Sustainability Strategies and Profitability of Small-Scale Coffee Enterprises in Ethiopia; A Case of Southern People's Regional State, Gedeo Zone

Mekonnen Weldegebrreal Hailu, Dr. Fr. Paul Mathenge & Dr Okumu Ndiao

Sustainability Strategies and Profitability of Small-Scale Coffee Enterprises in Ethiopia; A Case of Southern People's Regional State, Gedeo Zone

[1*]Mekonnen Weldegebrreal Hailu, [2]Dr. Fr. Paul Mathenge & [3]Dr Okumu Ndiao

[1]Postgraduate student, Catholic University of Eastern Africa

[2]Lecturer, Catholic University of Eastern Africa

[3]Lecturer, Catholic University of Eastern Africa

*Email of the Corresponding Author: mekoliqu@gmail.com

Abstract

This study examined the effect of sustainability strategies on the profitability of small-scale coffee enterprises in Ethiopia, a case of southern people's regional state, Gedeo Zone. The study's specific objectives were to examine the effect of coffee value addition, coffee quality inspection system, human resource development and product diversification on the profitability of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia. The study was anchored on five theories: value chain analysis, attribute theory, human capital theory, resource-based view and agency theory. A descriptive research design was utilized in the study. The target population was 28 small scale coffee enterprises. The unit of analysis were Kochere, Yirgachafe, Gedebe and Dila Zuria. The unit of observation was Leaders (board) of SSEs, Heads of Finance SSEs, SSEs Credits committees, Coffee and Tea Authorities officials and Woreda cooperatives Agency from woreda coffee and tea in four woreda of Gedeo Zone. Census was conducted in which all the 28 small-scale coffee enterprises were included in the study. Besides, the researcher used purposive sampling to select 5 leaders of the SSEs, 1 head of finance, 1 Credits committee, 1 Woreda Cooperative agency and 1 Coffee and Tea Authority official from each of the four woreda. The researcher administered questionnaires to the respondents. The correlation results showed that coffee value addition, coffee quality inspection, human resource development and Product diversification were positively and significantly associated. The regression results showed that coffee value addition was positively and significantly related to net earnings (β=.0.217 p=0.036). Also, it was found that coffee quality inspection was positively and significantly related to net earnings (β=.421p=0.000). Moreover, human resource development and net earnings was positively and significantly related (β=.206, p=0.032). Product diversification and net earnings was positively and significantly related (β=.315p=0.002). The study recommended that enterprises need to emphasize much on coffee value addition to increase profitability. The enterprises can

enhance coffee value addition through coffee, brandings and bagging. The study also recommended a coffee quality inspection system such as a quality management system for recognition of coffee quality and quality inspection centers to monitor the production and exportation of all coffee through the system. Further, it was recommended that enterprises invest heavily in the employees' training for effective dry processing. Further, it was recommended that the enterprise needs to be involved in the product (coffee) diversification. There should be different coffee qualities for internal consumption and export markets and the enterprises should also deal with more than one coffee brand.

Keyword: *Coffee value addition, coffee quality inspection system, human resource development, coffee diversification, sustainability strategies, profitability, small-scale coffee enterprises, Gedeo Zone, Ethiopia*

1.0 INTRODUCTION

1.1 Background to the study

Sustainability strategies are set of the priorities of the actions to be undertaken by an organization to increase the level of performance (Luo, Wang, Raithel & Zheng, 2015). The strategies provide an agreed framework to focus on investment and drive performance towards the targets (Grewatsch & Kleindienst, 2017). According to Jena, Chichaibelu, Stellmacher and Grote (2014), Ayuya, Gido, Bett, Lagat, Kahi and Bauer (2015), Grewatsch and Kleindienst (2017), Chiputwa, Spielman and Qaim (2015), Tefera, Bijman and Slingerland (2017) and Gathura (2016) the critical sustainability strategies for the profitability of the coffee enterprises include coffee value addition, coffee quality inspection, human resource development and products diversification.

Coffee value addition involves enhancements or additions of the ingredients to the coffee, resulting in higher returns to the commodity to the seller (Luo, Wang, Raithel & Zheng, 2015). The value addition can be through blending, which entails a mixture of two or more different origin coffee beans mixed (Dimitrov & Jain, 2014). Based on the findings of Jena, Chichaibelu, Stellmacher and Grote (2014), repackaging is a vital factor of the value addition and entails the presentation of the products in a new way that is more attractive and convincing to the customers. Besides, the coffee quality inspection refers to how the management reviews the quality of all factors involved in production to ensure the products are efficient in quality (Gathura, 2016).

Human resource development facilitates the updating of skills and leads to increased commitment, well-being, and a sense of belonging, thus directly strengthening the organization's competitiveness (Okoro, 2017). Training has a distinct role in achieving an organizational goal by incorporating the organization's interests and the workforce (Maina, 2016). Product diversification refers to the situation where the company produces more than one product so to expand in the market share (Deligianni, Voudouris & Lioukas, 2017). The coffee farmers can diversify to provide a variety of forest coffee, semi-forest coffee, garden coffee, and plantation coffee (Grewatsch & Kleindienst, 2017). According to scholars such as Gathura, (2016), Nguyen, Nguyen and Bosch (2015), Omare, (2014), Shumeta and D'Haese (2018), Chiputwa, Spielman and Qaim (2015), sustainability strategies influence the profitability of the institutions.

Profitability is the company's ability to use its resources to generate revenues above its expenses (Omwanza &Jagongo, 2019). Small-scale coffee enterprises' profitability is determined by the difference between sales and expenses (Benur & Bramwell, 2015). The current world real coffee prices are on the decline due to overproduction, leading to producers receiving low returns (Nkwasibwe, Mugisha, Elepu & Kaneene, 2015; Ayuya, Gido, Bett, Lagat, Kahi & Bauer, 2015; Mamuu, 2014). The profitability of small-scale coffee enterprises in the World has been declining and this has led many farmers of the product to switch to other farming (Gathura, 2016). In the study, the profitability was determined using net earnings. The study used the measure because it showed the enterprises' efficiency level in the management of the available assets.

