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Factors Affecting Sustainability of Business Relationships in Ethiopia Banana Value Chain

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ABSTRACT— Among other fruits crops in Ethiopia, banana is the most commonly grown and most widely consumed fruit crop, and has a paramount contribution to the livelihood developments of all value chain actors. However, the country's banana market is not technically as well as economically efficient. Also, the value chain actors' vertical coordination or integration is very weak. Chain integration requires the value chain actors to establish and maintain close and sustainable business relationships with their partners. Thus, this paper developed a structural equation model to determine factors that affect the sustainability of business relationships in Ethiopia banana value. Business relationship sustainability conceptualized as a higher-order latent construct measured by relationship stability and quality. Compared to the other two chain stages, the sustainability of business relationships at the farmers-to-cooperative stage and retailers-to-wholesaler stage is good. The findings show that equal power distribution, personal bonds, and the departure of key people significantly determine the business relationship sustainability along the value chain. For the farmers-local collectors and retailers-wholesaler's stages, equal power distribution is the main determinant of business relationship sustainability, while for the farmers-cooperative stage competition, and at the local collectors-wholesalers level, a personal bond is the most important determinant. The result shows that to build sustainable business relationships, it needs to ensure equal power distribution, thereby establishing a strong personal bond between the business partners.

KEYWORDS: Banana, Ethiopia, Relationship Sustainability

1. INTRODUCTION

Among other fruits crops in Ethiopia, banana is the most commonly grown and most widely consumed fruit crops. According to Central Statistics Agency (CSA) (2016), banana accounted for 68.11% of the total fruits produced in the country in 2013/14 for the Private Peasant Holdings of Meher Season. It has been grown in both large-scale commercial farm and smallholder farmers (household level banana producers their land area varies from 0.25 to 4.00-ha) [2]. As of 2014/15, smallholder farmers contributed about 99.65% of total banana production in the country, with only 0.35% of the commercial farm contribution [3]. Banana also contributes significantly to the livelihood development of all the value chain actors' in the country [3,4]. Taking this huge proportion and contribution into account, Ethiopia's banana market is not yet developed and is surrounded by several constraints and problems. Market technical and economic efficiency remains very low [6]. The primary value chain actors (producers) are not committed (loyal) to their business partners, particularly local collectors, and contributes significantly to a weakening of value chain coordination [7]. The vertical integration among business partners is weak. Besides, the country's final consumers highly complain about the low quality and high price of bananas. The marketing governance structure between the actors in the value chain is a market relationship characterized by long-term relationships without collaboration, and they involve informal marketing relations. These all show that far less attention has been paid to the issue of how value chain actors can be collaborate/coordinate with each other to improve market efficiency. Given the increasing demands of

consumers for healthy and high-quality food, enhancing collaboration in the value chain is of particular importance in the food sector [8,9]. Now a day, in addition to each chain stage of the supply chain, the market success of the product increasingly depends on the collective strategies of involving businesses along the chain [10]. The collaboration of business partners in the value chain goes beyond just a long-term relationship, being interdependent, having common goals, working together to achieve them, and solving problems together (Barnes, 2004) as quoted in [11].

