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Original Research Article

Dynamics in Farm Specific Capabilities: The Impact of Capabilities on Competitive Advantage

ABSTRACT (ARIAL, BOLD, 11 FONT, LEFT ALIGNED, CAPS)

Aims: Resource based view (RBV) consists of a rich body of related theoretical tools to analyse sources of competitive advantage at firm level and it is based on the economic rent concept which explains that a firm as a collection of unique resources and capabilities. Although the RBV theorises the relationship between resources and competitive advantage, it is still questionable that the RBV lacks a causality chain between resources and competitive advantage. This study questions the direct relationship between a firm's specific resources and competitive advantage contending that this relationship is mediated through firm's specific capabilities

Study design: An empirical investigation was conducted with sample consisted of farmers engaged in the commercial cultivation of minor export crops in Sri Lanka. Structural equation modelling analysis was employed to test the indirect relationships.

Results: The results exemplify that the hypothesized indirect effect of capabilities on competitive advantage and different capabilities have a different effect on competitive advantage. Managerial implications are highlighted with the interesting further research areas.

Keywords: Dynamic capabilities; Resources; Mediating effect; Minor export crops sector; Resource-based view

1. INTRODUCTION

Firm level competitive advantage has insofar received the greatest attention from researchers and practitioners [1, 2, 3]. This is not difficult to understand since in this rapid pace of competition, each firm is required to be more competitive and hostile. At the firm level, competitive advantage can be defined as the ability to offer products and services that meet or exceed customer values currently offered by its rivals, substitutes and possible market entrants [4, 5, 6, 7, 3]. From the above, it can be seen that competitive advantage appears to be a relative term although it consists of three unique characteristics, namely long survival, difficult to imitate and difficult to identify [8].

The concept of competitive advantage is widely used in modern economic literature to evaluate the patterns of trade and specialisation of firms in commodities which have a competitive advantage [9]. There are large volumes of scholarly output, both theoretical and empirical relating to sources of competitive advantage [10] of a firm. Hence, there are two theoretical foundations to explain the sources of competitive advantage at firm level, namely the RBV and the relational perspective [11]. Of the two, the RBV is the leading theory of competitive advantage sources [12, 10]. Hence, the RBV stipulates the fundamental sources and drivers of competitive advantage of a firm [13].

The RBV is characterised by two basic maxims. First, resource endowments are heterogeneously distributed. Secondly, capabilities which allow the firm to sustain competitive advantage [14]. Supporting this view, [4, 7] indicate that the resources and capabilities of a firm need to be scarce to the industry but relevant to the activities of the firm in order to establish competitive advantage. Therefore, firms should be heterogeneous with respect to resources and capabilities.

However, the RBV theory of building competitive advantage is not sufficient enough because modern firms are more than ever a system of relations [15]. Hinterhuber [16] argues that the RBV lacks a

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causality chain between resources and competitive advantage. This is why Wang [17] highlighted there is a very little attention in the literature regarding pre-determined functional relationship between the resources and capabilities of a firm, the capability of firms and its associated analysis related to competitive advantage. That highlighting point was also acknowledged by the studies of [16, 18, 19, 20, 21].

In order to address that gap, this study intends to develop and test a conceptual model relating a firm's resources to competitive advantage, mediated by firm's specific capabilities within the context of agribusiness sector.

The agricultural sector has contributed significantly to improving the economic well-being of nations [22]. The growing demand for agricultural products in the world requires the sector to be competitive in the world market in order to obtain benefits of increased demand [23]. Such competition demands agricultural producers (farmers) to capture greater value based on know-how [22]. Consequently, this view creates an interesting research to explore the competitive position of the agribusiness sector. This is in view that agribusiness activities provide an opportunity to realise higher and stable income for farmers and other stakeholders.

A review of literature suggests that there are only a handful of studies available in the agribusiness firms [24, 25, 26, 22, 27] with different sources of competitive advantage proposed. In line with that, there is little empirical evidence regarding the application of the RBV theory in the agribusiness sector [28].

