages are under five Development Blocks, Viz., Sivasagar, Demow, Amguri, Nazira, and Gaurisagar. For the study, primary data have been collectedfrom five localities, i.e Sivasagar, Demow, Amguri, Nazira, and Gaurisagar. Though the number of Muga, Eri, and Mulberry rearing villages is 473, out of these samples, only 25% of the villages have been covered under the study. That 25% of samples of Muga, Eri, and Mulberry rearing villages find out 118.25 (approximately), but the study has been considered 120 numbers of the sample which is selected by the random sampling method. The distribution of villages for data collection has been considered as follows: Sivsagar-23, Demow-37, Amguri-13, Nazira-16, and Gaurisagar-31.

SECONDARY DATA:
The secondary data has been collected from the various related periodicals, journals, and manuals along with data of government and non-government agencies in State sectors. The data was also collected from Khadi & Village Industries Board, Central Silk Board and Indian Institute of Entrepreneurship, Guwahati, Research findings of University and also all India University Libraries, Magazine and Journal, Newspaper and also personal contract with private entrepreneurs, etc.

FINDINGS AND ANALYSIS OF THE RESEARCH STUDY:

In Assam, the Sivasagar district is one of the major sericulture practicing districts which is located in upper Assam. There are three different types of silkworms rearing who have been the in different type of localities. These three rearings are Muga, Eri, and Mulberry which are being reared by sericulture farmers.

1. OBSERVATION OF SIVSAGAR DISTRICT AGRO-BASED INDUSTRIES PROFILE AND SELECTED SAMPLE PROFILE
This study is considered as a case study of the Sivsagar district which consisted of five blocks. Since, before finding out the result and analyzing it, we should know about the Sivsagar district profile. So, Table No.1.1 is presented the district Block's profile, where the study has been considered several blocks' names, number of circles, number of villages, number of families who adopted sericulture activities. It's also considered the production of sericulture farms from 2018 to 2020.

1.1 BLOCK'S NAME, NUMBER OF VILLAGES, NUMBER OF SERICULTURE FAMILIES AND CIRCLE OF SIVSAGAR DISTRICT:
In the Sivsagar district, there are an actual number of sericulture villages is 473, some villages are shared by two Seri circles due to some geographical parameters and so the total number has recorded 490.[1] The researcher has been collected data from the district office, Sivsagar, which represented in Table No.1.1.

[1] District Profile: Sericulture, Sivasagar District (Assam) page No.1,2018-19/2019-20

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Table- 1.1 Block wise Number of Villages and Sericulture Families[2]

Sr No.	Name of the block	Number of Villages	No. Of Sericulture Families	Number of Circle	No. of Villages (% age)	Number of villagers considered
1	Sivsagar	90	1027	6	22.50	23
2	Demow	148	1435	9	37.00	37
3	Amguri	51	459	3	12.75	13
4	Nazira	61	718	4	15.25	16
5	Gaurisagar	123	1340	8	30.75	31
Total		473	4979	30	118.25	120

Data collected from Assistant Director of Sericulture, Sivasagar District Office.

The above table represented five blocks and several villages with several sericulture families. This table is also presented on the bar chart and find out R square test. Out of five blocks maximum -Muga, Eri and Mulberry rearing entrepreneurs belong from Demow block. Here 148 villages with 1435 sericulture families belong from this block. In this block number of circles is also more than another block. And its followed the Gaurisagar block where 123 villages with 1340 families adopted agro-based enterprises, who were earning their income from these activities. It's presented in the bar chart also.

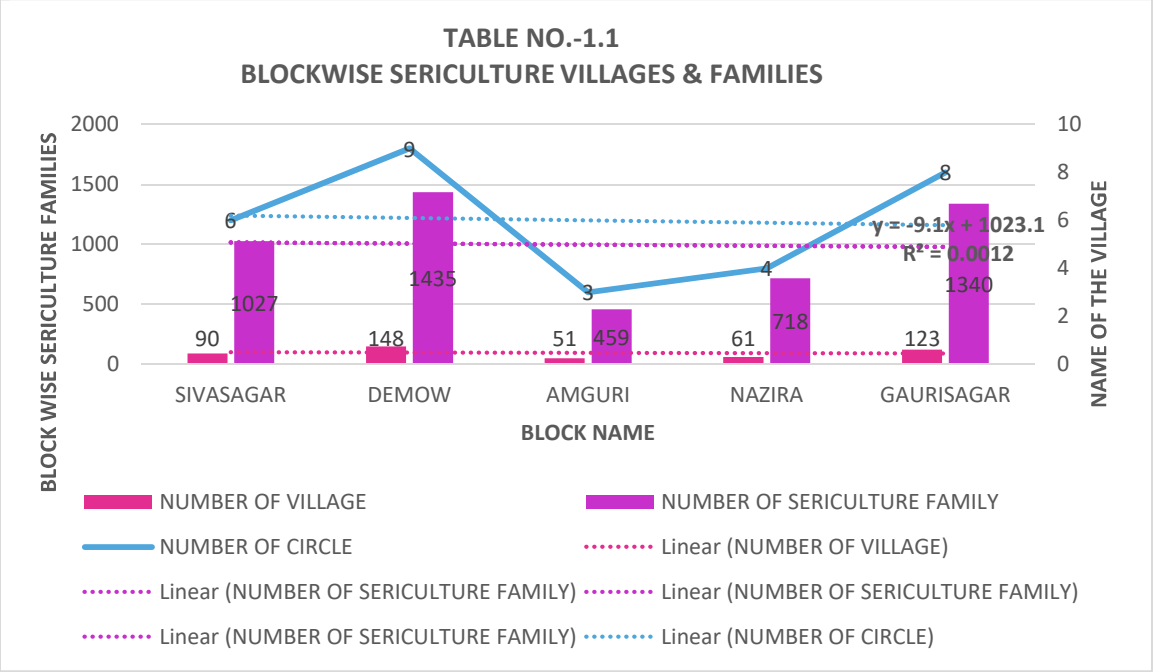

Fig no.1.1Bar chart & Linear equation

[2]Data collected from Assistant Director of Sericulture, Sivasagar District Office

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From the above table, the non-parametric test calculated, it finds out Rsquare value is 0.0012, which one very low significance. So, it's found out from the above table the variable is not normal These are very important for the government and must give important for their progress.

1.2 OBSERVATION OF PRODUCTION IN SERICULTURE FARMS 2018-19 AND 2019-20

Entrepreneurial activity at any time is dependent upon complex and varying socio-economic, psychological, and other factors. The various environmental factor exercises a strong influence factor on the economics of the entrepreneurs. So, table no.1.2 and table no.1.3 presented the whole Sivsagar district production of Muga, Eri, and Mulberry rearing.

Table -1.2 Production in 2018-2019

Sr.No.	Catagory	Muga	Eri	Mulberry	Total
1	DLF Consumption	853120	1484000	31400	23685200
2	Cocoon Production (Reeling/Cut-cocoon)	58817600	119140	9420	58946160
3	Raw Silk (Kg)	10731	992817	942	1004490
4	Silk Wage (Kg)	2902.8	16646.3	282.6	19831.7

From the table, the study finds out that out of three rearing in DLF consumptions maximum in Eri rearing silkworm. But, cocoon production in reeling and cut cocoon maximum production has been Muga rearing silkworm. In the case of raw silk production, maximum production has been Eri rearing silkworm and silk wage production earned also by Eri rearing silkworm.

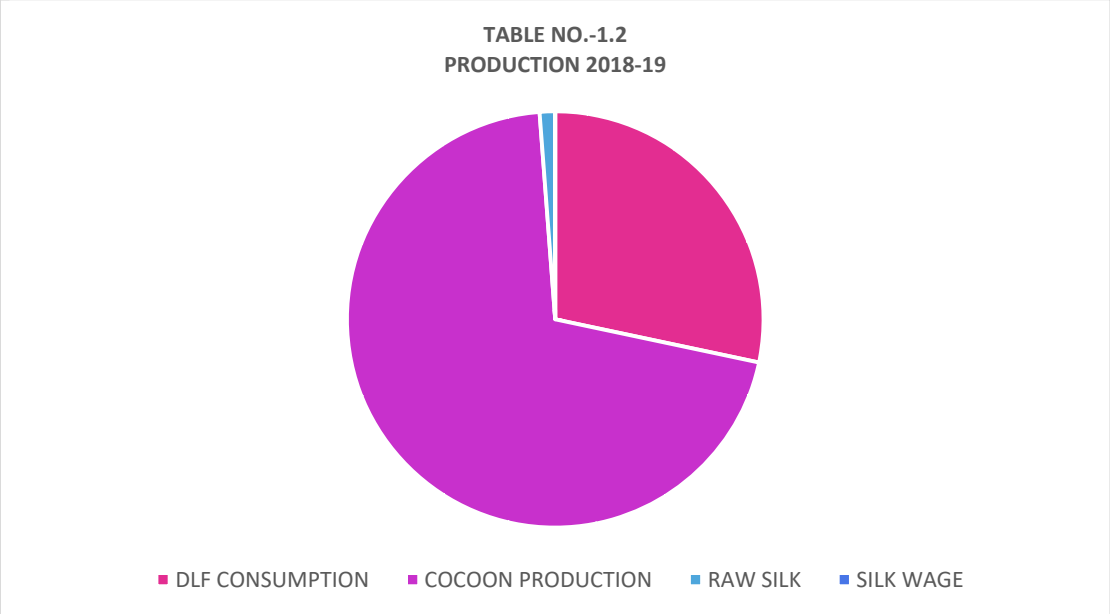

Fig. no.-1.2Pie chart

In table no.2 and pie chart (fig. no.-1)presented a production of 2018-19. It's showed that maximum DLF consumption in Eri rearing silkworm. But in cocoon production for reeling and cut- cocoon maximum production is done by Muga rearing silkworm. In the case of raw silk production and silk, the wage maximum has been in Eri rearing farmers. In table no. 3 presented 2019-20 production. It showed that in 2019-20 production is less than 2018-19.

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So, from both tables the researcher finds out that from 2018-10 to 2019-20, in all categories production was decreased. It may be due to the COVID-19 pandemic situation and the lockdown situation has been affected all the farmer's silkworm production processes. And also, by the lockdown situation, the economic growth and development have been collapsed of sericulture farmers, and in the 2019-20 period they could not exhibit drastic variation, and farmers also incurred the double loss.