When they collaborate, they could respond to the market need through relating activities like production, processing, and marketing. Well-developed intra-enterprise relationships provide competitive advantages by reducing business uncertainty through ensuring a more stable order inflow and quality level, as well as enhancing accessibility of appropriate resources like raw materials, capital, and specialized skills [12]. It also helps to exploit opportunities and to meet challenges in the value chain [13]. While weak coordination among the value chain actors results in a high complexity of information flow, this makes the production and the marketing activities complex [6]. Chain integration requires the value chain actors to establish and maintain close and sustainable business relationships with their buyers/sellers [14]. The development of sustainable business relationships along the chain contributes a lot to achieve supply chain integration [13]. The sustainable business relationship within the value chain refers to long-lasting, stable, and mutually advantageous chain participant interaction and transaction [9]. Relationship sustainability built on mutual interests such as improving the value-added in the chain; enhancing risk management, and/or cost minimization to achieve the common goal of producing, processing, and distributing products or foods in the chain effectively, efficiently and consistently with market needs, so that it contributes a lot in enhancing the performance of the value chain [9,10]. With the above-mentioned facts, knowing the main driving forces of sustainable business relationships in Ethiopia banana value chain is relevant. Although some studies [8, 9,10,15,16] conducted in different countries with a similar issue of the current study, particularly in the pig-meat, cereal, beef, dairy, and manufacturing sectors, studies regarding business relationship sustainability in fruits sector and Ethiopia has been scarce so far. Besides, two of the above studies [9,10] closely similar to the current study considered two stages of the value chain (Producer-Processer, & processer-retailer), while this study analyzed it with four stages (Producer-local collector, Producer-cooperatives, local collector-wholesaler, and wholesaler-retailer). Furthermore, the above studies are conducted in developed countries, so that their applicability may not be equally important to developing countries. Moreover, Fischer et al. (2009a) considered only two aspects of effective communication (frequency and quality) and combined stability and quality aspects of the relationship in the model, while Reynolds et al. (2009) considered the two dimensions of sustainability of the relationship separately, but they modeled the quality aspect with only two indicators and did not incorporate disturbance term, however, to model the latent variable in Structural equation modeling (SEM) a minimum of three indicators per construct is required. Also, since these variables (quality and stability of relationship sustainability) are considered as first-order constructs, it predicts by the higher-order factor business relationship sustainability, so residual errors should be modeled [17]. Thus, this study aimed at assessing the determinants of sustainability in Ethiopia's banana value chain business relationship to fill the identified gaps and add to the existing literature, and it incorporates all four aspects of effective communication and modeling the disturbance term with three indicator variables for each. The organizations of the remaining parts of the paper are as follows: section 2 set out factors affecting the sustainability of business relationship and hypotheses development, section 3 states the research methodology; section 4 addresses the results and discussions; finally, section 5 presents the conclusions and recommendations.

2. Factors affecting sustainability of business relationship and hypotheses development

Effective Communication (EC): Mohr et al. (1996) defined communication as the 'glue' that holds a relationship together. Effective communication contributes to the establishment and advancement of business relationship sustainability [9,10]. As per Low and Mohr (2001), communication effectiveness measured with four dimensions those are; relevance, accuracy, reliability, and timeliness. Relevance (Rele): is measure how information is valuable and important for the decision-making process. Accuracy (Accu): is the clear and accurate formulation and dissemination of information. Reliability (Reli): is about the credibility of the information. Timeliness (Time): is the distribution of information in the time that enables the receiver to react properly [10]. Communication effectiveness increases the transparency of exchange and builds up trust between partners, thereby contributing to relationship sustainability [9].

H1: Effective communication positively influence business relationship sustainability

Personal Bond (PB): the importance of social ties like friendship for business relationship sustainability [25,26]. Relations within a supply chain may shape with regard, which expressed in the form of acknowledgment, consideration, respect, friendship, and sociability [22]. According to Granovetter (2005), social tie and structure affect economic outcomes like innovation, price, and productivity for three reasons. First, social relation affects information flow and quality; actors trust the people that they know as the source of information than those impersonal sources. Second, social relations are an essential source of rewards and punishment. Third, trust is always built on social ties.

H2: Strong personal bond positively influences business relationship sustainability

Key people leaving (KPL): key peoples are persons who possess explicit knowledge about business interaction and responsible for the relationship with important business partners. In a situation where the business relationship is established and maintained by one/few people/s in an organization, that relationship becomes dependent on those people [29,30]. The departure of key people is mostly a problem for many firms where proper chain arrangements have not been made [25]. According to Reynolds et al. (2009), in the agri-food sector, which is mainly characterized by an excessive share of small- and medium-sized enterprises, these "key people" may comprise company/farm owners who retire at this time, a successful continuance of business relations may be in trouble [10].

H3: The departure of key people from the organization negatively influence business relationship sustainability

Equal power distribution (EPD): equal power distribution expressed by behavioral economics, the notion is that "In decisions about personal gains, people not only consider their benefits but also those of others". If they recognize as benefits are distributed unfairly, they will always sacrifice the opportunity that increases their wealth if it hinders an increase in the wealth of others [Frank 2003 as cited in 9, 10]. In a business transaction where there are equal power distributions among business partners, the probability of equitable benefit sharing among them becomes increase. Hence, equal power distribution could be a prerequisite for economic agents to get involved in business relations and an essential factor for assessing the sustainability of a business relationship [9,13]. If a power imbalance occurs, the partners with high power will try to exploit their advantage, and the partner with low power will become dissatisfied with the relationship. Hence, imbalanced relationships between partners are characterized by low collaboration and greater conflict [26].

