

## **The Role of Trust in Contract Enforcement: An Analysis of Smallholder Farmers and Sugar Millers in Swaziland**

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**T**he purpose of this case study is to investigate the role of trust in a contractual relationship in agricultural commodity markets. This case study was conducted in the sugar supply chain in Swaziland and conceptualizes the supply chain as a series of connected activities concerned with planning, coordinating, and controlling the production of sugar, starting with the production of sugarcane by farmers, through its processing by millers, and finally its sale to consumers. Thus it can be broken into units, beginning with the cane growers who provide sugarcane to millers, who then process it into sugar and pass it on to the Swaziland Sugar Association (SSA), which then markets it on behalf of both farmers and millers.

Trust in this study was conceptualized as the farmers' or millers' confident belief in the other's honesty. Trust economizes on information search and transaction costs. It creates the conditions under which exchanges between technologically and legally separate entities can take the form of problem solving rather than bargaining. Therefore, trust is expected to improve the supply chain performance by improving information availability, reducing transaction costs, reducing opportunistic behavior, and diminishing the likelihood of free riding and other negative externalities. The main theme is that trust increases the propensity of people to cooperate and produce socially efficient outcomes and helps to avoid inefficient noncooperative traps.

## 6.1 Characteristics of Sugarcane Farming

Sugarcane farming has several characteristics that necessitate specific institutional arrangements, such as contracts to facilitate and coordinate exchange. First, it involves highly capitalized and highly specific investments, especially at the processing levels. Second, it takes about 12 months for the sugarcane crop to be ready for harvesting, and once it has been harvested it has to be processed within 24 hours to prevent loss in the sucrose yield of the cane. This timing requirement also has implications for the optimal distance between the mill and sugarcane fields. The distance between the farm and the mill not only affects the quality of the cane through the loss in sucrose but also has cost implications that could substantially reduce the net return to the farmer.

In addition, harvesting of sugarcane must be done according to a schedule that allows all growers the possibility of delivering a predetermined daily quantity during the crushing season. This daily quota is needed because the sucrose content of the crop is low at the beginning of the season and increases with time, but it decreases toward the end of the season because of increased rainfall. Thus delivery scheduling enables every farmer to go through all the stages of sucrose concentration in the crop without some farmers benefiting more than others. Given the high transaction costs in coordinating so many small growers, milling companies often resort to farming large estates to secure their own supply of cane at lower costs. The limited size of own estates plus the sociopolitical imperative to encourage development necessitates some procurement of cane from outgrowers, which brings about a set of different coordination and contractual challenges to the milling company. This case study highlights the impact of trust on these challenges and transaction costs, and thus on the performance of the supply chain.

## 6.2 Stakeholders and the Institutional Framework (Environment)

The main participants in the Swaziland sugar industry are the SSA, the millers, and the cane growers. The sugar industry is regulated by the SSA, as mandated by the Sugar Act of 1967 (Government of Swaziland 1967).<sup>1</sup> The SSA regulates the functions of the industry, the millers are responsible for producing sugar, and the cane growers for producing sugarcane and delivering it to the mills. Apart from producing sugar, the millers also own sugar estates from which they produce sugarcane (UNCTAD 2000).

Historically, most cane production and sugar processing in Swaziland has been vertically integrated in mill cum plantations, whereas outgrowers have never had a significant role in the industry. However, large private farmers and small cane growers have started to play an increasingly important role. Outgrower farmers absorb some production risks that would otherwise have been incurred by millers and,

through their supply to the mill, they increase the mills' throughput. They now supply more than 36 percent of the national supply of sugarcane (UNCTAD 2000). The other 64 percent is produced by the milling companies' own estates.

