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Impact Of Implementation Of Sustainable Standards Certification On Financial Performance Of Low Grown Tea Factories In Galle District SRI LANKA

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Abstract: The objective of this study is to get to an idea and estimation about the implementation of sustainability certification standards projects on the financial presentation of tea factories located in Galle region Sri Lanka. The key focus of implementation of the Sustainable Standards schemes is the improvement of the economic, social and business performance of the industry that they are implemented. The study was done through an evaluation of financial status of tea factories operated under Sri Lanka Tea Board in Galle region, Sri Lanka where the sustainability certification has been seen at different scopes. The effects of these implementations of standards were measured through the assessment of the following specific financial performance indicators: Return on Assets (ROA), Return on Equity (ROE), Return on Sales (ROS), Return on Investment (ROI), Profits and sales performances. The research consists of both qualitative and quantitative methods which are focused on ensuring that an adequate number of figures were collected to conduct the analysis. The study methodology embraced for this research is a descriptive analysis among 50 sustainable certified tea factories in Galle region. Statistics collection was both primary (Questionnaire, Interviews, key figures) and some secondary data (company data on financial performance indicators) collection methods. Data was statistically analyzed using SPSS statistical tools version 23 for the quantitative data (Pearson Chi-Square test, Correlation and regression) and analyzed qualitative data using Microsoft excel.

As per the results of the research learning, it has recognized and can decisively state that there a significant encouragement on financial presentation from the implementation of sustainable certification in tea factories in Galle region. Therefore, the study commends that other tea factories also can adopt this sustainable certification to confirm upgraded financial presentation of their factories and facilitate the global market with modern concepts of businesses.

Index Terms **-** Voluntary Sustainable standards, financial performance, ROA, ROE, ROS.

I. INTRODUCTION

Tea and tea industry in the world

Tea, a dried leaf–infused beverage derived from the leaves of a small shrub originally from China, has become the world's second most popular beverage after water, with 3 billion cups consumed every day across the world. (Voora, 2019)

Ceylon Tea Industry

Beyond 100 years, the tea trade was the focal income source for Sri Lanka government revenue, while considerable amount of people is engaged in the industry. Recent statistics shows that recently economic contribution from the tea industry to the Sri Lankan economy is significantly declining. It was due to the opposition in the global tea industry. So, Sri Lanka shall identify the probable tactics and plans that Sri Lanka should embrace in order to enhance the attractiveness and efficiency of the Sri Lankan tea industry in the global tea market. Currently Sri Lankan tea industry faces several problems. Most common problems are low productivity, efficiency of tea factories are low, management problems, young generation not willing to work in the industry, therefore labour issues also emerging, competitors come to the global tea market as Kenya, China and India. Also, cultivation issues such as tea agronomy are standing or decrease, yield is low, cultivation speed is low, manufacture expenses are in elevation and there is a scarcity of work force Because of complex bunch of reasons. Integrated approaches are essential to improve the competitiveness of Sri Lanka tea industry. Analysis of industry reveals that the strength of competition in the global tea industry is very high. Sri Lanka has many unfavourable conditions with some favourable conditions. (Thushara, 2015)

As a country Sri Lanka yields different types of teas in extensive amounts. According to on Argo-climatic environments of Sri Lanka, eight areas identified as Sri Lanka tea divided into different tea classes with unique flavours and colour intensity in tea liquid. Based on this tea, types of prices of tea also differ. Basically, in three types of teas namely high elevated grown tea, mid elevated grown tea and low elevated grown tea.

Low elevated grown tea

As a key low elevated grown tea largely harvests in the area (height between sea level to 600 m) from Sabaragamuwa and Southern province of Sri Lanka. This is the area with different weather conditions. Because of that tea grown these areas, have distinguish features.

