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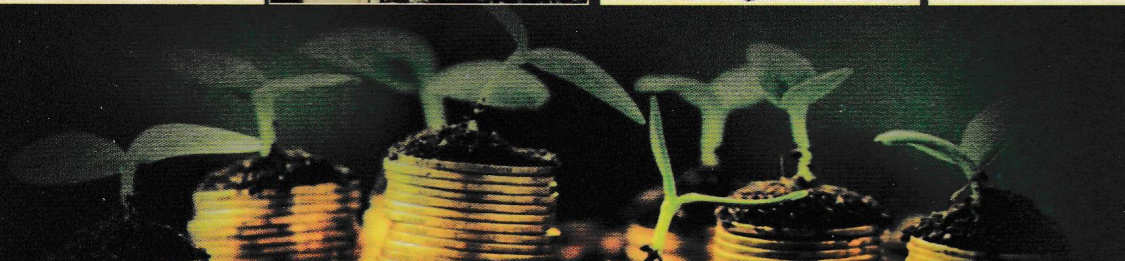
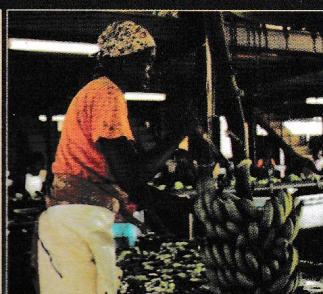
Presents

A SPECIALISED COMPENDIUM ON

**SUSTAINABLE AGRICULTURE IN
A DIVERSIFIED ECONOMY:
NIGERIA IN PERSPECTIVE**

EDITORS

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published in 2018.**

ISBN 978 – 0817 – 47 – 9

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Published in Nigeria by:

Molsyfem United Services, Port Harcourt.

CHAPTER 2

GROUP DYNAMICS AND SUSTAINABLE AGRIBUSINESS IN A DIVERSIFIED ECONOMY

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ABSTRACT

The paper examined the role of group dynamics in agribusiness group formation and its contribution to sustainable agricultural development. Analyses of factors that encourage agribusiness group formation, functions, classification were highlighted vis-à-vis relevant theories. Skills and attitude that agribusiness group leaders must possess were x-rayed as a prerequisite to survival of agribusiness group in a diversified economy. The use of Social Media was recommended as a means to strengthen agribusiness groups in performance of their unique role as one of the institutions capable of driving sustainable agricultural development.

Keywords: *Group Dynamics, Agribusiness, Diversification, Economy*

INTRODUCTION

Individual farm production and marketing are no longer a sustainable approach to agribusiness. With serious challenges facing today's agripreneurs, innovative production practices remain the only viable means of increasing profitability. In this wise, it is very risky to underestimate the importance of group membership in sustainable agricultural production. Lele *et al.* (2010) lists emerging challenges confronting agribusiness to include limited land and water availability, inability to meet up with changes in demand and consumption patterns; increasing urbanization and trade liberalization. This requires that sustainable means of organizing agricultural production including marketing becomes critical to optimizing production goals especially achieving reasonable profit margins. Bamard and van der Merwe (2016) view sustainability as the line of work that concentrates on economic and cultural benefits to organizations while adapting to a changing environment. Taking agricultural production as business has gone beyond the debate stage by the large population of people globally. This is the focus of agribusiness

which is the engine of sustainable agriculture as the economy tends towards diversification. In the same vein, the subsistence agriculture has given way to changes in the way agricultural business is done and the type of farmers that are actively found in the sector. This obviously suggests that new groups of farm actors in the business of agriculture are a reality. Agricultural group dynamics is important in understanding and building agrobusiness groups as institutions for achieving sustainable agriculture.

