Determinants of Collaborative Negotiation Style on Agribusiness Performance of High Value Food Crop Products in Tanzania: Evidence from Middlemen in Arusha

Harrison Chonjo18, Deus Ngaruko19 and Timothy Lyanga20

Abstract
This paper explored the role of collaborative negotiation style in agribusiness food value addition in Tanzania with insights from Arusha city. The data were collected from a cross-sectional survey of 280 middlemen who trade on high value crops with perishable nature in Arusha main markets. A multiple regression analysis was conducted to determined main factors contributing to collaborative negotiation style but also on their disaggregated effect on agribusiness performance. The results showed that collaborative negotiation style through satisfaction, assertiveness, solution and communality had a positive effect on agribusiness performance on (p< 0.05). The model has high concern for self and high concern for others; this created a good environment for the perpetual transaction of the high value products since each of the negotiating part’s interest has been considered. The high concern for others as well as high self-concern has been founded to add positive performance on high value products and made it to be one of the important negotiation models with positive impact on the agribusiness performance. The model found to be suitable on high value food crops. The perishable nature of high value food crops made collaborative negotiation style being suitable as the risk are reduced by middlemen involvement on the value chain process.

Keywords: Collaborative negotiation style, agribusiness performance, high value food products, middlemen Tanzania

1.0 INTRODUCTION
High value crops include crops like non-traditional food crops such as, fruits, houseplants, flowers, and foliage as well as condiments and spice vegetables Tegu et al. (2005). Msafiri et al. (2021) articulated some of the high value crops that are grown in Tanzania including Arusha, Kilimanjaro, Morogoro, Iringa, Mbeya, Tanga, Ruvuma, Manyara and Zanzibar region such are vegetable, fruits, flowers and spices. Some of these horticulture products include baby corns, baby carrots, onions, flower seeds, roses, potatoes, avocados, cabbages, tomatoes, oranges, pineapples, banana and jackfruits. These products are said to have higher value than traditional cereal grain due to its nature of demand and

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supply. In this category of the crops it was literally argued that it improves the livelihood of the household Mangesho (2021).

Middlemen are important entrepreneurs who play an important role on the agribusiness sector performance. The social structure can affect negative entrepreneur’s behavior and outcomes Adobor (2020), the obstacles behind its performance differ from town and in urban areas, Khan et al. (2022). Ume et al. (2020) assessed agribusiness performance in Nigeria basing on micro, small, medium and large enterprises by using five performance indicators, (real annual sales, annual labor productivity growth, capacity utilization, percent of firms fixed assets and annual employment growth) micro and large firms were having poor average performance by 0.506 in large firms and 0.448 in micro firms. Dossou et al. (2023) contend that in Benin business environment and market barriers led to negative performance of entrepreneurs. Some studies have revealed different obstacles behind its performance, Echessa (2020) argued lack of expertise on agribusiness firm as one of the causatives of its poor performance. The expertise are important key players in agribusiness chain from the primary stage of production to the tertiary level of consumption. Other important players are multinational cooperation Sekine et al. (2009) state corporations Ginting et al. (2013), entrepreneurs Mohamed et al (2020), institutional development Azizah et al. (2020) agribusiness companies Piracón et al. (2022)

On the other hand, lack of collaboration with suppliers, increase in overall cost of searching for information, policing and searching for information, bargaining and decision making (Ngaruko 2022) along with lack of information sharing and not using technology, On the assessment of factors affecting agribusiness performance in Somali land, John (2022) found that; entrepreneurship training, use of mobile money transfer, prolonged drought, price fluctuation, greenhouse technology, capital and access to extension services were statistically significant at 5%.

