Full Length Research Paper

The role of organizational culture in modeling buyer-seller relationships in the fresh fruit and vegetable trade between Ghana and Europe

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Accepted 17 September, 2007

In this paper, a model for buyer-seller relationships between Ghanaian fresh fruit and vegetable exporters and their buyers in Europe is provided. Organizational culture is brought into the limelight as an important dimension in the study of buyer-seller relationships in agribusinesses. Based on interviews with 101 managers of fresh fruit and vegetable export firms, the study revealed that certain organizational cultural dimensions (communication and team orientations) influence the firm’s relationship skills which in turn influence relationship quality. It is concluded that export firms can improve their relationships with their buyers if they look inward and evaluate certain aspects of their own internal organizational practices.

Key words: Organizational culture, relationship skills, exporters, importers, Ghana, Europe.

INTRODUCTION

Buyer-seller relationships in the food supply chains

In agriculture and food supply chains, a number of factors may influence the ability of the buyers and the sellers to build long-term relationships. Given the strategic nature of business to business relationship management (Bennett and Durkin, 2002), and the realization of the potential benefits that firms can reap from maintaining their existing business partners instead of continually seeking new ones (Reicheld and Sasser, 1990; Sheth and Parvatiyar, 1995; Bennet and Durkin, 2002), it becomes imperative that managers of agribusiness firms fully understand factors that influence their ability to build long-term relationships with the external constituents.

Against this background, a number of contributions (Hobbs and Young, 2001; Batt, 2003; Batt and Purchase, 2004; Clare et al., 2005; Schulze et al., 2006; James and Sykuta, 2006; Schulze et al., 2007) have been made on buyer-seller relationship management. They have identified both the antecedents and consequence of long-term business relationships in the field of agriculture and food supply chains. Although these studies have made important contributions to the understanding of buyer-seller relationships, some issues still remain unresolved.

One important example is the lack of studies on the role that the firm’s internal organizational practices, values and routines play in its ability to maintain and benefit from its relationships with the external constituents as emphasized by Petigrew (1979), Johnson (1995), Corby (1998), Voss et al. (2000), Noorderhaven et al. (2002), and Beugelsdijk et al. (2006).

In this contribution, it is argued that, organizational culture is an important firm level characteristic that can influence agribusiness firm’s ability to build, maintain and benefit from its working relationships with its customers. The remaining sections of this paper are organized as
The organizational structures of the FFV export firms can be likened to those in other industries and as such can be said to possess unique cultures, values and practices as exhibited in other industries. The products are sold to retailers, wholesalers and the service industry in Europe. The table below provides information about the quantity of FFV that is exported from Ghana to major European destinations in the year 2002.

### Literature review

In order to develop the conceptual framework for this study, a review of the literature on organizational culture, relationship skills and relationship quality was carried out.

### Relationship quality

“Relationship quality refers to a customer’s (or supplier’s in this case) perception of how well their relationships fulfill the expectations, predictions, goals and desires of the customer” (Jarvelin and Lehtinen, 1996). Relationship quality conveys a customer’s impression about the whole relationship (Wong and Sohal, 2002) and as such, is manifested in several distinct but related constructs. As a result, there seems to be no consensus among researchers on the set of constructs or variables that constitute relationship quality, or what its antecedents are (Crosby et al., 1990). Consequently, different researchers have used different variables to operationalize the relationship quality construct.

Some investigators (Crosby et al., 1990; Wray et al., 1994; Kim and Cha, 2002; Kim et al., 2006) for instance, operationalized the relationship quality construct as indicative of the level of satisfaction and trust in the supply chain. Leuthesser (1997), Dorsch et al. (1998) and Naudé and Buttle (2000) highlighted the relevance of trust, satisfaction, commitment, opportunism, customer satisfaction, and ethical profile in the measurement of relationship quality.

Trust is often considered to be the critical determinant of a good relationship (Dwyer et al., 1987; Ganesan, 1994; Morgan and Hunt, 1994). Trust refers to the willingness to rely on an exchange partner in whom one has confidence (Moorman et al., 1992). Anderson and Narus (1990) viewed trust as the belief that a business partner will perform actions that will result in a positive outcome for the firm and not take unexpected actions that may result in negative outcomes.

Satisfaction refers to a positive affective state resulting from the appraisal of all aspects of a firm’s working relation with another firm. With insights from the disconfirmation theory, satisfaction can be measured by comparison of a supplier’s performance with buyer’s expectation levels. Anderson and Narus (1990) indicated that satisfaction encourages long-term relationship. Ganesan

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**Table 1.** Fresh fruit and vegetable imports by selected EU countries in 2002.