Table-1.3 Production of 2019-20

Sr. No.	Category	Muga	Eri	Mulberry	Total	Incraesed/Decresed
1	DLF* Consumption	405000	634375	14877	1054252	(-)22,630,948
2	Cocoon Production (Reeling/Cut-cocoon)	24300000	50750	5130	24,355,880	(-)34,590.280
3	Raw Silk (Kg)	4050	42292.66	513.05	46,855.71	(-)957,634.29
4	Silk Wage (Kg)	1012.50	8458.8	112.8	9584.1	(-)10,247.6

DFL-Disease Free Laying

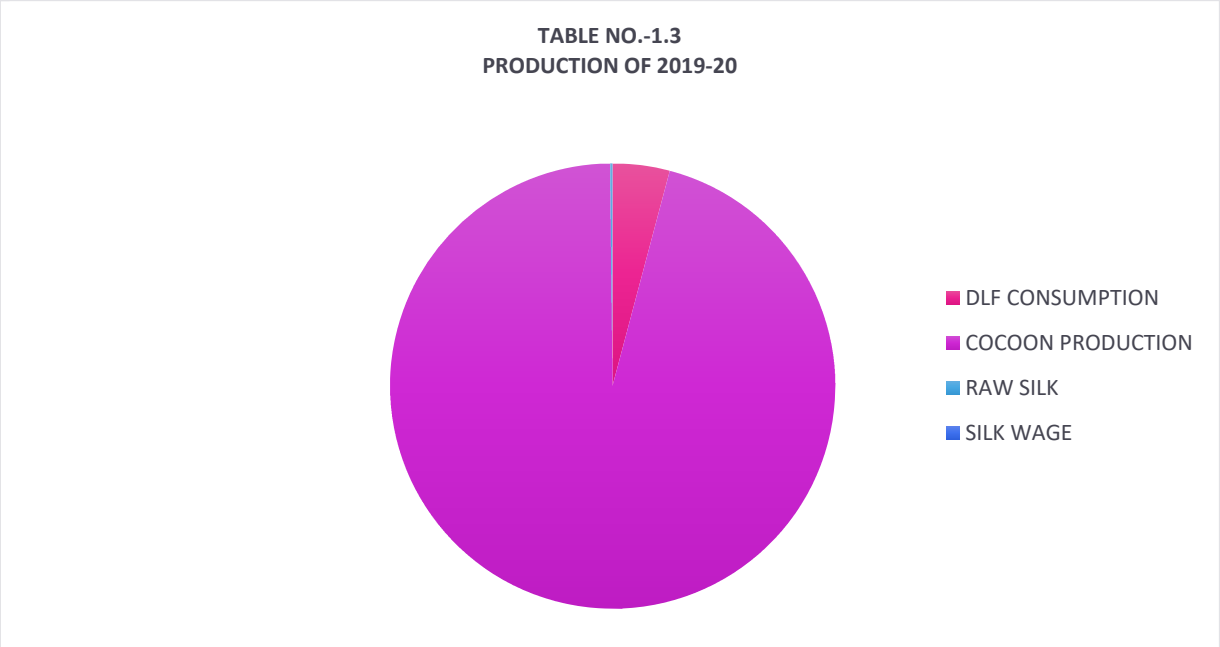

Fig. No.-1.3 Pie chart

2. OBSERVATION OF PROFILE OF SERICULTURE FARMERS/ FARMS

2.1(A) PERIOD OF ESTABLISHMENT:

While studying the sample of agro-based enterprises it is necessary to understand the size of the unit that is being operated by entrepreneurs which can be passed from the period of establishment, family structure, age group of enterprises, educational qualification. The study considered 120 samples, distribution of unit -50 units Muga rearing, 32 units Eri rearing, and 38 units Mulberry rearing based entrepreneurs. The pie chart presented nature-wise unit and table no.4 presented the period of establishment of enterprises.

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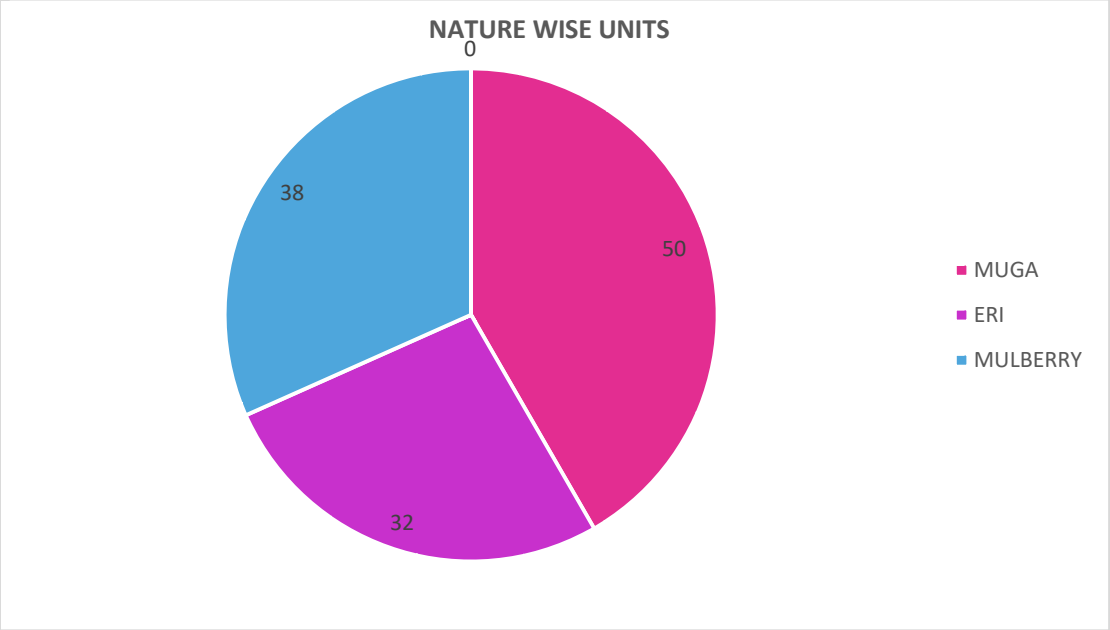

Fig. no.- 2.1(A)Pie chart

In a research study, the researcher has been considered as a profile only particular sericulture unit's which taking for study. Period of establishment, age groups of entrepreneurs, general educational qualification of entrepreneurs, etc., have been taken as important factors who have been influencing the farmer in sericulture activities. The age, educational qualification, and family members have not played any negative role in the growth of entrepreneurship. As such the income from sericulture activities are more than income from the agriculture sector.

Table-2.1 (B) Period of Establishment of Different Sericulture Farms

Period of Establish	Muga	Eri	Mulberry	Row total	%'age of unit
BEFORE-2000	15(12.50) [0.05]	11(8.00) [1.12]	4(9.50) [3.18]	30	25.00
2001-2005	12(12.08) [0.00]	9(7.73) [021]	8(9.18) [0.15]	29	24.17
2006-2010	10(10.00) [0.03]	8(6.40) [0.40]	6(7.60) [0.34]	24	20.00
2011-2015	8(7.50) [0.03]	2(4.80) [1.63]	8(5.70) [0.93]	18	15.00
2015 & AFTER	5(7.92) [1.07]	2(5.07) [1.86]	12(6.02) [5.95]	19	15.89
TOTAL	50	32	38	120(GRAND TOTAL)	100.00

Data collected from field survey

(The expected cell totals) and [the chi-square statics for each cell]

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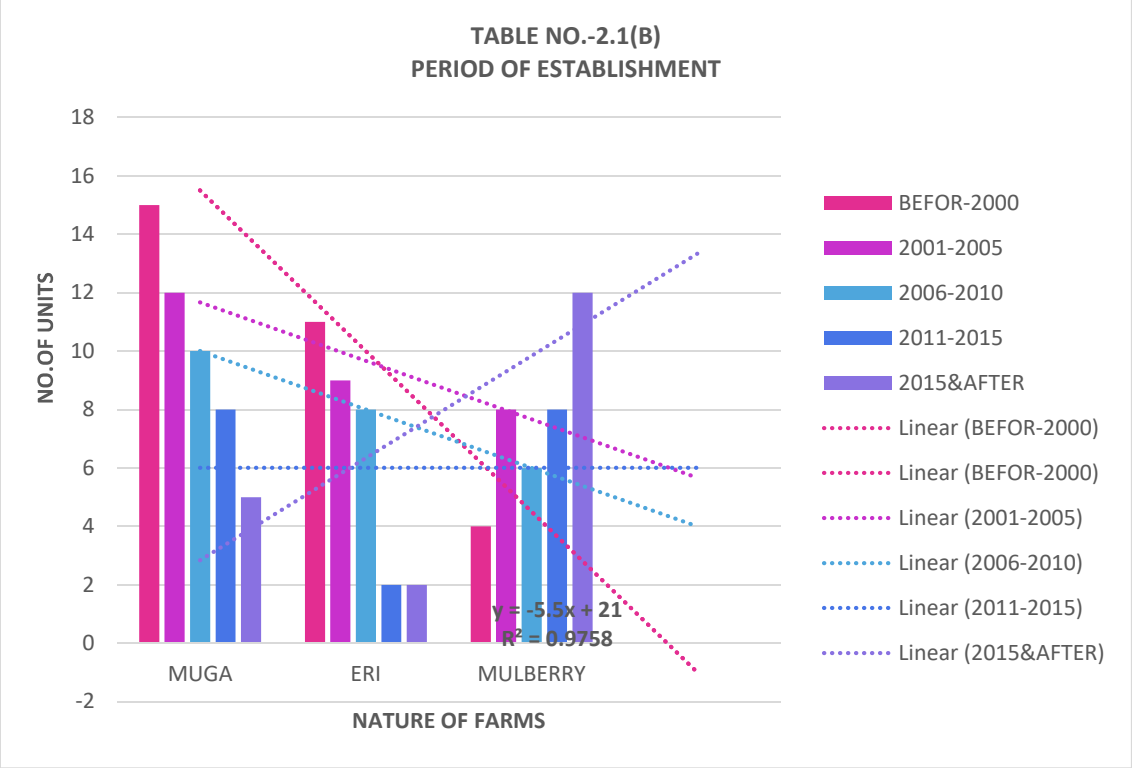

Fig. no.2.1(B) Bar chart & linear Equation

From the above, table no. 4 and bar chart with linear equation presented period of establishment of sericulture farms of entrepreneurs. The table presented the period of establishment majority of entrepreneurs (49%) established before the year 2000 and it followed 2001 to 2005. Because of that time, more people are established in a rural areas where space was more for agriculture and other agro-based activities. This table also presented after the year 2015 only 19% of entrepreneurs were established. In this period the minimum number of entrepreneurs has been established. The researcher finds out views from entrepreneurs due to slow development of rural areas and by educated of rural people, they did not interested for a stay in the rural area because of lack of education, job, and medical facility. The respondents gave an opinion, that time maximum educated entrepreneurs, are interested in paid-up jobs and better-leaving standards. Some respondent gave their opinion that newly educated rural youths hesitate to take up sericulture as a means of livelihood and they migrate to urban and semi-urban areas in search of government or various private jobs.

According to the research study table, bar diagram and chi-square test with a linear equation the researcher finds out the non-parametric test of association chi-square statistics is 17.3822 and the p-value is .026366 and linear equation R square vale is 0.9758 So, the level of measurement of variable is normal and ordinally is significant at $p<.05$. So, the establishment of enterprise or farms period is of very high significance and reasons are acceptable.

2.2 AGE GROUP AND GENERAL EDUCATIONAL QUALIFICATION OF ENTREPRENEURS:

The capabilities of a person in each job depend to a great extent on his/her age. Another major important is the education of entrepreneurs. Because these two instruments give able to think for themselves to become confident and also to develop capabilities of recognizing more accurately the area of exploitation. Hence age group and educational qualification of the entrepreneur's presented in table No.2.2(A)and table No. 2.2(B).

Table no. 5 depicted that there are four different types of age groups of entrepreneurs which cause entrepreneurs. From these four groups, a total of 120 units and a maximum of 40 percent of the sample respondents are in group 50 years and above and its follow up by

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30.84 percent of respondents group 40 to 50 age. The minimum sample of respondents i.e., 5.83 percent, are age group below 30 years.

