

The Role of Trust in Developing Business Relations between Fish Suppliers and Export Firms in Eritrea

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This paper provides a framework for analysing the role of trust in developing business networks between fish suppliers and export firms in Eritrea. It discusses main concepts of trust in light of transaction cost theory and networking theory. The framework considers three forms of trust: competence trust, social trust, and institutional-based trust. To verify the applicability of the conceptual framework, we conducted a case study and survey research in the Eritrean fish industry. The case study and survey results demonstrated that the level of trust developed between exchanging parties is not only based on their economic performance but also it is influenced by the social and institutional settings. In particular, the competence of export firm in providing credit and setting attractive prices, the influence of the 'law of the sea' and formal written contracts are considered important in developing and maintaining trust between fish suppliers and export firms. If both fishermen and export firms fulfill each others promises there is room for a business relationship based on flexible supply contracts.

INTRODUCTION

Many businesses have recognized the importance of trust in improving the performance of exchanging parties (Boersma et al 2003; Blois 1999; Sako and Helper 1998; Morgan and Hunt 1994). As a result, a great deal of attention has been paid by both economic and sociological scholars to develop concepts relevant for studying trust (Hakansson and Snehota, 1995; Williamson, 1993). The economic and sociological approaches differ in their theoretical assumptions and concepts, and several efforts have been made to bridge the gap between these two perspectives, e.g. views of transaction cost economics and networking theory on the discussions of trust. While transaction cost approach focuses on opportunistic behavior of exchanging parties and the risk associates with it, networking theory focuses on its correlate trust. Gulati (1995) also discusses that economic exchange does also take place in a social context and is embedded in a social network of relationships. For example, the social ostracism of Jatavs severely limits their supply cooperation with the white-collar trader in the Agra footwear industry (Knorringa, 1995). This is also true in the case of Afar fishermen in Eritrea, who have strong social bonds and who are influenced by their communal norms in trading with buyers (Habtom, 2006). The objective of this paper is to verify to what extent does trust based on economic, social or institutional contexts in the Eritrean fish industry. In order to verify the applicability of the model derived, a study on the Eritrean fish industry was conducted by specifically analysing the importance of trust between fish suppliers and export firms, which want to meet the demand of EU fish importers who mainly focus on regular supply of seafood products and delivery of quality fish in large volumes.

BRIEF BACKGROUND INFORMATION ON ERITREA

The Eritrean national fisheries, based almost exclusively on the exploitation of waters of the Red Sea shore and islands, obviously plays a key role in facilitating the nation's social and economic recovery and rehabilitation. While the potential for mining and petroleum extraction is either limited or unproven, and production in the agricultural and industrial sectors will require a considerable amount of time to be fully restored, the stock of Red Sea fish and other exploitable marine resources remained intact during the

years of war. Eritrea has major marine resources that have barely been exploited due to the long war of independence. The maximum sustainable yield is 80,000 metric tonnes per year, where currently only 13 per cent is utilised every year (MoF, 2007). If all resources are fully utilised at the maximum sustainable level, Eritrea can generate about US\$ 55 million annually from the fish sector. Despite the efforts made, the contribution of the fish industry is still marginal and currently the income generated from Eritrean seafood exports is estimated between US \$ 3 to 5 million. The major problem of the Eritrean fish industry has been a shortage of fish sold by fish suppliers to exporting firms and this leads us to the question how these exchanging parties could develop business relations and thereby increase their participation in meeting the demand of EU fish importers.

THEORETICAL APPROACH

The basic concept of transaction cost theory concerns efficiency. However, the concept of efficiency can be integrated in the networking theory. The networking perspective indicates that instead of considering minimizing the cost of one transaction alone, the efficiency criterion should be based on a set of transactions between two parties or should be aimed at maximizing the joint transaction value of a given transaction among several value system actors (Zajac and Olsen, 1993). In this case, the unit of analysis concerns the relationship rather than a discrete transaction, which provides a strong basis for understanding the coordination of industrial activities in a broader context. Also, the network approach considers the transaction costs as only one aspect of the total network relationships. To achieve an overall assessment of the network relationship, these costs must be compared with the total advantages of the cooperation. Frequent exchanges between partners may be the result of a gradual development of trust that helps partners to lower transaction costs by safeguarding against opportunism. The implications of the effect of trust on governance structures are generally ignored in transaction cost theory. This limitation of social embeddedness of economic actions and trust is best dealt with in networking theory (Uzzi 1997, Grabher 1993, Granovetter, 1985). From a networking perspective, opportunism is not considered as a basic characteristic of the actor. Instead trust is an important concept in the networking approach. We share the view that informal networks reduce transaction costs because of the high level of trust in the relationships. A high level of trust enables firms to reduce negotiation costs, it helps to reduce transactional uncertainty and it creates opportunities for the exchange of goods and services. Networking theory also argues that trust is a viable governance structure in a dynamic network environment (Hakansson and Johanson, 1993). Hence, our conceptual framework relies heavily on instruments that build trust.