The Sugar Act of 1967 specifies the structure of the Swaziland sugar industry and also provides the legal regulatory framework for the industry. The act specifies the composition of the SSA, which is made up of twelve members from the Swaziland Sugar Millers Association (SSMA) and twelve members from the Swaziland Cane Growers Association (SCGA). The two bodies are of equal status, and hence are both represented in the council of the Sugar Association, which administers the business and affairs of the association. The functions, powers, and duties of the SSA are set out in the Swaziland Sugar Industry Agreement (Government of Swaziland 1967).<sup>2</sup>

A quota or a license is required before a farmer can grow sugarcane. Each grower's delivery quota is set by the Swaziland Quota Board, which is a component of the SSA. The Quota Board consists of 10 members: three growers' representatives, three millers' representatives, three others nominated by the minister for Enterprise and Employment, and a chairperson nominated by the SSA. The quota in effect represents a contract between the grower and the miller. Growers are required to provide the full amount of their quota to the mill to which they are attached, and the mill in turn is required to accept all cane delivered to it up to each grower's quota. In essence the contract is limited to the amount of sucrose indicated in each farmer's quota. It is, however, silent about the price to be paid for the sucrose, as that is determined by the SSA. The contract is enforced through the rejection of cane or withdrawal of the quota for those who fail to meet the standards set out in the Sugar Agreement (Government of Swaziland 1967) as well as through price discrimination between quota cane and segregated cane. Quota cane refers to the amount specified in the quota, and segregated cane is any cane beyond that specified by the quota. The quota system is meant to ensure that the miller can handle the crop and that the grower has water rights and the right to use the land.

Each mill has a mill group committee, which consists of an equal number of representatives from the miller and growers attached to a particular mill. The mill appoints miller representatives, and the SCGA appoints the representatives for the cane growers. Although the mill group committee is accountable to the SSA, it is financed locally in a manner agreed upon by growers and mill representatives. One of the responsibilities of the mill group committee is to determine the quality standards of cane delivered to the mill to which growers are attached. If for any reason a grower delivers cane that does not meet these standards, the relevant mill group committee is entitled to reduce payment for cane produced by the defaulting grower(s) and to pay the amount deducted pro rata to the production of the remaining growers attached to the mill (Government of Swaziland 1967).

The mill group committee is also charged with making estimates of the quantity of cane that will be produced by each grower attached to the mill in its area. The grower has to supply his mill group committee with the accurate information it requires; otherwise, the mill group committee must make estimates. This information includes area of land available for cane production, estimated tonnage of cane, area of land under cultivation in the current year, and any area still to be planted (Government of Swaziland 1967; UNCTAD 2000).

In accordance with the Sugar Act (Government of Swaziland 1967), the SSA operates a pooled payment system in which the annual revenue earned from the sales of sugar is distributed to the millers and growers after deducting the industry obligation costs. This system of pooling revenues ensures that the payment per ton of sugar produced by millers is not affected by the timing of their sugar production. It also ensures that payment to the growers, per ton of sucrose delivered, is not affected by the timing of deliveries of cane over the season. Through the pooling system both millers and growers benefit from the best prices the industry receives from its preferential markets.

The SSA divides the total net payment to the mills according to quota sugar and segregated sugar. Quota sugar is that sugar produced during the year to the maximum aggregate of all quotas attached to the mill (the amount of brown and white sugar the mill should produce) plus any quota shortfall reallocated from another mill. The price that millers and growers receive for producing sugar and sugarcane, respectively, is determined by the SSA, which after identifying and projecting all revenue from the sale of sugar and sugar by-products (such as molasses) and deducting all industry obligations, passes the remainder to millers and growers. Millers and growers however, negotiate the ratio of the price split for sugarcane processing and production. The price split for the 2001/02 season was set at 67.5 percent to growers<sup>3</sup> and 32.5 percent to millers. Millers are paid on the basis of their sugar output, and payments are made a week after production. The millers, in turn, pay the cane growers based on the amount of sucrose extracted from their cane, and the growers are also paid a week after delivering their cane to the mill.

### **6.3 Context and Issues (Action Domain)**

This case study focuses specifically on the interactions and contractual arrangements between the milling companies and the cane growers, that is, where a variety of institutional problems emerge that could influence the efficiency of the supply chain and thus the returns to growers and millers.

To coordinate the sugarcane supply across the industry, all cane growers, including the estates of the milling companies, are subject to delivery quotas. These are

specified in terms of weight of sucrose in cane to be delivered to the mill. The aim of the quota is to ensure that (1) the national sugar production is restricted to the quantity that the market for sugar produced in Swaziland can accommodate at satisfactory prices, and (2) sufficient milling capacity is available to accommodate the deliveries.