1.2 Statement of the Problem

It is expected there exist an effective sustainability strategy to intensify the profitability of the small-scale coffee enterprises in Ethiopia, given that enterprises contribute to more than 17% of the employment opportunities in the country (Shumeta & D'Haese, 2018). The country is also the world's seventh-largest producer of coffee and Africa's top producer (Besides, Tefera, Bijman & Slingerland, 2017). However, coffee products' profitability among most small-scale coffee enterprises has been declining and fluctuating since 1999 (Tefera, Bijman & Slingerland, 2017). The growth rate of coffee among these enterprises has ranged between -21.3% and 35.6% from 1999 to 2010 (Ministry of Agriculture, 2010. Moreover, from 2011 to 2019, the growth rate was between -2.68 and 6.65% (Ministry of Agriculture, 2019). Therefore, it is evidenced that the coffee's growth rate in Ethiopia has been fluctuating, which has led many coffee small-scale enterprises to record deficient performance in some seasons. This fluctuation in the performance and low returns has influenced some farmers to uproot their coffee crops and shift to other sectors, such as maize and sorghum (Gashaw, Habteyesus & Nedjo. 2018).

Previous studies such as that of Tamru and Minten (2016) found that the poor infrastructure in the coffee growing regions, poor quality and lack of value addition have been a significant factor that has led to the deteriorating financial performance of the coffee enterprises in Ethiopia. Also, Jena, Chichaibelu, Stellmacher and Grote (2014) reported that most of the top roasters and buyers of Ethiopian coffee expressed concerns about the deteriorating quality and reliability of supply Ethiopian coffee. Therefore, the main reasons for small scale coffee enterprises in Ethiopia for not making profits may be the failure to embrace sustainability strategies, thus formed the basis of the current study.

Besides, some of the empirical literature reviewed revealed mixed results. Some studies showed that sustainability strategies had a positive effect on profitability, while other studies revealed a negative effect on profitability. For instance, those studies that found a positive effect of sustainability strategies on profitability included: Gashaw, Habteyesus & Nedjo, 2018; Alice & Langat, 2016; Wachinga, 2016; Muturi, 2018; Nyambura, 2015; Abasanbi, 2016; Moses, 2014; Gathura, 2016; Okoye & Ezejiofor, 2017; Gathura, 2016; Kalui, 2016; Nguyen, Nguyen & Bosch, 2015). A negative effect of sustainability strategies on profitability found in these studies (Kundu & Ngigi, 2018; Tamru & Minten, 2016; Nkwasibwe, Mugisha, Elepu & Kaneene, 2015; Schmidt, Zanini, Korzenowski, Schmidt & Benchimol, 2018). Moreover, among the literature reviewed, most studies were conducted outside Ethiopia. Therefore, the literature reviewed cannot be used

to make inferences about the effect of sustainability strategies on the profitability of the small-scale coffee enterprises in Ethiopia, thus forming a knowledge gap that needed to be ascertained.

1.3 Research Objectives

i. To examine the effect of coffee value addition on profitability of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia

ii. To establish the effect of coffee quality inspection system on profitability of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia

iii. To establish the effect of human resource development on profitability of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia (39)

iv. To examine the effect of products (Coffee) diversification on profitability of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Value Chain analysis theory

Michael Porter developed the Value Chain analysis theory in 1985. The theory reports that the value chain is an interdependent system or an interlinked network of activities, which, if managed carefully, could be a vital source of good performance and higher profitability. Porter (1998) analyzed the value chain in five steps; First, he identified the various distinct value chain activities that the organization undertakes and categorized them as primary or support activities (Zokaei & Simons, 2006). He then grouped these activities by type i.e., whether direct, indirect, or quality assurance and sought to establish the linkages of these activities within the value chain. Next, he assessed the distinct activities or combinations of activities that could add value to the customer. Finally, he developed a strategy to apply changes to those activities that contribute to performance, which leads to a firm's competitive advantage (Hergert & Morris, 2009). The internal processes that a company puts in place to design products, produce them, carry out marketing activities and support the product are referred to as a value chain.

2.1.2 Attribute theory

The proponent of attribute theory was Fritz Heider in 1952 and further advanced by Harold Kelley and Bernard Weiner in 1972. The theory assumes that quality reflects the service delivery system's attributes and management has full control of the inputs defining these attributes. Johnson (1988) points out that when the delivery of a service does not match the prior normative standards or the expectations that are held by the clients, they may opt to engage in the attribution process to ascertain or make sense of what might have taken place. Hasan and Kerr (2003) observe that the value of customer attribution largely depends upon the range and the kind of information that is available to the customer concerning the cause of the problem, including the frequency of the problem, the clients' perception on the preventability of the problem among others. According to Kvet and Watkins (1993), the quality of output often depends on an individual's judgment of the quality of its products. Savolainen (2013) points out that there is only better or worse quality and that the comparison basis is often contained within one's past personal experiences and prejudices. This personal history is expressed as expectations: when positive expectations are met, then quality

is judged to be acceptable; when expectations are exceeded, then quality is judged to be excellent. The quality of the products is a factor that enhances the retention of the clients in a long period hence fosters institution sustainability.

