



The Theory of Reasoned Action and The Prospects of Waqf-Muzar'ah-Supply Chain Model in Zanzibar

Issa Salim Moh'd¹

Corresponding email: issasmohd@hotmail.com

Article History

Received: December 2nd, 2022

Revised: December 15th, 2022

December 18th, 2022

January 18th, 2023

February 19th, 2023

Accepted: January 23rd, 2024

Abstract

The contribution of the agricultural sector to the development of Zanzibar Islands is considerable. This very important sector through the clove industry was the economic backbone upon which the government of Zanzibar relied for its foreign exchange and national revenue. However, since 1964, agricultural productivity particularly clove production has continually and significantly decreased due to many problems and challenges, especially financial ones. For example, financial intermediaries including banks, cooperatives and micro-enterprises provide micro-financing to the farmers but with high interest rates along with collateral requirements. The numerous programs, measures and policies adopted by the relevant parties to find solutions to the dwindling clove production have failed. This study has therefore proposed a *Waqf-Muzara'ah-Supply Chain model* (WMSCM) to address the challenges. The study has used Theory of Reasoned Action adopt the model. To the model, SPSS, AMOS and SEM have used accordingly. The results show that, both the attitude and subjective norm of the clove farmers in Zanzibar towards using the proposed model are statistically significant and have influence on their behavioral intention in using the model.

Keywords: Theory of Reasoned Action, SPSS, SEM, Waqf, Muzara'ah, Supply Chain Model.

JEL Classification: O13, G32, C20

Type of paper: Research Paper

@ IJIEF 2024 published by Universitas Muhammadiyah Yogyakarta, Indonesia

DOI:

<https://doi.org/10.18196/ijief.v7i1.15206>

Web:

<https://journal.umy.ac.id/index.php/ijief/article/view/15206>

Citation:

Moh'd, I. S. (2024). The Theory of Reasoned Action and The Prospects of Waqf-Muzar'ah-Supply Chain Model in Zanzibar. *International Journal of Islamic Economics and Finance (IJIEF)*, 7(1), 27-50. DOI: <https://doi.org/10.18196/ijief.v7i1.15206>

¹ Faculty of Business Administration, Muslim University of Morogoro, Tanzania

I. Introduction

The "Theory of Reasoned Action" (TRA) as noted by Ajzen (2012) and Chang (1998) was first established by Fishbein and Ajzen in 1975 and later revised by Ajzen and Fishbein in 1980 (Thaker, 2015). According to TRA as noted in Tsai et al. (2010), people are under volitional control making decisions according to rational and available systematic information. TRA is widely used model in psychology, whereby an individual's intention is determined by two theoretically distinct dimensions derived from attitude and subjective norm (Tsai et al., 2010). In TRA, the behavior intention of performing a particular behavior as explained by Fishbein and Ajzen, 1975 in Ramayah et al., (2009) is determined by a personal factor and a social factor. The personal factor is represented by attitude towards the behavior and the social factor is represented by subjective norm (Ramayah et al., 2009).

According to TRA, an individual's intention to perform a given behavior is the best predictor of that person's behavior. An intention represents a person's conscious decision to exert some effort to enact a given behavior. Intentions and behavior are believed to be strongly related to one another when measured at the same level of specificity (Weber et al., 2007).

Basically, this theory measures attitude, intention and behavior. TRA posits a series of relationships among a set of determinants leading to a particular behavior about the intention of using the developed model. For example, individuals with stronger intentions to engage in a behavior are more likely to engage in a behavior than are individuals with weaker intentions. Behavioral intention is directly influenced by an individual's general attitude toward a behavior and his subjective norm regarding the behavior. This theory uses two determinants to determine and measure peoples' behavioral intentions namely; attitude and subjective norm.

Attitude means a person's overall feeling of favorableness or unfavorableness toward the behavior. it involves a person's perceived social pressure exerted by most people who are important to him/her who are considering whether he/she should or should not carry out the behavior. In other words, attitude means overall evaluation of performing the behavior. In fact, many studies shows that, TRA remains an important model for measuring user's behavior (Ajzen, 2012; Guo & Feng, 2012; Lee, 2013; Levi et al., 2007; Ryu & Jang, 2006; Tsai et al., 2010).

The antecedent factors of attitude are a set of potential attitudinal beliefs that a particular behavior leads to a possible consequence and the consequence will be evaluated. In TRA, attitude is an important variable that predicts directly behavioral intention and indirectly the behavioral outcome (Fishbein & Azjen, 1795 in Ramayah et al., 2009). This could imply that, if the possible outcome or consequence resulted by a particular behavior seems beneficial to the individual, he or she may then intend to or participate in a particular behavior.

The second determinants of TRA for determining and measuring peoples' behavioral intentions is the subjective norm. Basically, subjective norm is related to a person's belief about whether significant others think that he or she should engage in a specific behavior. According to Weber et al., (2007) and Lee (2013), significant others in TRA are people whose opinions about the behavior in question are important to the person who is being asked to act or behave. Thaker (2015) asserts that, subjective norm can be summed by the normative beliefs, which is what specific people or group of people think the person should do, multiplied by the motivation to comply, or how much the person wishes to comply with the normative influence. A person' decision to behave in a particular manner is strongly influenced by the

people around him. These people may include his friends, co-workers, classmates, roommates, peer groups, community leaders, religious leaders, celebrities, inspiring and motivational people, public figures, employers, and other significant persons (Chang, 1998; Lee, 2013; Peslak et al., 2012). Hence, people seek information from others they admired, respected, or who are close to them (Tsai et al., 2010).

To sum up, both the attitude and subjective norm form the behavioral intention of a person. The TRA therefore, posits that, the person will have strong intention to performing the behavior if he evaluates it positively or favorably and believes that his important others would want him to perform that behavior.

Several studies have employed Statistical Package for Social Sciences (SPSS) to empirically test and analyze the "Theory of Reasoned Action". For example, Lee (2013) used SPSS to predict and understand undergraduate students' intentions to gamble in a Casino using TRA. Similarly, to explore social networking behavior and intention to use social networking (SN) using TRA, Peslak et al., (2012) used SPSS. In addition, Weber et al., (2007) tested the TRA as a comprehensive approach to understanding the proximal influences on organs donor's signing behavior using SPSS. Likewise, to test the applicability of TRA in predicting the intention to choose halal product among Malaysian consumers Lada et al., (2009) used SPSS.

Therefore, SPSS can be used for analytical and empirical testing of the TRA in many disciplines. Thus, the present study applies the same tool. The main objectives of this study are to develop an integrated Muzara'ah-Supply Chain Model (MSCM) for the clove industry in Zanzibar, to examine the relevance of the Theory of Reasoned Action and the proposed MSCM in overcoming financing challenges in the clove industry in Zanzibar, and to test the validity, applicability, acceptability and the prospects of the "MSCM" model developed for the clove industry in Zanzibar.

II. Literature Review

Hypotheses Development and Empirical Applications of The Theory of Reasoned Action (TRA)

The theory used in this study is the basis for the hypothesis development. A theoretical proposition as noted by Corbetta (2003) must be able to be broken down into specific hypothesis, whereas hypothesis means a proposition that implies a relationship between two or more concepts, which is located on a lower level of abstraction than the theory, and which enables the theory to be transformed into terms that can be tested empirically. In addition, the validity of a theory depends on whether it can be transformed into empirically testable hypothesis.

In this regard, the present study uses previous empirical studies that used TRA to facilitate the development of hypotheses that will be later empirically tested. The two TRA constructs namely; attitude and subjective norm will be discussed.

Attitude

Attitude is defined in the context of TRA as the person's own performance of the behavior, rather than his or her performance in general. The TRA as noted by Shumaila et al., (2010) is a general model and, as such, it does not specify the beliefs that are operative for a particular behavior. Thus, the researcher using the TRA must identify the beliefs that are salient for

participants concerning the behavior in question. Furthermore, the TRA basically deals with the prediction, rather than outcome of behaviors. Behavior in TRA is determined by behavioral intentions, this makes intention and behavior to be highly correlated. Many previous studies have documented the significant relationship between attitude and intention to do a particular behavior (Lada et al., 2009; Lee, 2013; Levi et al., 2007; Peslak et al., 2012; Ramayah et al., 2009; Ryu & Jang, 2006; Shumaila et al., 2010; Vermeir & Verbeke, 2006; Weber et al., 2007).