Growers are required to provide the full amount of their quota to the mill to which they are attached in each season unless prevented by force majeure, such as fire, frost, floods, and strikes (Government of Swaziland 1967). The mill in turn is required to accept all cane delivered up to each grower's quota. Any cane above the grower's quota is paid a segregated price. In the event the grower ceases, for any reason, to deliver sugarcane to the mill, the Quota Board may cancel the quota and reallocate it to other growers who meet the requirements (Government of Swaziland 1967).

The delivery quota for each grower is set by the Quota Board. The Quota Board in a sense is not a third party, because it is composed of both millers and growers, who are the actors and stakeholders. As such the contract is an incomplete one that cannot be legally enforced, because there are no verifiable variables or quantified penalties. Thus using the definition provided by Milgrom and Roberts (1992, 330), the quota agreement/contract between the cane growers and the millers can be considered as a relational contract: "a contract that specifies only the general terms and objectives of a relationship and specifies mechanisms for decision making and dispute resolution." A relational contract must therefore be self-enforced, so that trust plays an important role to ensure that the arrangement works well for all parties. Formal, written, and complete contracts usually imply significant distrust between the contracting parties, whereas if one party trusts the other there is little need for contractually specifying actions. Thus trust reduces transaction costs by replacing contracts with handshakes, or in this case an agreement managed by the industry actors.

The contractual arrangement in the sugar industry signals a clear example of a hybrid governance structure (Williamson 1996), because the nature of the crop and its processing precludes the spot market from being a coordination mechanism, and vertical integration is only possible for the milling company's farming on its own estate. The arrangement with the outgrowers is thus a hybrid structure of the two extremes.

Despite the clear rules set out in the Sugar Act and the quota arrangements, perceptions of unfairness exist regarding this exchange relationship between cane growers and millers. Farmers argue that they are competing with millers, because millers not only process sugar but are also involved in cane production, which entrenches their power in the supply chain. This perception of unfair competition could be a result of misaligned goals of the actors in the chain, with actors trying to maximize their own goals. The millers' objectives involve profit maximization by maintaining

their monopsonistic status. However, the cane growers want to increase their income through the sale of cane; maintain a food supply source; improve their standard of social services; ensure maximum use of their resources; and minimize exposure to risks, crop failure, and authority imposed by the processing firms.

Some farmers complain that at times millers deliberately record low levels of sucrose in their cane as a strategy to reduce the payment to producers. However, the sugar industry does allow farmers to verify the laboratory tests of their cane if they have any such suspicions. This suspicion by farmers implies that they have no confidence in the millers and therefore suspect opportunistic behavior by the millers. The perceived opportunistic behavior and associated power position of the millers is not conducive to strong cooperation between the actors in the chain. This perception often leads to acts of “counteropportunism” by growers. It is a clear indication of information asymmetry. Farmers in most cases are not well informed about the operations of the industry and the actual quality of the cane they deliver.

At every change of ownership along the value chain, competition occurs for returns between farmers and millers, thus resulting in negotiation of the “pricing of value added.” This concept involves the negotiation of the farmer’s cane input versus the miller’s manufacturing input. Cane growers complain of an unfair distribution of the sugar industry’s proceeds from sugar by-products. They argue that they are paid only on the basis of the cane they deliver, when in fact they are also entitled to the proceeds from by-products. Although the distribution of the industry’s proceeds to farmers and millers is based on an agreed formula, the formula allows farmers to obtain proceeds only from the resulting sugar output stream. Outputs containing residual sugar after mill processing, such as molasses and bagasse (fibrous remainder of cane after processing), are treated as the property of the mill. Bagasse is regarded as an unpriced fuel source, and the mills use it for the generation of mill steam and electricity.

Economically, if millers were to operate the whole industry without outgrowers, there would be no debate about the sharing of the proceeds, and essentially each stage in the value chain would be treated as a cost center. Similarly, if the whole industry was in the hands of the farmers, value-adding stages up to the marketing of sugar would be treated as cost centers. Therefore, farmers would like to have their value-added share priced during the transfer of ownership of the cane, using a payment formula instead of a distribution of the surplus after the sale of the product. Farmers consider this distribution of proceeds as unfair and regard millers as being opportunistic. By-products, for instance, have some economic value but are used or sold by millers without paying anything to the cane growers.