The study has been found out that young and teenager groups people, are not interested to do Agro-based activities, because of going to school and for further study and they are also hesitant about this type of work.

Table-2.2(A) Age Group of Entrepreneurs

Age Group	Muga	Eri	Mulberry	Total	%' AGE OF UNITS
Below-30	2(2.92) [0.29]	3(1.87) [0.69]	2(2.22) [0.02]	7	05.83
30-40	12(11.67) [0.01]	8(7.47) [0.04]	8(8.87) [0.08]	28	23.33
40-50	16(15.42) [0.02]	9(9.87) [0.08]	12(11.72) [0.01]	37	30.84
ABOVE-50	20(20.00) [0.00]	12(12.80) [0.05]	16(15.20) [0.04]	48	40.00
TOTAL	50	32()	38	120	100.00

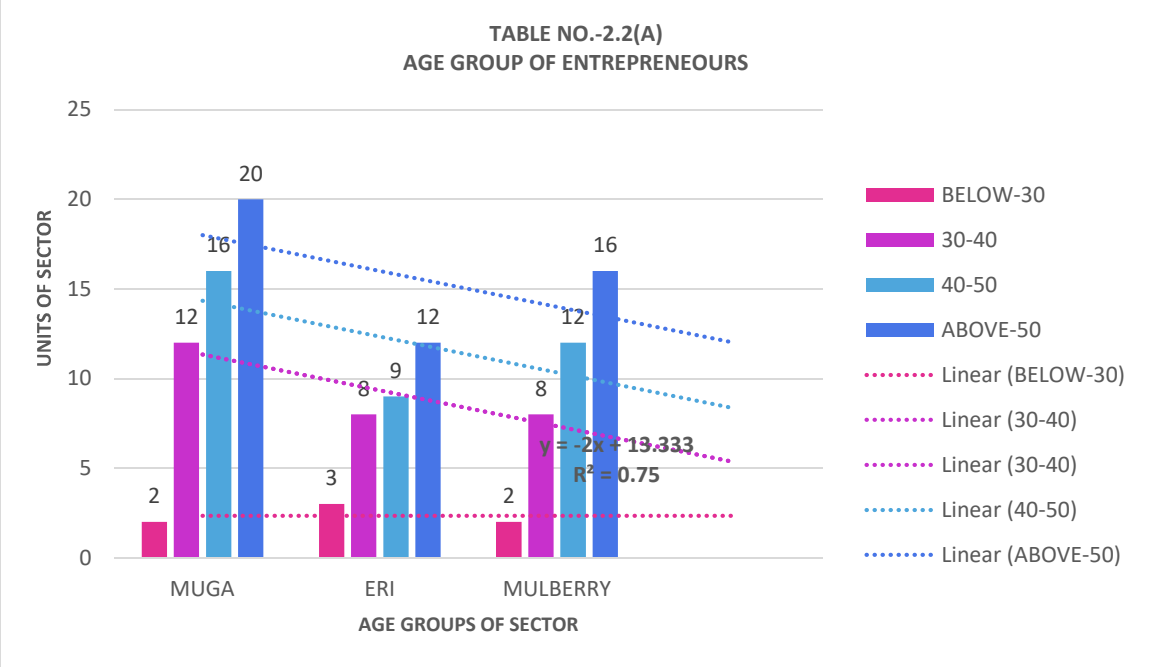

Fig. No.2.2(A)Bar chart & Linear equation

From the study, the result finds out there is no correlation between works and age group. The researcher also finds out the result by the non-parametric test of association chi-square statistics is 1.3269 and the p-value is .970156. So, the level of measurement of variable is not normal and ordinally not significant at p<.05. and so, the nature of the sector of entrepreneurs is not influenced by the age group of entrepreneurs which is acceptable (one variable does not affect the other).

Table -2.2(B) General Educational Qualification of Entrepreneurs

Qualifications	Muga	Eri	Mulberry	Total	%' Ageof units
Less than Matric	2(1.67) [0.07]	1(1.07) [0.00]	1(1.27) [0.06]	4	3.33
Matriculation	8(7.08) [0.12]	5(4.53) [0.05]	4(5.38) [0.36]	17	14.17
Higher	26(25.00)	13(16.00) [0.56	21(19.00) [0.21]	60	50.00

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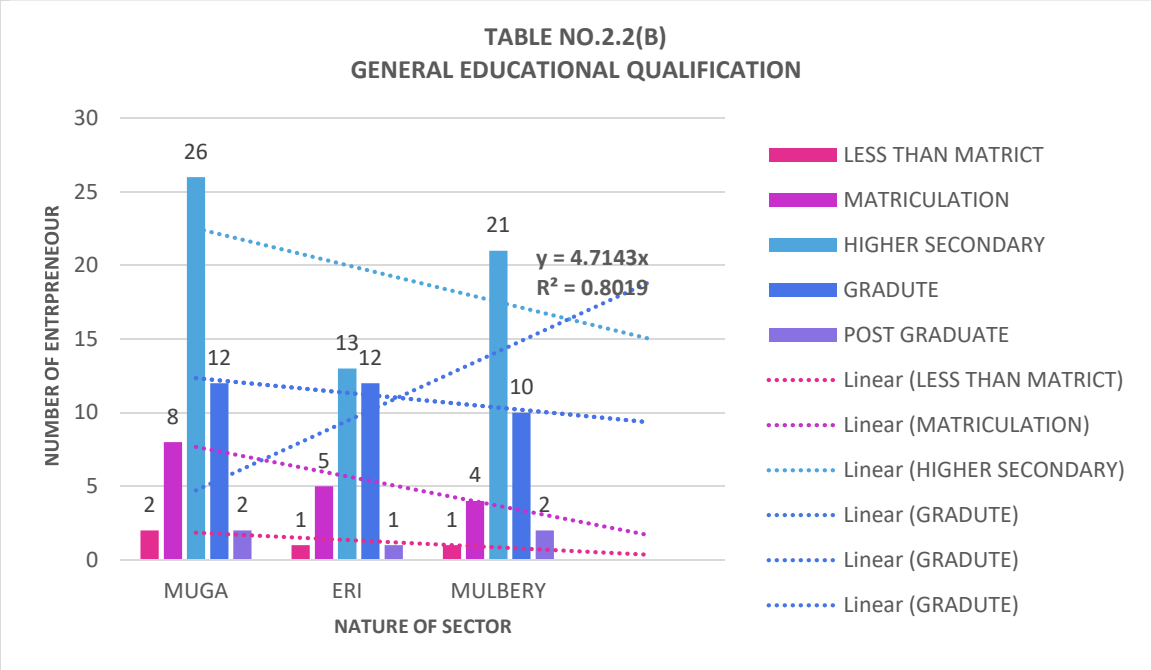
Secondary	**[0.04]**				
Graduate	**12(14.17) [0.33]**	**12(9.07) [0.95]**	**10(10.77) [0.05]**	**34**	**28.33**
Post Graduate	**2(2.08) [0.00]**	**1(1.33) [0.08]**	**2(1.58)90.11]**	**5**	**4.23**
Total	**50**	**32**	**38**	**120**	**100.00**

(The expected cell totals) and [the chi-square statics for each cell]



Fag. No2.2 (B)Bar chart & Linear equation

Table No. 2.2(B) and bar chart with linear equation represented general education qualification of entrepreneurs. From the above table 50 percent of the sample their education qualification minimum higher secondary passed. It followed 28.33 percent sample is graduates. And very few candidates their a minimum qualification less than matric i.e., 3.33 percent, because of these people are very poor, so could not effort their finance to go for school and also did not get time. Another point out the researcher that their sericulture business is a family business, and so only sources of income. For that, they must run up their sericulture enterprises and they did not get time for education. In the case of those entrepreneurs who are postgraduate, they are interested in doing paid-up jobs, so, they moved to urban areas.

The researcher also finds out the non-parametric test of association chi-square statistics is 2.9934 and the p-value is .934769. So, the level of measurement of variable is not normal and ordinally is not significant at p<.05 and linear equation R square vale is for graduate-level is highly significant for the farmer so, minimum general education till to graduate level is important for entrepreneurs. But, the educational qualification of the entrepreneurs did not influence the enterprises to run their business due to generation-wise business. So, they can run up their enterprises.

3.OBSERVATION OF SOCIO-ECONOMIC BACK GROUND OF SERICULTURE ENTREPRENEURS:

The sericultural activities at any time depend upon complex and varying socio-economic, psychological, and other factors. The various environmental factor exercises a strong influence factor on the economics of the entrepreneurs. The process of interaction and adaptation between the individual and his environment goes continuously. Therefore, the socio-economic origins of sericulture entrepreneurs are considered in small enterprises which play a crucial role in the entrepreneurs' movement. In this view, the researcher has been considered the family structure and the number with percentages of total employees, caste-wise sericulture farms,

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location of enterprises, capital investment, and sales turnover.

3.1 FAMILY STRUCTURE OF AGRO-BASED ENTREPRENEURS

In Agro-based activities, an entrepreneur's family structure and number with the percentage of employment is very important. The family and number of employments is the environment that motives or shapes the entrepreneurs,' knowledge of the structure. The information of the entrepreneur's understudy has been presented in table no.3.1 and Table No. 3.2.

Table-3.1 Family Structure of Agro-Based Entrepreneurs

Family structure	Muga	Eri	Mulberry	Row Total
Nuclear	15(24.17) [3.48]	20(15.47) [1.33]	23(18.37) [1.17]	58
Joint	35(25.83) [3.25]	12(16.53) [1.24]	15(19.63) [1.09]	62
Total	50	32	38	120

The chi-square statistic is 11.5637. The p-value is .003083. The result is significant at p<.05. **(The expected cell totals) and [the chi-square statics for each cell]**

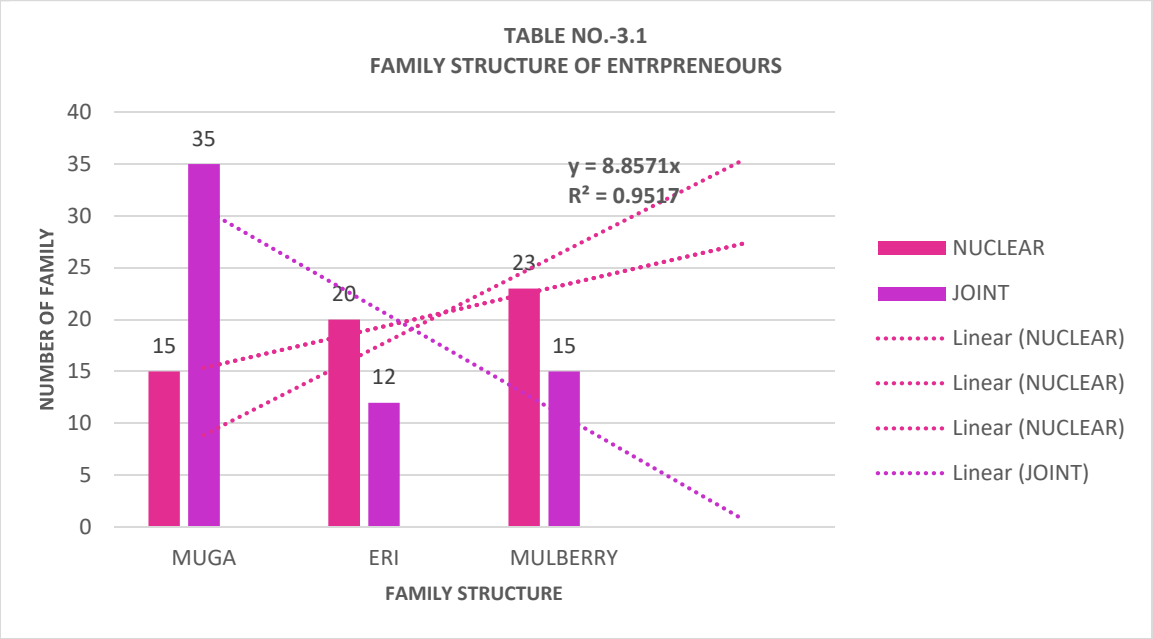

Fig. No.3.1 Bar Chart with a linear equation

The study presented out of 50 units of Muga rearing, 35units of families belong to joint families, and Eri and Mulberry rearing maximum units 20 and 23 belong from a nuclear family. In table no.7 and bar chart presented chi-square value and R square, both are highly significant

3.2 NUMBER WISE OF EMPLOYMENT IN ENTERPRISES

And table no. 8 and bar chart presented the number and percentage of employment in Muga, Eri, and Mulberry rearing entrepreneurs. This table showed that a maximum number of employees all three rearing 1-5 range. Because they have believed if a maximum number of employees have been there, they could not bear their expenses, it will be more than their sales turnover value, so profit will be not going up.