The study selected minor export crops sector in Sri Lanka since this sector has become one of the emerging sectors due to its highest foreign exchange earnings. Minor export crops include cinnamon, cloves, pepper, sesame seed, cocoa, cashew nuts, and cardamom with contribution to the GDP recorded as 9.7 percent. On the other hand, minor export crops' contribution on the total export is 5.4 percent. Further, this in the main sector providing ingredients to spices, where demand for spices increased due to the consumable purposes of food and medical industries. Because of the increasing demands, the government of Sri Lanka has set high export target to be achieved from these crops in 2020 [29].

Hence, the sector represents a rich context in which RBV is explored because resources appear to be important for the success of farms. However, consistent with the RBV, the study argues that possessing resources is not sufficient to attain competitive advantage; appropriate deployment of the resources is required to obtain competitive advantage. As such, in order to fulfil the desired targets, the major producers of these crops must identify the conceptual relationship of farm's resources to competitive advantage mediated by capabilities.

The rest of this article is organised as follows. In the next section outlines the theoretical view on RBV and variables. The study presents the research design in terms of the methodological approach. The results of the measurements are presented next before the paper is concluded with future research directions.

2. CONCEPTUAL REVIEW

2.1 The RBV

The RBV stipulate that a firm is a collection of heterogeneous resource [12], where tangible and intangible assets are semi-permanently tied to the firm [30]. According to Ziggers [31], the RBV conceptualizes resources and capabilities into two lines. One line broadly defines resources and includes all assets, capabilities, processes and knowledge [12]. Second line distinguishes resources from capabilities [32, 33, 19], where resources are lists of tangible or intangible assets such as physical, financial, information, technology, human and brand, whilst capabilities refer to the ability of a firm to absorb, integrate and transform internal and external resources into competitive advantage. The second line of conceptualisation is adopted in this study.

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Accordingly, the study conceptualizes the notion of resources and capabilities by providing a theoretical account of factors that enable a farm to manage at the given context. The conceptualization highlights the importance of the desired resources and capabilities on the desired sector; i.e minor export crops sector. In the next section elaborates on resources, capabilities, and competitive advantage relevant with minor export crop sector.

2.2 Resources

Resources refer to the stock of available assets that are owned, controlled and used by the firm [32, 34, 35, 21] to develop and implement its strategies. Generally, resources can be divided into several categories which are physical, financial, human and organisational [12, 36, 33, 37]. However, those resources may not be generalisable to all types of firms.

Prior studies related with agribusiness sector have identified different sources of competitive advantage. For instant, [24] indicated that people, price, non-price factors, internal factors, quality, and external factors are associated with competitiveness of the agricultural products in Perm Region. Dlamini [25] revealed that professional labors, cost of inputs, public sector support, and product quality affect the competitiveness of agribusiness sector in Swaziland. Dziwornu [26] emphasized that cost, experience and capacity utilization are the main factors significantly affect competitive advantage of agribusiness in Ghana. In additionally, [38, 39, 27] identified that driving forces of agricultural sector are natural capital, human capital, financial capital, physical capital, social capital, technological, reputation, and collective action.

Minor export crops farms are in small-scale nature. Kraja [40] identified that physical, technological, organizational, human, innovation, creativity, and reputation factors affect competitive advantage of small businesses. Acknowledging the prior studies, this study distinguished four facets of resources namely human asset, physical asset, financial asset, and reputation. These resources are considered more important than others in light of their applicability to the farming sector as highlighted during the expert interviews. Human resources include experience, intelligence and training of employees, whilst physical resources include plant and equipment, geographical location, access to raw materials and the technology used. Financial resources incorporate debt, equity and retained earnings, and reputation refers to the opinion of stakeholders regarding the products, services and processes of the farm.

All being said, farm's resources can determine what the farm can do. However, [19] indicated that resources inherited by firms can implement different level of capabilities.

2.3 Capabilities

Capabilities can be defined as the ability of a firm to perform its task which is related either directly or indirectly to its input-output process [41]. Further, [32] define capabilities as a set of coordinated resources oriented toward purpose attainment. Hence, they are rooted in firms' resources and processes, they are difficult to observe and imitate [34], and as such they are becoming a source of competitive advantage.