For example, based on the study conducted by Lada et al., (2009) which examined the intention of Malaysian consumers to choose halal products in Labuan, Malaysia. She findings from the 485 respondents among Malaysian in Labuan show that, the attitude is significantly positively related to the intention to choose and hence consume halal products.

Weber et al., (2007) examined the intention of organ donation in the US. Based from their study that collected 370 questionnaires from undergraduate students from a large mid-Atlantic university who were enrolled in multiple sections of introductory communication courses, Weber et al., (2007) found that, attitudes toward signing organ donor cards are positively related to individuals' intentions to sign them. Their findings are also consistent with study of Lee (2013).

Based on a sample of 227 derived from undergraduate students, who were enrolled in various communication courses, Lee (2013) examined the undergraduate students' intentions to Gamble in a Casino by using the Theory of Reasoned Action. Lee (2013), found that there is a significant relationship between attitude and intention among undergraduate students to media exposure, prior gambling experience, and level of gambling addiction contribute to the prediction of undergraduate students' casino gambling intentions.

Levi et al., (2007), in evaluating the applicability of the TRA to explain men's intentions to seek prostate cancer information, based from their 300 randomly selected African American respondents, found that there is a significant relationship between attitude and intention on prostate cancer information from physicians.

Peslak et al., (2012) studied the factors that influence the Social Networking Behavior using TRA. Based on the response from 196 respondents from several small northeast U.S. universities, they found that attitude toward social networking is positively associated with intention to use Social Networking (SN).

To investigate the factors influencing the tourist behavioral intentions to try local cuisine in a travel destination by using TRA, Ryu and Jang (2006) found that attitude and past behavior were significant predictors of tourist behavioral intentions to try local cuisine while in abroad. This finding is based from 366 responses of participants.

In terms of banking and trading, the theory of TRA has also been applied to test the attitude of traders in using modern means of transactions, where for example, e-commerce and online stock trading was examined by Ramayah et al., (2009). Ramayah et al., (2009) examined the intention of businessmen on online stock trading. Based from their structured questionnaires of about 144 potential investors in Malaysia, Ramayah et al., (2009) found that there is a significant positive relationship between attitude and the behavioral intention to use internet stock trading among Malaysian traders. The findings from this study are comparatively similar to the study conducted by Shumaila et al., (2010).

In their study on "Explaining Internet Banking Behavior", Shumaila et al., (2010), found that attitude is significantly positively related to behavioral intentions to predict actual use of internet banking. This result is based from the feedback of the group of internet users.

Vermeir and Verbeke (2006) used TRA to investigate the presumed gap between favorable attitude towards sustainable behavior and behavioral intention to purchase sustainable food products. Their finding shows that involvement with sustainability, certainty and perceived consumer effectiveness (PCE) have a significant positive impact on attitude towards buying sustainable dairy products, which in turn correlates strongly with intention to buy. This finding was based on a survey with a sample of 456 young consumers.

The TRA has also been used in the agricultural sector especially to determine the behavioral intention of farmers and their attitude (Ahnström et al., 2009; Garforth et al., 2004; Jerry J. Vaske & Donnelly, 1999; Lepp, 2007; Rehman et al., 2007; Tarkiainen & Sundqvist, 2005; Vermeir & Verbeke, 2006).

Ahnström et al. (2009) examined the perceptions about what is known about farmers and nature conservation actions in Europe, North America and Australia (New Zealand). Based from a review of literature, they found that on average, farmers believe that they are sustainable managers of land resources. They developed a model to show how attitudes of the farmers, the farming context and agri-environmental schemes interact and thus influence how the farming community affects nature and biodiversity.

Similarly, using TRA, Garforth et al., (2004) and Rehman et al., (2007) analyzed the technology adopters (farmers) and the role of their attitudes in adoption decisions in South West England. The findings from their studies show that attitudes towards technology have a strong influence on whether or not farmers intend to adopt it. They interviewed 75 farmers.

Based on a survey sample of 960 residents of Colorado, Jerry and Donnelly (1999) examined the attitude and behavior intentions of the Colorado residents on wildland preservation where agricultural activities take place. By using TRA, they found there is a positive relationship between attitude and wildland preservation.

By using TRA, Lepp (2007) investigated residents' attitudes towards tourism in Bigodi, Uganda. Based from a sample of 48 interviews, Lepp's study found that residents in Bigodi, Uganda have positive attitudes towards tourism. Positive attitudes result from resident's belief that tourism creates community development, improves agricultural markets, generates income, and finally, that tourism brings random good fortune.

Based from the above past empirical literature, the following hypothesis is established

H1: Attitude towards behavior of farmers positively affects their intention to use Waqf-Muzara'ah Supply Chain Model (WMSCM).

Subjective Norm

On one hand, subjective is defined as an individual's perceptions of social approval for performing a particular behavior (Cooke & DP, 2008). On the other hand, behavior is defined by Fishbein (2008) as "an action directed at a target, performed in a given context at a certain point in time". Most of the previous research using TRA assumed that attitude and subjective norm are independent (Tsai et al., 2010). Subjective norm involves a person's perceived social pressure from significant people to him/her while deciding whether he or she should or should

not engage in a given behavior. Significant people can be co-workers, bosses, directors, office bearers or leaders, whose opinions about the behavior in question are important to him or her when asked to ask a particular behavior (Weber et al., 2007 and Chang, 1998). Shumaila et al., (2010) notes that, to obtain an estimate of a subjective norm, each normative belief of an individual is first multiplied by motivation to comply with the referent and the cross-product is summed for all salient referents.

Generally, TRA does not specify the beliefs that can lead to a person to engage in a particular behavior. Thus, to use TRA successfully, the researcher must identify the beliefs that are salient for participants regarding the behavior under the study. Furthermore, TRA usually deals with the prediction, rather than outcome of behaviors.

Similarly compared to attitude, there is a considerable number of researches on subjective norms (Cooke & DP, 2008; Guo & Feng, 2012; Lada et al., 2009; Lee, 2013; Levi et al., 2007; Peslak et al., 2012; Ramayah et al., 2009; Ryu & Jang, 2006; Shumaila et al., 2010; Tsai et al., 2010; Weber et al., 2007).

For example, the study by Cooke and DP (2008) on the attendance at screening programs. Using TRA, Cooke and DP (2008) found that, there is a positive relationship between subjective norms and intention to attend screening programs especially for the non-invitation studies. Based from 266 respondents received by Guo and Feng (2012) on a understanding support for internet censorship in China using TRA. Guo and Feng (2012) found that there is a relationship between normative belief and subjective norms was significant.

In terms of IT there are four studies using TRA conducted by (Peslak et al., 2012; Ramayah et al., 2009; Rehman et al., 2007 and Shumaila et al., 2010). Peslak et al., (2012), had a sample of 196 students from northeast U.S. universities, (Peslak et al., (2012). They used TRA to empirically explore factors influencing the behavioral intention in using social networking. The findings of this study show that, there is a strong relationship between intention than subjective norm on using social networking sites (SN).

Based on a structured questionnaires that collected data from 144 potential Malaysian investors who are aware of Internet stock trading in Malaysia, Ramayah et al., (2009) found that, that attitude and subjective norm have a direct positive relationship towards behavioral intention to use Internet stock trading. Similarly, Rehman et al., (2007) by using TRA examined the factors that influence the uptake of new technologies on dairy farms in SW England. The findings of this study show the belief factor to be highly correlated with intention, that is, the greater the approval of the technology the greater the behavioral intention for its adoption by farmers. Further, by using TRA, Shumaila et al., (2010) evaluated the factor influencing internet banking consumer's behavior. Supported by a 435 sample from banking users, their results show that, there is a relationship between subjective norms and behavioral intention to use internet banking.

On the consumption of halal products in Malaysia especially Malaysian Muslims, the findings from the study conducted by Lada et al., (2009) reveal that, subjective norms significantly influences the consumers to choose halal products among Malaysian Muslims in Labuan.

In health related disciplines, using TRA, Levi et al., (2007) conducted a study to evaluate the applicability of the TRA in explaining men's intentions to seek prostate cancer information. The findings from this study reveal that, there was significant positive relationship between intenders to seek prostate information and their subjective norms. As such the study found that, Intenders were significantly more likely to indicate that their significant others such as

siblings and religious leaders wanted them to obtain information about prostate cancer from physicians than were nonintenders.