2.1.3 Human capital theory

The proponent of human capital theory was Theodore Schultz in 1961. Further, the theory was developed by Gary Becker in 1964. The theory reports that the capacity building of the employee in the organization is essential and increases the efficiency and cost minimization (Becker, 2009). Maintaining competent employees is significant to the organization since they become more innovative, thus fostering a competitive advantage (Gibbons & Waldman, 2004). The employees' satisfaction is fostered through job loyalty, job commitment, retention, pay satisfaction and career development (Sweetland, 1996). The value addition of employees through training is a long-term investment of the organization and facilitates it to be more competitive in the market (Klein & Cook, 2006). Training of the employees is not only to improve the fulfillment of the employees, but it is considered as a strategy by the organization to outsmart the competitors with the development of a pool of qualified employees (King, Montenegro & Orazem, 2012).

2.1.4 Resource-Based View

Barney (2001) established that resource based-view theory examines the importance of the available resource is to produce monetary value. The diversification of the products in a company is based on the available resources that the company commands in a particular market. McIvor (2009) suggested that an organization comprises of physical and intellectual resources that help to generate income and enhance sustainability. Also, Hafeez, Malak and Zhang (2007) reported that the assets available within an organization are critical to generating revenue and grouped as either physical assets or academic assets. The availability of massive resources enables the company to venture into other markets and diversify the products and services (Kraaijenbrink, Spender & Groen, 2010).

2.1.5 Agency Theory

Agency theory was developed by Stephen Ross and Barry Mitnick in 1976. The theory reports that management is an essential organ in an organization as it makes decisions and strategies to be followed; thus, it should be monitored regularly to check the effectiveness of the decision made on the profit maximization to the company (Donaldson & Davis, 1991). The profitability of the organization increases when there is good collaboration between the agent's agents (top management) and stakeholders (shareholders) (Adams, 1994). The boards of the profit-making organizations need to align the interests of management with those of shareholders to have a sufficient understanding of working toward achieving a common goal (Schulze, Lubatkin & Dino, 2003). Besides, the theory reports that the top shareholders and boards should always keep the management on the check. They should regularly report on how the organization is doing financially to minimize them from working toward self-interest. The theory shows that the profit maximization is maximized when the agent and principal are working toward a particular purpose.

2.2 Empirical Review

Gashaw, Habteyesus and Nedjo (2018) examined the determinants of coffee value addition by smallholder farmers in Jimma Zone, Ethiopia. The finding stress that policy aiming at offering

farmers a fair price, providing adequate credit and other extension services, providing drying facilities, building the capacity of farmers with knowledge, improving farmer's business diversification besides coffee farming and targeting gender-inclusive strategy (paying attention to women) were recommended to increase coffee value addition at farm levels.

Kundu and Ngigi (2018) sought to determine the factors influencing coffee marketing by small-scale producers and to assess the influence of smallholder coffee marketing systems to the coffee value chain. The findings of the study showed that crucial challenges facing coffee marketing include low and delayed payments to small-scale producers, poor management of producer and marketing cooperatives, little value addition and low education levels of top management of producer and marketing cooperatives and small producers. The results of the study also reported that smallholder coffee marketing systems in turn affects coffee value chain through financial constraints, reduced returns and reduced production.

Abasanbi (2016) conducted a study with the objectives of assessing the impact of pre and post-harvest processing practices on the quality of both wet and dry-processed coffee, identifying the inherent quality of coffee in the zone and investigating socio-economic technical and institutional factors related to coffee quality problems in the zone. The findings of the study indicated that any effort in promoting and adopting of CQPPHMP practice should recognize the socio-economic, institutional, and technical factors for better adoption of CQPPHMP practices. The study concluded that the quality of the coffee products increases the Profitability to the farmers and cooperatives significantly.

Kalui (2016) examined the effect of financial risk management strategies on the performance of horticulture firms in Kenya. The study's findings showed that horticulture firms employ a range of financial risk management strategies that include insurance, hedging, diversification, and the use of commodity-linked bonds to enhance a firm's performance since there is no single strategy can be utilized to manage all horticulture risks. The study also showed that horticulture firms that adopt and implement financial risk management strategies improve their performance in terms of increased sales, earnings and market share. Besides, Jena, Chichaibelu, Stellmacher and Grote (2014) established that introduction of the technology and effective marketing strategies raised the profitability of coffee cooperatives among the small‐scale coffee producers in the Harrar region.
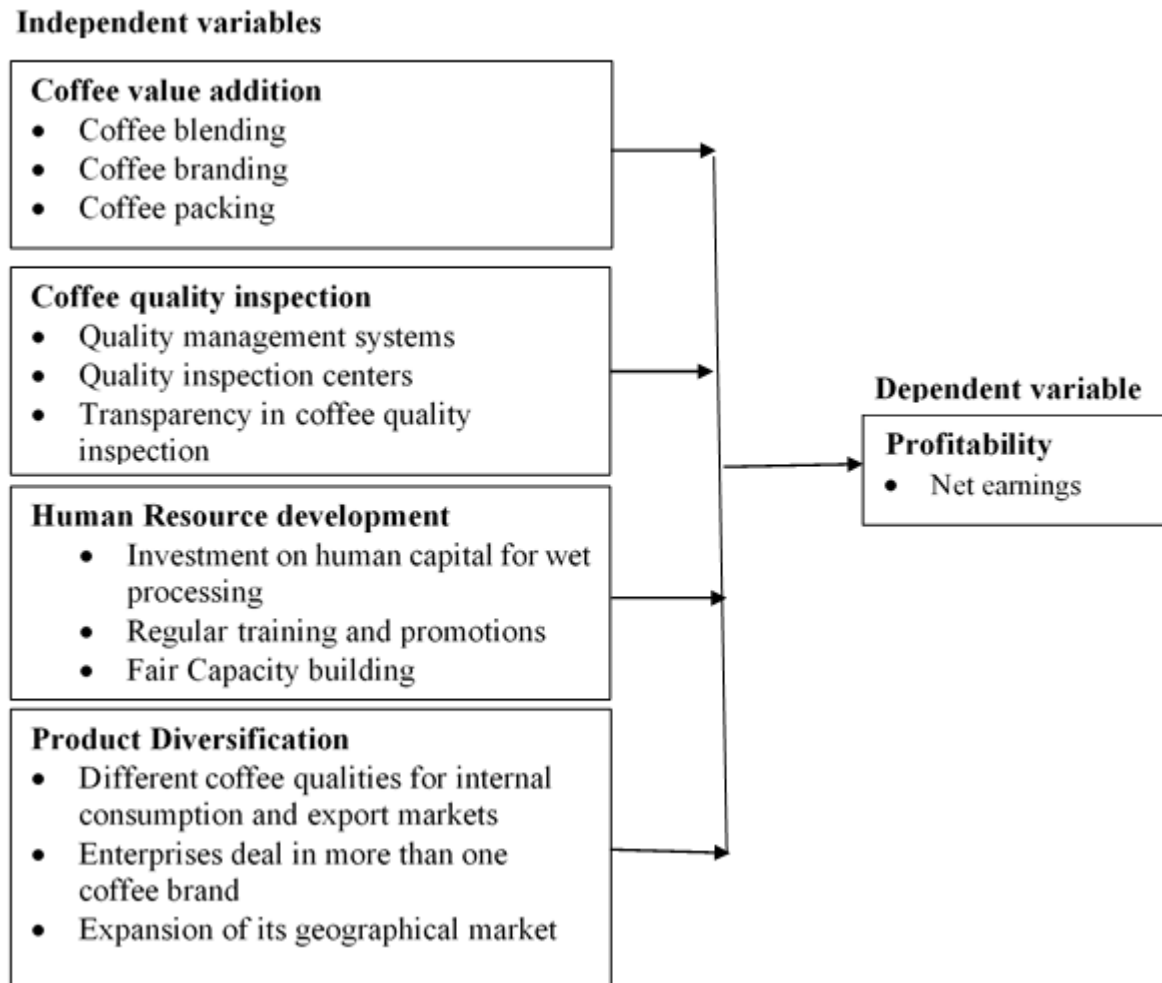
2.3 Conceptual framework