The challenges in the sugar industry can thus be summarized as improving mutual understanding of each participant’s goals and roles, avoiding the use of power to gain advantage, and ensuring smooth flows of cane and proceeds along the supply chain, as well as valuing the role of social capital in the exchange relationship.

The inherent conflicts in the sugar industry result from perceived opportunism and limited trust and cooperation between millers and cane growers, which in turn leads to poor performance by these farmers as a result of (1) perceived unfair pricing systems for sucrose, (2) perceived unfair value sharing of sugarcane by-products, (3) misunderstanding of rules and their enforcement in the industry, (4) lack of skills and information, and (5) conflicting objectives of cane growers and the millers.

#### **6.4 Trust as a Self-Enforcement Mechanism in Contractual Arrangements**

Agricultural contracts typically imply an agreement (written or oral, formal or informal) between a processing firm and an independent farmer to purchase the farmer's produce, and the terms of purchase are arranged in advance through the contract. These contracts can range from agreements that address nearly all contingencies (complete contracts) to simple, open-ended, informal agreements (incomplete or relational contracts). As argued above, the contracts (or rather the quota arrangements) in the sugar industry resemble a type of relational contract, because they are not verifiable by a third party and rely on the threat of termination to entice mutually satisfactory performance. For the exchange arrangement to work well for both actors, there is a need to rely on the good behavior of both and on social factors (such as trust) to enhance the success and sustainability of these types of contractual relationships.

Trust is considered to exist if one party believes that the other is honest or benevolent (Doney and Cannon 1997). Trust is the expectation that attenuates the suspicion that one party in the transaction will behave opportunistically (Gulati 1995). Thus if trust exists in a relational contract, the contracting parties will be convinced that they will not be victims of such behavior as adverse selection, moral hazard, hold-up, or any type of contractual hazard.

In Chapter 4 it was shown that the role of trust goes beyond just complementing incomplete contracts—it actually plays an effective role as an enforcement mechanism. It can be argued that the importance of law in contractual relations has been vastly overstated and that economic agents construct productive relationships mainly without reference to the legal system (Macneil 1985). Agents use a variety of purely private mechanisms, such as personal trust, calculative trust, reputation, and constructed mutual dependence. The main difference between relationship enforcement through legal institutions and through trust lies in the relative roles of trust and law in promoting cooperation (Deakin, Lane, and Wilkinson 1997).

Greif (1997) and Granovetter (1985) argue that relationships are embedded in a broader social structure. Therefore social or network relations affect the nature of interactions among traders and provide powerful enforcement mechanisms when a potential for dispute exists (Galanter 1974). Businesses rarely resort to legal remedies,

and even when they do, they find that contract law is often not interpreted according to accepted social principles and mores.

Several empirical studies suggest that the main factors influencing efficiency in the supply chain include informal elements (such as trust or norms that support exchange relations), irrespective of contractual obligations and authority relations (Cullen and Hickman 2001). Authority relations are those exerted throughout the supply chain by individuals who have superior information or power in the market. Teegen and Doh (2002) concluded that trusting relationships are perceived to promote alliance performance and that the presence of authority relations has a negative effect on alliance performance, which is further worsened by the absence of trust.

Milford (2002), in a study of the value chain in the Australian sugar industry, found that millers perceive the level of trust between millers and growers to be better than that perceived by growers and harvesters. Milford attributed the perception of lack of trust by growers and harvesters to the poor performance of the industry in the past, individualism on growers' part, and perceived power and information imbalances. Similarly a study by Medina-Munoz and Medina-Munoz (2002) on the role of trust in the success of interorganizational relationships found that all types of trust used in the analysis were positively and significantly associated with the success of the relationship between tour operators and accommodation companies.