Ruhuna Tea and Galle District

The teas of the Ruhuna district are defined as “low-grown” as they are cultivated at an altitude not exceeding 600m comprising vast sub regions from coastal plains to Southern edge of Sinharaja Rain Forest. The soil, combined with the low elevation of the estates, causes the tea-bush to grow rapidly, producing a long, beautiful leaf. Full-flavoured black tea is a distinctively unique Ruhuna specialty. Ruhuna factories produce a wide variety of leaf styles and sizes, including prized “tips. (Tea growing regions, 2017)

Sustainable certifications

Most of the sustainable certifications schemes relevant to the tea industry are voluntary schemes. But these schemes are implemented by the tea companies because of various reasons including legal and buyer requirements. Below are the most popular sustainable certification schemes operated in the world tea industry.

- Ethical tea partnership (ETP) – Aim of having socially and environmentally acceptable tea sector.
- UTZ certification- Industry –producer partnership which is focusing on traceability in tea sector.
- Organic – Product standard on produces organically without harmful and excess use of inorganic fertilizers and pesticides.
- Fair trade – Focus on poverty decline and sustainable growth.
- Rainforest Alliance (RA) - It is the criteria set by the sustainable agriculture network (SAN) based on Environment, Social and Economic aspects.
- Good Manufacturing Practices (GMP)/Good Agricultural Practices (GAP)- Focus on good farming and hygiene and cleaning practices in the industry
- International Organization for Standardization (ISO) – ISO standards are confirming that products and services are harmless, trustworthy and good in value. For enterprises, they are tactical implements that reduce expenses by diminishing surplus and faults and growing yield and effectiveness. They benefit planters and manufacturers to enter novel marketplaces and facilitate fair global trade.

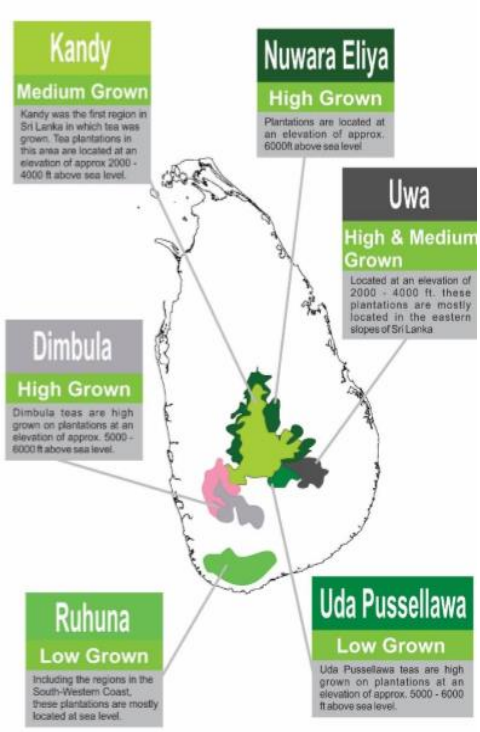


Image : tea grown regions in Sri Lanka

Abbreviations and Acronyms

VSS – Voluntary sustainable certifications
SLTB – Sri Lanka Tea Board
ROA – Return on Assets
ROE -Return on Equity
ROS -Return on Sales
ROI - Return on Investment
RA – Rainforest Alliance
HACCP- Hazard Analysis Critical Control Point
GMP- Good Manufacturing Practices
GAP – Good Agricultural Practices
SAN – Sustainable Agriculture Network

II. RESEARCH METHODOLOGY

2.1Population and Sample

There is very limited secondary data of the tea factories who are performing sustainable certification in, Galle region, Sri Lanka. Therefore, purposive sampling methods will be carried out to select the study population. Initially a pilot survey conducted by using unsystematically selected 50 ecological businesses resulting from the research sample. According to the results of the pilot survey, the questionnaire revised. A questionnaire survey carried out to collect the primary data against the predicted variables to examine the influence of sustainable certification on financial performance of the Tea factories in Galle region in Sri Lanka. The study involves quantitative analysis with hypothesis testing. The data gathering will be done mainly by using a close-ended authenticated questionnaire. Telephone interviews and visits carried out to verify or to get further information from the respondents. The Return on Asset (ROA), Return on Equity (ROE), Return on Sales (ROS), Return on Investment (ROI), Sales and profits are considered as the main profitability ratios in an income statement. For this study, it will be used both ratios, as those could impartially assume the financial performance of the SMEs. The ROA ratio procedures how competently a company would accomplish to handle its properties to produce revenues during a period and the ROE ratio deals with the capability of a firm to make revenues from its shareholder's investments.