H4: Equal power distribution positively influence business relationship sustainability

Competition (Comptn): There are two sides to the effects of competition in business collaboration. The first one is, in the face of a high level of competition, business partners may be forced to collaborate to become more competitive as a newly formed partnership. In another way, stiff competition may also force partners to act more self-centered and opportunistically to secure survival in a highly demanding market, which means that they may prefer competitive strategy than that of cooperative one [13,32,33,34]. In this study context, the focus is on business to business relationships, and for the farmers and local collectors as a seller competition refers to production season, and for retailers, as a buyer, it refers to offseason.

H5: Competition influence business relationship sustainability

Besides, literature [9,10,13] shows as there is a high level of association between effective communication, equal power distribution between partners, the development of personal bonds and the departure of key people who establish the partnership, these all collectively considered and should be developed together to build sustainable business relationships.

3. Methodology

3.1 Research Design

The study conducted in Arba Minch Zuria and Merab Abaya districts, Arba Minch Town, Addis Ababa, and Hawassa city along the value chain. A total of 330 sample respondents were taken from all units of analysis. Particularly 250 smallholder farmers, 30 local collectors, 15 wholesalers, and 35 retailers are considered. All the sample respondents were selected using systematic sampling. After the data cleaned and edited, 305 questionnaires (from farmers 234, local collectors 27, wholesalers 13, and retailers 31) are valid for the analysis. However, due to the small sample size wholesalers did not incorporate in the SEM model. Thus, the SEM model performed with 292 observations. The data were collected through structured questionnaires, focus group discussions (FGD) with farmers, key informant interviews (KII) with local collectors, wholesalers, & retailers, and observations. The collected data analyzed using descriptive statistics (mean and univariate-ANOVA) and Structural Equation Modeling (SEM).

3.2 Measures for Variables

Business relationships sustainability (BRS) conceptualized as a higher-order construct composed of two components, which are relationship quality and stability [14]. Relationship quality (RQ) represents the static component of a relationship that measures the strengths of a business relationship [30], and it explained by mutual trust, satisfaction, and commitment. Relationship stability (RS) represents the dynamic aspects of relationship sustainability and explained by a mutual dependence, conflict-resolution capacity, and a positive collaboration history. These two aspects are interrelated and together form a sustainable relationship [9,10,13]. To measure variables under study, the items adopted from literature [8, 13, 16, 20,21,22]. The condition of all those items measured using a 5-point Likert scale (1= Strongly Disagree, 2=Disagree, 3= Neutral, 4=Agree, and 5= Strongly Agree) are used.

3.3 Mathematical Model

SEM has two components, the Measurement Model and the Structural Model. The measurement model is used to determine how well the observed (measured) variables combine to define underline hypothesized constructs (latent variables), while the structural model describes the hypothesized relationships among latent variables. The two models together form a full structural model [9,10,34,35,36].

Measurement Model

$$Relevant_i = \lambda_1 EC + \epsilon_1 \quad (1)$$
$$Reliability_i = \lambda_2 EC + \epsilon_2 \quad (2)$$
$$Timely_i = \lambda_3 \mathrm{EC} + \epsilon_3 \quad (3)$$
$$Accuracy_i = \lambda_4 \mathrm{EC} + \epsilon_4 \quad (4)$$
$$CR_i = \lambda_5 \mathrm{RS} + \varepsilon_1 \quad (5)$$
$$CH_i = \lambda_6 \mathrm{RS} + \varepsilon_2 \quad (6)$$
$$MD_i = \lambda_7 \mathrm{RS} + \varepsilon_3 \quad (7)$$
$$RSat_i = \lambda_8 \mathrm{RQ} + \varepsilon_4 \quad (8)$$
$$Comt_i = \lambda_9 \mathrm{RQ} + \varepsilon_5 \quad (9)$$
$$Trust_i = \lambda_{10} \mathrm{RQ} + \varepsilon_6 \quad (10)$$
$$RS_i = \beta_1 \mathrm{BRS} + \mathrm{d}_1 \quad (11)$$
$$RQ_i = \beta_2 \mathrm{BRS} + \mathrm{d}_2 \quad (12)$$

Structural Model

$$BRS_i = \Gamma \mathrm{EC}_i + \gamma_1 \mathrm{PB}_i + \gamma_2 \mathrm{KPL}_i + \gamma_3 \mathrm{EPD}_i + \gamma_4 \mathrm{Compt.}_i + \zeta \quad (13)$$

Where, λ represent the relationship between latent variables and its indicators, β-the effects of second order endogenous constructs (BRS) on relationship stability and quality, and εi, & Ϭ represent measurement error in latent endogenous, and exogenous variables respectively. γ, represents the effect of observed explanatory variables on dependent variable (BRS); ζ, represents disturbance term; Γ represents the effect of the latent exogenous variable (EC) on latent endogenous variable (BRS), and d is residual error. The i subscript represent the ith case in the sample.