<table>
<thead>
<tr>
<th>Country</th>
<th>Imports from Ghana in 2002 (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>16,464</td>
</tr>
<tr>
<td>Italy</td>
<td>9,351</td>
</tr>
<tr>
<td>Belgium</td>
<td>8,784</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4,597</td>
</tr>
<tr>
<td>France</td>
<td>1,985</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,606</td>
</tr>
<tr>
<td>Denmark</td>
<td>1,621</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>751</td>
</tr>
<tr>
<td>Others</td>
<td>1,232</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46,391</td>
</tr>
</tbody>
</table>

Source: Trienekens et al. (2004).

follows. In order to put our empirical investigations into perspective, a brief overview of the fresh fruit and vegetable (FFV) trade between Ghana and the European countries is provided. Following, the concepts of organizational culture, relationship skills and relationship quality which form the basis for our conceptual framework are discussed. Next, hypotheses are formulated and tested based on empirical evidence from 101 export firms in Ghana. The final section draws conclusions based on the results of the empirical investigation and provides propositions for future research.

**Fresh fruit and vegetable trade between Ghana and Europe**

Ghana is one of the major countries that supply fresh fruits (pineapples, papayas, bananas and mangoes) and vegetables (okras, chillis and yam) into European markets. FFV export from Ghana into Europe has experienced considerable boom over the past ten years (Danielou and Ravry, 2005). Trade with Europe constitutes more than 80% of Ghana’s FFV traded internationally. From a total value of 1,585 thousand US dollars in 1986, the value of fresh fruit exports from Ghana increased to 26,838 thousand US dollars in 1998 (Takane, 2004). In the year 2004, the volume of FFV exported into the European market was approximately 113,000 tons. Of these, 70,000 tons were pineapples. This constituted about 10% of all fresh pineapples imported by EU countries (GEPC, 2006).

Sources at the Ghana Export Promotion Council indicate that there are about 147 firms that export FFV into various destinations in Europe. These firms have different sizes and organizational structures including small-holder cooperatives, non-resident commercial farmers and large-scale producer exporters (Obeng, 1994; Takane, 2004).
(1994) argued that a high level of satisfaction increases relationship quality through enhancement of morals among channel members, improvement in the level of cooperation, reduction in contract terminations and incidence of litigation.

A growing number of studies dealing with relationship management can be found in the agribusiness literature. Most studies have discussed selected constructs, such as trust, power, and dependency (Morgan and Hunt, 1994), means of collaboration beyond contracts and vertical integration (Hobbs and Young, 2001). The role of trust in supply chains is discussed in Batt and Rexha (1999), and Batt (2003). In these studies, the authors identified factors affecting the respective buyer-seller relationships and emphasized the role of collaboration and trust in various agricultural supply chains (Batt, 2003; Batt and Purchase, 2004). Hansen et al. (2002) suggested that trust between members of a co-operative and the co-operative management is an important variable in enhancing group cohesion. Farmers’ trust in co-operatives and private buyers is also investigated by James and Sykuta (2006) in the case of soybean and corn producers in the US. In these studies, they observed significant higher trust in co-operatives for the marketing of soybean and an equal level of trust for both co-operatives and private companies in the marketing of corn. Matanda and Schroder (2004) analyzed buyer-seller relationships in Zimbabwean horticulture with a comprehensive behavioral approach, focusing on a broad model of relational constructs. They elaborated differences between small and large primary producers in terms of satisfaction, dependency, conflict frequency, long-term orientation, commitment and social bonding. Clare et al. (2005) evaluated the relationship between farmers, livestock buyers and slaughterhouses in the New Zealand red meat industry, and found that buyers have a far closer relationship with farmer-suppliers than both groups have with slaughterhouses.

**Relationship skills**

Relationship skills refer to the extent to which actors are able to build and maintain close working relationships (Crosby et al., 1990). Smith (1998) viewed relationship skills as a higher order construct representing the mix of behaviors, approaches and styles used to effectively manage relationships. Anderson and Narus (1990), Morgan and Hunt (1994), Lusch and Brown (1996), and Johnson (1999) identified collaboration, flexibility and conflict resolution as dimensions of relationship management practices that influence relationship outcomes.

Jarratt and O'Neil (2002) and Jarratt (2004) argued that collaborative behavior in the form of sharing information and ideas, communication openness and forbearance from opportunism increases the perception of fairness in terms of relationship input and hence leads to improved relationship satisfaction. Heide and John (1992) viewed relationship flexibility as the willingness to move beyond the terms and conditions specified in contractual agreements as circumstances require. MacNeil (1980) argued that the requirement for flexibility in contracts arises as a result of the bounded rationality of manager’s decision making, the limited availability of information and non-constant state of the environment. In this case, flexibility becomes evidence that organization has discarded its internal hierarchical form and links with others as they build unique value propositions.

**Organizational culture**

**Definition and scope**

Organizational culture is defined as a set of organizational practices and characteristics that distinguish it from other organizations, and which captures the essence of what the organization is and how it operates as a social collectivity (Meek, 1988). Organizational culture can influence how people in an organization set personal and professional goals, perform tasks and administer resources to achieve them (Lok and Crawford, 2003). Organizational culture has been conceptualized as a higher order construct with many dimensions (Hofstede et al., 1990; O’Reilly et al., 1991; Christensen and Gordon, 1999; Schein (1992), in his seminal paper "Organizational culture and leadership: A dynamic view", identified organizational practices and artifacts together with espoused values regarding organizational actions, priorities and preferences as the more observable and accessible values of organizational culture.