2.2 Data and Sources of Data

Structure questionnaire is the main research tool of data collection and secondary data of the factories used to obtain ideas on ROA, ROE and ROS. Questionnaire consists of both open ended and closed ended questions. As per the Sri Lanka Tea Board statistics there are 94 tea factories functioning in Galle region. Out of that there are 50 tea factories having sustainable certification. So these certified 50 companies selected for the research and send the questionnaire through email to most of the companies. Few companies visited and obtained the data for questionnaire through interviewing respective persons of the company.

The research utilized mixed methods (qualitative and quantitative). Considered ratios (ROA, ROE, ROS), sales and ROI for comparison. Secondary data and preliminary data were collected. Secondary data based on their financial statements. Questionnaire was used to obtain preliminary data. Word form of the questionnaire send as emails and brief introduction on research questions were given through phone. Few companies visited physically and after visiting some companies as management interviews. All questions answered by the respondents after comparing the profitability data compared after the implementation of sustainable standards certification. Due to limitations of disclosing company financial figures, basically in this study focused on their perception on sustainability standards and thereby perception on financial performances. Therefore, aim of this study is to investigate whether sustainability certification has an impact of financial performances of the tea business.

Real-world concerns

Other than identified factors (ROA, ROE, ROS, ROI, Sales and profits), companies' financial performance also depends on various factors existing before the sustainable certifications. Therefore, this study is designed to measure only the impacts to the financial factors through questionnaire. So that influence of application of sustainability standards certifications more precisely recognized. During this study respondents instructed that evaluate recent financial position of tea planters which are applied sustainable standards certification associated with their previous financial figures before the implementation of sustainable standards certification. There are limitations to disclosing financial figures. Therefore, respondents advised to give their feedback on perception on financial performance before and after certification, by considering the financial figures they have. Also, to this study knowledge gap among tea sector workers and awareness problems are impacted. Therefore, must give basic information and brief about the research aim and about the meaning of research questions to individual respondents.

2.3 Theoretical framework

Conceptual framework

Sustainable standards certifications (Independent variable) ⟶ Financial performances (Profitability ratios) (Dependent variable)

Provided all the financial performances measuring theories profitability ratios

Theoretical framework

H1: Association available sustainable standards certification versus financial performances.
H0: No association available between sustainable standards certification versus financial performances.

Equations

ROA

Return on Assets (ROA), also known as return on total assets, is a measure of how much profit a business is generating from its capital. This profitability ratio demonstrates the percentage growth rate in profits that are generated by the assets owned by a company.

$$ROA = net\ income/average\ total\ assets$$

ROE

Return on equity (roe) is the measure of a company's annual return (net income) divided by the value of its total shareholders' equity.

ROE = net income / shareholders' equity

ROS

Return on sales (ROS) is a ratio used to evaluate a company's operational efficiency. An increasing ROS indicates that a company is improving efficiency, while a decreasing ROS could signal impending financial troubles.

ROS=net sales/operating profit

ROI

Return on investment (ROI), also called rate of return or yield, is a measure of the performance and efficiency of an investment. ROI is represented as a percentage of profit yielded by an amount of capital after costs and expenses over a certain period.

ROI = gross profit – expenses / invested amount x 100

2.4 Statistical tools and econometric models

Quantitative data from the questionnaire analyzed using SPSS Version 23. General data analysis and graphs done through Microsoft Excel). So generic data types are shown as pie charts and bar graphs. To investigate the association between two categorical variables, use Chi-square test in SPSS.