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Table-3.2 Number and Percentage wise of Employment

Number of Employees	MUGA		ERI		Mulberry		TOTAL	
	No. Of Employee	%' age of Employee	No. Of Employee	%' age of Employee	No. Of Employee	%' age of Employee	No. of Employee	%' age of Employee
Zero	10	20.00	0	0.00	0	0.00	10	8.34
1-5	15	30.00	13	40.62	12	31.58	40	33.33
6-10	14	28.00	9	28.13	10	26.32	33	27.50
11-15	7	14.00	8	25.00	9	23.68	24	20.00
15-20	4	8.00	2	6.25	7	18.42	13	10.83
TOTAL	50	100.00	32	100.00	38	100.00	120	100.00

Another point they have been given in case of Muga rearing maximum already belong from a joint family, so they did not feel an extra employee is required and also more important.

In the case of Eri and Mulberry rearing entrepreneurs believed that their process is very easy, so they can handle all systems by a few members.

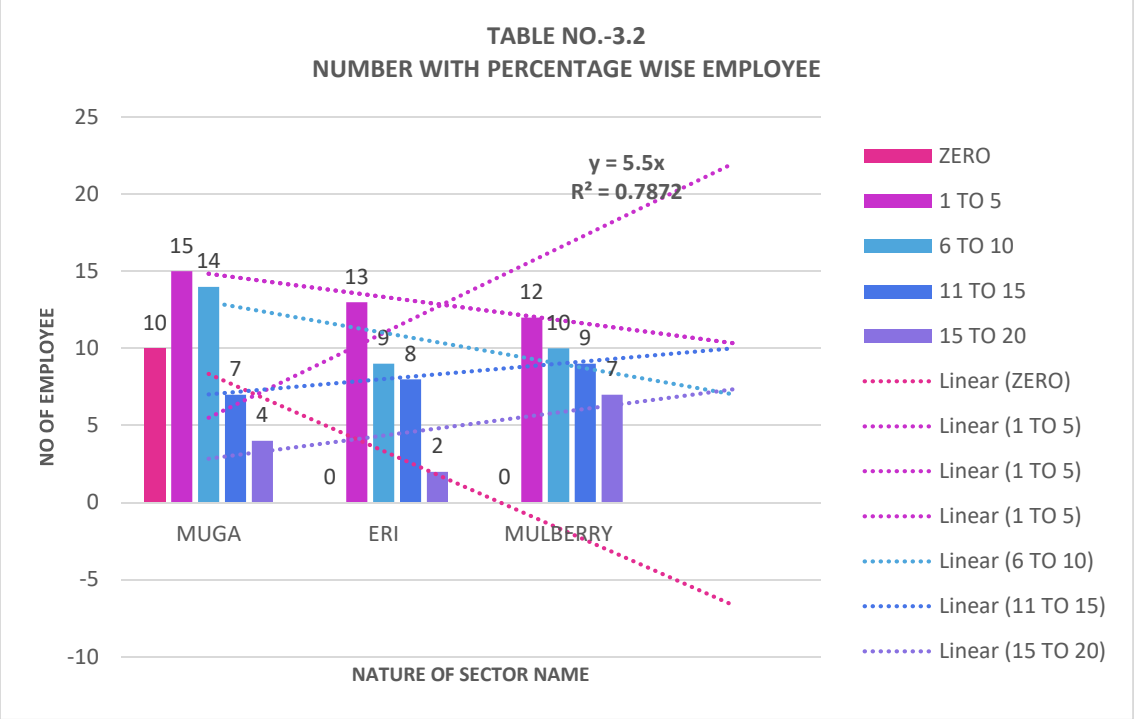

Fig. No.3.2Bar chart with linear equation line

The researcher also finds out the non-parametric test of association chi-square statistics is 11.5637 and the p-value is .003083 and also R square value is 0.7872. So, the level of measurement of variable is normal and ordinally is significant at p<.05. The level of family structure and number with percentages wise of employment is acceptable. Both variables are dependents on each other.

3.3 CATEGORIES WISE OF SERI FARM

Sericulture is generated in rural areas. In a rural area, the same community people leaving and their activities depend on their community also. So, the farmer community is very important for agro-based activities. In the Sivsagar district total of five blocks and these five blocks, there are different types of categories like ST, /SC. OBC and other farmers adopting sericulture-based activities Here the researcher finds out maximum farmers from OBC categories family specially called this community Ahomcommunity.

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Table-3.3 Community wise of Seri Farms

Community	Muga	Eri	Mulberry	Total Farms	%' age
ST	9(8.75) [0.01]	6(5.60) [0.03]	6(6.65) [0.06]	21	17.50
SC	12(12.50) [0.02]	9(8.00) [0.12]	9(9.50) [0.03]	30	25.00
OBC	25(25.00) [0.00]	15(16.00) [0.06]	20(19.00) [0.05]	60	50.00
Others	4(3.75) [0.02]	2(2.40) [0.07]	3(2.85) [0.01]	9	07.50
Total	50	32	38	120	100.00

(The expected cell totals) and [the chi-square statics for each cell]

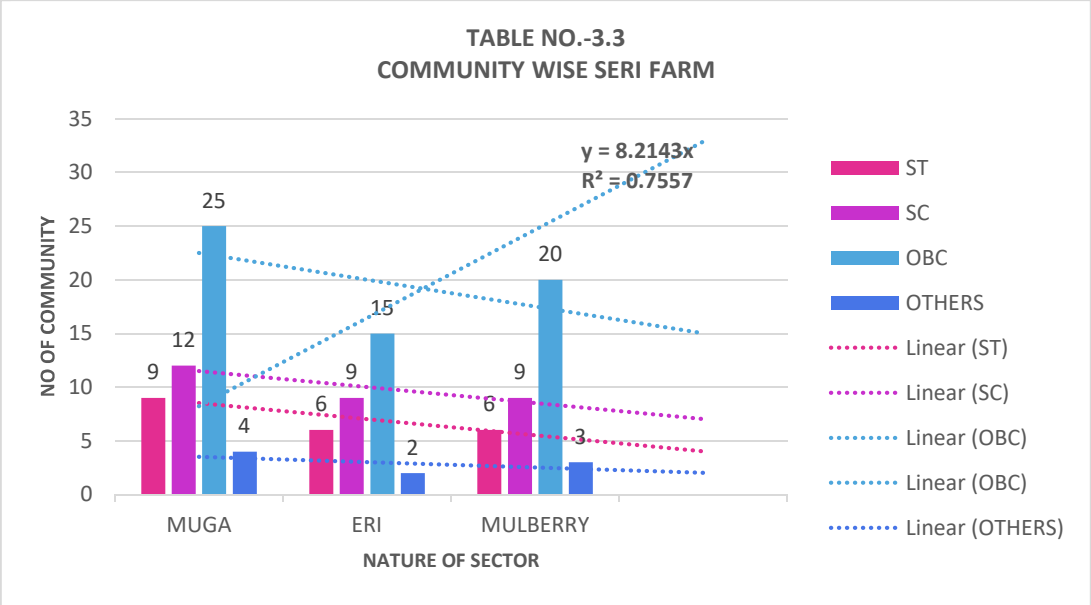

Fig. No.3.3 Bar chart and linear equation

After analysis from the table and bar chart, find out a maximum of 50 percent respondents were OBC category and its follow SC category by 25 percent. Very few respondents were other categories like brahmin, Kalita, kuchrajbansi, etc.

The study also finds out the non-parametric test of association chi-square statistics is 0.4769 and the p-value is 0.998108 at $p<.05$ level. and so, the level of measurement of variable is not normal and ordinally is not significant at $p<.05$. In the linear equation, the R square value is 0. 7557. It seems that OBC categories families are highly significant from their community, they are influenced by their activity. So, the community-wise farmers are independent, therefore, there is a relation between the category of farmers with nature of units rearing.

3.4 Location of Enterprises

Localization of enterprises is the most important factor for their development. The establishment of one enterprise depends on the environment and also support system which influences a person to become an entrepreneur. Table No.3.4 presented the localization of entrepreneur's enterprises.

Table No. 3.4 Location of Entrepreneurs' Enterprise

LOCATION	MUGA	ERI	MULBERRY	GRAND TOTAL	%' AGE OF UNITS
Rural	15(25.42) [4.27]	21(16.27) [1.38]	25(19.32) [1.67]	61	50.83
Urban	35(24.58) [4.41]	11(15.73) [1.42]	13(18.68) [1.73]	59	49.17
Total	50()	32()	38	120	100.00

(The expected cell totals) and [the chi-square statics for each cell]

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The above table and bar chart with liner line presented the location of the entrepreneur's enterprise. From the study researcher find out 50.83 percent respondent their enterprise's location in rural areas especially Eri and Mulberry silk rearing because the entrepreneurs did not have their enterprise or shop and another way if they want to take it in rent of enterprise in urban areas, it's also become too much cost price which one, they could not effort. On the other hand, in the case of Muga rearing entrepreneurs, they could not give more areas or fields required for plantation in pre cocoon period due to outdoor rearing. They can only spend their money to run their enterprises after finished works, because of post cocoon period not required too much space so they can effort that money.

The researcher also finds out the non-parametric test of association chi-square statistics is 14.8853 with the p-value is .000586 at p<.05 level. So, the level of measurement of variable is normal and ordinally is significant. On the other hand, the linear equation of R square value is also 0.964, which is highly significant and both variables are dependent. So, the localization of enterprises influences the enterprise's nature, they can run only their enterprises by their nature of the internal and external environment.