The challenges confronting agribusiness climate cannot be addressed by technology alone but requires farmers' access to a wide range of information, market intelligence as well as constructive engagement of relevant value chain actors. Swaminathan and Balan (2013) recommend that market intelligence can be better achieved using group dynamics approach. In other words, sustained profitable agribusiness is a function of a deep understanding of group dynamics and taking appropriate production decisions to maximize production goals. With globalization and changes in the means of production and communication, there are no longer rigid

prices for agricultural commodities. Diversification of the Nigerian economy requires that the oil sector which dominated our foreign exchange earnings must be supplemented with other sectors like agriculture which once the mainstay of the nation. If agriculture must play a significant role in development of the nation, value chains of crops and livestock must be developed. In achieving this, agricultural business groups must be formed and run to sustain new methods of production, marketing, storage and implementation of policies in agricultural sector. The result is that new commercial relationships among several value chain actors for inputs purchases and output sales must fully be understood and integrated into everyday production decisions by agribusiness managers. Inefficient markets are as a result of individual agricultural production method (Swaminathan and Balan, 2013). In essence, collective action specific to improving small holder benefits can guarantee benefits along the value chain enabling them gain market access and bargaining power (Ramdwar *et al.*, 2014). All these have useful links in sustaining agriculture and supporting diversification of the economy through multiple livelihoods that are non-agricultural based.

RELEVANCE OF AGRIBUSINESS GROUPS TO NATIONAL DEVELOPMENT

Agribusiness groups had always been in existence even in the most primitive societies for which they contribute to the sustainable agricultural development at such times. Ramdwar *et al.* (2013) reported that those farmers' groups are not new although most had existed for a short while and wound up. Liverpool and Winter-Nelson (2010) however, noted that social networks throughout rural communities have been shown to play an indirect role in increasing agricultural

productivity by knowledge sharing. Some reasons for which agribusiness groups should be encouraged to exist for real sustainable agricultural growth and to be achieved are outlined further. In developing and optimizing other sectors (diversification) to play active roles in economic activities, agribusiness groups can play multiple roles in facilitating business development beyond the immediate agricultural sector into sectors like non-food manufacturing. Services and transportation. A carefully planned diversified economy can be built on a sustainable agricultural sector if the following points are noted:

(a) The huge youthful population and others engaged in agribusiness can more easily access assistance and or services if in a group than individually.

(b) The active population engaged in agribusiness can overcome poverty, food shortage, powerlessness, unemployment and low self-esteem in the short term, it must be done collectively.

(c) Agribusiness groups can be powerful incubation/development structures for diffusion of skills in enterprise management and problem solving of socio-economic nature.

(d) Experience shows that development agencies, donor partners and government work more confidently with groups than individuals. Agribusiness groups should have formed and managed to provide institutional arrangements for interventions.

(e) Women who ordinarily will not be accessible are easily reached with development assistance from different sources when organized in groups. Gender issues if resolved can lead to sustainable agricultural development and a functionally working economy.

(f) Administrative cost of dealing with several individuals is drastically reduced if they are organized into groups. Privatization is central to economic diversification efficiency and sustainability.

(g) No meaningful sustainable agricultural development can occur without credit financing with efficient funds management. Default rate in revolving funds/loans is minimized through collective risk taking embedded in group lending

(h) Information exchange is critical to sustainable development and economic diversification, which requires channels. Agribusiness groups are a very vital channel of information in sustainable agricultural development and economic diversification. It is important to discuss factors that can lead to agribusiness group formation.

FACTORS THAT ENCOURAGE AGRIBUSINESS GROUP FORMATION

A number of factors will play vital role in the formation of agribusiness groups. However, these factors may not guarantee the functionality of the groups but are likely precursors of their emergence.

(i) **Physical Nearness** Poultry farmers for example who inhabit the same environment may come to be familiar with themselves to the extent that a farmers' group can emerge even if informally. The group members could be agribusiness managers living in villages, suburbs or even urban centre or actually operating their farms in contiguous neighborhoods. Physical Proximity can provide an excellent opportunity for the emergence of a wealth generating group due to frequency of interactions among

persons in similar or complementary agro-enterprises. It may be more profitable to exploit physical proximity for mutual economic gains than for unhealthy rivalry.

(ii) **Physical Attraction:** Today's agribusiness actors are young, agile, energetic and well-educated individuals who may find themselves attracted to each other physically which may result in emergence of a group. With changing economic climates and in renewed interest in agripreneurship, many youths have found agribusiness as a surer option for paid employment which is not even available.