Descriptive Statistics

As preliminary steps in the research, Cronbach's Alpha to test reliability of questionnaire

Table 1: Cronbach's Alpha test results of questionnaire

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.904	.930	8

Based on the results of Cronbach's Alpha value, obtained as questionnaire is reliable to collect primary data. (Cronbach's Alpha value is more than 0.70 and less than 0.95)

III. RESULTS AND DISCUSSION

3.1 Validity of the data set

After collecting the data conduct person correlation coefficient to check the validity of data set.

Correlations

		certified_yrs	increase_profit	increase_sales	increase_roi	yrs_of_certification_positive impact_financial	increase_roa	increase_roe	increase_ros	Total
certified_yrs	Pearson Correlation	1	.280*	.547**	.280*	.888**	.888**	.888**	.888**	.895**
	Sig. (2-tailed)		.049	.000	.049	.000	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50
increase_profit	Pearson Correlation	.280*	1	-.101	1.000**	.389**	.389**	.389**	.389**	.501**
	Sig. (2-tailed)	.049		.485	.000	.005	.005	.005	.005	.000
	N	50	50	50	50	50	50	50	50	50
increase_sales	Pearson Correlation	.547**	-.101	1	-.101	.733**	.733**	.733**	.733**	.679**
	Sig. (2-tailed)	.000	.485		.485	.000	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50
increase_roi	Pearson Correlation	.280*	1.000**	-.101	1	.389**	.389**	.389**	.389**	.501**
	Sig. (2-tailed)	.049	.000	.485		.005	.005	.005	.005	.000
	N	50	50	50	50	50	50	50	50	50
yrs_of_certification_positiveimpact_financial	Pearson Correlation	.888**	.389**	.733**	.389**	1	1.000**	1.000**	1.000**	.978**
	Sig. (2-tailed)	.000	.005	.000	.005		.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50	50
increase_roa	Pearson Correlation	.888**	.389**	.733**	.389**	1.000**	1	1.000**	1.000**	.978**
	Sig. (2-tailed)	.000	.005	.000	.005	.000		.000	.000	.000
	N	50	50	50	50	50	50	50	50	50
increase_roe	Pearson Correlation	.888**	.389**	.733**	.389**	1.000**	1.000**	1	1.000**	.978**
	Sig. (2-tailed)	.000	.005	.000	.005	.000	.000		.000	.000
	N	50	50	50	50	50	50	50	50	50
increase_ros	Pearson Correlation	.888**	.389**	.733**	.389**	1.000**	1.000**	1.000**	1	.978**
	Sig. (2-tailed)	.000	.005	.000	.005	.000	.000	.000		.000
	N	50	50	50	50	50	50	50	50	50
Total	Pearson Correlation	.895**	.501**	.679**	.501**	.978**	.978**	.978**	.978**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	

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

**. Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation coefficient, Correlation>Critical value. So, data set is valid

3.2 Outliers of data set

Using SPSS analyzed for outliers of data set and found Interquartile Range (IQR) as below.
Financial status, increase of ROA, ROE, ROS data – 1
increase profit, Increase ROI data – 2 and Increase sales data– 3

Table 2: Outliers of ROA data set

Descriptive					
	Increase_ROA			Statistic	Std. Error
Certified_yrs	Neutral	Mean		2.50	.139
		95% Confidence Interval for Mean	Lower Bound	2.20	
			Upper Bound	2.80	
		5% Trimmed Mean		2.50	
		Median		2.50	
		Variance		.269	
		Std. Deviation		.519	
		Minimum		2	
		Maximum		3	
		Range		1	
		Interquartile Range		1	
		Skewness		.000	.597
		Kurtosis		-2.364	1.154
	Agree	Mean		4.61	.082
		95% Confidence Interval for Mean	Lower Bound	4.44	
			Upper Bound	4.78	

		5% Trimmed Mean	4.62	
		Median	5.00	
		Variance	.244	
		Std. Deviation	.494	
		Minimum	4	
		Maximum	5	
		Range	1	
		Interquartile Range	1	
		Skewness	-.476	.393
		Kurtosis	-1.881	.768