THE CONCEPTUAL FRAMEWORK

The literature clearly shows that trust creates stability and guarantees continuity in the relationships between industry actors and it is the glue that holds the relationship together (Svensson 2004; Sven and Gronhaug 1995; Barney and Hansen 1994; Dwyer et al 1987). Several studies consider trust as a central feature of business relationships and propose different ways of measuring trust (Dyer and Chu, 2000; Mayer et al 1995; McAllister 1995; Young and Wilkinson 1989). For instance, Sako (1992) identified three types of trust, namely, contractual, competence and goodwill trust. Similarly, Shapiro et al. (1992) discussed deterrence-based, knowledge-based, and identification-based trust. Mishra (1996) focuses on competence, reliability and openness in defining trust. According to Doney and Cannon (1997), the development of trust involves five processes: a calculative, capability, predictive, intentionality and transference processes. Zucker (1986) defined trust as a set of expectations shared by all those involved in an exchange and identified three dimensions of trust, namely process-based, characteristics-based and institutional-based trust. Such classification integrates most of the instruments of measuring trust as explained by other researchers and allows us to examine the concept of trust in a broader perspective.

Hence, in our study, we adopted Zucker's (1986) definition and classifications of trust, with the exception that we redefined process-based trust as competence trust and characteristics based trust as social trust.

Competence trust is based on concrete experience concerning certain behavioural patterns. It results from the dynamics of past and future exchange processes and it is influenced by the reputation of industry actors. Each party gathers information on past transactions with which they can evaluate the other partner's trustworthiness. As a means of evaluation, they consider both technical and managerial competences in living up to their promises. Competence trust combines the explanations provided by Sako (1992) on the same issue, and the discussions of Shapiro et al. (1992) on knowledge-based trust. It is also consistent with the discussions of Mishra (1996), and Doney and Cannon (1997).

Social trust refers to the influence of social norms, religion, personal bonds or friendship in the relationships between industry actors. This is similar to the discussions of Sako (1992) and Shapiro et al. (1992) on goodwill trust and identification-based trust, respectively. According to Williamson (2000), characteristic-based trust represents a level 1 form of institutional arrangement, which is characterized by informal institutions, customs and norms.

Institutional-based trust concerns formal social structures, which are usually backed by sanctions based on the law. These include property rights, business contracts, formation of fish cooperative and fishery legislations. This type of trust incorporates the discussion by Sako (1992) on contractual trust, and the implications of deterrence-based trust as stated by Shapiro et al. (1992). Similarly, according to Williamson (2000), institutional-based trust represents level 2 and level 3 forms of institutional arrangements, which include the rules of the game and actual play of the game itself.

METHODOLOGY

In order to verify the applicability of the model derived, we studied business relations between fish suppliers and export firms in Eritrea. The research methodology is aimed at selecting a research method that is relevant to finding an answer to our research question: *What is the role of trust in developing business relations between fish suppliers and export firms?* A case study method was employed. A case study design depends on the unit of analysis. The unit of analysis may be an individual, a firm, a decision or a programme (Yin 1994, Miles and Huberman, 1994). In choosing the case, the most important criterion is that we learn as much as possible from the case (Eisenhardt, 1995). In this research, the unit of analysis refers to the business relationship that a firm has with other organisations. Accordingly, a case study protocol that is in line with our conceptual framework and each variable was properly classified and made operational. In order to understand the view of fish suppliers, both case study interviews and survey methods were employed. To obtain a good response rate with fish suppliers, it was considered more appropriate to start with a case study approach and the followed by a survey method. These methods helped to gather all relevant information that allowed us to present a complete case study on fish suppliers. The respondents were asked about their views on the importance of trust in developing business relations between themselves and export firms in future

There is a total of 35 fishing villages in Eritrea and after consultation with key informants and the Ministry of Fisheries, 17 fishing villages were selected for a case study. Accordingly, a case study interview with twenty-six fishermen was carried out. Each interview made was taped and properly transcribed. To complement the case study results, we also administered a survey through semi-structured questionnaires, with 63 fishermen selected from 26 fishing villages. The results of both case study interviews and surveys were linked to each variable under investigation and were compared with the views of partner firms. In order to verify the views of both respondents, we also referred to financial records and reports prepared by respondents and other organizations. The Fish suppliers sell most of their catch to Yemen and rarely to Eritrean enterprises. Hence, currently business relationships between fish suppliers and export firms in Eritrea are almost non-existent and in our interviews with the fishermen we focused on potential future business relationships with export firms. Also, we found that there are only two export firms involved in export activities in Eritrea and we selected both firms for a case study. We

collected relevant information by interviewing the managers of both companies. Hence, using different sources of evidence we were able to triangulate our findings on the main issues under study.