3.4. Variable Validity & Reliability Checking, and Model Fit Measure

The data analyzed through AMOS 22 software with SPSS. To determine the extent to which the hypothesized model fits the observed data, and to estimate the parameter of the model variance, covariance, and the residual error variance of the observed variables, the pooled Higher-order Confirmatory factor analysis (CFA) performed with business relationship sustainability as higher-order factors, relationship stability and quality as a first-order construct and effective communication as a latent exogenous construct. For reliability, convergent and discriminant validity test, composite reliability (CR) (> 0.7,) Average variance Extracted (AVE) (> 0.5), and the square root of AVE (greater than the correlation value of the factors with other factors in the model) have been used respectively [37]. The model fitness assessed through χ2, which deals with a measure of misfit for the model to be fit, the p-value for χ2 should be larger than .05. However, χ2 criticized for its sensitivity to sample size, when the sample size is large the chi-square value is always statistically significant indicating that model fit is unacceptable, although the model may be a close fit to the observed data [37,38,39]. Thus, to reduce the influence of sample size on the chi-square value, a normed chi-square (χ2/df) < 5.0 also considered. Comparative Fit Index (CFI) value ≥0.95, Root Mean Square Error of Approximation (RMSEA) value ≤0.08, and Normed Fit Indices (NFI), with value, varies from 0 to1 (1 represents a perfect fit) are also used to measure the model fitness [15,16].

4. Result and discussion

4.1. Descriptive Statistics

As it can be seen from Table 2, the business relationship sustainability along the chain is weak with the mean

score (3.059, ± 1.112), the stability of the relationships between producers and cooperatives is relatively high with the mean value (3.468, ± 1.048), followed by retailers to wholesalers with mean value (3.424, ± 1.127), while, the relationship sustainability score for producers to local collectors is the lower one with the mean score (2.792, ± 1.092). These indicate that relationship quality and stability along the chain is low. To compare the levels of relationship sustainability along the chain stage, a between-groups one-way analysis of variance (univariate-ANOVA) was performed. The assumption of homogeneity of variance was tested and satisfied on Leven's F test, F (3,288) =0.816, p=0.486. The independent between-group ANOVA yields a statistically significant effect, F (3,288) =8.430, p=.000, $\eta 2$ =.081. Thus, the null hypothesis of no difference between the mean is rejected, and 8.1% of the variance in business relationships sustainability is accounted for chain stage. Besides, to evaluate the nature of the difference between the four means, Ficher's LSD post-hoc-test was performed. The result revealed that the business relationship sustainability for farmers-to-local collectors is statistically significantly different at 0.05 significance level with all other three groups, for farmers-to-cooperatives (-0.675 ± 0.157, p=0.000), local collectors-to-wholesalers (-0.551 ± 0.222, p=0.014), and retailers-to-wholesalers (-0.631 ± 0.209, p=0.003). This shows that the business relationship sustainability for farmers to local collectors is less sustainable about the mean value of (0.675, 0.551, & 0.631) than that of farmers-to-cooperatives, local collectors-to-wholesalers, and retailers-to- wholesalers respectively. There is no statistically significant difference between the other three groups.

Table 1: Relationship Sustainability levels of the value chain actors at each stage

S.No.	Chain stage	Mean	Std. Deviation	Number of observations
1.	Farmers-to-Local Collectors	2.792	1.092	170
2.	Farmers-to-Cooperatives	3.468	1.021	64
3.	Local collectors-to-Wholesalers	3.343	0.995	27
4.	Wholesalers-to-Retailers	3.424	1.127	31
5.	Over all	3.059	1.112	292

Source: Authors' estimation

Note: Index score calculated based on six individual components examined by multiple item questions, each one measured on a rating scale of five points 5 strongly agree to 1 strongly disagree.