A number of authors have proposed a link between the various dimensions of organizational culture and organizational performance. Empirical evidence has been produced to support the relationship between organizational culture and firm’s management practices, processes and structures (Deal and Kennedy, 1982; Barney, 1986; Webster, 1988; Calori and Sanin, 1991; Desphande et al., 1993).

Jarratt and O’Neil (2002), argued that “organizational culture is critically important to relationship management practices because it significantly influences the attitude and commitment of all members towards relationship establishment and ongoing practice”. They pointed out that shared assumptions, values, beliefs and norms can become so deeply internalized by members of an organization that they seem so ‘natural’ to the extent that any alternative may seem ‘unthinkable’. In this case, these elements of organizational culture become particularly influential with regard to thinking and social action.

Beugelsdijk et al. (2006) proposed organizational culture as an important factor in understanding firm level characteristics that may be linked to the relationship skills of firms. These authors Barley (1983); Gregory (1983); Barton, (1992) and Bloor and Dawson (1994) argued that
compared to other organizational traits, organizational culture is both specific to an organization and relatively constant. In their study involving 102 Dutch Small and Medium Enterprises (SMEs), Beugelsdijk et al. (2006) observed a positive link between some dimensions of organizational culture and firm’s relationship skills which in turn influences its relationship performance.

Organizational culture has been pointed out as a key reason for the successful outcome of relationships and in the assessment of whether or not partner companies will be able to work together (Ritter, 1999; Dyer et al., 2001). Ransom et al. (1980) and Enz (1988) argued that organizational values may provide decision makers with a means of screening the environment and identifying constituents that share their values. They asserted that when two institutional actors share values, they tend to seek each other for reasons including basic comfort, expectations of trust and better communication. Schein (1992), Alvesson (1993) and Homburg and Pfleeser (2000) identified organizational culture as a powerful variable that influences the perception, thinking and action of members in an organization, especially with regards to their relationship management practices.

Dimensions of organizational culture

Noorderhaven et al. (2002) summarized the dimensions of organizational culture identified by Hofstede et al. (1990), O’Reilly et al. (1991) and Christensen and Gordon (1999) and identified many dimensions of organizational culture. Six of these dimensions were said to be conceptually related to relationship skills. These dimensions are: team orientation, communication orientation, result orientation, stability orientation, innovation orientation and employee orientation (Beugelsdijk et al., 2006).

Result orientation dimension deals with whether a firm is concerned with goals or the means of achieving such goals and hence measures result versus process attitude of firms. This dimension is expected to be negatively related to a firm’s relationship skills because an organization focusing too much on results may lack the necessary patience and understanding that is needed in developing inter-firm relations (Beugelsdijk et al., 2006).

Communication orientation generally emphasizes the ability and willingness to engage in open and critical communication. This dimension may be assumed to be positively related to the firm’s ability to build and maintain long-term relationships with outsiders. This is so because a climate of open critical communication within an organization will enable the members to learn from their mistakes through self-reflectiveness and self-correction. Walter (1999) observed that self-reflectiveness and self-criticism enable actors to cooperate, resolve conflicts and act responsibly.

Team orientation is concerned with the extent to which people are able to cooperate and coordinate withinand across units within an organization (Noorderhaven et al., 2002). This dimension is expected to contribute to the development of trust, cooperation and involvement. Team work among employees in an organization can stimulate team members to develop the same attitude towards external relationships and therefore, could be positively related to relationship skills.

Innovation orientation reflects the attitude of an organization towards risk taking, openness to new ideas and innovation (Walter, 1999). Organizations characterized by innovativeness have a high research and development intensity and are marked by high flexibility, cooperativeness and risk-taking behavior and therefore, will be expected to relate positively to relationship skills (Noorderhaven et al., 2002).

Stability orientation measures predictability and rule oriented-behavior in the firm and can be conceptualized as the opposite of innovation orientations and hence will be predicted to have a negative relationship with relationship skills. Employee orientation deals with the commitment of the organization towards the personal development of the employees and may include elements such as education, attention to personal events and accomplishments. Walter (1999) indicated that an atmosphere within an organization that fosters favorable inter-personal relationship will help to attract and retain employees who are specialized in establishing cordial relationship with the outside world. We therefore expect a positive relationship between employee orientation and relationship skills.

Conceptual framework

This study investigates the relationship between organizational cultural dimensions of FFV export firms in Ghana, relationship skills and relationship quality in their business with European importers. A conceptual model based on the literature is developed below:

Research hypotheses

Based on the literature review, we develop and test the following hypotheses;

General hypothesis is that the organizational cultural dimensions of the FFV export firms influence their relationship quality with their European buyers indirectly via their relationship skills.

Hypothesis #1: The relationship skills of the fresh fruit and vegetable export firms are influenced by their organizational culture.