On advocating the agribusiness performance some different scholars came up with findings on the area so as to improve the economic situation of the traders. According to Fani et al. (2021) measures like no collateral security should be given to young women in Cameroon, Incentives such as single-digit interest rates also should be provided with the intention to improve margin, improvement of variety of seed as well as advocating price control policy. Mwambungu (2019) assert on the importance of financial institution in providing credit to the SME’s on agribusiness industry. Along with the provision of the financial services, Lekule (2019) added on the importance of the use of information technology on improving the agribusiness sector as far as the technological use is concerned.
On the same study conducted by John (2022) some factors were not statistically significant as impediments of agribusiness performance. These included education, land size, farm inputs, and availability of farmers’ cooperative societies. Bajan et al. (2020) articulated differently from other scholars by looking the relation between carbon footprint environmental impacts with agribusiness performance. The case of global weather change in relation to economic activities contemporarily is a debatable global agenda. Marwa et al. (2021) found that through irrigation farming youth are benefiting contractual farm on French beans, and increase yield by 17%. This increase of yield accounts the increase of household income by 34% and 37.5%. Apart from the factors above, Nsumilinda (2021) explored government structure and its influence on performance; it was found that: the existing functional governance structure did not favor sustainable supply chain performance.

In negotiation process each part has different interest seek to advance from the opponent so as to have a joint action. In this process different styles are employed by negotiators jointly so as to solve problem between them. According to Dual Concern theory (Blake & Mouton, 1964; Deutsch, 1949) conflict management styles can be categorized into: compromising, forcing, yielding, avoiding and problem solving. Interest and conflict are motivation tools which drives parties to the negotiation. In these conflict management styles, the level of concern for self and concern for other determine negotiation styles during negotiation process.

Collaborative negotiation style is the type of style which has the end result of win/win situation for the both sides. Coburn, (2015), in this negotiation style, both self-concern and concern for others are higher. When both self-concern and concern for other is higher for the both sides of negotiation, negotiators tend to divide the pie equally and satisfying on both sides. This is mostly desired negotiation style to be used by traders in the market however other factors may affect the choice. Hanek (2021) contended that; collaborative negotiation style has been linked with satisfaction. Satisfaction is the end result of negotiation, at the end if the side win it is obviously satisfaction reflected as the result of the negotiation process. According to McGuire et al. (2022) collaborative negotiation style maps the integrative negotiation style, the integrative here can be reflected on consideration posed by each other to one another.

Not only on the above but also Kersten et al. (2022) argued that rational motivation system has a significant direct effect on social motivation (Collaborating negotiation style, competing negotiation style and accommodating negotiation style). Rational motivation propel negotiator a reason logically for either to choose certain negotiation style. In rational motivation as argued above many factors affects the choice of either to compete, collaborate, avoiding, accommodating or compromise. It is mostly used in trade and commerce however it’s not limited to that. Different negotiation styles are
employed in market during transaction cost. Each negotiation style opted by negotiators basing on the market environment.

Furthermore, middlemen in trade have been persisted from time to time however Sudrajat et al. (2021) argued that; socio-economic status defines the level of farmers to attach with them. In this scenario the prevailing social and economic status of the market determines whether farmers attach with middlemen or not. The availability of middlemen in the market in relation to the agribusiness performance has been articulated in different perspective.

Bett (2021) argued that, in order to increase fairness on pricing organization should eliminate middlemen in the production value chain. Nda et al. (2021) have the same idea of middlemen exploitation and suggest on provision of lower interest rates loans to the farmers and goods and services so that to alleviate them from middlemen exploitation. Muduli et al. (2022) and Kwesi et al. (2022) went contrary with Bett (2021), Nda et al. (2021) and Chouhan et al. (2022) by arguing that middlemen play a potential role of being a key distributor by distributing the poultry product by 50.5%, and are playing an important role in facilitating the trade. As far as this study is concerned the impact of middlemen’s negotiation style on agribusiness performance will be studied and analyzed, each in relation to its impact.