Independent variables

Coffee value addition
- Coffee blending
- Coffee branding
- Coffee packing

Coffee quality inspection
- Quality management systems
- Quality inspection centers
- Transparency in coffee quality inspection

Human Resource development
- Investment on human capital for wet processing
- Regular training and promotions
- Fair Capacity building

Product Diversification
- Different coffee qualities for internal consumption and export markets
- Enterprises deal in more than one coffee brand
- Expansion of its geographical market

Dependent variable

Profitability
- Net earnings

Figure 1: Conceptual Framework

3.0 RESEARCH METHODOLOGY

A descriptive survey research design was utilized in the study. The study used quantitative data analysis to analyze the collected data. The target population was 28 small scale coffee enterprises in southern people's regional state in the Gedeo zone. The unit of observation were board members of SSEs, CEO, HR, Heads of Finance SSEs, SSEs Credits committees, Coffee and Tea Authorities officials and Woreda cooperatives Agency from woreda coffee and tea in four woreda of Gedeo Zone. The study conducted a census. Purposive sampling techniques was used in the study to pick the respondents. The study used both the primary and secondary data collection instruments.

4.0 RESEARCH FINDINGS

4.1 Responses Covering Coffee Value Addition, Coffee Quality Inspection, Human Resource Development and Coffee Diversification

4.1.1 Coffee Value addition

The responses on coffee value addition from the key respondents within the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia are depicted in Table 1 below.

Table 1: Coffee Value addition

Statement	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Mean	SD
The enterprise uses coffee blending as a strategy to increase the profitability	41.10%	32.60%	6.20%	17.10%	3.10%	2.09	1.199
The enterprise advocates for coffee brandings as a strategy to increase the profitability	19.40%	52.70%	4.70%	12.40%	10.90%	2.43	1.242
Coffee bagging is value addition strategy used in the enterprise to promote the profitability	27.10%	46.50%	2.30%	16.30%	7.80%	2.31	1.249
There is high coffee flavouring within the enterprises	23.30%	56.60%	1.60%	14.70%	3.90%	2.19	1.076
The enterprise uses coffee packing as a value addition strategy to outsmart the competitors	31.00%	39.50%	7.00%	17.80%	4.70%	2.26	1.207
Average						**2.256**	**1.195**

Based on the results presented in Table 1, 73.70% (41.10%+32.60%) disagreed that the enterprise uses coffee blending as a strategy to increase the profitability, 20.20% (17.10%+3.10%) agreed with the survey question and 6.20% neither disagreed nor agreed. The mean score of the survey question was 2.09 with a standard deviation of 1.199. This implied that the majority of the enterprises do not uses coffee blending as a strategy to increase profitability. Moreover, 72.10% of disagreed the enterprises advocates for coffee brandings as a strategy to increase the

profitability, 23.30% agreed with the stamen and 4.70% neither agreed nor disagreed. The mean score of the survey question was 2.43 with a standard deviation of 1.242. This indicated that most of the respondents disagreed that the enterprises' advocates for coffee brandings as a strategy to increase profitability.

Further, 73.60% disagreed that coffee bagging is value addition strategy used in the enterprise to promote profitability, 24.10 agreed with the statement and 2.30% neither disagreed nor agreed. The mean score of the survey question was 2.31 with a standard deviation of 1.249. This implied that majority of the respondents disagreed that coffee bagging is value addition strategy used in the enterprise to promote profitability. Moreover, 79.90% disagreed there is high coffee flavouring within the enterprises, 18.60% agreed while 1.60% neither disagreed nor agreed. The mean score of the survey question was 2.19 with a standard deviation of 1.076. This illustrated that majority of the respondents disagreed there is high coffee flavouring within the enterprises.

