COHESIVENESS OF FARMERS’ GROUPS IN DELTA STATE NIGERIA: ITS IMPLICATION FOR AGRICULTURAL DEVELOPMENT

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ARTICLE HISTORY:
Received: 06-Nov-2019
Accepted: 17-Feb-2020
Online Available: 28-Feb-2020

Keywords:
Group cohesion, Farmers’ groups, Agricultural development, Protection motivation theory, Group satisfaction

ABSTRACT
This study which covered Delta State, Nigeria was embarked on to ascertain the cohesiveness of farmers’ groups and fathom the implications for agricultural development. At the first stage, 18 farmers associations were randomly selected from the list of farmers’ groups at the zonal headquarters of DTADP. Ten percent often membership strength of each selected association was randomly selected to form the study sample and this resulted to selection of 156 farmers. Farmers subscribed to the various groups for the purpose of accessing extension services/information and credit facilities. They also had the purpose of benefiting from government farmers’ empowerment schemes and exchange ideas, knowledge and information with other members of their respective groups. Most of the groups were found to be highly cohesive and members were also highly cohesiveness of the groups was influenced by members of satisfaction with the groups satisfied with their various groups. This implies that agricultural development and revival of the economy can be achieved. It is recommended that sustained cohesion of the groups should be encouraged through agricultural extension agents and other farmers should be encouraged for their specialized groups in other to reap benefits of self-help farmers’ groups.

Contribution/ Originality
The study affirmed that cohesiveness of farmers’ self-help groups determines the longevity of such groups. Group cohesiveness is an index of the members’ success in their farming endeavours. With the use of specialized group method, the constraint of the dearth of extension agents is being solved.

DOI: 10.18488/journal.1005/2020.10.1/1005.1.39.46
ISSN (P): 2304-1455/ISSN (E):2224-4433

How to cite Albert Ukaro Ofuoku (2020). Cohesiveness of farmers’ groups in Delta State Nigeria: Its implication for agricultural development. Asian Journal of Agriculture and Rural Development, 10(1), 39-46.

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1. INTRODUCTION

On the extent economic condition in Nigeria, the governments have realized that agriculture is the viable mechanism through which the economy can be revived from its current state. This realization has come to mean that farmers need to be encouraged and their people also need such encouragement to venture into farming. However, in this current state of trying to promote agricultural development, agricultural extension services are required; the farmers need credit facilities and series of cheap inputs. The farmers will be able to have access to these variables that are crucial to their farming business when they subscribe to self-help groups. This is more so when most Nigerian farmers are small-scale farmers. Ofuoku and Urang (2012) found that farmers subscribe to groups, especially farmers’ groups in order to have access to credit facilities and extension services. As a result of the dearth of extension personnel, farmers are currently reached in their respective specialized groups. Basorun and Olakulehim (2002) and Nagarajan and Ponnusamy (2019) observed that farmers in various locations had the realization of their disadvantaged situation such as poor access to extension services, the presence of middlemen, inflated prices of inputs and poor access to information and ideas. These made the farmers to set up self-help groups.

Self-help groups such as farmers groups are socio-economic groups (Ofuoku and Chukwuji, 2012; Ebi, 2014). These groups are so conceptualized for the fact that they are formed to help farmers achieve the socio-economic objectives that are their farming activities related. The accomplishment of these objectives is expected to have a positive relationship with their standard or level of living.

This invariably implies that farmers’ groups are formed in order for farmers to have the ability to perform some exercises that they cannot embark on successfully in isolation. Ofuoku et al. (2008) assert that farmers harness their financial resources in such groups for members to access as credit. These groups are also seen as clearing houses for knowledge, ideas and information (Ofuoku and Urang, 2012; Olayinka, 2014; Mensah et al., 2017).

Cohesion is very crucial to group activities. It is the life wire or heart of a group, as it affects attainment of goals, satisfaction of members and decision making in groups. It is often considered by scholars from the affective point of view, as personal attraction to groups (Ofuoku et al., 2008). It is the extent to which members are desirous of in a sustainable subscribing to the group. Ogionwo and Eke (1999); Rowland (2014) conceptualized it to be the degree to which members of a group desire to continue as members of the group. Groups are deemed to be highly cohesive when the members are highly committed and attracted to it, and vice versa.