Collaborative negotiation style has also been articulated on different perspective. Chang (2011) argue on collaborative negotiation style, social behavior and personality was centered in his study. The Taiwanese and Philippines Chinese were related to each other. On his finding it was found that; the significant relationship between the two groups in collaborative negotiation model existed. The study findings didn’t go far from this study as collaborative also was found of great significant by .220 after linear regression model computation. In his study collaborative negotiation style was found that: the subcultural difference was insignificant ($t = -1.608, p > .05$). Gurieva, et al (2021) went contrary to that by founding that cooperation and competition have a negative significant relationship with conflict avoidance ($r = -0.407$ and $r = -0.448$, respectively).

Apart from that, Lowe (2020) on culture and business negotiation focusing on Chinese firms in Nigeria. He found that: Mixed style of compromise and collaborative was preferred and used by 51% of the total (120). The highest frequency use must be the results of trade performance. In negotiation model selection the negotiator uses the most performing style at the end of the negotiation. The less performing model of negotiation preferred less as it has negative impact in performance. Kang (2018) argue on purchasing portfolio management with sourcing negotiation styles. The results were that: Leverage items (low supply risk, high profit potential used 33% Strategic items (High supply risk and high profit potential) used 79% while Bottleneck items (High risk, Low profit) used 21%. This study founded medium use of collaboration
negotiation style. Kang et al. (2018) explored risk on supply and profit in variance of product. The researcher’s focus was on general perishable products. Kang et al. (2018) didn’t explain on the trade performance on the use of each negotiation style.

The general objective of this paper is to assess impact of middlemen negotiation styles on agribusiness performance in Tanzania. This paper specifically examined collaborative negotiation style on the agribusiness performance. In this study, the middlemen who trade on the supply nodes of high value products (Perishable goods) from farm to the market were interviewed. Arusha City being one of the most tourism destination and Kenya bordered region the circulation of high value crops it is of importance. The middlemen negotiation styles have potential impact on agribusiness performance as the end results of the process.

2.0 METHODOLOGY

In this study the researcher applied the cross-sectional survey, data were collected at a single point in time of study. Cost and time effectiveness were among the factors that attracted the application of cross-section survey. This study involved middlemen who trade on high value and perishable crops with shorter shelf life in which its circulation and its transaction needs an expert to spearhead to enhance quickly transaction such crops includes horticultural products. In this study five major vegetable markets in Arusha city council were involved in primary data collection. This study used simple random sampling technique to get the respondents from the selected sample size. A total number of 247 sample responded to the questionnaires, in this study the sample size comprised of suppliers, producers and market vendors (traders). On testing the reliability, the researcher used Cronbach’s Alpha (α) which is the most common internal consistency measure. Linear regression was used on predicting casual effects between the independent and dependent variable. The model is indicated in equation (1).

\[ ATP = f(Collaboration) \] .......................................................... 1

Collaboration negotiation style was had four predictors as shown on the equation two below

\[ CoLNS = f(Satisfaction, Goals, Solution, Communality) \] .............................. 2

The general equation for measuring impact of collaborative negotiation style on agribusiness performance was generated as the equation three below stipulates. This general equation was very essential on exploring the field results for analysis and interpretation.

\[ ATP = Satscore + Goalscore + Solscore, Commscore \] .............................. 3
Where
ATP = Agribusiness Trade Performance
Satscore = Satisfaction total score of collaborating negation style
Goalscore = Goals total score of the collaborating negotiation style
Solscore = Solution total score of collaborating negotiation style
Commscore = Communality total score of the collaborating negotiation style

The variables were measured on five-point Likert-type interval scale varying from “strongly disagree” to “strongly agree”. Table 1 below stipulates frequency distribution of the collaborative predictors. The estimation parameters were important on relating the range of variable use with its effects on agribusiness performance. The percentage accumulations of strongly agreed and agreed were as follows; mutual solution had 74.1%, Communality had 74.5%, Both satisfactions had 78.6% and lastly Assertiveness had 73.7%. Literally collaboration was highly used during negotiation process at the defined magnitude as table 1 below stipulated

<table>
<thead>
<tr>
<th>Table 1: Collaboration negotiation style frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual Solution</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Somehow</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Researcher 2022

3.0 RESULTS AND DISCUSSION
Collaborating negotiation style was guided by four variables which include: satisfaction, assertiveness, mutual solution and communality. The findings are hereby presented as per the variables where respondents were asked specific questions based on their knowledge on the variables.