(iii) **Expected Dividends of Group Membership:** The social exchange theory can be used to explain why agribusiness managers may decide to build a wealth generating group for which reciprocal benefits can be obtained by the individual and their coming together. Where government through relevant land/economic policies can allocate land to promote agriculture or reduce tariffs on agro-commodities to business owners, groups could be formed. Sadly, many groups have been formed just to fulfill conditions for accessing well intended assistance in the agricultural sector without any honest motives of investing or participating in agro-allied business. This is one of the primary failures of well-designed agricultural cum development policies which in most cases are implemented to service political patronage. In such cases the recruitment of members is not likely to be genuine agribusiness actors but

political surrogates who quickly assemble to receive their proverbial share of the 'National Cake'

- (iv) **Social Support Window:** As an insurance against risk in times of needs including unpredictable business failures, group formation may offer a reliable social support window. An important institutional structure that has provided safety nets for farmers in most societies is the existence of groups in some cases, very informal types. This explains the existence of rotational weeding groups among women in some parts of Nigeria as well as men groups who rotate farm preplanning operations among themselves. This innovative structure if sustained will lead to formation of several functional agribusiness groups along several commodities value chains in Nigeria. This is a requirement for sustainable agricultural development and a diversified economy.

DETERMINANTS OF SUCCESSFUL AGRIBUSINESS GROUPS

Although certain factors have been identified as being integral to agribusiness group formation, other factors will define the extent to which they are functional. Groups that will successfully generate wealth for its members and provide other benefits for which it was formed will be built on a number of factors. This should be an important ingredient for sustainable agriculture in a diversified economy. These factors are explained further.

- (i) **Open and voluntary membership:** Open membership entails that conditions are known to every prospective member

and follow the principles of right to association and guarantees enjoyment of fundamental human rights. A close group will likely shut out a wide array of skilled business managers who could add value to the group and this may limit interactions that may weaken the group. Barham and Chitemi (2009) opined that successful collective action initiatives are influenced by group asset configuration, composition and characteristics. Open and voluntary membership provides an opportunity of building a pool of skilled entrepreneurs for maximizing the gains of economic group membership.

- (ii) **Freedom from Political or Religious Interference:** If an agribusiness group is devoid of political or religious interference, it will likely be more functional. The more an economic group is influenced by religious and political activities, the likely it will derail from its objectives, lose focus, weakens and disintegrates. Agribusiness group leaders must separate religion and politics from business because they are built on different premises and usually may relate together as practiced in real life situations.
- (iii) **Common Purpose:** The existence of common feeling by all would-be members of the need to aggregate to achieve common objectives is integral. A single purpose will lead to ease of reaching consensus on goals' setting while divided or multiplicity of members' interest is a recipe for disintegration.

- (iv) **Information and Awareness:** *Information* of prospective members and awareness of agreed proposal is central to successful functioning of agribusiness groups.

PERSONAL SKILLS AND ATTITUDE OF LEADERS OF AGRIBUSINESS GROUP

There are certain indispensable attributes and skills for which leaders and indeed every member of a wealth generating group should possess. They are listed and discussed further.

- (i) **Capacity to exhibit Patience:** Human beings do not embrace change at the same rate or speed; it therefore behooves the leaders of a wealth generating group to exhibit the capacity to be patient with slow members of the organization. Foundation leaders of a group are advised not to hurry the process of group formation because it is a very critical and delicate phase of development. At this stage, depending on leaders' capacity for patience especially with the late majority, it could result in a "win all or lose all" situation.
- (ii) **Empathy:** This is a very important soft skill of every successful leader. It is the ability of a leader to see the world or situation from other peoples' perspective and this is never an easy skill but a prerequisite for effective agribusiness success. An efficient agribusiness group leader at any level is the one that is able to see the situation of other members in the group, understand another person's circumstance, feelings and motives. Agribusiness leaders who constantly have the capacity to connect with both

the intellect (content) and the emotions (what others feel) group members will build a functional and sustainable team. It is an important component of emotional intelligence required in running successful businesses.