Like this all-financial ratio data shows IQR value as 1. Since all the data set values have <3 IQR, no outliers present at the data set

3.3 Check the Normality of data set

To check the normality, calculate the Kurtosis and Skewness using SPSS. Results are below

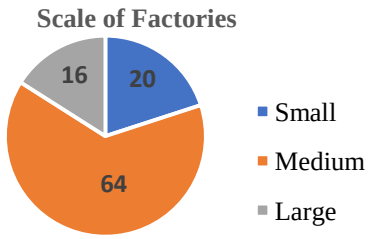
Table 3: Normality tests of data set

	Descriptive Statistics								
	N	Mean	Std. Deviation	Skewness			Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Std. Error	Skewness Standard error	Statistic	Std. Error	Kurtosis Standard error
certified_yrs	50	4.02	1.078	-.753	.337	-2.234	-.729	.662	-1.101
increase_profit	50	3.28	.454	1.011	.337	3	-1.021	.662	-1.542
increase_sales	50	3.58	.499	-.334	.337	-0.991	-1.969	.662	-2.974
increase_roi	50	3.28	.454	1.011	.337	3	-1.021	.662	-1.542
yrs_of_certification_positiveimpact_financial	50	3.72	.454	-1.011	.337	-3	-1.021	.662	-1.542
increase_roa	50	3.72	.454	-1.011	.337	-3	-1.021	.662	-1.542
increase_roe	50	3.72	.454	-1.011	.337	-3	-1.021	.662	-1.542
increase_ros	50	3.72	.454	-1.011	.337	-3	-1.021	.662	-1.542
Valid N (listwise)	50								

≥50 samples.
Kurtosis and Skewness:
Kurtosis < +/-2
Standard error
Skewness < +/-2
Standard error

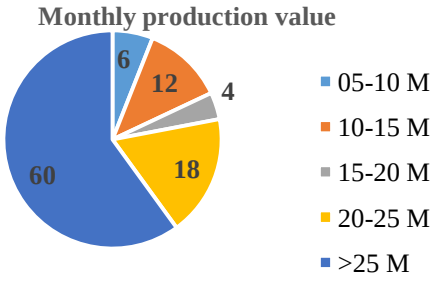
When consider about the data set kurtosis and skewedness values normal. Therefore, data set can be used for analysis.

3.4 Analysis of Generic Data



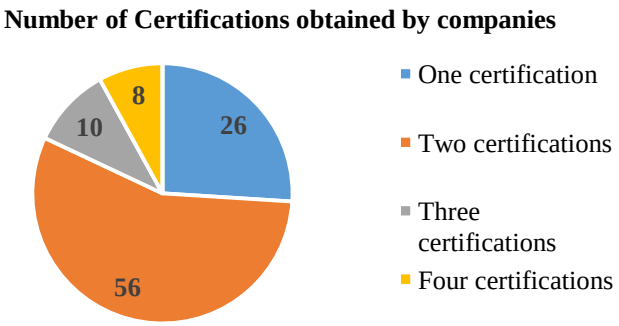
Among the 50 sustainable certified tea factories located in Galle region, 64% (32) are medium scale tea factories according to the Sri Lanka Tea Board classifications. 20% (10) are small scale factories and only 16% (8) are the large-scale factories.

Figure 1: Scale of tea factories located in Galle region



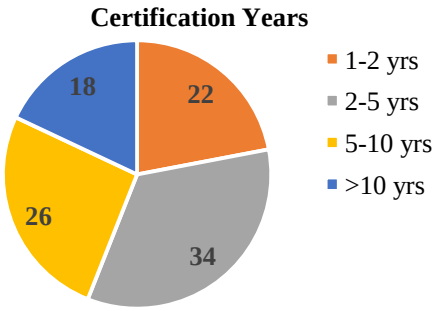
Majority of the companies belongs to > 25 million monthly production values category, 60% (30). 18% are in 20-25 million monthly production values and 4% (02 factories) is reporting 15-20 million monthly production value.