Likewise, 70.50% of the respondents disagreed the enterprises uses coffee packing as value addition, 22.50% agreed and 7% neither disagreed nor agreed. The mean score of the survey question was 2.26 with a standard deviation of 1.207. This meant that most of the respondents disagreed the enterprises uses coffee packing as value addition. The average mean score of the responses from the respondents was 2.256 with a standard deviation of 1.195. This implied that most of the respondents disagreed there is coffee value addition within the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia. This might be the reason behind low profitability in the enterprises.

4.1.2 Coffee Quality Inspection

The results presented in Table 2 present the responses on coffee quality inspection among the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia.

Table 2: Coffee Quality Inspection

Statement	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Mean	SD
There is quality management system in the enterprise for recognition of coffee quality	45.00%	26.70%	4.70%	19.10%	4.70%	2.08	1.27
There are effective quality inspection centres to monitor the production and exportation of all coffee through the system.	25.60%	52.70%	5.40%	8.50%	7.80%	2.20	1.15
There are coffee quality inspection centers used to categorize the coffee supplied based on its quality	31.80%	40.30%	7.00%	11.60%	9.30%	2.26	1.28
There is high transparency within the coffee quality inspection centers in the region	35.70%	40.30%	3.10%	15.50%	5.40%	2.15	1.22
There are adequate coffee quality inspection centers in the region to enhance its quality	26.40%	41.10%	6.20%	14.70%	11.60%	2.44	1.33
Average						**2.23**	**1.25**

As per the results presented in Table 2, 71.70% (45.00%+ 26.70%) of the respondents disagreed there is a quality management system in the enterprise for recognition of coffee quality, 23.80% (19.10%+4.70%) agreed and 4.70% neither disagreed nor agreed. The mean score of the statement was 2.08 with a standard deviation of 1.27. This implied that the majority of the respondents disagreed there is a quality management system in the enterprise for recognition of coffee quality. Moreover, 78.30% of the respondents disagreed there are effective quality inspection centers to monitor the production and exportation of all coffee through the system, 16.30% agreed with the survey question and 5.40% neither disagreed nor agreed. The mean score was 2.20, with a standard

deviation of 1.15. This indicated that the majority of the respondents disagreed there are effective quality inspection centers to monitor the production and exportation of all coffee through the system.

Similarly, 72.10% disagreed there are coffee quality inspection centers used to categorize the coffee supplied based on its quality, 20.90% agreed and 7.00% neither disagreed nor agreed. The mean score of the survey question was 2.26, with a standard deviation of 1.28. This showed that the majority of the respondents disagreed there are coffee quality inspection centers used to categorize the coffee supplied based on its quality. Likewise, 76.00% of the respondents disagreed there is high transparency within the coffee quality inspection centers in the region, 20.90% agreed and 3.10% neither disagreed nor agreed. The mean score of the survey question was 2.15 with a standard deviation of 1.22. This implied that most of the respondents disagreed there is high transparency within the coffee quality inspection centers in the region.

In addition, 67.50% of the respondents disagreed there are adequate coffee quality inspection centers in the region to enhance its quality, 26.30% agreed and 6.20% neither disagreed nor agreed. The mean score of the statement was 2.44, with a standard deviation of 1.33. This showed that the majority of the respondents disagreed there are adequate coffee quality inspection centers in the region to enhance its quality. The average mean score of the survey questions concerning coffee quality inspection was 2.23, with a standard deviation of 1.25. This designated that most of the respondents disagreed the small-scale coffee enterprises in southern people's regional state in the Gedeo one in Ethiopia engages in coffee quality inspection.

4.1.3 Human Resource Development

The responses of human resource development within the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia is presented in Table 3

Table 3: Human Resource Development

Statement	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Mean	SD
The enterprise has invested heavily on training of employees for effective dry processing in an effort to improve profitability	34.10%	47.30%	3.90%	8.50%	6.20%	2.05	1.13
There is high investment on human capital for wet processing to improve sustainability of the enterprises	25.60%	50.40%	5.40%	13.20%	5.40%	2.22	1.13
Training needs are identified through a formal performance appraisal mechanism.	21.70%	51.90%	3.90%	17.80%	4.70%	2.32	1.14
There is a regular training and promotions of the employees in the enterprise	23.30%	55.00%	6.20%	14.00%	1.60%	2.16	0.99
Capacity building of the employees in the enterprise is done in a free and fair manner and everyone qualifies for training	12.40%	56.60%	7.00%	20.20%	3.90%	2.47	1.07
Average						**2.24**	**1.09**

Based on the results presented in Table 4, 81.40% (34.10%+47.30%) disagreed the enterprises have invested heavily in training of employees for effective dry processing in an effort to improve profitability, 14.70% (8.50%+6.20%) agreed and 3.90% neither disagreed nor agreed with the survey question. The mean score was 2.05 with a standard deviation of 1.13. This implied that the majority of respondents disagreed the enterprises have invested heavily on training of employees

for effective dry processing in an effort to improve profitability. Moreover, 76% of the respondents disagreed there is high investment on human capital for wet processing to improve the sustainability of the enterprises, 18.60% agreed and 5.40% of the respondents neither disagreed nor agreed with the stated question. The mean score was 2.22 with a standard deviation of 1.13. This implied there is low investment on human capital for wet processing to improve the sustainability of the enterprises.

Furthermore, 73.60% of the respondents disagreed training needs are identified through a formal performance appraisal mechanism, 22.50% agreed and 3.90% neither disagreed nor agreed. The mean score of the survey question was 2.32 with a standard deviation of 1.14. This implied that training needs are not identified through a formal performance appraisal mechanism. Moreover, 78.30% disagreed there is a regular training and promotions of the employees in the enterprise, 15.60% agreed and 6.20% neither disagreed nor agreed. The mean score of the survey question was 2.16 with a standard deviation of 0.99. This implied there is no regular training and promotions of the employees in the enterprises.