On the same note, using the TRA, Weber et al., (2007) on the intention to organ donor consent found that, those who chose to sign the card for donating organ after their death perceived donation as something that their reference group would encourage, and had stronger intentions to consent to signing a card. Hence, there is a significant positive relation between intention to donate organ and subjective norms. The findings of Ryu and Jang (2006) from a sample of 366 respondents from Midwestern University indicate the relationship between the subjective norms and the intention of tourists to try local cuisine while at abroad.

Lastly, on assessing the effect of trust belief and salesperson's expertise on consumer's intention to purchase nutraceuticals with a sample of 334 consumers using TRA, Tsai et al., (2010) found that the salesperson's expertise and subjective norm can affect the consumer's attitude to sales. In addition, they found that, people sought information from others they admired, respected, or who were close to them.

A few studies have documented the behavioral intentions and subjective norm in the agricultural sector. These works relate the subjective norm as an important element of TRA in determining intentions and subjective norms of the stakeholders especially farmers in the agricultural sector (Heong & Escalada, 1999; Silk et al., 2005).

For example, in Leyte province in the Philippines where is rice produced, by using TRA, Heong and Escalada (1999) investigated farmers' decisions in stem borer management. Based on sample of 402 questionnaires, they found that farmers spent an average of \$39/ha on insecticides believing that if they had not controlled an average loss of 1004 kg/ha would occur. They also found that perceived benefits from insecticides were directly related with farmers' insecticide use and perceived severity. Similarly, the study found that, high peer pressure on farmers' spray decisions influences perceived benefits from sprays, insecticide spending and spray frequency. They also used SPSS for their analysis.

Silk et al., (2005) used to TRA to examine subjective norms related to Genetically Modified (GM) foods as a theoretical strategy for audience segmentation. Based on a sample of 858 farmers², they found that there is a positive relationship between behavioral intention and subjective norm among farmers in Europe and America. Therefore, the second hypothesis developed will be:

H2: Subjective norm of farmers positively affects their intention to use Waqf-Muzara'ah-Supply Chain Model (WMSCM).

The Role of Intention in Islam

Intention in Islam is very important element even to one's decision on his own deeds. In other words, intention in Islam is a foundation for every action for which man seeks to please his Creator, Allah. Based on the Hadith of the Prophet Muhammad (s.w.a), which was narrated on the authority of Amirul Mu'minin, Abu Hafs 'Umar bin al-Khattab (ra) who said:

² Farmers were considered as an important referent group for shaping subjective norms associated with GM foods as farmers have been found to be the most credible sources of GM food risk information along with environmental groups. The farmers were some of the first individuals to gain information about GM foods because they have first-hand experience with GM seeds

"I heard the Messenger of Allah (ﷺ) say: "The reward of deeds depends upon the intentions and every person will get the reward according to what he has intended. So, whoever emigrated for worldly benefits or for a woman to marry, his emigration was for what he emigrated for." [Bukhari & Muslim]

This hadith sets the foundation principle for one's life. In order for any action to be accepted and rewarded by Allah, it must be done purely for His sake. In addition, Islam considers any act done purely for the intention of pleasing Allah as a worship. Moreover, for acts of worship to be acceptable to Allah and for a person to be rewarded for them, there are two conditions which must be met: The first condition, is that, the act of worship should be devoted to Allah Alone. In other words, worshipping Allah alone is that, a person should intend in all his words and deeds, both inward and outward, to seek the pleasure of Allah. Allah says in the Qur-an:

"And they were not commanded except to worship Allah, [being] sincere to Him in religion, inclining to truth, and to establish prayer and to give zakah. And that is the correct religion." [Qur-an, 98:5]

The second condition is that, the action should be in accordance with the only way which Allah has prescribed through the Prophet in the laws that he has brought. The prophet Muhammad (s.a.w) is reported to have said on the authority of the mother of the faithful, Aisha (ra), who said: The Messenger of Allah (ﷺ) said:

"He who innovates something in this matter of ours (i.e., Islam) that is not of it will have it rejected (by Allah)." [Bukhari & Muslim]. In another version in Muslim it reads: "He who does an act which we have not commanded, will have it rejected (by Allah)."

Thus, the concept of "purity of intention" is of a paramount importance in Islam. In other words, if these conditions are not met then, the deeds are unacceptable.

Many contemporary researchers on the other hand employ the "Theory of Reasoned Action" (TRA), mainly to examine the individual's intention towards any particular action that equally acknowledges the crucial role of intention. In light with this, the present study, therefore, employs TRA to determine behavioral intention of the WTC staff and farmers in using the model that is proposed.

The Muzara'ah Supply Chain Model

About 98% of the population in Zanzibar are Muslims of which the majority are farmers, who are poor with low education, lack modern farming skills and have no access to financing. Hence, this situation makes them illegible, risky and un-bankable class of the society in the eyes of most financial institutions (Olaniyi et al., 2014; Oladokun et al., 2015). The existing models in the clove industry have been largely ineffective towards offering these services which are very significant in the production of the cloves. Hence, there is a need to address this situation. On the other hand, institutions such as waqf, muzara'h financing and supply chain models can provide such services but at cost that can be hardly afforded by them (Oladokun et al., 2015; Olaniyi et al., 2014).

Many studies such as Abubakar (2014); Ahemd et al., (2015); Ahmed (2007); Ahmed et al., (2015); Ali (2014); Ambrose et al., (2015); Amuda et al. (2014); Babatunde et al., (2015); Haneef et al., (2014); Hasan and Abdullah (2008); Ismail and Possumah (2014); Mahamood and Rahman (2014); Mohammad (2008); Shirazi et al., (2015); Yahya (2008); Zuki (2012) and Bello (2010) have discussed the importance of waqf financing models for the different economic sectors such as microfinance, SMEs, health and education. For agriculture, however,

there are only a few works. These works include; works by Amuda et al., (2014); Babatunde et al., (2015) and Hasan and Abdullah (2008);. Basically, these works are prominent in the literature of waqf and agriculture. These works developed integrated models on waqf and agriculture and lack empirical validation.

The present study benefits from the models proposed by Oladokun et al., (2015) and Olaniyi et al., (2014). These models are chosen and adapted for the clove industry in Zanzibar, because the models were conceptualized into a framework and later validated empirically, were proposed for the agricultural sector, derived and integrated waqf, muzara'ah and supply components into one model, some of the components are also incorporated in the model proposed in this study.

However, the models of Olaniyi et al., (2014) and Oladokun et al., (2015) were specifically developed to restore Nigeria's position of self-sufficiency in food and as a net exporter of agricultural products whereas the present study adapts the model specifically for clove industry in Zanzibar. The present study seeks to propose a model called Waqf-Muzara'ah-Supply Chain Model (WMSCM). This model comprises three important elements namely: Waqf, Muzara'ah and Supply-Chain. In addition, farmers, market are added within these elements. These elements altogether make a complete proposed Waqf-Muzara'ah Supply Chain Model (WMSCM). The proposed model is expected to be adopted by WTC to finance the clove industry in Zanzibar³. Each component incorporated in this model is discussed in the subsequent sections.

Waqf Financing: Waqf and Trust Commission (WTC) in Zanzibar

The first component of the proposed model, MSCM is the Waqf financing model. Generally, many studies such as Cizacka (2013); Cizacka (2004); Hashim (2010); Kahf (2008); Mahat et al., (2015); Mohsin (2012); Shirazi et al., (2015); Babatunde et al., (2015); Amuda et al., (2014) and Yahya (2008) argue that waqf as a financing model offered many services that are today financed by the state or the government. The services include education, health care, national security, transportation facilities, the basic infrastructure, food, shelter, religious buildings such as mosques, social services like bridges and well, and providing ventures that created many jobs for many people sector (Magda, 2011) as previously discussed.

The component of Waqf in this model is represented by the WTC roles. In Zanzibar, waqf has been donated for different purposes, usually by individuals. For example, by means of enriching people's lives, providing safety nets and supporting social infrastructures for the poor in the Islands, providing agricultural lands for farming activities especially clove farming activities (Yahya 2008; Carmichael 1997; Hashim 2010). However, in 2007, the government of Zanzibar established a corporate body (WTC) responsible for administering waqf and trust properties and the estates of the deceased Muslims. This body also coordinates Islamic affairs including Hajj (Pilgrimage) activities, Zakat and Sadaqat (The Wakf and Trust Commission Act No. 2 of 2007). However, the model charges 10% on the loan offered on the basis of service charge. The 10% charged is considered disguise to interest (riba) in Islam.