- (iii) **Business Knowledge:** A good understanding of the basic skills of running a business should be a requirement for leading a group engaged in business. Quite often people get into agribusiness without obtaining the basic training that is necessary to achieve production goals. Value chain actors' understanding in agribusiness will help leaders of agribusiness group plan and implement future activities. Knowledge of production, determination of profits, marketing and managerial skills are supposed entry skills of leaders in a wealth generating group engaged in agribusiness.
- (iv) **Commitment:** Leaders of agribusiness group must work on strong conviction of the value of what they are doing and exhibit the irreversible willingness to do it well. Commitment has neither a substitute nor a middle ground. Commitment to group goals' attainment in generating wealth and meeting other social goals is the soul of any successful group.
- (i) **Respect:** The attitude of exhibiting the 'big guy' posture with other prospective members of the group will undermine the process of formation. Similarly, the "I know-it-all" tendency among foundation members and or leaders is the other side of the same coin and must be avoided if successful business groups are to be built.

(ii) **Honest and Integrity:** The twin attribute of honesty and integrity is a priceless asset for the realization of a strong, functional and result-oriented business group. Leaders must at all times be identified with honest deals and integrity in the formative and developed stages of economic interest groups. These traits are among the major determinants of interest group that will generate wealth and distribute dividends that are derivable from group membership among all stakeholders.

(iii) **Agribusiness Group Formation:** The process of bringing business people to form a group is not an easy one even though it is also not an impossible task. The desire to maximize profit and achieve several economic goals of production requires innovation in the entire organization of the production process. Group formation, its structure and functions, is in itself an innovation in accelerating agribusiness development. Schult *et al.* (2011) posits that the space for innovation (which includes formation and running an economic production group) is entrenched in, and constituted by the dynamics between socio-cultural, biophysical, economic, political and legal subsystems in which it must operate. Critical to the formation of agribusiness group by entrepreneurs is the voluntary action that must be a guiding principle for all members. It is also noteworthy to state that group formation that may guarantee sustainability must begin with rule formulation and enforcement with clearly defined purposes. Gender dimension and perspectives must be

equally entrenched at the outset to optimize their impact on efficiency and effectiveness in collective actions. Increase production in sorghum from 21 - 50 metric tons among farmers in Kenya have been attributed to innovations in partnership which leveraged on group dynamics benefits (Kavoi, Kamau and Mwangi, 2016). Bartle (2010) suggested a three prong meeting that can identify agribusiness managers and result in group formation to include: (i) approaching local councilors and elders with proposed groups mission (ii) discussing with community members the mission, intended actions, nature of group and form (structure) to be formed (iii) interaction with interested community members (men and women) who are willing to participate in the group.

(iv) **Structure of Agribusiness Group:** Group structure is concerned with the pattern of relationships among members that hold the group together. This is fundamental to the realization of groups mutually agreed goals. Agribusiness group structure is strongly influenced by size, roles, norms and cohesiveness which are discussed further.

(v) **Group Size:** Smaller groups may be easier to manage than larger ones. However, two agribusinesses or a very large number may decide to organize themselves into a group. Experience shows that small groups of to ten persons provide a greater opportunity for participation and increases interactions which makes it more effective and functional. Suffice to say

that large groups are strongly associated with waste of precious time (an important resource in agribusiness) in trying to select members to play their role in other to minimize exclusion. Evidence abound that group size encourages both participation and result in satisfaction. Greater group cohesion is experienced among a six-member group through interaction and participation compared to when the number increases beyond 10 or 12. Agribusiness group should be built to engender strong group cohesion to optimize the benefits of group formation.

- (vi) **Group Roles:** It is common to observe predetermined roles assigned to members when the group is informal. For every role, specific responsibilities and duties are attached. As the needs of a group arise, emergent
- (vii) roles naturally become more assertive by expressing themselves; as more

progress is made, emergent roles become replaced by assigned roles. Generally, group roles can either be work, maintenance or blocking roles. Work roles are primarily task-oriented activities designed to achieve group's goals (reached through consensus). The initiator; clarifier, summarizer and reality tester are specific work roles in a group (formal or informal). A tabular display of specific work roles and content are represented in Table 2.