RESEARCH RESULTS AND DISCUSSIONS

An analysis is made on the importance of trust in the relationship between fishermen and export firms. The conceptual framework of three forms of trust explains the relationship between fishermen and export firms, namely competence trust, social trust, and institutional-based trust.

Competence trust

The respondents were asked to select the ones that best represent their competence of export firms in the future from four variables of attractive prices, the promise of being a regular buyer, the provision of credit, and the provision of market information. Evidence in Table 1 reveals that those who rated ‘credit provision’ and ‘attractive prices’ as (very) important make up 84 % and 76 %, respectively. On the other hand, 52 % and 19% rated the variables ‘regular buyer’ and ‘provision of market information’ as (very) important, respectively. This confirms that in order to win the confidence of artisanal fishermen and to develop trust, Eritrean exporters – like the Yemeni buyers – should be able to provide credit and set an attractive fish price. This may increase the number of fishermen who regularly supply fish to the export firms.

Table 1: The importance of Competence trust in the future relationship between fish suppliers (N=63) and export firms

Importance of Competence trust Factors	Very important	Important	Neutral	Not important	Not important at all	Mean	Standard deviation
Attractive price	46.0	30.2	11.1	12.7	0.0	4.10	1.04
Promising to be a regular buyer	20.6	31.7	42.9	4.8	0.0	3.68	0.86
Getting access credit	44.4	39.7	12.7	1.6	1.6	4.24	0.86
Providing market information	4.8	14.3	34.9	46.0	0.0	2.78	0.87

Source: Survey Data (2005)

Export firms stressed that the competence of a fisherman is best evaluated by his reputation as a regular supplier and by his punctuality in meeting deadlines. However, they complained that fishermen failed to offer the desired competence because they could not regularly supply, and also they did not adhere to quality requirements. They added that since fish suppliers have an alternative market, Yemen market, they have been less committed to provide Eritrean export firm with the required supply of fish. Hence, if both fishermen and export firms in Eritrea are to develop trust in the relationship, they have to fulfil each other’s expectations. In particular, if exporters are to develop trust in their relationship with fish suppliers, they may adopt similar means as used by the Yemen buyers.

Social trust

As mentioned earlier, social trust refers to the influence of blood relationships, friendship, personal relationships, belief, norms and other socio-cultural ties between fish suppliers and export firms. The respondent fishermen were asked about the perceived importance of social coherence in their relationship

with export firms and asked to select one of five variables that highly influence their relationship with a specific exporter. The variables include applying ‘law of the sea’, ‘religion’, ‘social/cultural background’, ‘kinship ties’ and ‘personal bonds/friends’. The Result in Table 2 shows 84 % of the respondents rated the variable ‘applying law of the sea’ as (very) important in developing business relationships. The law of the sea is an informally developed principle that enforces fish suppliers and export firms to co-operate with each other and it is of special importance for getting and payment of loans.

Table 2: The importance of Social trust in the future relationship between fish suppliers (N=63) and export firms

Importance of social trust \ Factors	Very important	Important	Neutral	Not important	Not important at all	Mean	Standard deviation
Kinship ties	7.9	27.0	27.0	11.1	27.0	2.78	1.32
Religion	20.6	27.0	15.9	11.1	25.4	3.06	1.50
Law of the sea	54.0	30.2	3.2	3.2	9.5	4.16	1.25
Personal bonds	9.5	12.7	9.5	33.3	34.9	2.29	1.32
Same social/cultural background	3.2	33.3	15.9	25.4	22.2	2.70	1.24

Source: Survey Data (2005)

The respondents who rated the variables ‘religion’, ‘social/cultural background’, ‘kinship ties’ and ‘personal bonds/friends’ as (very) important make up 48 %, 37 %, 35 % and 22 % respectively. The respondents reasoned that if the exporter has a religion, then it means that he fears God and do not dare to cheat by increasing price or do other unethical things during the time of the relationship. Those who stated that religion is not important in their relationship with an exporter stressed that business and religion have their own set of boundaries and do not interfere with one another.