The literature has identified a number of conceptualisations of different capabilities [42, 41, 13, 11, 19, 39]. Those studies categorized capabilities as cross-functional, broad-functional, activity-related, specialised, organisational learning, core competences, organisational integration, alliance-building, product development, informational and technological capabilities, market linking, marketing, and management-related. As far as resource concerned, those capabilities may not be generalisable to all types of firms. In line with agribusiness sector, [42] identified several capabilities of the farmers. Learning capability with regard planting, land preparation, and harvesting. Investment capability with regard labor, fertilizer, packaging, and transportation considered as another capability of the farmers. Further, process and technical capability in terms of weeding practices, bed preparation, and fertilizer utilization, linkage capability, and strategic marketing capability as the important capabilities of farms.

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Due to the relative importance of the spices produced for food and medical supplies, the experts viewed that quality management capability as an important capability to be included in this study. Their view also reflected by [43] who identified that small scale business could gain competitive advantage by having these capabilities. Quality management capability concerns the ability to design, develop, and produce products to fulfill customer requirements [11]. Gorton [44] insist that a product quality management strategy will be more successful where customers are willing to pay a premier for high quality. With regards to agribusiness, [45] highlight that poor product quality management is one of the severe issues that generates low competitiveness of Indian spices.

In additionally, [46] and [47] identified that the ability to maintain quality and market the yields has become the most important factor in spice trading. Hence, marketing capability included as second category of capability in minor export sector. Marketing capability consists of firm's knowledge of customers and competitors, integrating markets, and pricing effectiveness [48]. Marketing capabilities can be defined as a set of complex resources and skills in the marketing field that are the result of a process of knowledge accumulation and its integration with values and norms developed through organisational processes from all over the firm [49] Forsman [50] reveals that marketing capability enhanced the competitive advantage of food processing firms in Finland.

Since, the study intends to construct the conceptual model relating a farm's resources to competitive advantage mediated by capabilities; it does not attempt to provide an entire list of all possible resources and capabilities that farms might possess to obtain competitive advantage. In sum, resources refer to the inputs in a production process such as raw materials, employees' skills, and availability of capital. Similarly, capabilities refer as a farm's ability to perform repeatedly a productive task which relates either directly or indirectly to a firm's capacity for creating value through effecting the transformation of inputs into outputs. It implies that farms may have different opportunities to garner the benefits within the same resources. However, the extent to which a farm realizes this potential depends on how it deploys its resources. Hence, capabilities are peculiar to the farm, whereas for examples quality management and marketing capabilities are idiosyncratic to a dynamic capability.

2.4 Competitive Advantage

The study defines competitive advantage as a specific way of using firm's resources and other precise activities to keep firms separate from its competitors and to keep it active and growing. This definition is adapted from the study of [22].

The conceptualization and measurement of competitive advantage at firm level is still a controversial discussion in the field of management. In prior studies, competitive advantage deals with the dimension of value and quality, which could be listed as cost-based, product-based, and service-based [13]. Lower manufacturing costs and lower price products are included into cost-based advantage. Product-based advantage comprises higher product quality, packaging, design, and style. Firms can also achieve service-based advantage through product flexibility, accessibility, delivery speed, and technical support. By putting together the concepts of cost, quality, and market, [51] and [52] developed five dimensions to measure competitive advantage at firm level namely price/cost, quality, delivery dependability, product innovation, and time to market. The dimensions are employed by the studies of [53, 54, 55, 20, 56]. According to experts' view, product innovation is not applicable to minor export crops, hence exploit market opportunities [20] dimension is incorporated.

As aforementioned, there is a significant lack of published research analyzing the relationship among resources, capabilities, and competitive advantage in the field of agribusiness sector. In order to close that research gap this study intends to identify the conceptual relationship of farm's resources to competitive advantage mediated by capabilities for the case of minor export crops in Sri Lanka.

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3. STUDY DESIGN

The study involves both a conceptual and an empirical analysis. Acknowledging the prior studies and expert opinion, the construct were identified as presented in the preceding section. The questions of each of the constructs were developed and then reviewed by a set of academic with relevant expertise in order to ensure comprehensiveness and clarity. The questionnaire was then translated into the Sinhala language in order to overcome the language barrier with the unit of analysis, i.e. farmers. The translated questionnaire was re-tested to ensure that it is free of translational errors.