Scholars in chain relationships increasingly acknowledge the role of such interpersonal factors as trust on interfirm outcomes. Larson (1992), studying the governance of exchange relationships, found that personal relationships and reputations, coupled with knowledge of the firm's skills and capabilities, shape the context of new exchanges between firms by reducing uncertainties about the motives and intentions of the other firm. Several studies suggest that interpersonal trust operates in an independent yet complementary manner to many organizational variables (Anderson and Narus 1990). For example, it facilitates relational processes, such as collaboration and relational norms, but has limited impact on performance (Moorman, Zaltman, and Deshpande 1992). However, empirical results suggest that interpersonal trust is capable of safeguarding joint competitive advantages against varying levels of ex post opportunism. Thus the adverse effect of suspicions of opportunism may be limited to less tangible relational outcomes, such as expectations of continuity and evaluations of an exchange counterpart.

## **6.5 Methodology**

Data collected in 2001 from a sample of 124 smallholder cane growers and representatives of farmers' associations who supply cane to the three sugar mills in Swaziland (Simunye, Ubombo, and Mhlume) were used in this study, following the theoretical

framework outlined in Chapter 3. Data were collected by means of personal interviews. Trust was measured using proxy variables in a structured four-point Likert-type scale questionnaire, in which 1 was equal to strongly disagree and 4 equal to strongly agree (Table 6.1 shows the items used to measure trust).

Because the data selection criterion was to increase validity in addition to obtaining a representative sample (Carmines and Zeller 1988), purposive sampling was used, because it ensures that certain important segments of the target population are represented. The power of purposive sampling lies in selecting information-rich cases for study, that is, those cases that provide a great deal of insight into the issues of central importance to the research (Patton 1990). The sample incorporated 10 percent of the members from those farmer associations whose members mainly farm on individual plots of land and not on communal land. A farmer was only interviewed if he or she had sold sugarcane to the mill at least once.

Globalization, technological advancement, and increased instability and uncertainty of the competitive arena and the environment in which organizations operate has led to increased complexity of organizations (Kanter 1989). In response to these complexities, organizations have explored the use of social structures in which they operate by forging interorganizational relationships. In the past, few studies focused on the social context of organizations. Hence researchers paid little attention to the role of relationships among organizations and the effect that the social environment has on the outcomes of these relationships. This case study is concerned with the relationship of the smallholder cane growers and millers in the Swaziland sugar industry supply chain. It attempts to bring to light the role of relational factors, such as trust, in the performance of agricultural supply chains. The challenge is to find suitable proxies to measure the concept of trust.

**Table 6.1 Survey items measuring trust**

Response number	Response
1	The mill's decisions are meant to benefit both growers and the mill
2	The mill treats cane growers with care
3	There is a mutual understanding between the mill and the cane growers
4	The mill can be relied upon for its technical ability
5	The mill sometimes withholds some information that may be useful to cane growers (R)
6	The mill cheats on farmers (R)
7	One has to monitor and double-check whatever information the mill gives to growers (R)
8	One sometimes thinks of quitting sugarcane farming (R)
9	The way farmers are treated by the mill makes one think of changing to another mill (R)

**Note:** R indicates reversed coding. (The responses to these items were reversed before the analysis was conducted; for example, responses 1 and 4 were switched, and 2 and 3 were also switched.)

## 6.6 Farmers' Trust and Perceptions of Their Relationships with Millers

As argued above, trust is generally regarded as an important asset in an exchange relationship among actors in the supply chain. Its importance is rooted in the belief that trust leads to desirable attitudes of commitment, promotes cooperation, and reduces transaction costs associated with monitoring and providing safeguards in an exchange relationship. So what does the case study show about the levels of trust between millers and growers in the Swaziland sugar industry?

Every transaction involves some element of trust. The fact that transactors agree to exchange shows that there is some level of trust, however minimal. Trust in relationships is important, as it enhances cooperation among parties. The results in Table 6.2 show that less than half of the respondents (46.8 percent) trust the millers. Trust in an exchange relationship is important because it reduces opportunistic behavior and promotes cooperation and commitment in the relationship. The results indicate that farmers were nearly evenly divided on the issue of trust (46.8 percent trust versus 42.7 percent who do not).