- (viii) **Maintenance Roles:** These are social-emotional activities that help members maintain their involvement in the group and raise their personal commitment to the group they have voluntarily agreed to belong. The different types of maintenance roles and their content are presented in Table 3.

TABLE 2: CONTENT OF SPECIFIC WORK ROLES IN A GROUP

Work Role	Content
1 Initiator	Defines problem, proposes action and suggests procedures
2 Informer	Findings facts and giving advice or opinions
3 Clarifies	Interpret ideas, define terms, and clarify issues for the group
4 Summarizes	Restate suggestions, offer decisions, and come to conclusions for the group
5 Reality tester	Analyze ideas and test the ideas in real situation

TABLE 3: CONTENT OF SPECIFIC MAINTENANCE ROLE IN A GROUP

Maintenance Role	Content
2 Harmonizer	Reduces tension in the group
3 Gate keeper	Keeps communication channels open and makes suggestions that encourages participants
4 Consensustester	Ask if group is nearing a decision and set possible conclusions
5 Encourager	Are friendly, warm and responsive to other group members.
6 Compromiser	Modifying decisions, offer compromises and admitting errors.

(ix) **Blocking Roles:** As the name suggests these are activities that ultimately disrupt the group. Some examples of this type of role is where an individual or a few group members dominant discussions, verbally attack other group members, distract group meetings with trivial or unnecessary humour. Blockers usually resist group ideas; disagree with group members

for personal reasons which they sometimes may not disclose. Effort must always be made to reduce role ambiguity in an agribusiness group since it has serious implications on profit margins, image of the business and overall survival of the group. Role ambiguity refers to discrepancy between the role sent and received as illustration in Figure 1.

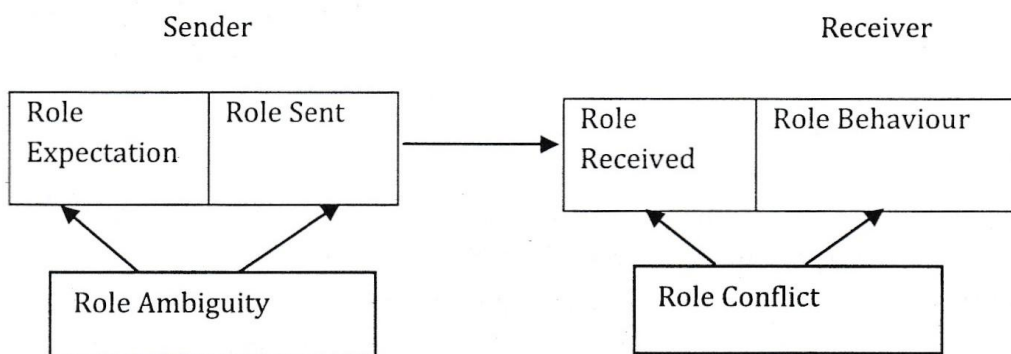


Figure 1: shows distinction and relationship between role ambiguity and role conflict which are important issues in group dynamics

Commitment: Leaders of agripreneural business group must work on a strong conviction of the value of what they are doing and exhibit the irreversible willingness to do well.

Respect: The attitude of exhibiting the “big guy” posture to the other “less privileged” prospective or actual members of the group will undermine the process of formation. Similarly, the I “know-it-all” tendency among foundation members is the other side of the

same coin and must be avoided for progressive group development.

Honesty and Integrity: A twin attributes which acts as a fixed asset in the realization of a strong agribusiness group are honesty and integrity. Leaders must at all times be identified with honest deals and integrity in the formation of group that will generate and equitably distribute the dividends derivable from group membership among all stakeholders.

AGRIPRENEURS' GROUP FORMATION

Getting a group started is not easy but not impossible. Group formation, its structure and function is in itself an innovation to accelerate agribusiness development. Schut *et al.* (2011) is of the opinion that the space for innovation (which includes formation and running an economic group production) is entrenched in, and constituted by the dynamics between social-cultural, biophysical, economic, political and legal subsystems must operate.