Fig. No.3.4 Bar chart with a linear equation

3.5 CAPITAL INVESTMENT OF ENTERPRISES

Table No.3.5 and bar chart presented the total capital investment of entrepreneurs by 120 Agro-based entrepreneurs who are selected for the study. The extent of capital investment depends on the nature of works and entrepreneurs. In Muga rearing entrepreneurs out of 50 units, maximum of 15 respondents, invest up to 5 lakhs, and only 5 units could be invested above 20 lakhs. Because muga rearing is an outdoor rearing process and it depends upon natural conditions. It has been done outdoor on the trees themselves. Only during the egg-laying process, rearing is done indoors on small sticks or sunglasses. Other points have been found in the research study, that entrepreneurs didn't want to take too many risk factors from the outdoor process. Because outdoor muga silkworm is fraught with problems like weather, temperature, predators such as birds, lizard and other disasters like forest fire and cyclones which are natural and the entrepreneur could not do protect own self. So, entrepreneurs have been scared for their investment of money in muga rearing silkworms.

In table 3.5, Eri and Mulberry rearing, both entrepreneurs have been maximum amount invested in 20 lakhs above level, because of both are indoor rearing process and they also

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ready to take the risk. In the case of Eri rearing, certain conditions are can maintained, like ambient temperature, humidity, adequate ventilation with adequate lighting, and protection from insects, pests, fires, and so on. And the other hand in the case of Mulberry rearing entrepreneur's they have been maintaining equipment, the right temperature, stable humidity, and so on. which is one man-made process. These two entrepreneurs all process is stable and also a one-time investment. So, they have been fully prepared for risk as equally as they are ready to bear the problem.

The research study and table, also find out the non-parametric test of association chi-square statistics is 16.3582 and the p-value is .037531 at a level of 0.05 percent. And linear equation R square value is 0.9776 also. The result showed the level of measurement of variable is normal and ordinally highly significant. So, the level of capital investment group of units wise is acceptable and the reasons are also dependable on each other (**The expected cell totals) and [the chi-square statics for each cell].**

Table-3.5 Capital Investment of Enterprises

CAPITAL INVESTMENT (IN LAKHS)	MUGA	ERI	MULBERRY	OVERALL
UPTO-5	15(9.17) [3.71]	2(5.87) [2.55]	5(6.97) [0.56]	22
5-10	12(9.58) [0.61]	4(6.13) [0.74]	7(7.28) [0.01]	23
10-15	10(9.17) [0.08]	6(5.87) [0.00]	6(6.97) [0.13]	22
15-20	8(10.42) [0.56]	9(6.67) [0.82]	8(7.92) [0.00]	25
20 &ABOVE	5(11.67) [3.81]	11(7.47) [1.67]	12(8.87) [1.11]	28
TOTAL	50	32	38	120

(The expected cell totals) and [the chi-square statics for each cell]

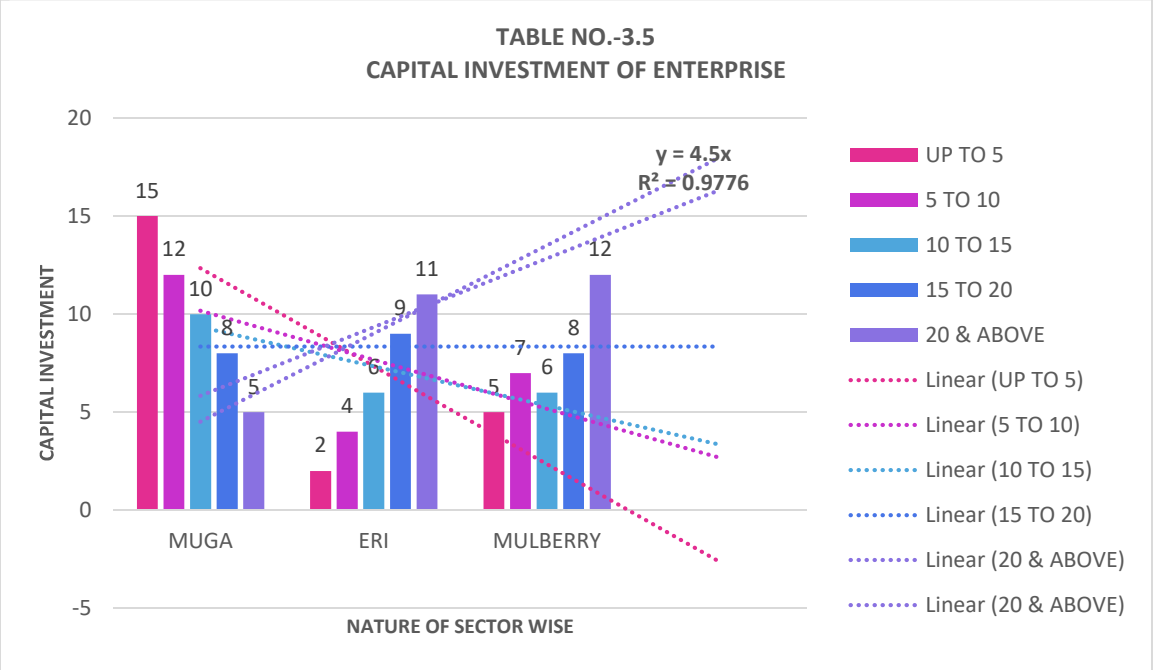

Fig. No.3.5 Bar chart with a linear equation

3.6 SALES TURNOVER OF ENTERPRISES

Sales turnover is a very important factor of any enterprise as equally as entrepreneurs. So, here table no 3.6 presented sales turnover of enterprises.

The maximum muga rearing entrepreneurs earned within 5 lakhs, but in Eri and Mulberry rearing entrepreneurs their capital turnover is more than 10 lakhs because muga rearing is seasonal and it is purely an outdoor culture and

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also completed depending on natural condition. Being exposed to the natural environment Muga culture practice encounter lots of from brushing worms to the spinning of cocoons. Eri and Mulberry silk contribute to around 80 percent of silk. Eri is easier than Muga, so the entrepreneur can do easily processed and can-do export timely and there are no pollution or emission in an environmentally friendly production process. It's zero waste of every single Eri cocoon. It's also a durable silk fabric with multiple uses. its excellent thermal properties and suitability for blending with wool have also made it a popular fabric for the colder climes in India and abroad. Eri is only natural silk and does not involve the killing of a living organism as it is not extracted from larvae. In the case of mulberry within Assam, but other parts of Assam, it's too much export from Sivsagar district because Assam is in demand among the connoisseurs of Assam 'paat' because of texture.

Table-3.6 Sales Turnovers

RUPEES IN LAKH	MUGA	ERI	MULBERRY	
0-5	**15(8.75) [4.46]**	2(5.60) [2.30]	4(6.65) [1.06]	21
5-10	12(10.00) [0.04]	4(6.40) [0.90]	8(7.60) [0.02]	24
10-Above	10(9.58) [0.02]	7(6.13). [0.12)	6(7.28) [0.23]	23
20-50	8(10.00) [0.40)	8(6.40) [0.40]	8(7.60) [0.02]	24
ABOVE-50	5(11.67) [3.81)	**11(7.47) [1.67]**	**12(8.87) [1.11]**	28
TOTAL	50	32	38	120

(The expected cell totals) and [the chi-square statics for each cell]

The researcher's study from the table, bar chart, and linear equation, also finds out the non-parametric test of association chi-square statistics is 16.9322 and the p-value is .030823. So, the level of measurement of variable is normal and ordinally is significant at p<.05 and the level of sales turnover capital is acceptable. But, the R square test value is only 0.2802 which is very low significant in levels 0 to 5 lakhs. So, the reasons are dependent on each other with the progress of enterprises. (**The expected cell totals) and [the chi-square statics for each cell].**

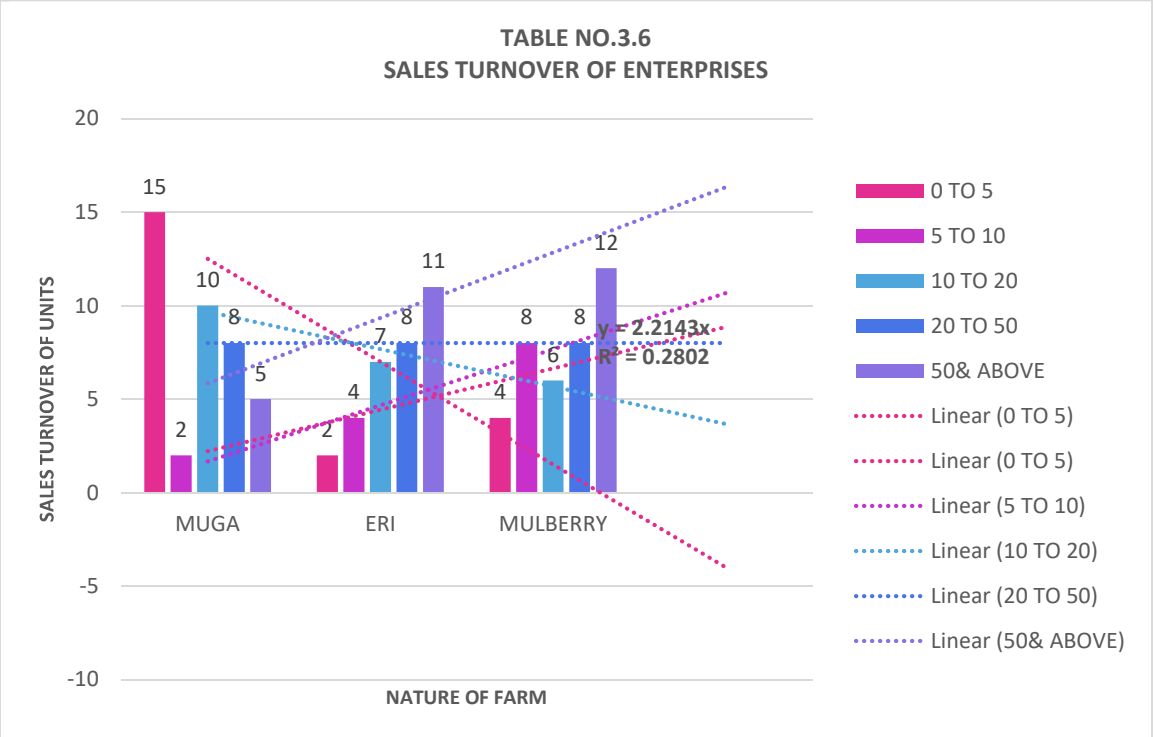

Fig. no.-3.6 Bar chart with a linear equation

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4. OBSERVATION OF PROBLEM AND PROSPECT OF ENTERPRISES AND ENTREPRENEURS

About the problems of the existing sericulture farmer, it is observed that the existing farmers were facing problems on shortage of raw silk which required for the industries, the requirement of working capital, requirement of capital for acquiring those fixed assets in managing an enterprise, technical knowledge in installation and operation of machinery, organization problems, marketing problems of raw silk and finished products. The enterprises are facing an acute shortage of raw silk in the district as such, they are purchasing from outside. The supply of working capital is also not sufficient, as the financial institutions have failed to provide loan facilities in all localities of the district for setting up sericulture farms. It is also witnessed that reeling machines are installed in some existing enterprises but due to the absence of expert reelers and the absence of proper training to entrepreneurs, they are unable to operate the machines. However, the entrepreneurs have tried to bridge the gap of supply and requirement of raw materials, by reeling the cocoons through locally made Bhir or Bhowri. The study find out the problem and prospect of sericulture farmers and presented table No.13 to table no.15.