It is also worth noting that trust can be built in three ways in an exchange relationship:

- Institutionally based trust is minimal trust based on formal controls, such as rules, procedures, and regulations in the industry. These controls specify the patterns of behavior and penalties or sanctions to be applied in cases of nonconformance by both growers and millers.
- Characteristic-based trust is based on the reputation of millers and farmers. Reputation results from the collection and distribution of aggregate feedback on past behaviors of millers and farmers. Because farmers believe that millers are cheating them, they do not believe millers have a good reputation.
- Process-based trust results from the intensity of interaction between millers and farmers. This interaction only occurs at the mill group committees and through representatives at the SSA.

The provision of an extension service by the government and the SSA contribute to the farmers' belief that millers are not making an effort to assist or interact with them. The risk involved in the interaction process becomes important in enabling trust. However, in the case of smallholder farmers and millers, there is no risk of either party defaulting on the contract, because it would be uneconomic for farmers to change mills or switch to other crops. The millers own estates from which they

**Table 6.2** Sample cane growers' trust in millers

Trust level	Number of respondents	Percentage of respondents
No trust	53	42.7
Not sure	13	10.5
Trust	58	46.8
Total	124	100

supply their own cane to their mills. Hence they may not be affected by defection of some farmers. Therefore no risks are faced jointly by both parties, which hinders the development of trust. In addition, some farmers argue that millers refuse to employ farmers' representatives in laboratories, because they would ensure that farmers are not cheated during the testing of sucrose content. This argument clearly indicates limited trust by farmers in the millers.

Table 6.3 compares the perceptions of the cane growers who have some trust in the millers and those who do not trust the millers at all. The results indicate that almost all respondents are certain about their relationships with their millers. Nearly all respondents indicated that they are committed to their contractual relationships with their millers. The perception by farmers of lack of cooperation on the part of millers is evident in both types of farmers (84.9 and 62.0 percent, respectively, of those who do not and who do trust their millers). Both farmers who do not trust

**Table 6.3** Cane growers' trust in millers and their perceptions of their relationship

Perception of relationship	Respondents without trust (n = 53)	Respondents with trust (n = 71)	Total respondents (n = 124)
Uncertain of relationship	1 (1.9)	1 (1.4)	2 (1.6)
Certain of relationship	52 (98.1)	70 (98.6)	122 (98.4)
No commitment	2 (3.8)	0 (0)	2 (1.6)
Commitment	51 (96.2)	71 (100)	122 (98.4)
No cooperation	45 (84.9)	44 (62.0)	89 (71.8)
Cooperation	8 (15.1)	27 (38.0)	35 (28.2)
No relative dependence	23 (43.4)	16 (22.5)	39 (31.5)
Relative dependence	30 (56.6)	55 (77.5)	85 (68.5)
No Influence by miller	6 (11.3)	16 (22.5)	22 (17.7)
Influence by miller	47 (88.7)	55 (77.5)	102 (82.3)
No opportunistic behavior	5 (9.4)	28 (39.4)	33 (26.6)
Opportunistic behavior	48 (90.6)	43 (60.6)	91 (73.4)
No satisfaction	19 (35.8)	6 (8.5)	25 (20.2)
Satisfaction	34 (64.2)	65 (91.5)	99 (79.8)

**Note:** Numbers in parentheses are percentages.

**Table 6.4 Trust and profit making**

Perception of relationship	Respondents without trust ( <i>n</i> = 47)	Respondents with trust ( <i>n</i> = 69)	Total respondents ( <i>n</i> = 116)
Not making profit	13 (27.7)	4 (5.8)	17 (14.7)
Making profit	34 (72.3)	65 (94.2)	99 (85.3)

Note: Numbers in parentheses are percentages.

and those who do perceived their dependence on the millers (56.6 and 77.5 percent, respectively). The results also suggest that more than three-quarters of both types of farmers are influenced by millers. A majority of both types (90.6 percent of those who do not trust and 60.2 percent of those who do trust) perceives that millers exercise opportunistic behavior toward farmers. The majority of those who trust (91.5 percent) and those who do not trust millers (64.2 percent) are satisfied in their relationship with the millers. Satisfaction in this study was used as a proxy for performance.

These results show the importance of trust in complementing relational contracts. They reveal that farmers who trust their millers outperform those without trust. It is possible that those lacking trust develop an attitude toward millers and so cheat on their contract terms. For example, they may plant larger areas of land than specified in the contract, burn more cane than scheduled for delivery, and then report a runaway fire because they want to supply all their cane when the sucrose content is high.