Critical to the formation of agribusiness group by entrepreneurs is the voluntary action that must be the guiding principles of all members. It is noteworthy to state that the group formation involving rules formulation and enforcement with clearly spelt out purposes. Gender perspective has to be entrenched at the outset to optimize their impact on efficiency and effectiveness in collective actions.

Increased production and marketing in sorghum from 21 metric tons among farmers in Kenya have been attributed to innovation in partnership which leverages on group dynamics benefits (Kavoi, Kamau and Mwangi, 2016). Bartle (2010) suggests a thrice prong meeting that can identify farmers and result in group formation to include:

- (i) approaching local councilors and elders with proposed groups' mission
- (ii) meeting with community members to fully discuss mission, intended actions, nature of group and the form (structure)
- (iii) meeting with interested members (men and women) of the community interested and willing to participate. At this stage names, address, ages current economic activities and levels of operation are well documented.

AGRIBUSINESS GROUP FUNCTIONS

If agribusiness managers with like minds come together, a group would have been formed. The group members will likely share common ideas and influence each other in agricultural production process, marketing and even in policy input formulation. Anyone with an innovative idea in the group gain acceptance and diffusion takes place. Kavoi and Mwangi (2016) posit that mobilizing and strengthening collective action by farmers will lead to attracting development assistance and improve agricultural productivity. Ramdwar *et al.* (2014) citing Barham and Chitemi (2009) noted that farmers group asset configurations, composition and characteristics.

Agribusiness group is a structure for diffusion of innovation in agricultural business. Wangombe and Van Dijk (2013) cited by Ramdwar, *et al* (2014) reported that agricultural innovation adoptions have not only translated into rapid agricultural growth and poverty among the resource-poor smallholder farmers.

AGRIBUSINESS GROUP FUNCTIONING

Membership of agribusiness group that encourage males and females will likely be stronger and will attract assistance. FAO (2012) defines gender equity as fairness and impartially in the treatment obligations and opportunities. If an agricultural business group must functional to improve agricultural growth and rural development, gender balance is fundamental. From the foregoing discussions, cohesive agricultural groups will perform the following functions:

- (a) Formal organizational functions: these are functions mutually agreed to by members as their primary interest for formation. The basic function of an agribusiness group will be to ensure a sustainable wealth generation for members. This is achievable using the

- cooperative through the following:
- (a) organized and guided action to achieve economic inclusion at all levels of the society.
 - (b) facilitating and encouragement of profitable savings and investment culture among all members.
 - (c) capacity building for members for skills in all aspects of production, processing or marketing depending on the interest of the members.
 - (d) Helping in allocating financial resources that members required for the enterprises.

GROUP DEVELOPMENT THEORIES

Group theories are used to explain why and how groups come in to existence-group dynamics. Some of the theories are briefly explained further.

Classical Theory: George Homans is credited to have developed this model. The theory provides that group develop based on activities, interactions and sentiments. Fundamentally, the theory implies that individuals who share common activities interacts more and develop attitudes (positive or negative) towards each other. The primary raw material for group formation under the Classical theory in *-interaction*. **Social**

Exchange theory: Group formation is an outcome of implicit expectation of reciprocal benefits built on trust and felt obligation. The dividends expected must be mutually forged and where a positive exchange relationship is a positive exchange relationship is a possibility or guaranteed, a group will likely attract individuals. John Thibaut and Harold Kelley (1959) are the two proponents of the Social Exchange theory. The social exchange (membership of an agribusiness group can lead to stability (guaranteed market for produce sales and is brought about by the benefits for which an individual gets while contributing to the group is associated with **Social Identity Theory:** where a

group will offer individual a sense of identity and self-esteem affiliation is likely. In our discussion, graduates of higher institutions who engage in agribusiness and form a group will likely attract others to belong. The group could be formed along several of the value chains of agro-commodities like rice, cassava, vegetables, poultry, fisheries or even agro-produce market associations. Fresh graduates could be attracted to join such groups having seen others do so. The theory is credited to Tajfel and Turner who propounded it in 1977.