In addition, 69% disagreed capacity building of the employees in the enterprise is done in a free and fair manner and everyone qualifies for training, 24.10% agreed and 7.00% neither disagreed nor agreed. The mean score of the statement was 2.47 with a standard deviation 1.07. This implied that the capacity building of the employees in the enterprise is not done in a free and fair manner and everyone does not qualify for training. The mean score of the responses relating to human resource development was 2.24 with a standard deviation of 1.09. This signified that the majority of the respondents disagreed there is human resource development within the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia

4.1.4 Product (Coffee) Diversification

The responses of product (coffee) diversification within the small-scale coffee enterprises in southern people's regional state in the Gedeo zone in Ethiopia is presented in Table 4

Table 4: Product (Coffee) Diversification

Statement	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree	Mean	SD
There are different coffee qualities for internal consumption and export markets	7.80%	10.90%	2.30%	58.90%	20.20%	3.73	1.14
The enterprises deal in more than one coffee brand	5.40%	25.60%	5.40%	37.20%	26.40%	3.53	1.28
The enterprise has expanded its geographical market to other regions or countries other than its original market	9.30%	15.50%	4.70%	45.70%	24.80%	3.61	1.27
The coffee packaging standards meet international standards	24.80%	57.40%	3.10%	12.40%	2.30%	2.10	0.99
There is high diversification of coffee products that are consumed and locally and those for the exports	31.80%	38.00%	8.50%	14.00%	7.80%	2.28	1.26
Average						**3.05**	**1.19**

Based on the results presented in Table 4, 79.10% (58.90%+20.20%) of the respondents agreed there are different coffee qualities for internal consumption and export markets while 18.70% (7.80% +10.90%) disagreed and 2.30% neither disagreed nor agreed. The mean score of the statement was 3.73, with a standard deviation of 1.14. This implied there are different coffee qualities for internal consumption and export markets in the enterprises. Furthermore, 63.60% agreed the enterprises deal in more than one coffee brand, 31% disagreed and 5.40% neither disagreed nor agreed. The mean score of the survey question was 3.53, with a standard deviation of 1.28. This implied that enterprises deal in more than one coffee brand to meet the consumers' tastes and preferences.

Moreover, 70.50% agreed the enterprises has expanded their geographical market to other regions or countries other than its original market, 24.80% disagreed and 4.70 % neither disagreed nor agreed. The mean score of the survey question was 3.61 with a standard deviation of 1.27. This implied the enterprises has expanded their geographical market to other regions or countries to expand their market outreach. In addition, 82.20% of the respondents disagreed the coffee packaging standards meet international standards, 14.70% agreed and 3.10% neither agreed nor

disagreed. The means score of the statement was 2.10 with a standard deviation of 0.99. This implied that coffee packaging standards do not meet international standards.

Further, 69.80% disagreed there is high diversification of coffee products that are consumed and locally and those for the exports, 21.80% agreed with the statement and 8.50% neither disagreed nor agreed with the statement. The mean score of the survey question was 2.28 with a standard deviation of 1.26. This indicated there is low diversification of coffee products that are consumed and locally and those for the exports. The average mean score of the survey question about coffee diversification was 3.05, with a standard deviation of 1.19. This intimated that the respondents had a mixed opinion concerning product (coffee) diversification among the small-scale coffee enterprises in the Gedeo zone, Ethiopia

4.2 Correlation Analysis

Correlation analysis is a statistical method used to evaluate the strength of association between two quantitative variables. The correlation analysis results are presented in Table 5

Table 5: Correlation Analysis

		Net Earnings	Coffee Value Addition	Coffee Value Addition	Human Resource Development	Product Diversification
Net Earnings	Pearson Correlation	1.000	.651**	.719**	.572**	.695**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
Coffee Value Addition	Pearson Correlation	.651**	1.000	.617**	.560**	.672**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
Coffee Quality Inspection	Pearson Correlation	.719**	.617**	1.000	.526**	.665**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
Human Resource Development	Pearson Correlation	.572**	.560**	.526**	1.000	.529**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
Product Diversification	Pearson Correlation	.695**	.672**	.665**	.529**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	

The correlation results depicted in Table 5establishes that there is a positive and significant association between coffee value addition and net earnings (r=.651, p=.000). Also, a positive and significant association exists between coffee quality inspection and net earnings (r=.719, p=.000). Furthermore, human resource development and net earnings was found to have a positive and

significant association (r=.572, p=.000). Lastly, product diversification was found to be positively and significantly associated with net earnings (r=.695, p=.000).

The results concur with Muturi (2018) findings who revealed that governance, financial education, availability of credit services, and social-economic characteristics influence the performance of small-scale tea farmer's projects. Further, Nyambura (2015) showed a strong relationship between the extent of adoption of the quality management system, various quality management systems and coffee quality and higher Profitability. Moreover, Gathura (2016) concluded that the main factors affecting the productivity and Profitability among the farmers in the region included knowing modern facilities and the best marketing strategies influenced the Profitability of the farmers significantly. Further, Gathura (2016) established that quality inspection, marketing factors, finances, government policies and physical and human resources greatly affected coffee production.