Hypothesis #2: The relationship quality of the FFV export firms is influenced positively by their relationship skills.
METHODOLOGY

Survey design

In order to test the hypotheses stated above, data were collected from FFV export firms in Ghana between August 2006 and February 2007. The data base of the firms was obtained from the Ghana Fresh Produce Industry Directory 2006 compiled by the Ghana Export Promotion Council. About 147 FFV export firms were identified.

A questionnaire was then designed based on an extensive review of the literature on organizational culture, networks, inter-firm relationships (Hofstede et al., 1990; O’Reilly et al., 1991; Morgan and Hunt, 1994; Christensen and Gordon, 1999; Beugelsdijk et al., 2006) and from marketing expert opinions.

Prior to the survey, the questionnaire was pre-tested with four supply chain and alliance specialists. In the second stage, the questionnaire was pre-tested with 147 firms in Ghana. The participants were asked to comment on the format of the questionnaire; wording, length and order of the questions. After each stage, feedback was obtained and the questionnaire was modified.

Two experienced enumerators were recruited and trained to serve as data collectors. The key informant technique (Phillips, 1991; Mitchell, 1994) was used for the data collection. However, data obtained were triangulated with more information from other stakeholders in the industry.

To increase the response rate, personal interviews in which the managers of the export firms were visited by the enumerators on appointment were deemed appropriate. On average, each questionnaire lasted about 50 min.

Of the 147 export firms found in the Ghana Fresh Produce Industry Directory 2006, 101 successful interviews representing about 69% response rate were obtained. This rate is large enough compared to other similar studies. Beugelsdijk et al. (2006) obtained 102 responses from their study of relationships in Dutch Small and Medium Scale enterprises (SMEs). In terms of percentages, Jarratt and O’Neil (2002) obtained a response rate of 12% of the 1250 questionnaires used in their study of relationship quality and organizational culture in the study involving the service and manufacturing companies in Australia.

Measurements

To remain consistent with previous research, we operationalized the various concepts in accordance with organizational culture, marketing and network research. Six dimensions of organizational culture which were used by Beugelsdijk et al. (2006) in their study of Dutch SMEs were adapted for this study. The dimensions are among those summarized by Noorderhaven et al. (2002) from the work of Hofstede et al. (1990), O’Reilly et al. (1991) and Christensen and Gordon (1999). These are: orientation, communication orientation, employee orientation, stability orientation, innovation orientation and team orientation. The relationship skills construct was operationalized using five statements which included items on communication, long-term orientation and joint problem solving.

The relationship quality was conceptualized as a higher order construct with two dimensions. These are trust and satisfaction and reflect the overall strength of the relationships and the extent to which it meets the needs and expectations of the parties involved (Crosby et al., 1990; Kim and Cha, 2002; Kim et al., 2006). In all cases, a five point Likert-scale type questions ranging from: 1 = strongly disagree, 2 = disagree, 3 = partly agree/disagree, 4 = agree and 5 = strongly agree, were used to measure the various latent constructs used for the organizational cultural dimensions, relationship skills, relationship quality and the control variables. The control variables are factors other than organizational culture that may also affect the relationship quality of firms. They include partner importance, price satisfaction; firm size and cultural fit.

Walter (1999) argued that large firms may exhibit higher relationship quality than smaller firms because the large firms may be able to employ relationship promoters who will deal with the outside constituents. As we did not obtain information on the total investments or annual turnover, we used the number of employees of the firms as a proxy for firm size. This criterion is also used by the association of Ghana industries to classify firms into small, medium and large-scale.

In addition, we considered partner importance as an important control variable in our model because the more important a partner relationship is to a firm, the more that firm will be willing to adapt to its partner and do all that it can to make the relationship succeed (Ping, 1997).

Medcof (1997) and Douma et al. (2000) argued that, the fit between the cultural practices of firms and their partners has effect on the success of their relationships. In this study, cultural fit conceptualized as shared values or value congruence between the exporters and the importers (Heide and John, 1992; Morgan and Hunt, 1994; Helms and Stern, 2001) was measured by one item in a reversed order (that is, cultural dissimilarity) “The European buyers and I perceive things differently”, since people’s values are reflected in their opinions, perceptions and actions (Markus and Kitayama, 1991).

Another important factor that has been used in the agribusiness literature as a possible antecedent of relationship quality is price satisfaction (Schulze et al., 2006). The main rationale for this construct is that the economic outcome that is measured by the price the exporters receive is important for the evaluation of the relationship (Jaervelin, 2001) and may affect the development of trust. We operationalized price satisfaction with the construct “The buyers pay me the right prices for my product”.

Although we recognize that price satisfaction is comprised of short and long-term satisfaction as well as relative price satisfaction, we think that the statement used to operationalize the construct captures all these dimensions.