Then, the questionnaire was initiated to pilot test by thirty farmers from desired crops. With this approach, the reliability and construct validity were tested and evaluated. In response to that, further minor changes were made. A total of 41 items were included in the mass survey questionnaire using a five-point Likert scale ranging from strongly disagree to strongly agree. Resources construct consists of four dimensions and nineteen items were included in the dimensions. In the constructs of quality management capability and marketing capability, five items were included each. Finally, there are 12 items were consisted of competitive advantage construct.

3.1 Sample and Data

The scope of this study comprises entities which have experience in commercial cultivation of minor export crops, especially cinnamon, pepper, and clove. This study considers three instead of one crop in order to increase the observed variances as well as to strengthen the generalisability of findings. For this purpose, 450 farm owners (150 from each crop) were randomly selected from the highest growing districts of the selected crops.

Utilizing the structured questionnaire developed, face-to-face interview was conducted with the selected farm owners as they are considered to be the most appropriate to answer questions regarding specific farm resources and capabilities related to their territorial environment. Though face to face-to-face interview method was relatively time consuming, it ensures the highest response rate. Interviews were lasted 20-25 minutes. The survey was conducted during the period in December 2015 – March 2016.

3.2 Hypotheses

Prior studies examined and highlighted that there is a direct effect of resources and capabilities on competitive advantage [57, 33, 13, 21, 58]. There is a little attention about how firms utilize their resources that relate to specific capabilities to achieve competitive advantage [16, 18, 19, 20, 21, 17].
In order to address this research gap, this study intends to question the direct relationship between a firm's specific resources and competitive advantage contending that this relationship is mediated through firm's specific capabilities. Hence, the study proposes that reflects this question as follows;
Hypothesis 1: The relationship between resources and competitive advantage is mediated through quality management capability
Hypothesis 2: The relationship between resources and competitive advantage is mediated through marketing capability

3.3 Data Analysis Method

The study followed two procedures; first the assessments of adequacy of the measurement items and second the test of the structural model. In order to assess the adequacy of the measurement items, individual-item reliability, construct reliability, and discriminant validity were measured. Statistical Package for Social Sciences (SPSS version 20) was employed to examine the adequacy of the measurements. A structural equation model (SEM) was run to identify the conceptual relationship of farm's resources to competitive advantage mediated by capabilities as proposed in the above hypotheses. SEM is able to construct latent variables that are not measured directly and allows to clearly capturing the unreliability of measurement in the model while estimating the structural relations between latent variables. Therefore,

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before testing the hypotheses it requires to run a confirmatory factor analysis to verify the convergent and discriminant validity of all measurement scales used in the study. The study used SEM analysis to estimate the model following the guidelines developed by Baron [59]. Instead of using multiple regressions, SEM technique allows to examine the process model which links some exogenous and endogenous variables through one or more intervening path ways fits the observed data [60].

4. FINDINGS

4.1 Measurement Adequacy

Sampling adequacy was calculated by using Kaiser-Meyer-Okling (KMO) test to examine the appropriateness of factor analysis. KMO index which is as higher as 0.5 indicates the appropriateness of the factor analysis and items of the study fulfilled the required standard. Then, the study assessed individual-item reliability by testing the factor loading of each item on their respective construct and Cronbach's alpha to test the reliability of the construct. Table 1 shows the results of reliability of individual-item and construct. In general, factor loadings and Cronbach's alpha values above 0.7 are desired to accept [61]. Results in Table 1 indicated that all factor loadings and alpha values were above the cut-off value, hence reliability of items and constructs were adequate. In order to complete the assessment, the study computed average variance extracted (AVE) to test the discriminant validity. Table 2 illustrates the square root of AVE and correlations between the constructs. In general, the square root of AVE should higher than correlations between the constructs. Table 2 indicates that discriminant validity of the constructs is adequate. Overall, the Table 1 and 2 assure that the items and constructs of the model are sufficient to interpret the structural model.