Figure 2: Monthly production values (in Millions)



All companies have at least one certification scheme. Some have more than one certification scheme implemented.

Figure 3: Number of certifications operates in the companies



Majority (34%) of companies certified for sustainable certification for 2-5 years.

Figure 4: Certification years

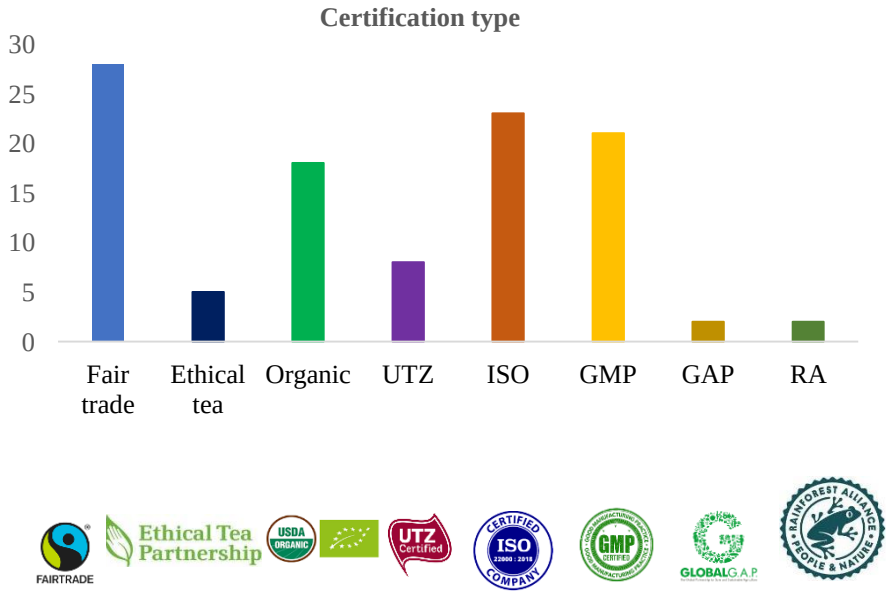


Figure 5: Certification types

Fair trade certification is the most popular certification type. Organic, ISO and GMP certifications also in considerable amounts.

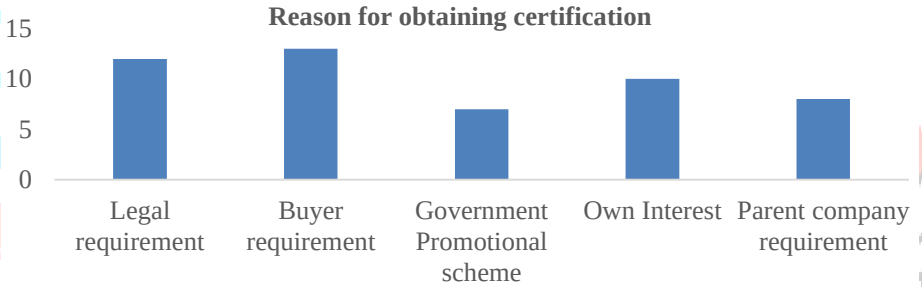


Figure 6: Reasons for obtaining certifications

Mostly due to buyer requirements and closer amount due to legal requirement

3.5 Results of Descriptive Statics of Study Variables

Analysis of whether any association between sustainability certification on financial performances

For these analysis, Pearson Chi-Square Test at 95% confidence level is used in SPSS software.

Association between sustainable certified years and Profits

H1: There is an association between certified years and profits

H0: There is no association between certified years and profits

Table 4: Chi-square test on sustainable certified years and profits

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.965[a]	3	.030
Likelihood Ratio	12.366	3	.006
Linear-by-Linear Association	3.853	1	.050
N of Valid Cases	50		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.			

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.030, So P<0.05. There for accept H1. There is an association between sustainable certified years and profits.