Statistical analyses

Principal component analysis and reliability tests

The Statistical Program for Social Scientist version 15.0 which is supplied by the SPSS Inc. was used for all statistical analysis. To assess the unidimensionality of the factors used, principal component analyses with varimax rotation was used and all factors with eigen values above 1 were extracted. In addition, all factors with factor loadings above 0.5 were retained. To test for the appropriateness of the factor analysis for the scale, the Kaiser-Meyer-Olkin Measure of Sampling adequacy (KMO-MSA) was conducted and all fell within the accepted region (KMO is greater than or equal to 0.5). Factor analysis was performed on all the organizational cultural dimensions, relationship quality and relationship skills of the export firms (see Appendices 1 and 2).

The results show that there is only one factor underlying each of the cultural dimensions identified. Two items each were loaded on the innovation, employee, result and stability orientation dimensions, and three items each on communication orientation and trust orientation. A reliability test was used to purify the measurement scale for each of the constructs used in the study. The alpha coefficients for all the organizational cultural dimensions except stability and result orientation were above the conventional cut off point of
The regression model indicates that communication and team orientation are both positive and significant at 5% indicating that the two dimensions are related positively to the firms’ relationship skills. Thus, exporter firms that are characterized by higher degrees of internal communication and team work will be able to adopt the necessary skills and tactics needed to promote their relationships with outsiders. This is in consonance with Verbeke (2000) who argued that a climate of open critical communication within firms enables the workers to learn from past mistakes without resorting to self-defensive strategies. Such atmosphere within an organization can be transferred to inter-firm relationships that would enable the exporters and the importers to cooperate with one another and to resolve conflicts in a more cordial manner. Employee orientation and innovation orientation are statistically unrelated to the relationship skills of the FFV exporting firms.

The regression model in Table 3 explores the impact of relationship skills on relationship quality. We included some control variables in order to determine the actual impact of the organizational cultural dimensions. The model in Table 2 is a base model that links all the control variables, namely; price satisfaction, partner importance, firm size and cultural fit to the relationship quality of the firm. We left out the relationship skills in order to determine the effects of all the other variables except relationship skills which will be considered in the next model in Table 4.

Appendix 4 indicates that about 33% of the respondents either disagreed or strongly disagreed with the statement on cultural dissimilarity between them and the European buyers. About 50% of the exporters generally agreed or strongly agreed that there were some cultural dissimilarity in the way the European buyers and they perceived things. The regression models in Tables 3 and 4 indicate that cultural dissimilarity has a significant and negative relationship with relationship quality. Thus, differences in the value congruence of the exporters and

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**Organizational cultural dimensions**

- Team orientation
- Communication orientation
- Employee orientation
- Innovation orientation
- Stability orientation
- Result orientation

**Figure 1. Conceptual framework for organizational culture, relationship skills and relationship quality.**

0.60 (Ranging from 0.626 to 0.873). The low alpha values for the stability orientation (α = 0.512) and the result orientation (α = 0.563) implied that the questions used to operationalize these organizational cultural dimensions did not adequately measure the underlying constructs and hence were not considered for further analysis (See Appendix 2 for factor loadings, KMO, alpha values and the percentage of variance explained by the factors).

Although the relationship skills and the relationship quality dimensions had initially been conceptualized as multi-dimensional, factor analysis of the measurements scale used showed unidimensionality of the factors with five and six items, respectively, loading on the relationship skills and the relationship quality constructs. The respective alpha values were .861 for relationship skills and .878 for relationship quality implying that the measurement scale used is a good indication of the underlying construct (Nunnally, 1978). The control variable partner importance scale has two items with alpha value of .871.

**Regression analyses**

The statistical analysis used for this study is the two stage least squares regression. Our ultimate dependent variable is the relationship quality and the independents are the dimensions of the organizational culture. The instrumental variable is the relationship skills dimension. Using the factor score saved from the principal component analyses, the strength and direction of the relationships between the various constructs were evaluated. We first established the link between organizational cultural dimensions and relationship skills and subsequently linked this to relationship quality.

**RESULTS AND DISCUSSIONS**

The regression model in Table 2 is the first stage of the two-stage least square regression. The model links the various dimensions of organizational culture to relationship skills. The dependent variable is relationship skills and the independent variables are the organizational cultural dimensions except stability and result orientations that were left out for further analysis because their alpha values were below the conventional cut off point of 0.60. The organizational cultural dimensions included are employee orientation, team orientation, communication orientation and innovation orientation.
Table 2. Regression model for organizational cultural dimensions and relationship skills.

<table>
<thead>
<tr>
<th>Cultural Dimension</th>
<th>Co-efficient(beta)</th>
<th>Standard error</th>
<th>T statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.000</td>
<td>0.085</td>
<td>0.000</td>
</tr>
<tr>
<td>Team orientation</td>
<td>0.313</td>
<td>0.119</td>
<td>2.638*</td>
</tr>
<tr>
<td>Communication orientation</td>
<td>0.265</td>
<td>0.115</td>
<td>2.303*</td>
</tr>
<tr>
<td>Employee orientation</td>
<td>-0.098</td>
<td>0.089</td>
<td>-1.106</td>
</tr>
<tr>
<td>Innovation Orientation</td>
<td>-0.930</td>
<td>0.087</td>
<td>-1.069</td>
</tr>
</tbody>
</table>

R²=0.30, Adj. R² = .271; F = 10.286; *p ≤ .05; **p ≤ .01; ***p ≤ .001
Dependent variable: Relationship skills. Independent variables: Dimensions of organizational culture.