Therefore, to address this issue, the role of WTC in the proposed model is explained in two ways. On one hand at first, the waqif (donor) gives land to farmers. This was done especially in the past where Arabs used to give their lands for farming purposes to their family members. On the other hand, WTC assumes the responsibilities of taking care of these farms. Therefore,

³ The WTC, a corporate body in Zanzibar which is responsible for waqf properties will be the main focus. The body also serves as a financing model in the clove industry in Zanzibar

the role of Waqf will be to finance, offer farming skills and expertise to farmers. WTC also provides logistics and acts as a middleman for farmers especially in market linkages. Thus, to raise fund for financing, providing farming skills and expertise, the WTC collects funds from both money as well as by issuing Waqf Certificates.⁴ After the fund is collected, the WTC manages and effectively utilizes the Waqf Fund. Further, the WTC is obliged to handle the funds productively and ensure that, the amount does not fall below the principal amount donated and collected. Thus, the staff of WTC have to be capable, well skilled in management so that to ensure the fund is not lost.

The WTC allocates the collected funds to assist farmers and its staff in providing financing facility to facilitate the acquisition of farming skills, and expertise through educational programs, scholarship, workshops, seminars, and education sharing sessions, agricultural trainings and the use of modern farming activities. This will enhance their human development and capacity. Thus, in order to ensure, these farmers use effectively the facility offered to them, the WTC monitors their performance continuously. Furthermore, the WTC model can provide farmers financial facilities for trainings and provide them with necessary farming skills.

Moreover, the revenue generated from Waqf institution will be used to further finance these farmers for their working capital, paying middlemen, agricultural tools and production equipment (refer to figure 3.5, the function of Muzara'ah financing, provision of logistics, expertise and information on micro and macro-economic data). The WTC can also provide financing farmers for their farming activities, the financing will basically come from either pooled fund from issuing certificates (cash waqf) or the waqf resources that are available at hand with the existing WTC.

Muzara'ah Financing

The second component proposed in the WMSCM model is Muzara'ah financing. Generally, there are many models in Islamic financing for real economic activities like agriculture. Normally, parties involved in these activities bear the risk and share the profit earned or loss incurred from the business. These modes of finance may take the form of participatory like Muzara'ah (State Bank of Pakistan, the Islamic Banking Department; Oladokun et al., 2015 and Olaniyi et al., 2014). The present study focuses on Muzara'ah mode of financing due to its suitability for agricultural financing hence clove farming. The word Muzara'h (sharecropping) comes from the Arabic word "zara'a" which means "crop" (verb). Muzara'ah, therefore, is a form of partnership between landlord and agricultural labour whereby the productive outcomes are shared according to agreed terms. At macro level, Muzara'ah would be, for example, the bank provides agricultural land and machinery to farmers who will then cultivate and offer all the farming activities. The output generated from the cultivation is shared between them in a pre-agreed proportion (Mohsin, 2005).

The nature of this mode of financing in fact addresses many challenges facing the clove industry in Zanzibar. For example, lack of financing and high cost of production. The Muzara'ah model provides financing to farmers with collateral free, sharing profit and loss. Thus, farmers now can afford the cost of production. In addition, the Muzara'ah financing can also provide logistics packages which is one of the challenges facing the clove industry in Zanzibar (refer to figure 3.5 on Muzara'ah, and logistics e.g. transportation services, etc). This in turn addresses the challenge of an extended supply chain. Furthermore, the Muzara'ah financing can also address the problem of private sector participation where the banks as private institutions can

⁴ It is not known if the WTC now collects waqf in form of cash money and certificates

now participate by sharing profit and loss with either WTC or directly with the farmers. Moreover, the Muzara'ah financing is a free interest financing hence addresses the problem of interest rates prevailing in the conventional financing models.

Muzara'ah finds its legitimacy from Prophet Muhammad (s. a. w) where lands seized from the conquered Khaybarite Jews were leased to them for equal sharing of the produce based on the principle of Muzara'h (Oladokun et al., 2015; Olaniyi et al., 2014). Muzara'ah has played a tremendous role in financing agricultural sector in the modern banking system for example; the State Bank of Pakistan (SBP) has a special scheme for agricultural activities, Sudanese Islamic Bank (Khaleefa, 1990) and Iranian banks (Sadr, 1999; Sadr et al., 2008 and Islamic Development Bank, 1993).⁵ As for Sudan, Muzara'ah financing has been successful to Sudanese farmers as they were able to realize unprecedented profit. It is worth noting that, a farmer in a SIB Muzara'ah financing gets 75% and 25% goes to the bank. The SIB provided agriculture financing amounting to 29.4%, 33.5%, 33.9% and 24.7% from 1406H (1986), 1407H (1987), 1308H (1988) and 1409H (1989) respectively. In addition, the bank also provided Muzara'ah financing but on the basis of Musharakah amounting to 47.59%, 60.9%, 54.7 and 52.1% and on the basis of Mudarabah financing amounting to 0.67%, 0.3% 0% and 0% in the same four years (Khaleefa, 1990).

According to Khaleefa (1990) during 1406H (1986) and 1407H (1987) SIB acquired fixed assets (tractors, discs, water pumps, etc.) for financing Musharakah in partnership with small farmers. In addition, 858 of Musharakah contracts were signed with small Sudanese farmers involving a cultivated area of 2,900 *feddans* of irrigated farms and 1,000 of rented farms. The SIB applies three methods in offering financing to farmers who apply for the Muzara'ah facility. The first method is where the SIB provides the capital and the farmer provides his/her farm and cultivates it. The second method is whereby SIB sets a three-party partnership between SIB, the farm owner and an agricultural expert whereby the SIB provides working capital, the farm owner provides the farm and all basic infrastructures, e.g. water, labour, electricity etc. and the expert overtakes management and supervision. And the third method applied is in crop production, whereby SIB owns its own machinery (e.g. tractors, water pumps etc.) and presents its contribution to the partnership in the form of a comprehensive package of inputs and services provided on real cost basis (Khaleefa, 1990).

However the Muzara'ah applied in the Islamic history is simple and the contemporary market as noted by Oladokun et al., (2015) and Olaniyi et al., (2014) is complex which needs logistics, expertise and knowledge of market mechanisms. Generally, farmers lack these essential elements to face the challenges of the contemporary agricultural activities. All these components are incorporated into an extended supply chain.

Supply Chain Model

The third component in the proposed model is the supply chain. Supply chain model is very important in the proposed model. The clove industry in Zanzibar lacks an extended supply chain model. One of the elements of an extended supply chain as discussed earlier which is missing in the clove industry in Zanzibar is that the product should represent customers' outstanding value for money. Thus, the corporation has to understand this need and how it

⁵ The Agriculture Bank of Iran (Bank Keshavarzi Iran) also provides Muzar'ah Financing on its Islamic Banking Services Window. In this bank, the bank furnishes the customer with pieces of farmland for some specified duration and related proceeds are shared. See, <http://www.bki.ir/en/Banking/Islamic-Banking>.

can serve it to its customers (Stock et al., 2000; Thomas et al., 1996; Vidal & Goetschalckx, 1997; Wilson, 2010; Mau, 2002). The following additional components are proposed.

Farmers

The farmers who have been equipped with necessary farming skills by Waqf resources and are given working capital and have access to financing to maintain and manage their farms, this will financially motivate them to engage in the production process especially farming activities. They will enter into a Muzara'ah contract with the Waqf and Trust Commission (WTC). The WTC on the other hand, can enter into another muzara'ah contract with private institution which could be a financial institution (bank). On one side, the WTC will provide financing, agricultural inputs such pesticides and fertilizers and farmers on the other side will contribute their labour and expertise which they have been equipped with prior financing by Waqf in a separate contract.

After all, all parties will share the crop output based on agreed ratio. In addition, the farmers in the proposed WMSCM model are also responsible for growing, weeding, watering, preserving, maintaining and managing their "farmlands". Farmers can sell the harvests and/or send them to the market. The market now could be the ZSTC or any private institution. Similarly, as a part of their partnership, the WTC or the financial institution will finance weeding, watering, and the whole husbandry process expenses because, the WTC and financial institution are now partnering with the farmers and do not act as their creditors. This also removes the tendency of dependency and irresponsibility. It also encourages the spirit of brotherhood and a mutual understanding among the parties.