4.1 MAJOR PROBLEMS OF SERICULTURE FARMS

Table No. 4.1 Major Problems of Sericulture Farms

SR. NO	REASONS	MUGA	ERI	MULBERRY	GRAND TOTAL	%' AGE OF UNITS
1	Procurement of raw materials	6(9.17) [1.09]	5(5.87) [0.13]	11(6.97) [2.34]	22	18.33
2	Inadequate supply of Raw materials	7(12.08) [2.14]	12(7.73) [2.35]	10(9.18) [0.07]	29	24.17
3	The high price of Raw materials	20(16.67) [0.67]	11(10.67) [0.01]	9(12.67) [1.06]	40	33.33
4	Maintenances & conservation source of raw materials	17(12.08) [2.00]	4(7.73) [1.80]	8(9.18) [0.15]	29	24.17
TOTAL		50	32	38	120	100.00

(The expected cell totals) and [the chi-square statics for each cell]

The table and pie chart depicted that 33.33 percent of respondents have been felt the higher price of raw materials is one of the major problems and is followed by 24.17 percent of respondents, who have been faced an inadequate supply of raw materials and maintenance with conservation source of raw-materials problems. From 33.33 percent of respondents, the majority of Muga rearing farmers. But in the supply of materials faced by Eri and Mulberry rearing farmer which is presented in pie chart Fig. no 13.

The researcher finds out the result from table no.13, the non-parametric test of association chi-square statistics is 13.8161, and the p-value is .03176. So, the level of measurement of variable is normal and ordinally is significant at $p<.05$. So, the reason for problems for farmers and the nature of units both are dependent variables. Hence, the reasons for problems are dependents on each other in nature of farmers and they also faced step by step.

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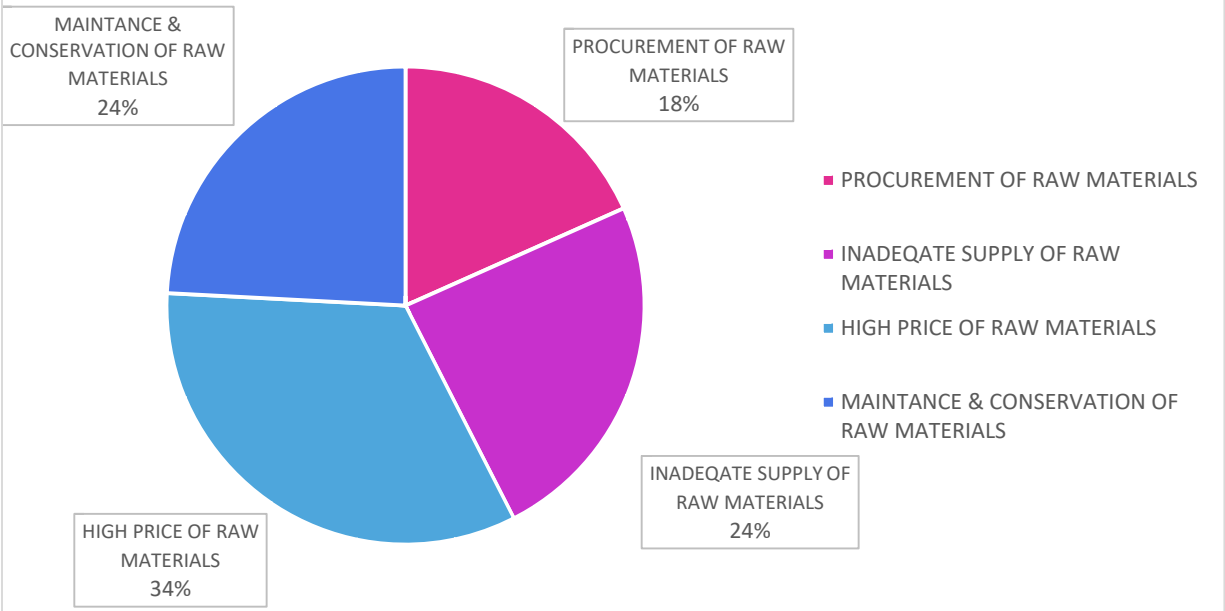

Fig. no.4.1Pie-chart

4.2 ECONOMICAL PROBLEMS OF SERICULTURE FARMERS

Table no. 4.2 and presented the economic problems of sericulture farmers, which one another important issue for the farmer.

Table No. -4.2 Economic Problems of Sericulture Farmers

SR. NO	REASONS	MUGA	ERI	MULBERRY	OVERALL UNITS	%' AGE OF UNITS
1	**Working Capital problem**	**15(9.17) [3.71]**	2(5.87) [2.55]	5(6.97) [0.56]	22	18.33
2	**Fluctuation of market price**	12(9.58) [0.61]	4(6.13) [0.74]	7(7.28) [0.01]	23	19.17
3	**Minimum sales return**	10(9.17) [0.08]	6(5.87) [0.00]	6(6.97) [0.13]	22	18.33
4	**Labour problems**	8(10.42) [0.56]	9(6.67) [0.82]	8(7.92) [0.00]	25	20.83
5	**Unavailability training facilities**	5(11.67) [3.81]	**11(7.47) [1.67]**	**12(8.87) [1.11]**	28	23.33
TOTAL		50	32	38	120	100.00

(**The expected cell totals) and [the chi-square statics for each cell]**

Table no.4.2finds out 23.33 percentage of respondents faced unavailability of the training facility. Its followed 20.83 percent of respondents, they were facing Laboure problems which is unavoidable.

The study finds out the result from the table and bar chart with a linear equation, the non-parametric test of association chi-square statistics is 16.3582, and the p-value is .037531. The level of measurement of variable is normal and ordinally is significant at $p<.05$ level. So, the reason for economic problems for farmers and the nature of units both are dependent variables of each other which are unavoidable.

On the other hand, the linear equation of R square value is 0.9776 in the highest-levelproblem, which faced by farmer i.e.,unavailability of the training facility. So, the reason for economic problems for farmers and the nature of units both are dependent variables of each other which are unavoidable.

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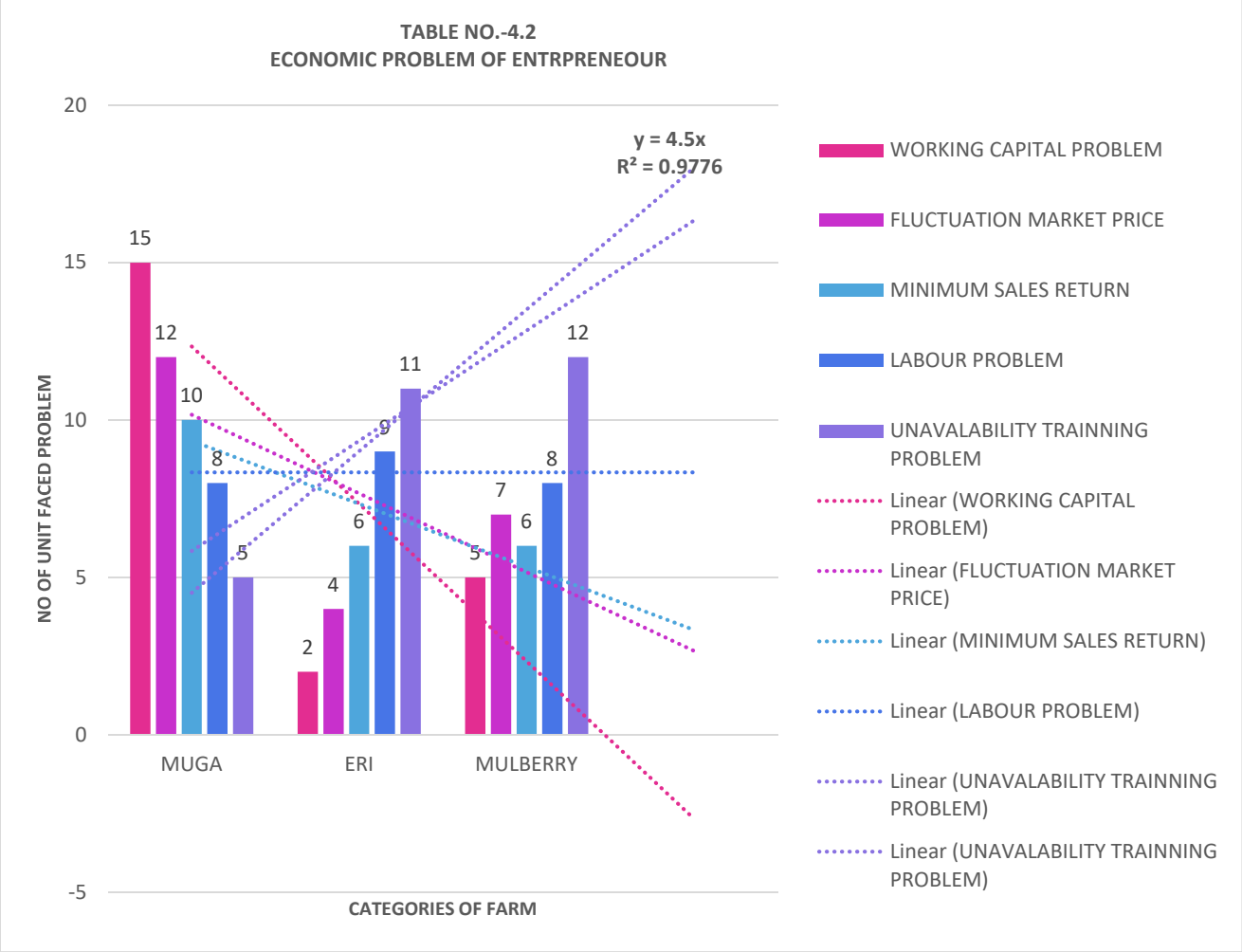

Fig.no.4.2 Bar Chart with a linear equation

5. GOVERNMENT ASSISTANCE FOR SERICULTURE FARMS:

5.1 FOOD PLANTATION OF GOVERNMENT AND PRIVATE CENTRE OF COCOON PRODUCTIONS

Government and assistance are other important factors of sericulture farms. Because maximum sericulture farms are growing in rural areas, where lots of problems are faced by farmers like raw material, market, training facilities, etc. Table no. 15 presented farmers' perspectives on particular farms. The study finds out in the Sivsagar district five-block, out of this five-block only 7 numbers government farms are there i.e. Sivsagar(1), Amguri(3), Demow(1), Gaurisagar(1), and Nazira(1) block. In each block, there is one Government farm, except Amguri there are three government farms. For Eri rearing have2 government farms in Demow block and Mulberry rearing, there is only one farm i.e., in Gaurisagar.