Table 3. Base regression model for relational constructs and relationship quality.

<table>
<thead>
<tr>
<th>Relationship building factors</th>
<th>Co-efficient (beta)</th>
<th>Standard error</th>
<th>T statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.005</td>
<td>0.380</td>
<td>-0.013</td>
</tr>
<tr>
<td>Price satisfaction</td>
<td>0.248</td>
<td>0.066</td>
<td>3.758***</td>
</tr>
<tr>
<td>Cultural dissimilarity (crush)</td>
<td>-0.291</td>
<td>0.080</td>
<td>-3.646***</td>
</tr>
<tr>
<td>Partner importance</td>
<td>0.118</td>
<td>0.085</td>
<td>1.377</td>
</tr>
<tr>
<td>Firm size (number of employees)</td>
<td>0.001</td>
<td>0.001</td>
<td>1.174</td>
</tr>
</tbody>
</table>

R²=0.326, Adj. R² = .297; F =11.473; *p ≤ .05; **p ≤ .01; ***p ≤ .001
Dependent variable: Relationship quality. Independent variables: Relational constructs (except predicted values relationship skills).

Table 4. Final regression model for relational constructs and relationship quality.

<table>
<thead>
<tr>
<th>Relationship building factors</th>
<th>Coefficient(beta)</th>
<th>Standard error</th>
<th>T statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.276</td>
<td>0.390</td>
<td>0.708</td>
</tr>
<tr>
<td>Cultural dissimilarity (crush)</td>
<td>-0.285</td>
<td>0.078</td>
<td>-3.646***</td>
</tr>
<tr>
<td>Relationship skills (predicted)</td>
<td>0.418</td>
<td>0.178</td>
<td>2.346*</td>
</tr>
<tr>
<td>Price satisfaction</td>
<td>0.161</td>
<td>0.074</td>
<td>2.167*</td>
</tr>
<tr>
<td>Partner importance</td>
<td>0.119</td>
<td>0.083</td>
<td>1.424</td>
</tr>
<tr>
<td>Firm size(number of employees)</td>
<td>0.001</td>
<td>0.001</td>
<td>0.939</td>
</tr>
</tbody>
</table>

R²=0.363, Adj. R² = .329; F = 10.715; *p ≤ .05; **p ≤ .01; ***p ≤ .001
Dependent: Relationship quality. Independent: All variables including predicted values of relationship skills

the importers could lead to differences in expectations between the parties. This is consistent with Desphande et al. (1986), and Markus and Kitayama (1991) who identified a country’s culture as a key environmental characteristic that underlies systematic difference in consumer behavior, cultural norms and beliefs which act as powerful forces shaping peoples perceptions, dispositions and behaviors. Hofstede (1980) also explained how national culture affects management processes and the effectiveness of buyer-seller relationships which could be influenced by the way in which the actors perceive their respective national values. Dash and Guin (2006) in consonance with our observation argued that a country’s cultural characteristic can influence the structure of the buyer-seller relationships as well as determine the interpretation of how consumers or (suppliers and buyers in this case) perceive the relationships and their expectations. Thus differences in cultural dimensions of the suppliers and the buyers can lead to differences in expectation which may consequently have a negative impact on relationship quality. Conversely, Cultural fit on the other hand can facilitate higher levels of understanding among the importers and the exporters and hence may increase the level of trust and improve relationship quality.

Appendix 4 shows that about 37 and 29%, respectively, represent those that were satisfied and those that were not satisfied with the price that is paid by the European buyers and the remainder was partly satisfied and partly not satisfied. It seems that a considerable number of the firms did not have problems with the price levels
and hence were satisfied with the price that is paid by the European buyers. A positive relationship between price satisfaction and relationship quality observed from the models in Tables 3 and 4 is an indication that the export firms consider price as important variable in their perceived relationship quality. Thus, firms that receive satisfactory prices from their buyers have a better relationship quality. This is in line with Jaervelin (2001) who argued that the economic outcome is important for the evaluation of relationships because it positively influences the development of trust.

Firm size was measured by the number of employees (Appendix 3) and ranges from as low as 15 to more than 500 employees. The average number of employees was 88 although this number is highly influenced by the large number of employees of the large-scale producer-exporter firms. Contrary to our expectations, firm size has no statistically significant relationship with relationship quality. This implies that although these firms varied in sizes, the differences in sizes of the firms did not influence their relationships with the external constituents because it appears the large FFV export firms did not use their financial resources to employ “relationship promoters” or obtain an established alliance departments within the firms’ structures that were tasked with boundary spanning responsibilities. In general, the boundary spanning responsibilities were seen to be an integral part of the export departments of the companies which were not so specialized in promoting relationships. Partner importance scale has no significant impact on relationship quality. This can be interpreted to mean that although these firms consider some relationships to be more important than others for the future development and continuity of their businesses; this in itself does not influence their perception of trust and satisfaction. Thus, the firms seem to care about the dimensions that enhance immediate operations and results of their activities such as the fit in culture and price more than the long term orientation.