Market

One of the features in the proposed extended Supply Chain Model is the linkage among the institutions. Thus, in the proposed Model farmers now have farmlands and are well equipped with necessary farming skills and expertise. In addition, they can access financing, fertilizers and pesticides. However, these farmers need to sell their clove to the relevant and reasonable market. In the case of the existing ZSTC model, farmers can sell their cloves but at low and unreasonable prices offered by this model. In practice, if other price options are given, these farmers will definitely opt for alternative markets for their cloves as discussed earlier.

One way of addressing this problem is by proposing relevant and viable features to be incorporated in the existing model. One of these features is incorporating private institutions in the proposed MSCM model to the existing model, WTC. Thus, the private institution in the proposed model will enter into a Muzara'ah contract either directly with farmers or with WTC. The WTC basically is on behalf of farmers. Private institution can be a financial institution or any institution that can provide and offer services such as financing farming activities, link farmers to reasonable markets where farmers can sell their produces at reasonable prices.

Basically, the contract entered between the parties is a partnership contract where each party is responsible for his negligence and all the parties share the profit earned and loss incurred according to the ratio prior agreed. Therefore, the harvest will be shared between the WTC, and/or private institution (assuming it is the financial institution) and the farmers based on the predetermined ratio. The traditional Muzara'ah financing model is simple and its role stops at this level.

But, in the proposed WMSCM, the private institution, e.g. bank is expected to extend its role since it is a partner with either WTC and/or farmers. Thus, the role of an extended supply chain

model becomes relevant and significant at this level. One of the key components of the Supply Chain Model is to satisfy customer and ensure the support of the product from the very first step and, to provide financing for agricultural inputs i.e. clove inputs like seeds, fertilizers, pesticides. Similarly, the financial institution supports to facilitate the efficient transportation of the ready clove to sell to the local ZSTC or private clove centres where cloves are sold.

The private institution can enter into a contract with the government to build warehouses for the cloves, clove packaging, build manufacturing industries for clove and clove stem, extracting oil, toothpaste, soaps, and other types of spices. In practice, the government alone cannot effectively do all these as it lacks expertise, skills and even financing. Moreover, the financial institution may also give micro and macro-economic data related to the clove industry and predict about the prices, demand of the crop i.e. marketing expertise and market dynamics. It does this because it is a partnership contract hence it is the partner with the farmers and no longer a debtor-creditor relationship. This partnership requires coordination and cooperation between the parties for their contract and is based on profit and loss sharing. The figure below shows the *modus operandi* of the proposed MSCM.

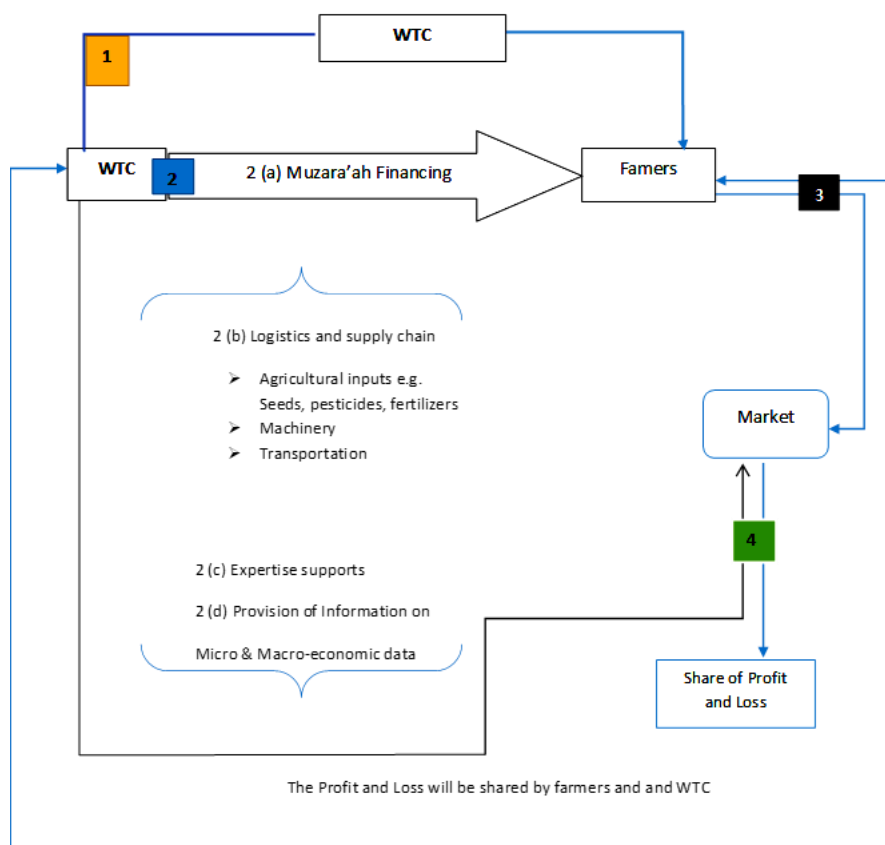


Figure 1: The Proposed Muzar'ah-Supply Chain Model (MSCM)⁶

⁶ This model is adapted from the model proposed by Oladokun et al. (2015) and Olaniyi et al. (2014)

Below are the illustrations of the above proposed WMSCM

The WTC provides necessary farming skills to farmers. Remember the farmland was given by Waqif (the donor). The WTC which is responsible for Waqf properties and partner with farmers will now enter into a Muza'arah contract with farmers. However, since the existing WTC financing model currently charges 10% as a service charge (this is prohibited in Islam as discussed earlier), in the proposed MSCM, the WTC will agree the percent of share of profit and loss in the contract. Further, the WTC, can also enter into a contract with any private institution (assuming it is a financial institution for example, bank, which according to the WTC constitution, the commission can assume that function). The contract may also be a Muzara'ah financing where on behalf of farmers can buy agricultural inputs for example, fertilizers, pesticides, and other harvesting materials. On the other hand, the farmers on their side contribute labour and farming expertise and skills necessary for clove cultivation.

Once the cloves have been harvested, they will be sent to the market for selling. The marker could be the existing ZSTC or in case of private market (i.e. in this case, the WTC or financial institution can engage with and link to other supporting markets)

After selling of the cloves, the profit and loss from the sales will be distributed between the parties involved in the contract according to the predetermined agreed ratio.

Benefits of the Proposed Model (WMSCM)

The proposed MSCM model is expected to produce several outcomes if successfully implemented. These outcomes include:

If applied successfully, the proposed WMSCM should allow farmers to improve their community welfare, assist them to access financing without interest, and acquire farming expertise and skills. Furthermore, supply chain proposed will act as a middleman, the Muzara'ah financing institution should be able to engage in searching for markets (buyers for the cloves) through extended supply chain models. Thus, more people will be attracted in agricultural activities (since agriculture is their main economic activity, i.e. clove farming). This will eventually increase farmers' production, will increase the level of employment rate and increase their income and improve their purchasing power. In turn, this will motivate them to plant more and hence produce significant clove, hence the production in the clove industry will also increase.

Moreover, the proposed MSCM model has participation features (it is a partnership model). Basically, the element of partnership will encourage the sense of belonging and the spirit of brotherhood between or among the parties, thereby reducing dependency on the interest mode of transactions (Oladokun et al., 2015; Olaniyi et al., 2014).

According to Human Development Report (2011), about 68% of the population in Zanzibar are poor people living below the poverty line standard of 1.25 USD a day whose life depends on the subsistence agricultural activities. If the proposed WMSCM model is applied successfully in the industry, these majority poor farmers will reduce their poverty, increase their employment rate, increase their income and purchasing power and consequently improve their socioeconomic life. Not only that but also the proposed model will have impacts on other economic sectors of the Zanzibar like trade, tourism, manufacturing industry, banking industry, financial institutions. Moreover, the cooperation and partnership between

WTC, farmers and private institution will have specific impacts on the economy of the Islands such as international relations, labour expertise, and increase in the exports.