4.2. Statistical Analysis through Structural Equation Modeling (SEM)

The multi-collinearity test for the formative measurement conducted through the linear regression test, and there is no multi-collinearity among the predictor variables as all the VIF values are less than the cutoff point 10. The normality test also carried out by evaluating the kurtosis value, and it is in an appropriate region. Thus, the data is normally distributed so that the co-variance based estimation approach is used to estimate the structural model using Maximum Likelihood estimation method. Confirmatory Factor analysis (CFA): higher-order confirmatory factor analysis had performed and, all the loadings are performed well with the loading values greater than 0.7. The composite reliability (CR) results are also above 0.7, the estimated values of average variance extracted (AVE) are greater than 0.5 and the square root of AVE (SQR AVE) for the variables is greater than the variable's correlation (EC & BRS) with other variables in the model (see Table 2). The model also satisfied all model fit indices (χ/df 1.614 and p=.015, GFI=0.967, NFI=0.981, TLI= 0.990, CFI=0.993, RMSEA= 0.046).

Table 2: Validity Test Result

Factors	CR	AVE	Correlation Matrix and SQR AVE	
			EC	BRS
EC	0.928	0.765		**0.841**
BRS	0.828	0.707	0.338	

Source: Authors' estimation

Note: shown in bold on the diagonal of Table 2 represent for the square root of AVE

4.3 Structural Model

The final model is well fitted for all fit indices with estimation result, the chi-square ($\chi 2$) test= 1.388 and P-value 0.018, Goodness of Fit Index (GFI) =0.956, Normed Fit Index (NFI) =0.967, the Tucker-Lewis index (TLI) =0.988, the comparative fit index (CFI) =0.991, and RMSEA value 0.037. The structural model runs for the complete data set and each value chain stages. All the constructs perform well in the measurement models, with all factor loadings above the required levels of 0.70. For the complete data set, equal power distribution (0.441), and personal bond (0.375), are the most important determinants positively influence business relationship sustainability followed by key people leaving (-0.167) have a significant negative impact. Even if it does not have a significant impact competition found to have a negative sign, this indicates that the types of business relationships along with the value chain actors' is competitive type in which partners act opportunistically than that of collaboration. The finding other than effective communication is consistent with the previous studies (Fischer, 2009; Fischer et al., 2009a; Reynolds et al., 2009). Unlike previous studies, effective communication does not have a significant impact on relationship sustainability in this study. This may be because of the actors' opportunistic behavior, hiding information, or misleading the seller/buyer by telling unreliable information becomes as normal and accepted by the actors as the rule of the game. The finding confirms three of the stated hypotheses H2, H3 & H4. Overall the three explanatory variables explain 50% of the variation in business relationship sustainability. Four of the five determinants have a significant positive association with one another along the value chain including for all group-specific computation, suggesting that the existence of equal power distribution develop a personal bond and facilitate effective communication, the development of personal bond also facilitate effective communication, and vice versa, also key people in the business relationship build a personal bond.

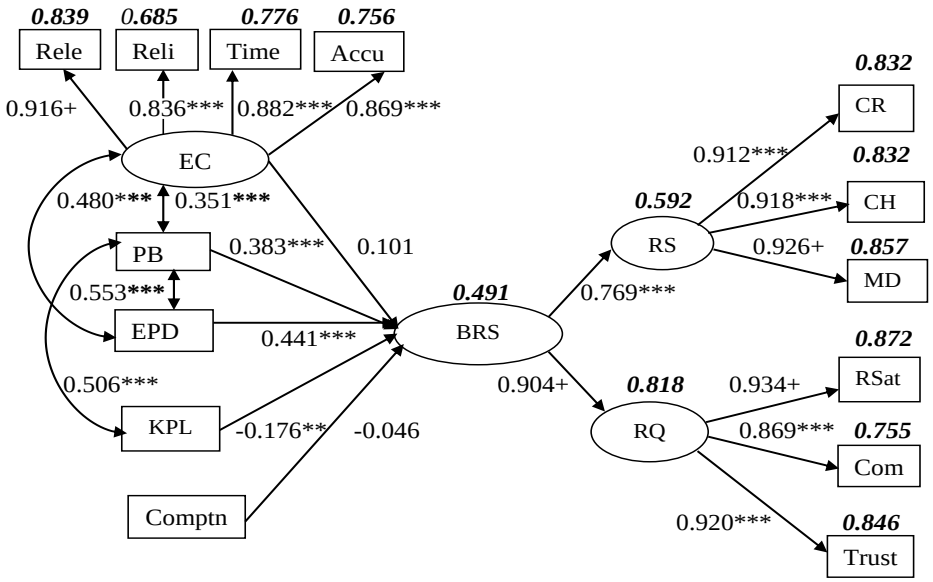

Figure 1: Standardized SEM estimation results for the Pooled model

Notes: numbers in regular characters are standardized estimated parameters, those in italics and bold are squared multiple correlations (R2). *** (**) statistically significantly different from zero at the 0.01 (0.05) significance level; + constrained parameter, therefore no significance level was computed.