The regression model in Table 4 is the final regression model that links all the relational constructs to relationship quality of the FFV export firms. We included the predicted values of the relationship skills obtained from first regression model in Table 2 in order to assess the impact of all the variables on relationship quality. We obtained a positive and statistically significant relationship between relationship skills and relationship quality. The co-efficient of variation in our model increased from 30% to 33% implying that the organizational cultural dimensions are important and contributes in explaining the relationship quality of the FFV exporters. This implies that the exporters’ relationship skills influenced by their organizational culture are related to their ability to benefit from their relationships with the buyers in Europe. This may result from the fact that when firms exhibit more openness towards their buyers, solve problems jointly, cooperate more, conduct joint activities in research and development, and provide clear and full information to their buyers, this will be reciprocated by the buyers by acting in a relational like manner thereby enhancing the level trust and satisfaction in the supply chain.

**Limitations and directions for future research**

Like many other studies, this study is not free of limitations. The first limitation is that there may be an issue of single informant bias in the data collection process. The key informant technique that was used to determine the organizational cultural dimensions prevailing in the firms may suffer from the problem of mono-operational bias (Cook and Campbell, 1979). This is because only the managers of the various export firms were interviewed. Moreover, the information obtained represents the perception of the exporters which may differ from that of the importers.

Secondly, the cross-sectional nature of the data implies that we are unable to capture changes in the exporters’ relationship skills over a period of time. The essence of this is that the attitudes of firms towards relationships change with time, especially as the relationship moves from emergent stage to mutual dependence (Jarratt and O’Neill, 2002). Capturing time series data would provide a better insight into this aspect of relationship building.

In addition, there are other factors that may also affect the perceived relationship quality of the Ghanaian FFV exporters which were not considered in our model. Examples are the macro-environmental factors such as the international trade rules and regulations, quality control and certification. These factors have been treated as given and moderating in our analysis. Their effects may have a very strong influence on the relationships between the exporters and the importers.

The sample size of firms (n = 101) may affect the quality of the measurements and generalization of the results obtained. Statistical measurements such as the principal component analysis that was used in the study perform better with larger samples.

To avoid the problem of mono-operational bias in the measurement of organizational culture, future research should make more rigorous efforts to gather information from employees working at the different levels and sectors of the firms. This will enable better understanding and provide more confidence in the organizational cultural practices prevailing in the various firms. This may also imply the use of more participatory approaches in the form of researcher-member interaction (Roussau, 1990), in the assessment of the organizational practices of the export firms. Secondly, future research must consider the relationship quality measured from the perspective of both the buyers and the sellers and must also incorporate more dimensions in operationalizing the various constructs.
Appendix 1. Relationship quality, relationship skills and partner importance.

<table>
<thead>
<tr>
<th>Factors and Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship skills KMO = .830, Cronbach’s alpha = .878, Explained variance = 68.624%</strong></td>
<td></td>
</tr>
<tr>
<td>I provide clear and full information to the buyers</td>
<td>.795</td>
</tr>
<tr>
<td>I inform the buyers in time in case of problems</td>
<td>.843</td>
</tr>
<tr>
<td>I like to solve problems jointly with the buyers</td>
<td>.789</td>
</tr>
<tr>
<td>I do not always choose a buyer who pays the highest price</td>
<td>.791</td>
</tr>
<tr>
<td>I organize joint activities between the buyers and myself</td>
<td>.925</td>
</tr>
<tr>
<td><strong>Relationship Quality KMO = .843, Cronbach’s alpha = .861, Explained variance = 59.134%</strong></td>
<td></td>
</tr>
<tr>
<td>The European buyers will not deliberately deceive me</td>
<td>.829</td>
</tr>
<tr>
<td>Considering all my experiences, I am generally very satisfied with the European buyers</td>
<td>.804</td>
</tr>
<tr>
<td>The business relationships with the European buyers are so good that I do not think of change</td>
<td>.784</td>
</tr>
<tr>
<td>The buyers are honest</td>
<td>.766</td>
</tr>
<tr>
<td>I believe in information provided by the buyers</td>
<td>.759</td>
</tr>
<tr>
<td>The buyers deal with me as expected</td>
<td>.662</td>
</tr>
<tr>
<td><strong>Partner Importance KMO = .500, Cronbach’s alpha = .889, Explained variance = 90.063%</strong></td>
<td></td>
</tr>
<tr>
<td>The EU buyers are important for the continuity of my business</td>
<td>.949</td>
</tr>
<tr>
<td>The EU buyers are very important for the future development of my business</td>
<td>.949</td>
</tr>
</tbody>
</table>

Appendix 2. Organizational cultural dimensions.