III. Methodology

The process of data collection took five months on average. In the process of data collection, the drop-off approach was employed. This research used self-administered questionnaire survey to collect the data. The questionnaires were distributed by hand to the prospective respondents in their five villages (Tundauwa, Kilindi, Kuungeni, Chake-Chake and Wambaa) which are allocated in different localities of southern part of Pemba. To make this process simple, the researcher with the help of research assistants (the researcher had five research assistants, one from each village) approached the prospective respondents, introduced the purpose of the survey. Sometimes, the respondents were old in age, so the researcher had to explain and read line by line (question by question) until the respondents understood. Then, the researcher asked the respondents if they would assist him to fill in the questionnaires. Once the respondents agreed to participate, the researcher then handed over the designated questionnaire to the participating respondents. The researcher left the respondents alone and gave them ample time (some of the respondents took more than one month to answer). The researcher tried his best not to interfere the respondents in any way, so as to avoid any potential bias such as the respondents feel intimidated, threatened, or even influenced by the researcher. Once the questionnaire completed, the respondents then returned the questionnaires to the researcher. The researcher collected all the completed questionnaires distributed.

Regarding the response, a total of 250 questionnaires were distributed, 227 were fully-filled in, returned and collected. This makes 90.8% of the total returned questionnaires. This response is considered large enough and sufficient for statistical reliability, validity and analysis (Kline, 2011).

This study has employed Statistical Package for Social Science (SPSS) and Structural Equation Modeling (SEM) for data analysis purposes. Thus, the data were coded, tabulated and analysed using SPSS version 23 (AMOS 23 as an added module was also employed). In addition, to determine the behavioural intention (willingness) of the respondents to use the proposed model, factor analysis (FA) was conducted. Hence, the factor analysis included analysing relationship between attitude and subjective norm towards the behavioural intention of the respondents in using the proposed MSCM model. Structural Equation Modeling (SEM) was also used to study relations among latent variables to assess the acceptability of the proposed model. SEM is a very powerful, statistical multivariate analysis method used to examine relationship among the latent variables.

Generally, this study has adopted SEM because it has several advantages over other statistical multivariate techniques used in social science research. SEM provides ways to test the specific relationship among the observed and latent (no-observable) variables. Similarly, SEM considers several structural models (equations) simultaneously (Natchtigal et al., 2003). This study has three non-observable variables namely: attitude, subjective norm and behavioral intention and thirteen observed variables. The second reason for adopting SEM is because it allows theory testing even when experiments of other statistical techniques are not possible (Carvallo, 2014). And lastly, this study has applied SEM because it is the most favorable statistical technique research compared to other statistical techniques. For example, multiple regression analysis.

IV. Results and Discussions

The graph below shows the results of the structural equation modeling of the proposed Waqf-Muzara'ah-Supply Chain Model (WMSCM) for the clove industry in Zanzibar. Generally, the results indicate that, both attitude and subjective norm of the farmers affect their behavioral intention towards using the proposed model. TRA was used to test their behavioral intention. Therefore, next section discusses the results, findings of the SEM for the proposed model.

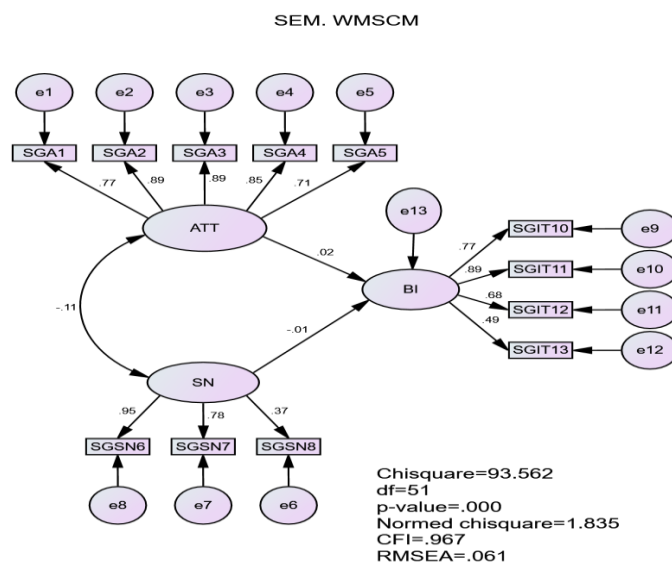


Figure 2: Structural Equation Modeling (SEM) of MSCM.

Research Hypothesis 1

Overall, this study has two hypotheses. These hypotheses have been tested through TRA model. The first hypothesis is:

H₁₀: Attitude towards behavior of farmers do not positively affect their intention to use Waqf-Muzara'ah Supply Chain Model (WMSCM).

The result as depicted in the figure 2 shows that, the attitude of the farmers towards their behavioral intention is 0.02. Based on this result where path loading is less than 0.05 which implies that, there is a significant relationship between the attitude of farmers and their behavioral intention to use the proposed model. Therefore, the author rejects the null hypothesis of this study and hence accepts the alternative hypothesis namely:

H₁₀: Attitude of farmers positively affects their behavioral intention to use the proposed model, Waqf-Muzara'ah Supply Chain Model (WMSCM).

Basically, attitude as suggested by Azjen (1795) in Ramayah et al., (2009) predicts directly the behavioral intention and indirectly the behavioral outcome. This would also explain the possible outcome or consequence of the farmers towards using the proposed WMSCM model. Hence, if the outcomes of using the proposed model will appear to be beneficial to the farmers, they may then intend to or participate in a behavior (using the proposed model). Therefore, based on this analysis, although the outcome of the model in Zanzibar have yet to

actualize, the behavioral intention (willingness of the farmers to use the proposed model) is positively affected by their intention to use it.

Furthermore, attitudes are disposition of individual to respond in favor or against a certain behavior. Attitude could be positive or negative depending on the individual's evaluation of the outcome of the behavior through indirect measures (Ajzen, 1975). Therefore, when the clove farmers have positive views about the outcome of the proposed model, the more favorable their attitudes towards their behavioral intention using the model. The opposite is also true if the clove farmers have negative views about the outcome of the proposed model, their attitudes towards their behavioral intention of using the proposed model will be negatively affected.

However, based on the results, the attitude of the clove farmers in Zanzibar positively affect their behavioral intention to use the proposed model. The positive relationship between the attitude and the behavioral intention of the clove farmers in Zanzibar of this study could be influenced by their positive thinking, belief, religious belief and trust on the positive outcome of using the proposed model. This is not surprising as the more positive thinking on the intention to use the proposed model, the more productivity of their produce and to address the prevailing challenges in the clove industry in the Islands. On the other hand, many studies such as (Lada et al., 2009; Weber et al., 2007; Peslak et al., 2012; Ramayah et al., 2009; Lee 2013; Levi et al., 2007; Shumaila et al., 2010; Jerry et al., 1999; Rehman et al., 2007; Garforth et al., 2004) have found similar results that attitude was an influential factor towards the behavioral intentions of the respondents to use the proposed models. Thus, consistent to the past studies, the findings from this study show that, there is a significant positive relationship between the attitudes of the farmers and their intentions towards using the proposed model.

Therefore, for the institutions that will be adopting this model particularly, WTC and ZSTC, it is important for them to find ways that would impart and instill this positive attitude towards using the proposed model. This can be achieved through creating convenient environment for farmers to acquire Waqf and Muzarah financing. The institutions can also establish programs that will be monitoring and supervising the beneficiaries and recipients of the services. In addition, as the model proposed, the adopting institutions should facilitate and provide accurate, relevant and clear information about the proposed model. This will build and improve the positive relationship of the attitudes and the intentions to use the model.

Research Hypothesis 2

The second hypothesis developed is:

H₂₀: Subjective norm of farmers affect their intention to use Waqf-Muzara'ah-Supply Chain Model (WMSCM).

According to the results as shown in the graph 2, the path loading is -0.01 which is less than the significance value of 0.05. Despite the fact that, the relationship between the subjective norm and the behavioral intention (willingness) of the farmers to use the proposed model is negative but there is a statistically significant relationship between the subjective norms of these clove farmers and their intention in using the model. Hence, the null hypothesis is rejected and the author accepts his alternative hypothesis which is:

H_{2a}: Subjective norm of farmers affects their intention to use Waqaf-Muzara'ah-Supply Chain Model (MSCM).

This result shows that, the subjective norms of the clove farmers in Zanzibar have statistically significant influence on their intention to use the proposed Waqaf- Muzara'ah-Supply Chain Model (WMSCM). The result indicates that, the subjective norms are statistically significantly but negatively influenced by their behavioral intention towards using the proposed model. Subjective norm is individual's perceptions (clove farmers' perception) on using the proposed (Cooke & DP, 2008). It involves farmers' perceived social pressure from significant people to them (family members, relatives, co-workers, friends and religious leaders) could have both positive and negative influence on their decision to use the proposed model (Weber et al., 2007) while deciding whether they should or should not engage in using the proposed model.