For the exporters, personal bonds/friendship, cultural background and religion, are the most important factors that influence their relationships. Friendship and acquaintance enable to them share the same relational values. For instance, when fish suppliers start delivering fish regularly, they may get to know the exporter. As a result, when they face problems, like of financial deficit or a lack of ice, the export firm can solve their problem. Similarly, cultural background may have a typical influence on the behaviour of fishermen, e.g. to pay credit back very lately. The majority of fish suppliers are from Afar ethnic group. Most of them are illiterate and lack the culture of saving money, which exposes them to debt. This has been of special concern for export firms when providing credit to fish suppliers. Moreover, since all Afar fishermen are Muslims, they stop fishing during the religious fasting period, Ramadan, which creates irregularity of fish supply.

The managers of export firms were also asked whether their firms ‘sign of goodwill’ do more than what is expected of them. They responded that they usually put extra effort for the development of the relationship by buying any type of fish delivered by fishermen and find alternative markets for each type of fish. Even if there is low demand, they usually prefer to buy fish from fish suppliers and put it in a store. They believe that although making such kind of investments lead to increased storage costs and wastage, it helps fishermen develop trust in their firm. If they would not do so, they could loose the fish supplier.

Institutional-based trust

Institutional-based trust is associated with property rights, laws and mechanisms of enforcing laws that influence the relationship of fishermen with export firms. So far, contractual agreements between fish suppliers and export firms were almost non-existent, and the few agreements that did exist consisted of oral promises. The respondents were asked to evaluate the importance of written and non-written contracts in the future. Evidence in Table 3 that fish suppliers are more interested in profitable contractual agreement, which allow them to supply fish in large volumes to the export firms. Further, over 83 % rated ‘written contracts as very important while 30 % consider unwritten contracts’ as very important. The managers of export firms think that written contracts are better than unwritten ones because they can be used as a reference document in case one of the parties refuses to act according to the agreement.

Table 3: The importance of Institutional-based trust in the future relationship between fish suppliers (N=63) and export firms

Importance of Institutional-based trust	Very important	Important	Neutral	Not important	Not important at all	Mean	Standard deviation
Factors							
Written contracts	71.4	11.1	7.9	7.9	1.6	4.43	1.04
Unwritten contracts	11.1	19.0	27.0	25.4	17.5	2.81	1.25
<i>- Importance of designing flexible supply contract</i>							
Gaining reasonable profit margin	77.8	17.5	4.8	0.0	0.0	4.73	0.54
Fixing life of the contract	17.5	44.4	19.0	11.1	7.9	3.52	1.15
Fish quality specification	9.5	25.4	36.5	25.4	3.2	3.13	1.01
Quantity specification	36.5	39.7	9.5	7.9	6.3	3.92	1.17
Just-in-time delivery	14.3	44.4	27.0	7.9	6.3	3.52	1.04

Source: Survey Data (2005)

The export firms pointed out that apart from gaining a reasonable profit margin, the contract should also stress just-in-time delivery as well as quality specification. This also shows the preference for the delivery of quality fish over quantity, because the export firms prefer to buy specific species that have high demand on the world market. To conclude, the main finding is that both fish suppliers and exporters are willing to enter into a flexible supply contract that is profitable for them.

CONCLUSION AND IMPLICATIONS

This paper attempts to verify to what extent does trust based on economic, social or institutional contexts. The theoretical discussions and the field research confirm the importance of trust as the main factor in developing business relations between fish suppliers and export firms. The framework considers three forms of trust: competence trust, social trust, and institutional-based trust. The derived concepts were hardly applied in the Eritrean seafood industry. This paper contributes to the existing discussions on trust by exploring to which extent such concept could be applied in totally different setting just as the Eritrean

fish industry. The case study and survey results demonstrated that the level of trust developed between exchanging parties can be based on their economic performance, or it can also be influenced by the social and institutional settings. In particular, the capability of exchanging parties in providing credit and setting attractive prices, the influence of the 'law of the sea' and formal written contracts that are backed by sanctions are considered important in developing and maintaining trust between fish suppliers and export firms. The same concepts can also be applied in analysing the role of trust in solving fish supply problems of other developing economies. At the same time, the outcome of this research can be compared with results of research conducted in the fish industry of developed countries. Future research should focus on operationalising a flexible supply contract through which fish suppliers and export firms link their activities, develop resource ties and maintain economic and legal bonds.

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