The farmer-local collector stage (F-LC): (see table 5), equal power distribution (0.413), and personal bond (0.373) are the most important determinants of business relationship sustainability, followed by competition (-0.312), and the departure of key people (-0.169). The negative sign for competition maybe because of unequal power distribution between farmers and local collectors, in which local collectors possess more power, act opportunistically, do not keep their promise, and always abuse the farmers [9]. Consequently, it affects the development of strong personal bonds and the farmers' trust in them. Thus, in the face of high competition, due to the fear of not selling at the specified time since the product is highly perishable, and also to find a relatively better price, farmers tend to sell for the one who reaches them first and provide a relatively better price instead of stay with the same buyer. Moreover, farmers and local collectors involve in an informal partnership and the personal bond mostly established by the one who forms that partnership, mostly the head of the household, as a result, if that individual might leave (retire), the relationship would also be terminated. The four identified explanatory variables explain 56% of the variation in business relationship sustainability.

For the farmer-cooperative case (F-C): (see table 5), competition (0.435), and equal power distribution (0.361) and are the most important determinants of business relationship sustainability, followed by the personal bond (0.334). The departure of key people does have a significant impact on a sustainable relationship. It may be because the farmers have a formal contractual agreement with cooperatives. Furthermore, the positive sign for competition, unlike local collectors, maybe the cooperatives are always on the farmers' side (do not abuse them), always in a position to buy their banana, and they are collaborative with each other. The three explanatory variables identified explain 53% of the variation in business relationship sustainability. The significant association between a personal bond and equal power distribution indicates that a friendly relationship /personal bond/ between farmers and cooperative administrators will trigger an imbalanced distribution of power, resulting in low business relationship sustainability for those who have no friendly relationship with administrators. Though, in reality, as they are the farmers' representatives, they required to treat all of them equally. This could be because the administrators mostly work indefinitely. This may also be seen as the cause of most of the cooperatives' poor performance, as members complain that they do not benefit from the dividend and tend to resign from cooperative membership.

The local collector-wholesaler stage (LC-W): (see table 5), personal bond (0.585), and equal power distribution (0.467) are the most important determinants of business relationship sustainability, followed by the departure of key people (-0.375). Effective communication and competition do not have a significant impact, this could be because as local collectors reside in the production area, have a banana farm, and have friendly relationships with different parties, enabling them to access market information from their colleagues and with whom they have close relationships in central and regional markets, so that they might not value whether or not their buyer provides them timely, reliable, accurate and relevant information, also due to the type of market structure (oligopoly with a limited number of wholesalers) respectively. The three explanatory variables explain 78% of the variation in business relationship sustainability.