It is a common phenomenon that the element of trust in relationships is linked to economic benefits. In most cases people who realize economic benefits in their relationships are likely to have developed trust in that relationship. Table 6.4 presents the perceptions of profit for the respondents who trust millers and those who do not. Nearly all farmers (94.2 percent) who trust the millers indicated that they make a profit from the sale of sugarcane. About three-quarters (72.3 percent) of those who do not trust the millers also indicated that they make a profit. Thus more of those who trust millers (compared to those who do not) perceive themselves to profit from sugarcane production, indicating the importance of trust in enhancing economic benefits.

## **6.7 Farmers' Trust and the Duration of Their Relationship with Millers**

The relationship between exchange partners is expected to improve with time. Thus the level of trust in a relationship is expected to be increase as the duration of the relationship increases, which is largely a result of repetitive engagements. However, the

**Table 6.5** Duration of relationship and farmers' trust in millers

Duration	Respondents without trust (n = 49)	Respondents with trust (n = 71)	Total respondents (n = 120)
Less than 10 years	19 (38.8)	41 (57.7)	60 (50.0)
More than 10 years	30 (61.2)	30 (42.3)	60 (50.0)

Note: Numbers in parentheses are percentages.

results in Table 6.5 show a negative relationship between the number of years in the exchange relationship and farmers' trust in their millers. More than half (57.7 percent) of the farmers who trust millers have farmed sugarcane for less than 10 years, whereas 61.2 percent of those who do not trust millers have more than 10 years in sugarcane farming. This result may reflect the poor relationships these farmers have experienced with the millers, which they regard as bad because they were not given all proceeds from the sugarcane, such as the value of the bagasse that is used as fuel by millers. The result suggests that trust changes over time, evolving through stages of development, build-up, and decline. Trust as an asset depreciates when one party senses opportunistic behavior on the part of the other party.

**6.8 Conclusions and Implications**

This study has shown that trust is important in enhancing the performance of members of a supply chain and hence that of the whole supply chain. Farmers who trusted their millers complied with the contract specifications because they do not anticipate cheating by the millers. This behavior may be associated with the good performance of these farmers. Farmers who do not trust their millers are outperformed by those who do.

Both smallholder cane growers and millers need to understand that trust cannot be created easily. It is not a simple factor that can be regarded as separate from other preconditions of an exchange. There is a need for (1) directness (honest and effective communication, and explanations and justifications for actions), (2) continuity (frequency of communication, taking time to explain, and investing time in the relationship), (3) multiplexity (mutual understanding of parties, roles, and responsibilities), (4) parity (fairness, impartiality, not acting opportunistically, integrity, good intentions, and honoring promises), and (5) common interests and diversity (shared values, purpose, and vision; setting expectations; successful handling of problems; and reconciliation). Overall, the smallholder cane growers and millers need to practice fairness, show integrity, ensure effective communication, and show commitment.

This study proposes that the development of relational contracts between supply chain participants embedded in a social system is an appropriate strategy for smallholder farmers. Relational contracts are more rewarding when undertaken in appropriate facilitating conditions. These conditions can be created by social control mechanisms, such as trust and cooperation. Such an environment would reduce the costs of transacting, because contracts characterized by trust and cooperation are self-enforcing. Hence there is no need for a third party, such as the courts.

## Notes

1. The Sugar Act (Government of Swaziland 1967) consists of 16 paragraphs. Paragraph 3 defines the SSA and its functions:

There is hereby established a body corporate, to be known as the Swaziland Sugar Association, which shall be capable of suing and being sued in its corporate name and of performing all such acts as prescribed from time to time in its constitution and as are necessary for, or incidental to, the carrying out of its functions under the Agreement and under this Act.

2. The Swaziland Sugar Industry Agreement is introduced in paragraph 6 of the Sugar Act of 1967 (Government of Swaziland 1967) and states that “The Agreement. . . Shall be binding upon all millers, growers, miller-cum-planters, refiners, and any other persons engaged in any aspect of the sugar industry.”

3. Growers in this case refers to cane-growing farmers and cum-mill planters.

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