Table 1: Factor loadings and Cronbach's alpha values

Construct	Dimensions	Items	Factor Loading	Cronbach's alpha
Resources (R)	Human Asset	Experienced employees	0.7136	
		Employees come up with new ideas Trusted employees	0.7464	0.7482
		Trusted employees	0.8003	
		Employees are dedicated towards work	0.7392	
		Employees are capable of carrying out their own work	0.7127	
	Physical Asset	Acquire suitable raw materials	0.8317	
		Adequate farming equipment	0.7348	0.7859
		Adequate harvesting equipment	0.7031	
		Favourable geographical location	0.7626	
		Farm developed fertilizer	0.7483	
	Financial Asset	Adequate money to devote to farm operations	0.7586	
		Adequate money to buy capital equipment	0.7037	0.8201
		Loans from banks	0.8142	
		Loans from informal channels	0.7186	
		Low interest rates for credit capital	0.7346	
	Reputation	Reputation about product(s)	0.8351	
		Maintain good reputation of product(s)	0.8426	0.7951
		Customers value our farm reputation	0.7365	
		Employees value the farm reputation	0.7820	
Quality Management Capability (QMC)		Clear quality goal of our product(s)	0.7114	
		Comply with the specific cultivating standards imposed	0.7583	0.7635
		Practice environmental friendly operations	0.8263	
		Employees are well aware about product quality	0.7275	
		Maintain quality raw material suppliers	0.6994	

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Marketing Capability (MC)		Knowledge of our customers	0.7296	
		Knowledge of our competitors	0.8204	0.7866
		Develop pricing programs	0.7377	
		Discover other farmers' strategies	0.8224	
		Monitor competitors' price changes	0.7533	
Competitive Advantage (CA)	Price	Offer competitive price	0.7988	
		Able to offer price as low as other farmers	0.7432	
	Quality	Able to compete based on our product quality	0.8033	
		We offer high quality products to our customers	0.7488	
	Delivery dependability	Deliver customer orders' on time	0.7324	0.7508
		Deliver the kind of product needed by our customers	0.7941	
	Time to market	Deliver product to market quickly	0.7254	
		Product delivery time is lower than other farmers	0.7232	
	Exploit market opportunities	Expand our customer base than other farmers	0.8142	
		Expand our supplier base than other farmers	0.6986	
		Obtain human resources than other farmers	0.7421	
		Access capital goods than other farmers	0.7439	

Table 2: Correlation Matrix and AVE

Construct	R	QMC	MC	CA
R	0.752			
QMC	0.327*	0.704		
MC	0.275**	0.048*	0.713	
CA	0.274*	0.304*	0.476*	0.736

N = 450
* P ≤ 0.05; ** P ≤ 0.01

4.2 Structural Model

After evaluating the confirmatory factor analysis of the measuring instruments, the study proceeded to test the hypotheses. A structural equation model is run to verify the effect of resources and capabilities on competitive advantage. Baron [59] emphasize that there are three procedures to be fulfilled in order to assess mediating effects. First, the path coefficient between independent and dependent variable has to be significant. Second, when the mediating variables are included in the model, this path coefficient should decrease in size and has to be non significant. Finally, path coefficient between independent and mediating variable as well as between mediating and dependent variable should be significant. Hence, it is required to test direct effects and mediating effects.
Bootstrapping method was used to assess the statistical significance of the estimated parameters. Table 3 shows the results of bootstrapping test and Figure 1 was constructed based on the significance direct and indirect relationships.

Table 3: SEM Result – Bootstrapping test

Path	R^2	Estimate	t-value
R → CA	0.238	0.287	2.317*
R → QMC	0.124	0.324	2.047*
R → MC	0.063	0.281	1.996*
R → CA		0.071	1.104ns
QMC → CA	0.472	0.283	2.634*
MC → CA		0.482	2.032*

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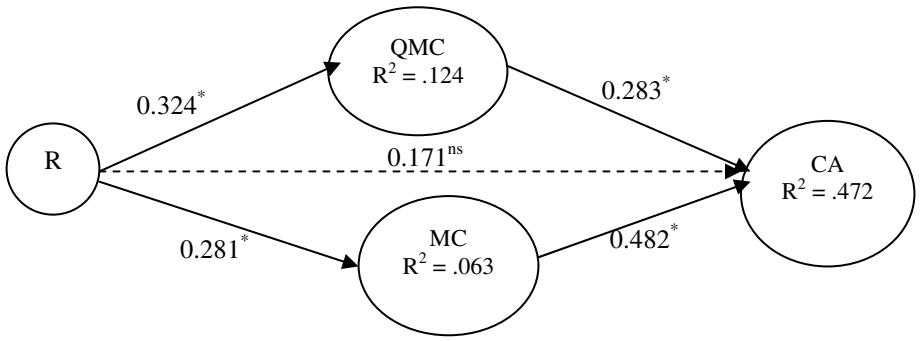
* P ≤ 0.05; ns = not significant
Notes: p = 0:000; RMSEA = 0:067; BBNFI = 0:837; BBNNFI = 0:884; CFI = 0:926