Table 3 Standardized SEM estimation results for the specific groups

Paths				F-LC	F-C	LC-W	R-W
Structural model	Effective communication	→	Relationship Sustainability	0.102	0.115	0.062	0.385***
	Personal Bond	→	Relationship Sustainability	0.373***	0.334***	0.585***	0.324**
	Equal power distribution	→	Relationship Sustainability	0.413***	0.361***	0.467***	0.397***
	Key people leaving	→	Relationship Sustainability	-0.169**	-0.099	-0.375**	-0.220
	Competition	→	Relationship Sustainability	-0.312***	0.435***	0.052	0.292**
Squared multiple correlations	R2 Relationship Sustainability			0.559	0.532	0.779	0.744
Measurement Mode	Relationship Stability	←	Relationship Sustainability	0.719***	0.754***	0.781***	0.869***
	Relationship quality	←	Relationship Sustainability	0.856+	0.848+	0.877+	0.984+
	Conflict Resolution	←	Relationship Stability	0.934***	0.834***	0.952***	0.827***
	Collaboration History	←	Relationship Stability	0.914***	0.937***	0.968***	0.927***
	Mutual Dependency	←	Relationship Stability	0.950+	0.888+	0.820+	0.878+
	Relationship Satisfaction	←	Relationship quality	0.943+	0.950+	0.993+	0.901+
	Commitment	←	Relationship quality	0.849***	0.874***	0.727***	0.828***
	Trust	←	Relationship quality	0.950***	0.935***	0.839***	0.836***
	Relevant	←	Effective communication	0.919+	0.920+	0.976+	0.840+
	Reliability	←	Effective communication	0.870***	0.805***	0.828***	0.720***
	Timeliness	←	Effective communication	0.915***	0.871***	0.770***	0.831***
	Accuracy	←	Effective communication	0.873***	0.866***	0.862***	0.820***
Covariance	Effective Communication	↔	Personal Bond	0.348***	0.348***	0.348***	0.348***
	Effective Communication	↔	Equal Power Distribution	0.334**	0.520**	0.944***	0.630**
	Personal Bond	↔	Key people leaving	0.330**	0.686**	0.998**	0.709**
	Personal Bond	↔	Equal Power Distribution	0.608***	0.495**	0.690**	0.697**
Communalities	R^2 Relationship Stability			0.517	0.569	0.610	0.755
	R^2 Relationship quality			0.733	0.719	0.770	0.967
	R^2 Conflict Resolution			0.872	0.695	0.937	0.770
	R^2 Collaboration History			0.836	0.879	0.906	0.683
	R2 Mutual Dependency			0.902	0.788	0.728	0.684
	R2 Relationship Satisfaction			0.889	0.903	0.986	0.813
	R2 Commitment			0.721	0.764	0.770	0.685

	R^2 Trust	0.903	0.874	0.703	0.698
	R^2 Relevant	0.844	0.847	0.952	0.706
	R^2 Reliability	0.758	0.649	0.686	0.519
	R^2 Timeliness	0.837	0.758	0.593	0.690
	R^2 Accuracy	0.762	0.750	0.743	0.672
Model fit	χ2/df, NFI, CFI, RSMEA	1.420, 0.882, 0.961, 0.038			

Notes: *** (**) statistically significantly different from zero at the 0.01 (0.05) significance level; + constrained parameter, therefore no significance level was computed.

At the retailer-wholesaler stage (R-W): (see table 5), equal power distribution (0.397) and, effective communication (.385), are the most important determinants of business relationship sustainability, followed by the personal bond (0.324), and competition (0.292). The departure of key people does not have a significant impact on business relationship sustainability. This may be attributed to the fact that business at a retail level often performed by all family members, may lead to personal relationships with the family members other than the household head only. The four identified explanatory variables explain 74% of the variation in retailer-wholesaler stage sustainability of the business relationship.

5. Conclusion and Recommendations

Sustainability of business relationships along the value chains other than farmers-cooperatives and retailers-wholesalers are weak. The actors do have competitive business interactions, which are characterized by the achievement of one partner is at the cost of the other one other than collaborative, opportunistic behavior is highly practiced thus, the game is the zero-sum game. Equal power distribution is the most important determinant of the business relationship sustainability along the chain, farmers-local collectors, and retailers-wholesaler's stages. While competition is the most important determinant at a farmers-cooperatives level, and personal bond is at the local collectors-wholesalers stage. Besides, the absence of equal power distribution triggers weak personal bonds, which in turn affects effective communication and vice versa. The departure of key people does not have a significant effect on business relationship sustainability in the business partnership with a formal contractual agreement and the business run family-wise. The service year of the cooperatives administrators' is extended to an indefinite period and affects the fair distribution of power. These all together contribute to weak relationships sustainability in the chain. The implication is that, to establish a sustainable business relationship, it needs to ensure equal distribution of power between the partners, thereby building a strong personal bond. Therefore, the actors' especially local collectors and wholesalers need to work in a way to assure a balanced distribution of power /avoid opportunistic behavior/ and build a friendly relationship thereby establishing a collaborative business relationship that enables them to extract more profit through joint value creation by combining their assets, knowledge, and capabilities with their partners. On the other hand, the country's government should work on issues that cause power asymmetry and weak personal bonds between business partners such as information asymmetry, lack of formal credit access, standardized grading system, and weight measurement control. It also needs to promote the importance of collaborative marketing to all the value chain actors as contrasted with that of competitive types of marketing. Besides, it also needs to design the way that the cooperative administrators have the term of service or maybe change every three to five years.

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