4.3 Regression Analysis

Regression analysis examines the relationship between variables. It is a set of statistical methods used for the estimation of relationships between a dependent variable and one or more independent variables. The components of the regression analysis include the model fitness, analysis of variance and finally the regression coefficients. The model fitness is presented in Table 6

Table 6: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798a	0.637	0.626	0.4391

Predictors: Coffee value addition, coffee quality inspection, human resource development, product diversification

Based on the results presented in Table 6, coffee value addition, coffee quality inspection, human resource development and product diversification were satisfactory in explaining net earnings (profitability) of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia. This was supported by the coefficient of determination, also known as the R square of 0.637 (63.7%). This means that coffee value addition, coffee quality inspection, human resource development and product diversification explain 63.7% of the variations in net earnings (profitability).. The results concur with the findings of Muturi (2018), who revealed that governance, financial education, availability of credit services and social-economic characteristics influence the performance of small-scale tea farmer's projects

The analysis of variance was examined by the researcher. The analysis of variance (ANOVA) shows whether the independent variables are significant in explaining the dependent variable. In the study, the independent variables were coffee value addition, coffee quality inspection, human resource development and product diversification while the dependent variable was net earnings (Profitability). Thus, the analysis of variance (ANOVA) is presented in Table 7

Table 7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.031	4	10.508	54.498	.000b
	Residual	23.908	124	0.193		
	Total	65.939	128			

Dependent Variable: Net Earnings (Profitability)

The results in Table 7 indicate that the overall model was statistically significant. This was supported by an F statistic of 54.498 and the reported p-value of 0.000, which was less than the conventional probability significance level of 0.05. This implied that coffee value addition, coffee quality inspection, human resource development and product diversification were significant in predicting net earnings (profitability) of small-scale coffee enterprises in southern people's regional state, Gedeo zone in Ethiopia

The researcher also presented the regression of coefficients. The regression coefficients are estimates of the unknown population parameters and describe the relationship between a predictor variable and the response. Therefore, the regression of coefficients is presented in Table 8

Table 8: Regressions of Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.194	0.201		-0.965	0.336
	Coffee value addition	0.217	0.102	0.169	2.124	0.036
	Coffee quality inspection	0.421	0.09	0.363	4.678	0.000
	Human resource development	0.206	0.095	0.149	2.165	0.032
	product diversification	0.315	0.099	0.261	3.191	0.002

Dependent Variable: Retention of students

Based on the results presented in Table 8, coffee value addition was positively and significantly related to net earnings (β=.0.217 p=0.036). This meant that a unitary improvement in coffee value addition would lead to an increase on the net earnings (profitability) by 0.217 units by holding other factors constant. Coffee quality inspection was positively and significantly related to net earnings (β=.421p=0.000). This indicated that when coffee quality inspection increase by one unit, the net earnings (profitability) will increase by 0.421 units while holding other factors constant. Moreover, the results presented in Table 4.10 showed that human resource development and net earnings (profitability) was positively and significantly related (β=.206, p=0.032). This implied an increase in human resource development by one unit would lead the net earnings (profitability) to increase by 0.206 units while holding other factors constant. Lastly, the study established that

product diversification and net earnings (profitability) was positively and significantly related (β=.315p=0.002). This meant that an improvement in product diversification by one unit will lead to an increase in the net earnings (profitability by 0.315 units holding other factors constant.

The results concur with the findings of Tefera, Bijman and Slingerland (2017) who showed factors influencing the performance of coffee in Ethiopia included harvesting methods and timing, packing, supervision and marketing. Similarly, Muturi (2018) revealed governance, financial education, availability of credit services and social-economic characteristics influence the performance of small-scale tea farmer's projects

5.0 CONCLUSIONS

The study concluded there is a positive and significant association between coffee value addition and net earnings. In addition, the regression results noted that coffee value addition was positively and significantly related to net earnings. The coffee value addition measures are coffee blending, coffee brandings, coffee bagging, coffee flavoring and coffee packing. coffee value addition also involves of enhancements of the coffee ingredients to make it have higher returns and profitability.

The study concluded that ta positive and significant association exited between coffee quality inspection and net earnings. The regression results revealed that coffee quality inspection was positively and significantly related to net earnings. The study's coffee quality inspection include a quality management system, quality inspection centers, and transparency within the coffee quality inspection centers. The coffee quality inspection also entails how the management reviews the quality of all production factors to ensure the products are efficient in quality.

The study concluded a positive and significant association existed between human resource development and net earnings. The regression results revealed that human resource development and net earnings (profitability) was positively and significantly related. The human resource development segments include investing in employees' training, investment in human capital for wet processing, identifying training needs through a formal performance appraisal mechanism, and having regular training and promotions of the enterprise's employees.

The study concluded a positive and significant association existed between product diversification and net earnings. The regression results established that product diversification and net earnings (profitability) was positively and significantly related. coffee diversification includes having different coffee qualities for internal consumption and export markets, dealing in more than one coffee brand, expanding the geographical market, and meeting international standards. The diversification entails producing more than one product to expand the market share.

6.0 RECOMMENDATIONS

Based on the regression results, the study recommended that enterprises emphasize much on coffee value addition to increase profitability. The enterprises can enhance coffee value addition by using coffee blending as a strategy to increase profitability. The study also recommended that the enterprise advocates for coffee brandings, coffee bagging and coffee packing as a value addition strategy to outsmart the competitors. The study further recommended that there be a coffee quality inspection system. Thus, there should be a quality management system and quality inspection centers to monitor all coffee production and exportation through the system.

The study also recommended an advancement in human resource development in small-scale coffee enterprises to improve profitability. The enterprise needs to invest heavily in training employees for effective dry processing. There should be regular training and promotions of the employees in the enterprise and capacity building need to be done in a free and fair manner. The study further recommended that the enterprise needs to be involved in the product (coffee) diversification. There should be different coffee qualities for internal consumption and export markets and the enterprises should also deal with more than one coffee brand. The enterprise needs to expand their geographical market to other regions and the coffee packaging standards need to meet international standards.

REFERENCES

Adams, M. B. (1994). Agency theory and the internal audit. *Managerial auditing journal*, *9*(8), 8-12.