Based on goodness-of-fit criteria shown in Table 3, the structural model was acceptable and the analysis proceeded with interpretation of the hypothesis tests. It required to estimate the direct effects in the model. The R^2 values of competitive advantage, marketing capability, and quality management capability are respectively 0.472, 0.063, and 0.124. Both quality management capability and marketing capability are significantly related to competitive advantage (ß = 0.283, $p < 0.05$; ß = 0.482, $p < 0.05$). Further, resource is significantly related to quality management capability (ß = 0.324, $p < 0.05$), whereas to marketing capability (ß = 0.281, $p < 0.05$). In additionally, correlation matrix (Table 2) indicates that resource is positively and significantly related to competitive advantage ($r = 0.274$, $p < 0.05$). This result is in line with the findings of [4, 13, 7]. All being said, the first and third conditions of [59] were fulfilled. When both mediating variables are included in the model, the path coefficient of the direct relationship between resource and competitive advantage gets non-significant (ß = 0.071, $p > 0.05$). Hence, the second condition was met.

Specifically, it required to test the increase in R^2 of competitive advantage when these capabilities were included in the model. There is a significant increase in R^2 from 0.238 to 0.472, indicating that both quality management capability and marketing capability contribute as mediating variables to the explanatory power of the model.

The path coefficients from resource to quality management capability and from the latter to competitive advantage are significant. This indicates the acceptance of hypothesis 1 (*the relationship between resources and competitive advantage is mediated through quality management capability)*. Similarly, the path coefficients between resource and marketing capability and between marketing capability and competitive advantage are significant. Hence, it substantiates hypothesis 2 (*the relationship between resources and competitive advantage is mediated through marketing capability)*.



N=300; * P ≤ 0.05; ns = not significant

Figure 1: Structural Model

5. DISCUSSION AND CONCLUSION

Competitive advantage can serve a useful scientific purpose which is beneficial to different industries and the agribusiness sector is no exception. Technological improvements, importance of information systems, and changes in climate and economies have created a competitive environment in the agribusiness

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sector. A better understanding of the competitiveness of agriculture products hence provides the necessary economic framework to compete at both the domestic and the global markets.

The contribution of agribusiness sector to the economy of Sri Lanka is very significant in terms of gross domestic product, export earning, and employment generated. Among agribusiness, minor export crops, cinnamon, clove, and pepper are the main agricultural products representing spices and this sector now become a one of emerging sector due to its highest foreign exchange earnings and export targets in 2020.

Most of these minor export crops farms are family-owned business, with specific characteristics in terms of resources and capabilities. Within the resource based view, the study explores the conceptual relationship of farm's resources to competitive advantage mediated by different capabilities for the case of minor export crop farms.
The result of the study is in line with the importance of combining valuable and rare resource-capability will attain a competitive advantage [6, 20]. However, prior studies based on the RBV have not focused on specific capabilities [11] that lead to firm's competitive advantage. Hence, the result seems to reinforce prior studies' findings by specifying the mediating effect of capabilities (i.e; quality management capability) between resources and competitive advantage.

The results of the study distinct the prior studies' findings [57, 33, 13, 21, 58], indicating a direct relationship between resources and competitive advantage. Hence, they perceived that resources would strengthen farms' competitive position relatively to their competitors. The analysis of the study indicates that a significant direct relationship between resources and competitive advantage became insignificant when capabilities included as mediating variables. As [31] highlighted understanding relationships without considering mediating variables could be characterized by conceptual limitations and estimation biases. This is why [34] also emphasized firm can create competitive advantage not by selecting suitable resources than rivals, but by integrating them with the proper capabilities. Combinations of resources and capabilities enable a firm to gain competitive advantage though there are common resources available in the firms. The viewpoint of [34] becomes valuable to the situation of minor export crops farms where the resources are widely available or not rare. This idea also concluded by [62] by theorizing that firms can build competitive advantage from their available resources and capabilities. Hence, if the firm is able to identify the valuable and rare resources and capabilities, that lead firms to attain competitive advantage.