Similar to the farmers' belief from their social pressure can also explain the possible outcome or consequence of the farmers towards using the proposed model. Hence, if the outcomes of using the proposed model are perceived to be beneficial to them, they may intend to use the proposed model and if the outcomes are perceived to be negative they may have different decision. Therefore, based on this analysis, this result is not surprising as the outcomes of the model in Zanzibar have yet to actualize. Other factors that could contribute to this negative influence (result) are: lack of awareness of the proposed model. The model is still new, people have not much knowledge on the proposed model. Thus, according to this result subjective norms of the clove farmers have strong influence on their intention towards using the proposed model especially if adopted in the Islands. These findings are consistent with studies such as (Tsai et al., 2010; Cooke & DP, 2008; Guo & Feng, 2012; Ramayah et al., 2009; Peslak et al., 2012; Ryu & Jang, 2006; Silk et al., 2005). These past studies have shown that social pressure groups and their like, have significant impact and strong influence on their behavioral intentions to perform a required action.

Therefore, the results of present study for the subjective norm have similar direction of the past studies. As such, the intention to use WMSCM by the clove farmers is influenced by the social groups including family members, relatives and friends. Hence, it is highly recommended that, the adopting institutions of the proposed model especially the WTC, SZST and the relevant institutions to recognize the power of the subjective norms (social groups) and thus develop mechanism of disseminating information about MSCM to these groups. This could be done via radio stations, TV channels, national magazines and newspapers, streamers, flyers and posters, buntings, social media and platforms by providing the relevant information about the MSCM to these social groups, the farmers may likely enhance and support their intention to use the proposed model.

V. Conclusion and Recommendation

Conclusion

The results show that, both the attitude and subjective norm of the clove farmers in Zanzibar towards using the proposed WMSCM model are statistically significant and have influence on their behavioral intention in using the model. Thus, the proposed model using the Theory of Reasoned Action in Zanzibar Clove Industry is highly recommended and encouraged to be applied as there are indicators for its possibly positive applications and outputs. This model can not only be confined to clove industry in Zanzibar, but it can also be extended to other agricultural sectors such as maize, rice, sugar, flour, etc. in Tanzania, Africa or anywhere in the world.

Recommendation

The findings show that, the proposed WMSCM model was seen viable and alternative financing model to the existing models in the clove industry and hence was taken and recommended as promising in the Islands. Thus, it is expected that the proposed model would be able to address the problems facing the clove industry in Zanzibar. On other hand, majority opinions suggested that, the proposed model be applied and extended to other farming activities and should not only be confined to the clove industry. The last objective of this study was to test the validity, applicability, acceptability and the prospects of the "MSCM" model developed for the clove industry in Zanzibar. The findings from the survey show that, majority of the respondent farmers agreed that, the challenges facing the clove industry were still persistent and relevant to the industry. The findings also revealed that, despite the attempted measures to address the prevailing challenges in the industry, the problems still continue to constrain the industry. Further, the findings show that, the problems have mainly been due to the structural failures and weaknesses of the existing models used to finance the clove industry in Zanzibar.

Therefore, majority of the respondents from the survey recommended another model that could address these issues of which the proposed model was seen an alternative and viable to the industry. More specifically, the Theory of Reasoned Action was used to test the proposed model where three main constructs of the TRA were used (attitude and subjective norms and behavioral intention). These constructs were used to investigate the relationship towards the behavioral intention of the farmers to use the proposed model if adopted. The TRA was used to validate the model proposed. Therefore, with the results derived from the tests, it was revealed that, both the attitude and subjective norms of the TRA have significant relationship towards the behavioral intentions of the clove farmers to using the proposed model. Both personal and social factors (attitude and subjective norms) were found to have significant relationship. Thus, the religious belief and social groups of the respondents have significant relationship towards using the proposed model. Majority of them (individual farmers and through their significant others) believe that, the model is viable, relevant and could be an alternative to the industry especially in addressing the problems facing the industry. The respondents had also positive feedback on the significant economic contributions that could likely be resulted by the proposed model. In addition, according to the results derived through SEM from both exploratory and confirmatory factor analyses, it was revealed that, the model fits the industry and can be an alternative to the current failed models used to finance the industry. This study suggests the proposed WMSCM be taken for implementation.

Author Contributions

Conceptualization, Moh'd.; Methodology, Moh'd.; Investigation, Moh'd.; Analysis, Moh'd.; Original draft preparation, Moh'd.; and Review and editing, Moh'd.

Acknowledgement

-

Conflicts of Interest

The authors declare no conflict of interest.

References

- Abubakar, A.M. (2014). Towards an Effective Investment in Waqf Properties in Nigeria. *Proceeding of the International Conference on Masjid, Zakat & Waqf (IMAF 2014)*, (December 2014), pp.115–122.
- Ahmed, H. (2007). Waqf -Based Microfinance: Realizing The Social Role of Islamic Finance "Integrating Awqaf in the Islamic Financial Sector." *Integrating Awqaf in the Islamic Financial Sector*, pp.1–22.
- Ahmed, U. (2015). Examining the Perception of Muslim Community in Uganda on Waqf and its Role on Socio-Economic Development Kulliyah of Economics and Management Sciences , Communities of Research , Humanities and Quality of Life ., *Middle-East Journal of Scientific Research*, 23(6), pp.1173–1180.
- Ahnström, J. (2009). Farmers and nature conservation: What is known about attitudes, context factors and actions affecting conservation? *Renewable Agriculture and Food Systems*, 24(1), pp.38–47. Available at: http://www.journals.cambridge.org/abstract_S1742170508002391%5Cnhttp://dx.doi.org/10.1017/S1742170508002391.
- Ajzen, I. (2012). Martin Fishbein's Legacy: The Reasoned Action Approach. *The ANNALS of the American Academy of Political and Social Science*, 640(1), pp.11–27.
- Ali, K.M. (2014). Waqf for Poverty Alleviation: Challenges and Opportunities. *IRTI Working Paper Series*, pp.1–15.
- Ambrose, A.H.A.A., Aslam, M. & Hanafi, H. (2015). The Possible Role of Waqf in Ensuring a Sustainable Malaysian Federal Government Debt. *Procedia Economics and Finance*, 31(15), pp.333–345. Available at: <http://www.sciencedirect.com/science/article/pii/S2212567115012058>.
- Amuda J. Y., Azizan C. E., & Oladapo H. B. (2014). An agricultural Approach to the commercialization of Cash Waqf between Malaysia and Nigeria. *Journal of Advanced Management Science*, 2(4), pp.344–348. Available at: <http://www.joams.com/index.php?m=content&c=index&a=show&catid=39&id=167>.