Collaboration is the unique negotiation style which characterized with both; high self-concern and high concern for others. It is one of the win/win situation results which occur after negotiation. This is one of the hardest negotiation style to be used however seemed to have better results on trade performance. Fu et al (2011), Coburn (2015), Bao et al (2019). The aforementioned independent variables were intended to speculate the degree of self-concern and concern for others on the collaboration model

Score Interpretation
The table below illustrates the adaptation of the collaborating negotiation style on the three-estimation range; low range, medium range and high range. The
scores projected the frequent use of the negotiation style on agribusiness which was compared on its performance in relation to the other negotiation styles. The same score range were adopted in this study.

Collaboration negotiation style found to have 15.4 mean, 16.0 median, 16.0 mode and uniformity of minimum of 4 and maximum of 20 like the other variables as stipulated in the table above. On the side of the Total score it was found to have 3814.00. This score can be interpreted as per the table above; collaboration to be used on medium level. Like other variables collaboration negotiation style will be analyzed also in relation to the agribusiness performance.

As stipulated on table 2, the contribution of both satisfactions was found that; a unit increase of both satisfaction lead to average increase of total collaborating by .225. In this notion the more both parties to the negotiation both satisfied during the negotiation process, the more the parties increased collaboration. The satisfaction of the both sides (middlemen and farmers) leads to increase of the collaboration on both sides as both sides win the negotiation as the end results of the agreement.

Another independent variable used was assertiveness; the assertiveness was intended to explore the attainment of what the negotiators needed at the end of the agreement. The table 2below illustrates that; a unit increase of assertiveness lead to average increase of total collaborating by .573. Assertiveness was the highly impacted independent variable which higher causal effect in the model. Assertiveness is one of the best strategies which might be first foresighted by the negotiators before entering into negotiations table. As far as the end results are oriented, it is easier for the negotiation side to focusing on the targeted end results.

Mutual solution was the third independent variable used on exploring the total collaborating negotiation style. Mutual solution was intended to explore both side attainment of the solution. In this course of negotiation, both sides were explored to have both solutions desired at the end of the negotiation. It was found that; a unit increase of mutual solution leads to average increase of total collaborating by .225. As both sides reached mutual solution on the negotiated interest, the total collaborative was increasing as both sides win the negotiation on the table. Total collaboration was also computed in relation to the agribusiness performance. The end results were essential in exploring it causal effect on the trade performance as it is the main objective of this study. The table below illustrates the above explanation in summary. The table has the roots from the regression model 2.
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Harrison Chongoro, Deus Ngaruko and Timothy Lyanga

Table 2: Total Collaborating Negotiation Style Coefficients

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.62E-015</td>
<td>.035</td>
<td>.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both Satisfaction</td>
<td>.345</td>
<td>.024</td>
<td>.225</td>
<td>39.888</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Assertiveness</td>
<td>.678</td>
<td>.032</td>
<td>.573</td>
<td>16.835</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Mutual Solution</td>
<td>.345</td>
<td>.021</td>
<td>.225</td>
<td>26.062</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Communality</td>
<td>.340</td>
<td>.022</td>
<td>.223</td>
<td>25.220</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Total Collaborating

Source: Researcher 2021

The significant relationship between collaboration negotiation style and agribusiness performance was found. The percentage increase of total collaborative negotiation style led to the percentage increase of total agribusiness performance by .256. Collaboration negotiation style was found to be friendly on both middlemen and seller on the market. As far as stated earlier on collaboration negotiation style that; the model has higher level of self-concern and concern for others. In this notion the win/win environment were created on both middlemen and farmers.