Association between sustainable certified years and Sales
H1: There is an association between certified years and sales
H0: There is no association between certified years and sales

Table 5: Chi-square test on sustainable certified years and sales

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.408[a]	3	.000
Likelihood Ratio	40.508	3	.000
Linear-by-Linear Association	14.681	1	.000
N of Valid Cases	50		
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 2.94.			

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.000, So P<0.05. There for accept H1. There is an association between sustainable certified years and sales.

Association between sustainable certified years and Return on Investment (ROI)
H1: There is an association between certified years and ROI
H0: There is no association between certified years and ROI

Table 6: Chi-square test on sustainable certified years and ROI

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.965[a]	3	.030
Likelihood Ratio	12.366	3	.006
Linear-by-Linear Association	3.853	1	.050
N of Valid Cases	50		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.			

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.030, So P<0.05. There for accept H1. There is an association between sustainable certified years and ROI.

Association between sustainable certified years and financial performance
H1: There is an association between certified years and financial performances
H0: There is no association between certified years and financial performances

Table 7: Chi-square test on sustainable certified years and financial performances

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.000[a]	3	.000
Likelihood Ratio	59.295	3	.000
Linear-by-Linear Association	38.633	1	.000
N of Valid Cases	50		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.030, So P<0.05. There for accept H1. There is an association between sustainable certified years and financial performances.

Association between sustainable certified years and Return on Assets (ROA)
H1: There is an association between certified years and ROA
H0: There is no association between certified years and ROA

Table 8: Chi-square test on sustainable certified years and ROA

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.000[a]	3	.000
Likelihood Ratio	59.295	3	.000
Linear-by-Linear Association	38.633	1	.000
N of Valid Cases	50		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.			

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.030, So P<0.05. There for accept H1. There is an association between sustainable certified years and ROA.

Association between sustainable certified years and Return on Equity (ROE)
H1: There is an association between certified years and ROE
H0: There is no association between certified years and ROE

Table 9: Chi-square test on sustainable certified years and ROE

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.000[a]	3	.000
Likelihood Ratio	59.295	3	.000
Linear-by-Linear Association	38.633	1	.000
N of Valid Cases	50		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.			

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.000, So P<0.05. There for accept H1. There is an association between sustainable certified years and ROE.

Association between sustainable certified years and Return on Sales (ROS)

H1: There is an association between certified years and ROS

H0: There is no association between certified years and ROS

Table 10: Chi-square test on sustainable certified years and ROS

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.000[a]	3	.000
Likelihood Ratio	59.295	3	.000
Linear-by-Linear Association	38.633	1	.000
N of Valid Cases	50		

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.96.

As per the SPSS chi-square test output, at 95% confidence level Pearson Chi-Square value is 0.000, So P<0.05. There for accept H1. There is an association between sustainable certified years and ROS.

IV. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

The study established that there is an association between sustainable certification and financial performances in various financial management tools like ROA ROE, ROS, ROI, profits and sales. the study found that implementation of sustainable certification is impact to the business practices. the study revealed that there is a significant association between the independent variable of certification implementation years and the dependant variables of variables, ROA ROE, ROS, ROI profits, sales and overall financial performance of the organization. finally, as per correlation results it was found that ROA ROE, ROS, sales are having significant association with certification implementation years. profits have small association (p=0.03) with certification years. Therefore, we can't say profit increase exactly because of the increase of certification years. There might be other reasons for the profits of the company, other than how long they have maintained the certificates.

Conclusion

Tea industry undergone numerous challenges and issues during history and involvement of the tea industry on the way to the Sri Lankan economy is progressively diminishing due to various reason (world bank report, 2017). Searching alternative market opportunities and introducing novel concepts in tea production business are the solutions to overcome these challenges. therefore, as a tea industry Sri Lanka, we need high quality tea with low production cost to compete in the global market. sustainable certifications help to achieve this target.