Table- 5.1Food Plantation of Government and Private Centre of Cocoon Productions

SR. NO.	GOVT./PVT. FARM &FOOD PLANTATION	MUGA	ERI	MULBERRY
1	No. of Farms/ Govt Centre	7	2	1
2	Government Reeling/ Spinning units	3	-	3
3	The area under food plant (Government) [In hector]	95.44	2.46	3.05
4	The area under food plant (Private) [In hector.]	61.44	62.00	26.90

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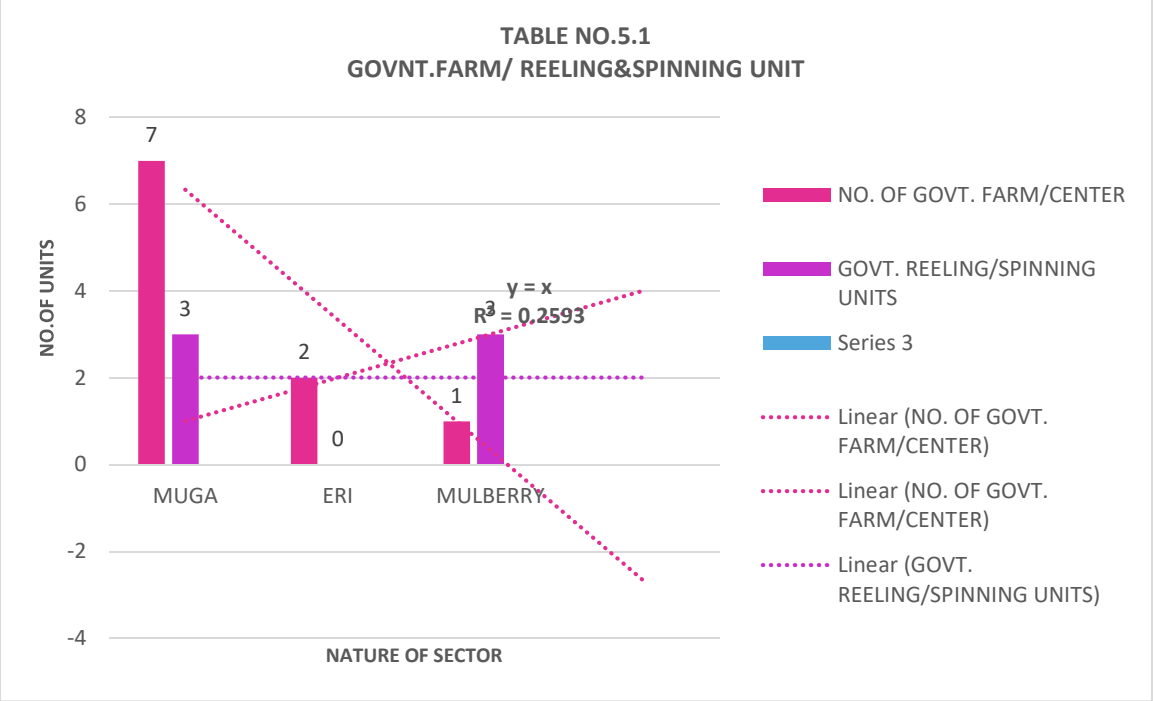

Fig. no.5.1 Bar chart with a linear equation

The study finds out that the government reeling and spinning production center have been only in Muga rearing and Mulberry rearing silkworm. For Eri rearing, there did not have any government production center. The area under for food plantation in the government sector, Muga have maximum i.e., 95.44 hector area, but Eri and Mulberry, there are minimum areas only 2.46 and 3.05 respectively. But in the private sector Muga rearing and Eri rearing, both there have been almost equal i.e., 61.44 and 62.00 hectors respectively and for mulberry 26.90 hectors only.

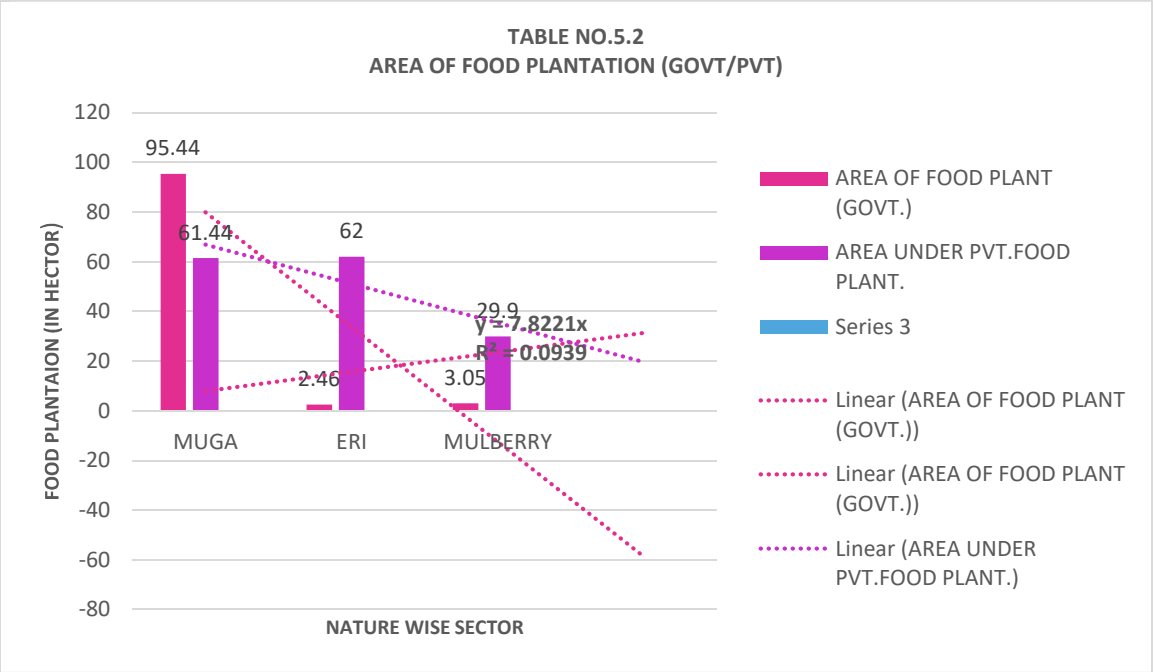

Fig. No-5.2Bar chart with linear equation line

The study also finds out that the government reeling and spinning production centers have been only for Muga rearing and Mulberry rearing silkworm. For Eri rearing, there did not have any government production center. The area under for food plantation in the government sector, Muga have maximum i.e., 95.44 hector area, but Eri and Mulberry, there

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are minimum areas only 2.46 and 3.05 respectively. But in the private sector Muga rearing and Eri rearing, both there have been almost equal i.e., 61.44 and 62.00 hectors respectively and for mulberry 26.90 hectors only. The level of linear equation R square value is 0.0939, it's very low significance. So, the food plantation areas both government and private are very minimum. It should be increased.

5.3 TECHNICAL COURSES AND PROGRAMMES ORGANIZED BY THE RESEARCH AND TRAINING INSTITUTE

Another important factor of the entrepreneur's that their technical and professional qualification in a particular field which one presented in table no.5.3.Every business of ownership depends on the facilities of pooling of financial resources, managerial and technical skills, and business experiences.

This table presented 34.17 percentage of the sample, they did not have any technical qualification, but 33.33 and 32.50 percent had a certificate and graduate/ professional training respectively. Almost equally all groups of samples were depicted in the study. The study verified that maximum Muga rearing entrepreneurs have graduate and technical training than in Eri and Mulberry rearing. Because of maximum entrepreneurs, they think they should be known about post cocoon processing system, so they go for training and other qualification which is required. Another important point out that in these areas maximum people are given more importance in muga rearing enterprise because muga rearing is too costly other than rearing after production of a traditional product.

TABLE NO -5.3 THE TECHNICAL COURSES AND PROGRAMMES ORGANIZES BY THE RESEARCH AND &TRAINING INSTITUTES

TRAINING COURSES	MUGA	ERI	MULBERRY	TOTAL	%' AGE OF UNITS
Structure Course	10(17.08) [2.94]	16(10.93) [2.35]	15(12.98) [0.31]	41	34.17
Farmers Skill Training, Technology/Orientation Programmes/ Capsule & adhoc Courses and Exposure Visit	15(16.67) [0.17]	12(10.67) [0.17]	13(12.67) [0.01]	40	33.33
Other Training Programmes/STEP/SAMARTH	25(16.25) [4.71]	4(10.47) [3.94]	10(12.35) [0.45]	39	32.50
Total	50	32	38	120	100.00

(The expected cell totals) and [the chi-square statics for each cell]

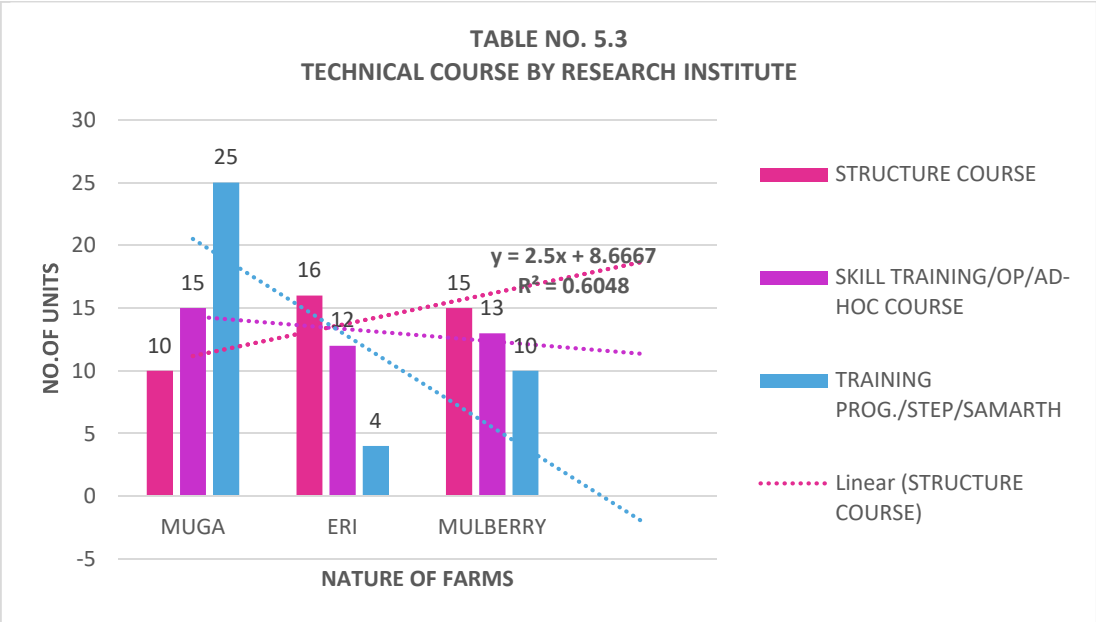

Fig. no.5.3 Bar chart with a linear equation

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Since the researcher finds out almost all units of respondence equal percentage so the entrepreneur, they can apply for their business in accordance nature of business. On the other hand, the non-parametric test of association chi-square statistics is 15.0375, and the p-value is .004624. So, the level of measurement of variable is normal and ordinally is significant at p<.05. So, the technical qualification and professional qualification both are interdependence each other and both are very important for an entrepreneur's progress. And linear equation R square value is 0.6048 which is one moderate significance, therefore though the extra technical qualification is important, they can handle their business due to heredity of business, so they can apply to handle their business.

5.4 NATURE OF ASSISTANCE PROVIDE BY GOVERNMENT AND NON-GOVERNMENT INSTITUTIONS

About assistance provided by different organizations in the field of entrepreneurship development assistance in the form of training for operating reeling machines, weaving techniques, design differentiation, product diversification, the technique of bleaching and dyeing, fashion designing, etc. are offered by the Central Silk Board, State Sericulture Department, NHDC, Demonstration cum Technical Service Center and Institute of Fashion Technology. The District Sericulture department, Central Silk Board, Weavers' Services Centers, Institute of Fashion Technology have played a pivotal role to train up entrepreneurs in the aforesaid sphere of activities. So. table no. 17 presented the government and non-government assistance and different type of combinations. Each different type of combination is divided into 5 levels which one the farmer can effort for training cost and government and private sector provided for the farmer.