Alice, A. O., & Langat, J. K. L. J. (2016). Evaluation of effects of value addition in sweet potatoes on farm income in Homa, bay County, Kenya. *Journal of Economics and Sustainable Development. Vol*, *7*, 2222-1700. Journal of Economics and Sustainable Development www.iiste.org ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.7, No.20, 2016

Ayuya, O. I., Gido, E. O., Bett, H. K., Lagat, J. K., Kahi, A. K., & Bauer, S. (2015). Effect of certified organic production systems on poverty among smallholder farmers: Empirical evidence from Kenya. *World Development*, *67*, 27-37.

Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of management*, *27*(6), 643-650.

Benur, A. M., & Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism management*, *50*, 213-224.

Chiputwa, B., Spielman, D. J., & Qaim, M. (2015). Food standards, certification, and poverty among coffee farmers in Uganda. *World Development*, *66*, 400-412.

Chiputwa, B., Spielman, D. J., & Qaim, M. (2015). Food standards, certification, and poverty among coffee farmers in Uganda. *World Development*, *66*, 400-412.

Deligianni, I., Voudouris, I., & Lioukas, S. (2017). Do effectuation processes shape the relationship between product diversification and performance in new ventures?. *Entrepreneurship Theory and Practice*, *41*(3), 349-377.

Dimitrov, V. & Jain, P. C. (2014). The Value-Relevance of Changes in Financial Leverage beyond Growth in Assets and GAAP Earnings. *Journal of Accounting, Auditing & Finance*, 23(2), 191-222.

Donaldson, K. M., Ishii, K., & Sheppard, S. D. (2004). Customer value chain analysis. In *International Design Engineering Technical Conferences and Computers and Information in Engineering Conference* (Vol. 46962, pp. 993-1001).

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of management*, *16*(1), 49-64.

Gaitán-Cremaschi, D., Van Evert, F. K., Jansen, D. M., Meuwissen, M. P., & Oude Lansink, A. G. (2018). Assessing the sustainability performance of coffee farms in Vietnam: a social profit inefficiency approach. *Sustainability*, *10*(11), 4227.

Gashaw, B. A., Habteyesus, D. G., & Nedjo, Z. S. (2018). Determinants of coffee value addition by smallholder farmers in Jimma Zone, Ethiopia. *The International Journal of Business Management and Technology*, *2*(4), 112-123.

Gathura, M. N. (2016). Factors affecting small-scale coffee production in Githunguri District, Kenya. International Journal of Academic Research in Business and Social Sciences, *3*(9), 132.

Grewatsch, S., & Kleindienst, I. (2017). When does it pay to be good? Moderators and mediators in the corporate sustainability–corporate profitability relationship: A critical review. *Journal of Business Ethics*, *145*(2), 383-416.

McIvor, R. (2009). How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operation Management,* 2 (1), 45-63.

Mugenda, O. M & Mugenda, A. G. (2008) *Research methods: Quantitative and qualitative approaches*. Acts Press. Nairobi

Muturi, L., W. (2018). *Factors Influencing The Performance Of Small Scale Tea Farmers Projects In Embu North Sub County, Embu County Kenya.* (Master Thesis, University of Nairobi)

Mwamuye, M. K., Nyamu, H. M., Mrope, N. P., & Ndamungu, A. K. (2014). Factors Influencing Performance of Agricultural Companies in Kenya: A Case of Coast Province. *Internatinoal Journal of Business and Commerce*, 25-38.

Nguyen, T. V., Nguyen, N. C., & Bosch, O. J. (2015). Contribution of the systems thinking approach to reduce production cost and improve the quality of Vietnamese coffee. *International Journal of Markets and Business Systems*, *1*(1), 53-69.

Nkwasibwe, A., Mugisha, J., Elepu, G., & Kaneene, J. B. (2015). Increasing the efficiency of the dairy value chain in Uganda: Determinants of choice of milk marketing channels by dairy farmers in Kiruhura District, Uganda. *Livestock Research for Rural Development*, *27*(9), 168.

Okoro, C. O. (2017). Macroeconomic factors and financial performance: evidence from Nigeria. International Journal of Social Sciences and Humanities Reviews, *7*(1), 1-9.

Olla, P., & Patel, N. V. (2002). A value chain model for mobile data service providers. *Telecommunications policy*, *26*(9-10), 551-571.

Porter, M. E. (1985). Value chain. *The Value Chain and Competitive advantage: creating and sustaining superior performance*.

Porter, M. E. (2001). The value chain and competitive advantage. *Understanding Business Processes*, 50-66.

Savolainen, R. (2013). Approaching the motivators for information seeking: The viewpoint of attribution theories. *Library & Information Science Research*, *35*(1), 63-68.

Schmidt, F. C., Zanini, R. R., Korzenowski, A. L., Schmidt Junior, R., do Nascimento, X., & Benchimol, K. (2018). Evaluation of sustainability practices in small and medium-sized coffee enterprises in Southern Brazil. *Sustainability*, *10*(7), 2460.

Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Toward a theory of agency and altruism in family firms. *Journal of business venturing*, *18*(4), 473-490

Shumeta, Z., & D'Haese, M. (2018). Do Coffee farmers benefit in food security from participating in coffee cooperatives? Evidence from Southwest Ethiopia Coffee Cooperatives. *Food and nutrition bulletin*, *39*(2), 266-280.

Tefera, D. A., Bijman, J., & Slingerland, M. A. (2017). Agricultural co‐operatives in Ethiopia: evolution, functions and impact. Journal of International Development, *29*(4), 431-453.

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and applications*, *5*, 147-158.

Zokaei, A. K., & Simons, D. W. (2006). Value chain analysis in consumer focus improvement. *The International Journal of Logistics Management*.