Table 3: General Econometric Model from Equation 3

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>10.517</td>
<td>1.324</td>
<td>7.945</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Collaborating</td>
<td>.221</td>
<td>.045</td>
<td>.256</td>
<td>4.963</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Total ATP

Source: Researcher 2021

4.0 CONCLUSION AND RECOMMENDATIONS
This style was used on the medium level in reference to it computed total score of 3814.00. Most of the traders/negotiators have no intention of win/win situation during the negotiation process rather than having a competitive bargaining and acquiring self-win. On this study it was found that; when middlemen and seller collaborated during negotiation process, the long standing and lasting relationships are created between the partners in trade. The established strong relationship creates more frequency of trade between the partners and more margin generation by the both parties as they both win at the end of the agreement.

Collaborating negotiation style has showed positive impact on trade performance. The model has distinction features in the following manners; collaboration negotiation style has higher level of self-consideration and higher level of consideration for other. In this notion the negotiation process tends to go smoothly as each part of the negotiation is highly considered for the other part.
The highest level of consideration for each other during the negotiation process creates more rooms for possible future transaction among the transacting partners. This model has win-win motives at the end of negotiation.

For the transaction or agreement to be executed both sides of the negotiation have to reach to the comfort zone of satisfaction (Smith, 2013; Eden, 2014; Cassell, 2018). In this zone of comfort, the mindset has to agree on the settled conflict during the negotiation. For the settlement of the conflict to be potential significant the knowledge has to be at equilibrium (Vanderschraaf, 1998). The equilibrium point of knowledge creates the gap for the accommodation of new variant. The knowledge gap creates the chance of acquiring the new knowledge as knowledge is found out of knowledge. The knowledge equilibrium in this context implies the psychological state of mind whereby the mind is at a great chance of accepting the new information during the negotiation process. The knowledge equilibrium is contrary to Nash equilibrium game theory whereby each party has to focused on his or her strategy while other maintain theirs (Vanderschraaf, 1998).

For the accommodation of new knowledge to be reached the will power/determination ability has to be zero or freezing so as a new information/knowledge is accommodated. This procedure can be associated with a Nature Theory of negotiation. In any transaction so far each sides must win out of the negotiation when producer accept that he has to support the one from the sun as he has the water regardless of the magnitude of winning the knowledge gap has convinced him enough to accept the reality which was not there before. The same applies to the buyer/middlemen when he accepts the fact that his survive comes from the water side this will create the same environment of accommodation of the knowledge.

Collaborating negotiation style can be used on national, multinational and bilateral agreements. Collaboration negotiation style had good results whereby a unit the increase of the collaboration led to average increase agribusiness performance by .220. Collaborative negotiation style is highly recommended since it is the only model which has both high self-concern and high concern for others. This consideration environment creates a smooth atmosphere of agreement between transacting parties during negotiation process.

The application of this model saves time as well as benefiting both sides of the negotiation agreement. The application of this model does not gives/making negotiation process easier. The knowledge gap between the negotiating parties it is an important element to be founded earlier as possible for the agreement to be reached earlier. The knowledge gap is another important area of research which can be explored. The art of negotiation can be only the attainment of the knowledge gap. As long as the negotiation is the process of
convincing/persuading the attainment of knowledge gap could be an important area for the negotiators to understand when on the negotiating table.

In addition, collaborating negotiation style is favourable model of negotiation which can be used on perishable goods. The model provides the rooms for negotiation between parties to create environment for win/win situation. Furthermore, collaboration negotiation style can be favourable in conflict management, dispute settlement and in managing of diplomatic relations. As the model involves high self-concern and high concern for other it can be of the better result on leadership and management as well as on the interpersonal relationship.

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