Acknowledging the study of [11], it requires to focus on specific capabilities that play significant mediating role between farm's resources and competitive advantage. Mediating analysis of quality management capability and marketing capability suggest that the deployment of resources through quality management and marketing capability has a more profound effect of the competitive advantage of the farms. Moreover, the relationship between marketing capability and competitive advantage is stronger than the relationship between quality management capability and competitive advantage. Despite the effects of marketing capability on firm's growth [35, 63, 64], this finding provides evidential support to the importance role of marketing capability and competitive advantage of small scaled family owned agribusiness farms. Apparently, the result is in line with [50]. Obtaining knowledge of customers, competitors, and pricing strategies plays important transformation role in order to enhance competitive advantage through getting better returns from farms' resources.

The findings also corroborate prior works on quality performance and competitive advantage of the firm [45, 13, 55, 65, 66, 43]. Specifically, [44] insist that a product quality management capability will be more successful where customers are willing to pay a premier for high quality which indicates the price competitive advantage. This is in view that the ability to maintain quality of the yields has become the most important factor in spice trading [46, 47]. The study's results suggest that farms that are capable of managing quality of the product and process will gain better returns from their resources than competitors.

By putting together, farm owners have the obligations to ensure the quality of crops produced, more so when they are pressured to increase production. This is seen as a dynamic capability of farms compared

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to the ordinary capabilities of land preparation, planting, fertilising, weed controlling, harvesting and storing the crops.

Finally, as pointed by [18, 11, 20] the positive effects of the capabilities related to quality management and marketing have significant indirect impact on farms' competitive advantage. Taking this significant indirect paths indicate an important role for quality management and marketing capabilities as mediating variables.

Since this paper only intends to identify the mediating effects of quality management and marketing capabilities on the relationship between resources and competitive advantage, future studies should incorporate to gain more in-depth analyses on how capability is conceptualised in agribusiness farms. Maybe other theoretical frameworks like knowledge-based view, relational view, and process management [17] could be helpful in gaining a more precise understanding of such conceptualizations. Likewise, the level of government intervention, collective actions, and entrepreneurial ability could be identified as farm's resources and it may improve the explanation of some of these results. Further, farms' features could be analyzed such as number of family members working in the farm, intention of doing cultivation of farm owner, farm owner educational qualification, gender of farm owner, vocational training in the marketing and quality management field, and farming experience, in order to assess their influence on gaining and enhancing farms' resources and capabilities and their moderating effect on competitive advantage. Hence, it would be more vital to identify the influence of religious beliefs of farm owner on competitive advantage of farm.

6. MANAGERIAL IMPLICATIONS

Since quality management and marketing capabilities have a significant indirect effect on competitive advantage, agribusiness farms should develop and strengthen such operative capabilities through relevant authorities such as the Ministry of Agriculture, Ministry of Industry and Commerce, Export Development Board, Department of Export Agriculture and the Spice Council. Further, findings reveal that marketing capability has stronger influence on competitive advantage than quality management capability, possessing marketing techniques allow farm owners to take advantage of their market sensing activity through their knowledge of customers and competitors as well as skills in developing pricing strategies. Techniques relevant with targeting and analysing market trends seem to be lacking amongst farm owners, because of the little education and training support they have received. Relevant authorities should invest in different training programmes, particularly in defining marketing strategies, analysing marketing trends, and decisions of marketing mix. This investment will compensate by developing marketing capabilities.

Farm owners have an obligation to ensure that the crops produced meet certain quality standards because of the relative importance of the spices produced for food and medical supplies. The findings indicate quality management capability mediates the relationship between farms' resources and competitive advantage. Hence, that capability can be established by setting a clear quality goal, adopting cultivation standards and environmental-friendly approaches, creating awareness of product quality amongst employees and having suppliers who supply high quality raw materials. There is an important role that relevant authorities could play in terms of establishing quality standards, offering training for modern cultivation techniques, and motivating environmental friendly practices. Finally, it is not sufficient to develop the capabilities. Farmers as well as relevant authorities need to be aware on how to utilize those capabilities to effectively manage the farms' resources.

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