So, to meet up global challenges and enter to new market opportunities, regulatory authorities of Sri Lanka for tea, especially Sri Lanka tea board initiated a sustainable certification programme as tea companies to follow. Also, buyers are encouraging to have these certifications. so now most of the companies are certified for sustainability certifications. some other researchers conducted to find out impact of sustainable certification on business performances in various other ways such as production process improvements, employees' safety and welfare, ethical business, work environment development, and impact on environmental performances. but there is a research gap to find out whether these certifications helpful to improve the financial status of the company. So this study aimed at identifying the financial performances against sustainable certification in the tea factories in Galle region, Sri Lanka. in this study data analysed using SPSS software and according to the data type Pearson chi-square test used to investigate association between financial performances and sustainable certification based on period of certified years. the study concluded that there was a significant association between implementation of sustainable certifications and financial performance of tea factories in Galle region. sustainable certification can help entrepreneurs to reach a win -win situation, the enterprises that adopt sustainable certification could benefit from financial performances as well as more recognition from the buyers. therefore, the findings will aware the entrepreneurs the real commitment to implementation of sustainable certification could influence the financial performances and the findings will motivate the other entrepreneurs to go with sustainable certification.

Limitations of the study

In the case of financial figures, most companies do not like to disclose their financial figures since those are confidential and sensitive information to the business. Therefore, research was planned to obtain their perception on financial performance based on financial figures before and after implementation of sustainable certifications. So each respondent instructed to mark their perception on values of financial performances specially in ROA, ROE, ROS, ROI and sales and profit values based on their financial figures disclosed in income statement, cash flow statement, annual report as secondary data, Also respondents informed that their information keep confidential even after research and not disclose to the third party.

Also, key financial tools and other technical terms were not familiar to the respondents and sometimes cannot understand the meaning of those to overcome this issue, briefing of questions given to each respondent and few companies visited and gave instructions. Also, some have technical issues filling the questionnaire in google form. So, questionnaire was simplified as Microsoft word format and sent through email and collect back in same way.

Challenges of implementation for sustainable certification in the tea production units/factories.

Various studies show in the globe that sustainability certification increases financial performances and other businesses. To achieve this the study revealed that there are some major challenges of establishing sustainable certifications in firms and this could be summarized as financial, operational and human resources. lack of financial resources, lack of human resources, lack of knowledge on sustainable certification implementation, lack of commitment of workers and lack of commitment of management towards the implementation of sustainable certification are the key constrains for implementation of sustainable certification in tea industry in Galle region, Sri Lanka.

Recommendations

Since the study results show there was an association between financial performance and implementation of sustainable certifications, the companies should obtain more relevant sustainable certifications to the system and make sure real implementation of requirements of sustainable certifications. Also, they can integrate these sustainable certifications into the business strategies and make both as one. Thereby they can drive the organization's business direction towards sustainable business. to in line with this, companies should integrate their company policies, annual business objectives and processes with the requirement of sustainable certification. Thereby they will be able to improve their business growth through financial performance, because requirements and methods mentioned in each sustainable standard follow management concepts, technical requirements of processes and provide guidelines to be followed in each requirement. Meantime companies to be identified barriers and constrains to the implementation of sustainable certification and treat them to have better system in place. Also certified companies can act as role models to the industry and to other companies who are not certified yet and promote and motivate them to have these certifications. So thereby as a sector they can perform well and compete in the global tea trade to maintain further the Ceylon tea symbol.

To the tea firms

To overcome the challenges of implementation of sustainable certifications, tea factories to be undergone implementation of more than one certification scheme. Thereby they can overcome the different issues, because different certifications have different approaches and would overcome one issue by another. (ex: rainforest alliance and utz) but at the end all certifications enhance business growth in different ways by uplifting financial performance of the firm. Also, they can integrate common requirements of each certification into one platform to face different challenges.

To the government

As a governing body to the tea industry Sri Lanka, Sri Lanka tea board must play key role in implementation of sustainable certifications in the industry. implementation of these sustainable certifications enhances business growth, financial performance and prepares companies to compete in global tea trade. So, Sri Lanka tea board to be act as a facilitator to the sustainable certifications by arranging loan schemes for certification, providing technical consultancies and arranging promotional campaigns in the global trade to promote certified companies and their brands.

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