Tuckman's theory: Bruce Tuckman in 1960 developed a model that has been universally used to explain "how" groups develop. The theory lays a foundation to the fact that groups must pass through stages to get to a point where they are formed become productive and effective. Most groups will encounter similarities in conflict and resolutions as they pass through the forming (foundation phase), storming (conflict over objectives), norming (decision and compromise) and performing (the work phase).

STRENGTHENING GROUP WITH SOCIAL MEDIA PLATFORMS

Social networks are very much the same. Agribusiness group leaders cannot pick who joins your open LinkedIn group or Facebook group. However, it is easier can limit who joins your closed groups. One example that can be used is the WhatsApp platform. It is the responsibility of a group leader and as a team member to do their best in being an effective team member. There is so much benefit to be had for those who invest the time in social groups. The relationships that can be formed as the initiators monitor the stages of development. Effective agribusiness groups can form human bonds that can last a lifetime. Relationships that will stand the test of time

must be consciously built. With the evolution of technology, it becomes easier to connect and

build bonds that can sustain the agribusiness in particular and others generally.

REFERENCES

- Ashimolowo, R.O. (2014) Group Dynamics in Extension. Lecture Notes ARD 501 <http://www.unaab.edu.ng>.
- Cherrington, D.J. (1994) Organizational Behaviour. Boston: Allyn and Bacon
Recovered from: <https://www.amazon.com/Organizational-Behavior-Management-Individual-Performance/dp/020511959X>
- Kavoi, J.M., Kamau, G.M and Mwangi, J.G. (2016): Gender and Group Dynamics in Subsistence Agriculture; A case study of Kenya. International Journal of Agricultural Extension 04(01) 2016: pp11-18.
- NSGMED (2014) Group Dynamics-Definition, Types of groups, objectives. Nursing Journals and Articles. Published June, 2014. Recovered from www.nsgmed.com/management/group-dynamics-definition-types-of-groups-objectives on 15th May, 2017.
- Ramdwar, M. N., Stoute, A.V.A. and Ganpat, W.G. (2014) A Focus Group Approach to Exploration of Dynamics of Farmers Group in Trinidad, West Indies. Journal of Agricultural Extension and Rural Development. Volume 6(9) pp288-297.
- Schut, M., Paasen, A., Leeuwis, Bos, C.S., Leonard, W. and Lerner, A. (2011) Space for innovation for Sustainable Community-Based biofuel Production and Use: Lessons learned for Policy from Nhambita Community, Mozambique. *Energy Policy*, 39, 5116-5128
- Kavoi, J.M., Kamau, G.M. and Mwangi, J.G. (2016): Gender and Group Dynamics in Subsistence Agriculture: A case study of Kenya. International Journal of Agricultural Extension 04(01) 2016 pp11-18.
- Swamithnathan, B. and K.C.Siva Balan(2013): An Inquiry in to the Role of Group Dynamics in Enhancing Farm Remuneration. American International Journal of Research in Humanities, Arts and Social Sciences. Volume 4(1), September-November, 2013, pp41-44.
- Tuckman, B.W and Jensen, M.A.C (1977) Stages of Small group development revisited. *Group organizational studies* (2) 419-427. recovered from www.lancaster.ac.uk/palatine/AGP/resource/11.htm. www.dictionnaire.com/definition/group-dynamics.html.
- Liverpool, S and Winter-Nelson, A. (2010) "Poverty Status and the Impact of Formal Credit Technology Use and Wellbeing among Ethiopian Smallholders." *World Development* 38: 541-554.
- Barham J, and Chitemi, C. (2009) Collective action initiatives to improve marketing performance: lessons from farmer groups in Tanzania. *Food Policy* 34 (1):53-59. <http://dx.doi.org/10.1016/j.foodpol.2008.10.002>
- Bartle, R.A. (2010) The international journal of computer game research. Volume 10 issue 1 April 2010 ISSN: 1604-7982 <http://gamestudies.org/1001/articles/bartle>

Food and Agriculture Organization of the
United Nations Rome, (2013) FAO
Policy on Gender Equality Attaining

Food Security Goals in Agriculture and
Rural Development. FAO, Rome