<table>
<thead>
<tr>
<th>Factors and Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation orientation KMO = .500, Cronbach’s alpha = .626, Explained variance = 73.376 %</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, we are expected to look for new opportunities for the company</td>
<td>.857</td>
</tr>
<tr>
<td>In this company, our workers are encouraged to come up with all kinds of proposals for change</td>
<td>.857</td>
</tr>
<tr>
<td><strong>Communication orientation KMO=.715 , Cronbach’s alpha = .856, Explained variance = 77.848%</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, criticism of employees is openly discussed with managers</td>
<td>.849</td>
</tr>
<tr>
<td>In this company, there is good communication among employees</td>
<td>.910</td>
</tr>
<tr>
<td>In this company, conflicts are often discussed openly</td>
<td>.887</td>
</tr>
<tr>
<td><strong>Team orientation KMO = .730 , Cronbach’s alpha = .873, Explained variance = 79.798%</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, it is common that employees are transferred to perform different task at the workplace</td>
<td>.891</td>
</tr>
<tr>
<td>In this company, good cooperation among the employees is a normal part of our activities</td>
<td>.880</td>
</tr>
<tr>
<td>In this company, all workers work together as a team</td>
<td>.908</td>
</tr>
<tr>
<td><strong>Result Orientation KMO = .500, Cronbach’s alpha = .563, Explained variance = 69.160%</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, employees are responsible for the results of their work</td>
<td>.835</td>
</tr>
<tr>
<td>In this company, there are high demands concerning the results of our employees’ activities</td>
<td>.835</td>
</tr>
<tr>
<td><strong>Employee Orientation KMO = .500 , Cronbach’s alpha = .825, Explained variance = 68.173%</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, there is limited attention to the personal problems of the employees</td>
<td>.925</td>
</tr>
<tr>
<td>In this company, employees are allowed to attend courses only when it will benefit the company</td>
<td>.925</td>
</tr>
<tr>
<td><strong>Stability Orientation KMO=.500, Cronbach’s alpha = .512, Explained variance = 67.254%</strong></td>
<td></td>
</tr>
<tr>
<td>In this company, we are expected to follow a dressing code</td>
<td>.920</td>
</tr>
<tr>
<td>In this company, employees are expected to give full declaration of any costs they incur</td>
<td>.920</td>
</tr>
</tbody>
</table>

Finally, data from other sectors of the food supply chain can also be collected in order to confirm the results of this study. This will be necessary to enhance the generalization of results to cover other sectors of the agribusiness and food supply chains.

Conclusion and managerial implications

In summary, this paper reports on an exploratory investigation into the relationship between organizational culture and relationship skills and its impact on relationship
Appendix 3. Firm size, cultural dissimilarity and price satisfaction.

Firm size

The total number of employees in the company

Cultural dissimilarity

Measured with the statement “The European buyers and I perceive things differently”.

Price satisfaction

We measured price satisfaction with a single statement “The European buyers pay me the right prices for my produce”.

Appendix 4. Descriptive statistics on cultural fit and price satisfaction.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cultural fit/dissimilarity</th>
<th>Price satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>14</td>
<td>13.9</td>
</tr>
<tr>
<td>Disagree</td>
<td>19</td>
<td>18.8</td>
</tr>
<tr>
<td>Partly agree/disagree</td>
<td>18</td>
<td>17.8</td>
</tr>
<tr>
<td>Agree</td>
<td>30</td>
<td>29.7</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>20</td>
<td>19.8</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>100</td>
</tr>
</tbody>
</table>

Appendix 5. List of abbreviations.

GEPC: Ghana Export Promotion Council

FFV: Fresh fruits and vegetables

quality of the Ghanaian FFV export firms. We contribute both theoretically and empirically to the agribusiness literature and come out with some proposals for future research. We bring organizational culture into the limelight as an important factor in the study of buyer-seller relationship quality in agribusinesses.

Statistically significant and positive relationships between communication and team orientations on the one hand and relationship skills on the other hand point to the importance of such firm level characteristics and routines in determining the FFV export firms ability to build, maintain and benefit from their relationships with the external constituents such as the European buyers.

The results have some implications for the FFV supply chain actors. First, we recommend that export firms which want to maintain long-term relationships with their customers in Europe can do so by looking inward and evaluating their own internal activities, values and routines as a critical starting point. Particularly, managers of such firms can institute mechanisms that will enhance more team work and communication among the employees in order to improve the employees’ relationship skills which may result in improvement in their relationships with their external constituents. Secondly, significant relationship between price satisfaction and relationship quality also indicates that the European importers can enhance the perception of their suppliers’ relationship quality by paying the suppliers satisfactory prices for their products.

Finally, we postulate that appraisal of cultural practices and values of each of the actors at macro, meso and organizational levels will be very important in reducing the incidents of misunderstandings and conflicts which will consequently improve relationship quality.

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Beugelsdijk S, Koen IC, Noorderhaven JN (2006), Organizational culture and relationship skills. Organizational studies on line first. SAGE publications.