TABLE NO.-5.4(A) NATURE OF ASSISTANCE GOVERNMENT AND NON-GOVERNMENT

SR.NO.	Nature of assistance	Training Operating reeling machine (1)	Weaving Technique (2)	Design differentiation (3)	The technique of beaching and dying (4)	Fashion Designing (5)
1	Combination (Level-A)	Yes	Yes	Yes		
2	Combination (Level-B)	Yes	Yes	Yes	Yes	
3	Combination (Level-C)			Yes	Yes	Yes
4	Combination (Level-D)	Yes	Yes			YEs
5	Combination (Level-E)	yes	Yes	Yes	Yes	Yes

From the above analyzed, table no.17 prepared by study and presented the nature wise level, which one in different sector farmer have been trained from government and non-government institution.

TABLE NO -5.4(B) DIFFERENT TYPES OF GOVERNMENT ASSISTANT IN DIFFERENT LEVELS FOR FARMERS

Sr.No.	Categories	Muga	Eri	Mulberry	Total	%' Age of units
1	Level-A	15(12.50) [0.50]	10(8.00) [0.50]	5(9.50) [2.13]	30	
2	Level-B	12(11.67) [0.01]	8(7.47) [0.04]	8(8.87) [0.08]	28	
3	Level-C	8(8.75) [0.06]	9(5.60) [2.06]	4(6.65) [1.06]	21	
4	Level-D	5(7.08) [0.61]	3(4.53) [0.52]	9(5.38) [2.43]	17	
5	Level-E	10(10.00) [0.00]	2(6.40) [3.03]	12(7.60) [2.55]	24	
	Total	50	32	38	120	100.00

(**The expected cell totals) and [the chi-square statics for each cell]**

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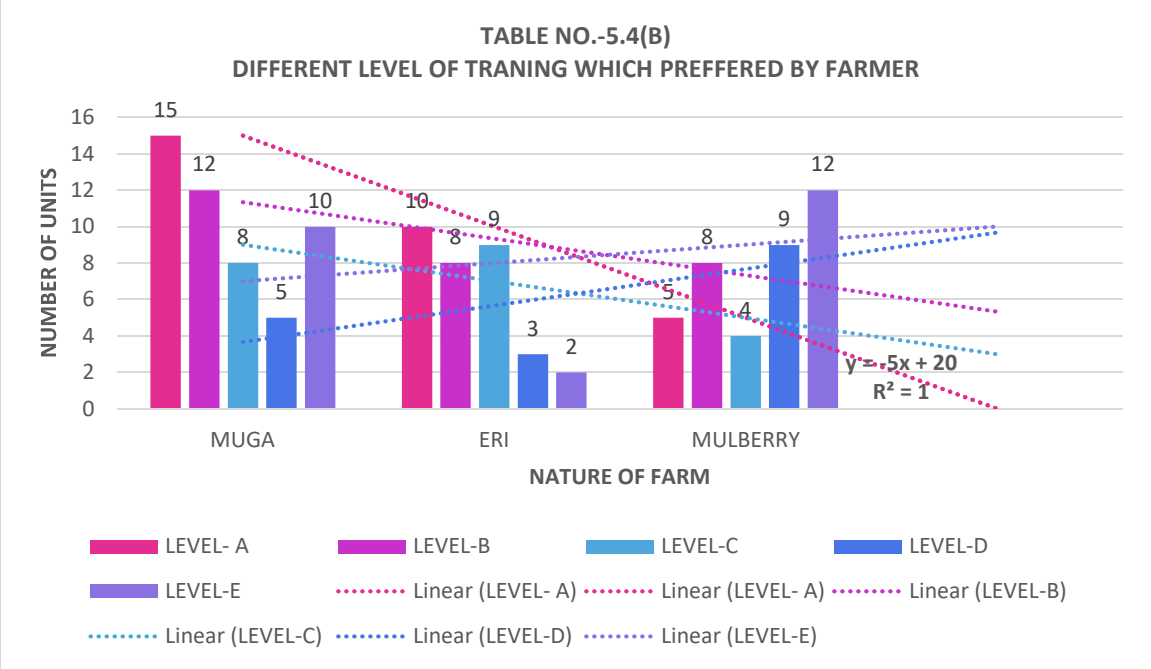

Fig. No.5.4(B) Bar chart with the linear equation

After the table and bar diagram with linear regression analysis, it presented that out of 120 respondents, 30 respondents of units, they preferred level-A, which one combination of training operating reeling machine, weaving technique and design differentiation training of entrepreneurs. Maximum respondents preferred this level. Because, if any sericulture farmer wants to do open new enterprise or want to do start, then they must know about their initial stage, So, every respondent, they are conscious for the beginning stage. After this level, 28 respondents, preferred level-B, which is one combination of weaving techniques, design techniques, and beaching and dyeing techniques. All these level government and non-government institutions provide to the farmer. Here some courses are free and, in some courses, there take fees. But non-government centers are always provided with a minimum of the cost of fees.

In the study finds out the result from the table, the non-parametric test of association chi-square statistics is 15.582, and the p-value is .048769. So, the level of measurement of variable is normal and ordinally is significant at $p<.05$ level and both are dependent on each other. Here the linear regression and R^2value are also exactly 1. So, the government assistant which is provided for farmers and the level of combination facilities of units both are dependents each other which are unavoidable and farmer selection level also perfect.

SUGGESTIONS

To ensure the success of the sericulture entrepreneurs the following suggestion has been offered:

- The Sericulture department should advise the planters or rearers to use the healthy seedlings plants to erect new plantations or extend plantations to improve the system of the plantation. They should extend technical advice to the rearers by making a periodical inspection of the plantations. And they should ensure a timely visit to the plantations to ensure clearing of plantations, manuring, pruning, and pollarding practices.
- The sericulture Department should ensure the supply of full requirements of Seed Cocoons in the district. And seed Cocoons Certification Centers should be established along with a selection of Private Grainier as licensed Seed Grower fixing proper responsibilities to produce pebrine-free seed cocoons.
- The Sericulture Department should undertake a detailed survey to assess the feasibility of the establishment of a Cocoon Market (for both seed and commercial) with price regulation to fulfill the demand for seed cocoons and to relieve the rearer from the extensive

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journey here and there in search of seed cocoons and abolish monopolistic behavior of the private seed growers.

- The Sericulture Department should arrange for the mobile laboratory to examine the silkworms to protect from the probable pebrine infections and to save from the total damage by initiating emergent measures instead of distributing laboratory testing equipment to the selected seed rearers as and when the message of invoking pebrine is received.
- The Sericulture Department should advise arranging the Awareness Programme for the rearers of commercial cocoons to sell their produce at the rate fixed by the Purchase Advisory Committee. The rearers should be made aware that the floor price is fixed at the initiative of Government types of machinery and representation of private rearers and the rate fixed is profitable. In this context, the information about the rate offered by the private businessmen should be collected and considered before fixing the price to fulfill the endeavor.
- The individual rearers and reelers who have been practicing the reeling job of muga cocoons should be estimated in the district and deputed for training to be acquainted with the operation of modern reeling types of machinery to replace Bhir and Bhowri to strengthen the enterprises.
- Vigorous Awareness Programme needs to be imparted at village level to educate the entrepreneurs and to organize them to take up entrepreneurship in the post-cocoon sector of sericulture activities such as Reeling unit, Weaving center, Raw Silk testing unit, Yarn Processing, and Dyeing unit, Fabric Dyeing unit, and so on. with the help of concerned agencies.
- The Sericulture Department can arrange Entrepreneurship Development Programmes jointly with the Institutions which provide financial and technical services to the entrepreneurs on sericulture, as the EDP's scenario in the district is grim and entrepreneurs are ignorant about those services or facilities provided by the institutions.
- The Directorate of Sericulture, Government of Assam should take initiative to establish an Institute of Fashion Technology at Sivsagar district in the line of the same institute established at, Sualkuchi, Kamrup.
- The Central Silk Board should disseminate the information about the results of various research conducted under Regional Muga Research Station; Boko and Central Muga & Eri Research Institute Ladoigarh; Assam regarding the advanced system of the plantation, use of high leaf yielding 'Som' seedlings, to the grass-root rearers.
- The CSB should make available the technical persons of the Sericulture Department of the Government of Assam, to help the rearers by providing proper counseling regarding the outcome of advanced technology of plantation, pest management, and disease management. etc. The Silk Board needs to ensure that eggs and seed cocoons that are distributed to the rearers are free from pebrine.
- The Central Silk Board can organize refresher courses or programs to invite resource persons of the Government Organizations related to the sericulture sector and to make available information on the results of researches undertaken in the seed sector under the Central Silk Board. They should arrange EDPs to educate the rearers about the facilities offered under Catalytic Development Programme approved in every 5 years Plan either by its assets or through the Sericulture Department and through NGOs to educate the entrepreneurs.
- The Silk Board should help the entrepreneurs in acquiring the modern technologies required for enterprises in the post-cocoon sector along with counseling for installation and maintenance of the same. They should organize Sericulture Demonstration Camp not only in the town areas but also in the silkworm rearing localities to educate entrepreneurs about installation, operation, and maintenance of such machinery and economics of full capacity utilization with financial help under CDP through Demonstration cum Technical Service Centre, Soalkuchi.
- Necessary initiatives should be taken jointly by the Central Silk Board, Sericulture Department, Government of Assam, and the Assam Science

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Technology and Environment Council (ASTEC) to obtain the 'Geographical Indication'- the patent of silk of Assam for its legal protection within the country and in other countries affiliated to the World Trade Organization (WHO).

- The Governments at Central as well as at State have to prepare for playing a more supportive role by providing new machinery, establishing Community Centers for reeling, spinning, and weaving with facilities for testing and grading of silk at different silk rearing villages giving proper attention to the required transport facility or road connectivity, area of production and consumption. The Government agencies would require to bring expertise for developing diversification of the product to meet the requirements of markets at the national and international level.

conclusions:

The development of sericulture entrepreneurs depends on education, training facility, availability finance, various expansion program, government initiative, Research and Development efforts, updated and new technology, expansion of the new market, publicity, motivation facility, and so on become extremely important.

In Sivsagar District an industrial society has not emerged till now. The society of the district has not considered a different sector of sericulture entrepreneurship as a source of permanent income. The attitude of the people in the society in general towards little bit in muga entrepreneurship, but not in other Eri and Mulberry sector is conducive for entrepreneurship development. The unemployed youths have not shown enthusiasm to engage in sericulture entrepreneurship as a career. Hence the social environment must be changed and youths have to be encouraged to accept sericulture activities as entrepreneurship for economic upliftment and to make Sivsagar district the second Silk city after Soalkuchi in Assam.

It concludes that though sericulture entrepreneurs have been a lot of problems, but at present sericulture, farms are one of the most profitable farms in the state. Entrepreneurs also play a vital role in the growth of our country. They can contribute significantly to the economic development of the state through their entrepreneurial skill.

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2. Data collected from Assistant Director of Sericulture, Sivasagar District Office

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