- Amuda, Y.J. & Che, E.N.A. (2013). Alleviation of Poverty among OIC Countries through Sadaqat, Cash Waqf and Public Funding. *International Journal of Trade, Economics and Finance*, 4(6), pp.403–408. Available at: <http://www.ijtef.org/index.php?m=content&c=index&a=show&catid=48&id=606>.
- Bello, D.A. (2010). Poverty Alleviation through Zakah and Waqf Institutions: A Case for the Muslim Ummah in Ghana. *First National Muslim Summit*, (23191), pp.1–29.
- Chang, M.K. (1998). Predicting unethical behavior: A comparison of the theory of reasoned action and the theory of planned behavior. *Journal of Business Ethics*, 17, pp.1825–1834.
- Cizacka, M. (2013). A History of Philanthropic Foundations: the Islamic World From the Seventh Century To the Present. *Journal of Chemical Information and Modeling*, 53(9), pp.1689–1699.
- Cizacka, M. (2004). Ottoman Cash Waqfs Revisited : The Case of Bursa 1555- 1823. *Foundation for Science Technology and Civilization*, pp.1–20. Available at: <http://www.fstc.co.uk>.
- Cooke, R. & DP, F., (2008). How well do the theory of reasoned action and theory of planned behaviour predict intentions and attendance at screening programmes? A meta-analysis. *Psychology & Health*, 23(7), p.745–765 21p. Available at: <http://search.ebscohost.com/login.aspx?direct=true&db=jlh&AN=105675718&site=ehost-live>
- Garforth, C. (2004). Improving the Design of Knowledge Transfer Strategies By Understanding Farmer Attitudes and Behaviour 1. *Journal of Farm Management*, 12(1), pp.17–32.
- Guo, S. & Feng, G. (2012). Understanding Support for Internet Censorship in China: An Elaboration of the Theory of Reasoned Action. *Journal of Chinese Political Science*, 17(1), pp.33–52.
- Haneef, M.A. (2014). Integrated Waqf Based Islamic Microfinance Model (IWIMM) for Poverty Alleviation in OIC Member Countries. *Middle-East Journal of Scientific Research*, 19(2), pp.286–298.
- Hasan, Z. & Abdullah, M.N. (2008). The Investment of Waqf Land as An Instrument of Muslims' Economic Development in Malaysia. *The Dubai International Conference on Endowments' Investment, 4-6th February 2008*, pp.1–25.
- Hashim, A. (2010). Awqaf. p.12. Available at: http://philosophy.uonbi.ac.ke/sites/default/files/chss/arts/philosophy/hashim/Administration_of_waqf_institutions_in_the_Kenya_coast.pdf.
- Heong, K.L. & Escalada, M.M. (1999). Quantifying rice farmers' pest management decisions: Beliefs and subjective norms in stem borer control. *Crop Protection*, 18(5), pp.315–322.
- Ismail, A.G. & Possumah, B.T. (2014). *Waqf as Economic Matters but Being Left Out as Policy Tools*, Jeddah 21413, Kingdom of Saudi Arabia.
- Jerry J. Vaske & Donnelly, M.P. (1999). A Value-Attitude-Behavior Model Predicting Wildland

Preservation Voting Intentions. *Society & Natural Resources*, 12(6), pp.523–537.

Kahf, M. (2008). Financing the development of waqf property.pdf.

Khaleefa, M.U. (1990). Islamic banking in Sudan's rural sector. In *Financial Institutions Working in accordance with Shari'ah*. p. 30.

Lada, S., Tanakinjal, G.H. & Amin, H. (2009). Predicting intention to choose halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(1), pp.66–76.

Lee, H. S. (2013). Predicting and Understanding Undergraduate Students' Intentions to Gamble in a Casino Using an Extended Model of the Theory of Reasoned Action and the Theory of Planned Behavior. *Journal of Gambling Studies*, 29(2), pp.269–288. Available at: <http://link.springer.com/10.1007/s10899-012-9302-4>.

Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. *Tourism Management*, 28(3), pp.876–885.

Levi, R. (2007). The Theory of Reasoned Action and Intention to Seek Cancer Information. *American Journal of Health Behavior*, 31(2), pp.123–134.

Mahamood, S.M. & Rahman, A.A. (2014). Waqf Financing For Higher Education: Contemporary Funding Applications in Some Selected Countries. *Pelestarian Institusi Wakaf; Memperkasa Pendidikan Tinggi Negara*, pp.263–278.

Mahat, M.A., Jaaffar, M.Y. & Rasool, M.S.A. (2015). Potential of Micro-Waqf as an Inclusive Strategy for Development of a Nation. *Procedia Economics and Finance*, 31(15), pp.294–302. Available at: [http://dx.doi.org/10.1016/S2212-5671\(15\)01193-4](http://dx.doi.org/10.1016/S2212-5671(15)01193-4).

Mau, M. (2002). Supply Chain Management in Agriculture - Including Economics Aspects like Responsibility and Transparency. *Exploring Diversity in the European Agri-Food System*, (August), pp.28–31.

Mohammad, M.T.S. (2008). Sustaining the Means of Sustainability : the Need for Accepting Wakaf (Waqf) Assets in Malaysian Property Market. *The 14th Annual Conference of the Pacific Rim Real Estate Society*, pp.1–17.

Mohsin, M.I. (2012). Waqf-shares : new product to finance old waqf properties. *Bank and Bank Systems*, 7(2), pp.72–78.

Nachtigall, C. (2003). (Why) should we use SEM? Pros and cons of structural equation modeling. *Methods of Psychological Research*, 8(2), pp.1–22.

Oladokun, N.O., Larbani, M. & Mohammed, M.O. (2015). The problems facing the agricultural sector in Nigeria and the prospect of Muzara'ah and supply chain model. *Humanomics*, 31(3), pp.354–371.

Olaniyi, O.N. (2014). The Financing Problems Facing the Agricultural Sector in Nigeria and the Prospect of Muzara'ah-Supply Chain Model (MSCM). *Global Review of Islamic Economics and Business*, 2(1), pp.1–14.

- Peslak, A., Ceccucci, W. & Sendall, P. (2012). An Empirical Study of Social Networking Behavior Using Theory of Reasoned Action. *Journal of Information Systems Applied Research (JISAR)*, 5(3), pp.12–23.
- Ramayah, T. (2009). A decomposed theory of reasoned action to explain intention to use Internet stock trading among Malaysian investors. *Computers in Human Behavior*, 25(6), pp.1222–1230. Available at: <http://dx.doi.org/10.1016/j.chb.2009.06.007>.
- Rehman, T. (2007). Identifying and understanding factors influencing the uptake of new technologies on dairy farms in SW England using the theory of reasoned action. *Agricultural Systems*, 94(2), pp.281–293.
- Ryu, K. & Jang, S. (2006). Intention to Experience Local Cuisine in a Travel Destination: The Modified Theory of Reasoned Action. *Journal of Hospitality & Tourism Research*, 30(4), pp.507–516. Available at: <http://jht.sagepub.com/cgi/doi/10.1177/1096348006287163>.
- Shirazi, N.S., Obaidullah, M. & Haneef, M.A. (2015). *IRTI Working Paper Series Integration of Waqf and Islamic Microfinance for Poverty Reduction : Case of Pakistan*, Jeddah 21413, Kingdom of Saudi Arabia. Available at: <http://www.irti.org/English/Research/Documents/WP-1436-05.pdf>.
- Shumaila, Y., Foxall, G.R. & Pallister, J.G. (2010). Explaining internet banking behavior: Theory of reasoned action, theory of planned behavior, or technology acceptance model? *Journal of Applied Social Psychology*, 40(5), pp.1172–1202. Available at: <http://dx.doi.org/10.1111/j.1559-1816.2010.00615.x>.
- Silk, K.J., Weiner, J. & Parrott, R.L. (2005). Gene cuisine or Frankenfood? The theory of reasoned action as an audience segmentation strategy for messages about genetically modified foods. *Journal of health communication*, 10(8), pp.751–767. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/16316937>.
- Stock, G.N., Greis, N.P. & Kasarda, J.D. (2000). Enterprise logistics and supply chain structure: The role of fit. *Journal of Operations Management*, 18(5), pp.531–547.
- Tarkiainen, A. & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107, pp.808–822.
- Thomas, D.J. (1996). Coordinated supply chain management. *European Journal of Operational Research*, 94(1), pp.1–15.
- Tsai, M.T., Chin, C.-W. & Chen, C.C. (2010). The effect of trust belief and salesperson's expertise on consumer's intention to purchase nutraceuticals: Applying the theory of reasoned action. *Social Behavior and Personality: an international journal*, 38(41), pp.273–287.
- Vermeir, I. & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer "attitude - Behavioral intention" gap. *Journal of Agricultural and Environmental Ethics*, 19(2), pp.169–194.
- Vidal, C.J. & Goetschalckx, M. (1997). Strategic production-distribution models: A critical

review with emphasis on global supply chain models. *European Journal of Operational Research*, 98(96), pp.1–18.

Weber, K., Martin, M. M., Corrigan, M. (2007). Real donors, real consent: Testing the theory of reasoned action on organ donor consent. *Journal of Applied Social Psychology*, 37(10), 2435–2450. <https://doi.org/10.1111/j.1559-1816.2007.00265.x>

Wilson, W. (2010). Evolving Agricultural Supply Chains. In *A Symposium Sponsored by The Federal Reserve Bank of Kansas City*. p. 30.

Yahya, S.S. (2008). Financing social infrastructure and addressing poverty through wakf endowments: experience from Kenya and Tanzania. *Environment and Urbanization*, 20(2), pp.427–444.

Zuki, M.S.M. (2012). Waqf And Its Role In Socio- Economic Development. *ISRA International Journal of Islamic Finance*, 4(2), pp.173–178.