Considering the afore mentioned facts, it is useful to investigate the level of cohesion of farmers’ groups with a view to predicting the success of governments’ efforts toward revitalizing, agricultural sector of the state economy. This was therefore conceptualized to assess the level of cohesion of farmers’ groups in Delta State, Nigeria. Specifically, it had the objectives of ascertaining the purpose farmers wished to achieve for subscribing to farmers’ groups; determine the level of cohesion of the farmers’ groups, ascertain members’ level, of satisfaction in the groups. It was hypothesized that farmers’ level of satisfaction does not influence farmers’ groups’ cohesion.

2. MATERIALS AND METHODS

The study covered Delta State, Nigeria. Delta State is situated in the Niger Delta Zone of Nigeria. It is constituted by 25 local government areas. The state is demarcated into 3 agricultural zones by the Niger Delta State Agricultural Development Programme (DTADP) – Delta North, Delta Central, and Delta South Agricultural Zones.
Agriculture and agro-related activities are the predominant occupations of the people of the state. Since various food and cash crops are cultivated in the state, the economy qualifies to be called an agrarian economy. The food crops are mainly cultivated in the state are maize, cassava, yam, cocoyam, plantain and banana and varieties of leaf and fruit vegetables while the cash crops include oil palm, rubber and marginally cocoa. Moreover they are also into livestock farming; the animals kept by them are poultry, goats, sheep, fish and marginally rabbits (DTADP, 2015).

All food, cash crops and livestock farmers in Delta State who subscribe to the farmers groups form the study population. Multistage sampling procedure was utilized in selection of the study sample. At the first stage, 18 farmers associations were randomly selected from the list of farmers’ groups at the zonal headquarters of DTADP, for ease of access. Ten percent (10%) of the membership strength of each selected association were randomly selected to form the study sample as illustrated in the Table 1; this resulted to selection of 156 farmers as shown:

Table 1: Agricultural farmers’ association or group 1 membership

| Zone         | Membership                                      | Strength | 10 percent |
|--------------|-------------------------------------------------|----------|------------|
| Delta North  | Ubulu-Ukwu Farmers’ Union                       | 18       | 8          |
|              | Obiaruku Farmers’ Association                   | 181      | 18         |
|              | Delta North Poultry Association                 | 56       | 6          |
|              | Abavo Farmers’ Association                      | 125      | 22         |
|              | Ika Oil Palm Farmers’ Union                     | 42       | 4          |
| Delta Central| Rubber Producers’ Association Eku               | 21       | 2          |
|              | Oil Palm Farmers’ Union, Ethiope                | 38       | 4          |
|              | Isoko Fish Farmers’ Association                 | 127      | 13         |
|              | Poultry Farmers’ Association Zonal Branch       | 139      | 14         |
|              | Udu Farmers’ Association, Otor-Udu              | 84       | 8          |
|              | Jesse Cassava Farmers’ Union                    | 232      | 23         |
| Delta South  | Potato Farmers’ Union, Patani                   | 83       | 8          |
|              | Plantain Farmers’ Association Patani            | 66       | 7          |
|              | Fish, Farmers Union of Patani LGA              | 78       | 8          |
|              | Warri South-West Fish Farmers’ Union           | 105      | 11         |
| Total        |                                                 | 156      |            |

Primary data were collected through the administration of a structured interview schedule and questionnaire to farmers without or with little level of formal education and those with a reasonable level of formal education respectively. The collection of data was done by the researcher and agricultural sciences teachers within the respective locations of the various farmers’ groups.

The data collected were subjected to statistical analysis thus: objective i was met with applications of frequency counts and percentages, objectives ii and iii were addressed with the use of the 4-point Likert-type scale parameters indicating cohesiveness such as regular meeting attendance, payment of dues/subscriptions, involvement in group activities, and prompt response of leadership to members needs were measured with application of 4 point Likert-type scale of very regular (4), regular (3), fairly regular (2) and not regular (1). The mean score for all the parameters was summed up and divided by the number of farmers, groups to get the ground mean of cohesion. The grand mean was further divided by the number of parameters used to measure cohesion to get the cohesion index. Cut off mean was computed to be 2.5 (> 2.5 = highly cohesion; 2.5 = cohesive 2.3 - 2.49 = fairly cohesive; < 2.3 = not cohesive. Level of satisfaction of members by the group leadership was also computed with the use of 4 point Likert-type scale of highly satisfied (4), satisfied (3), fairly satisfied (2) and poorly satisfied (1). The satisfaction means, grand mean and satisfaction index were computed following the same procedure used for cohesiveness.
The hypothesis was tested with the application of Pearson product moment correlation coefficient (PPMC). This statistical tool was used by Ofuoku and Ekorhi-Robinson (2018) in a similar study. The formula is given below:

\[ r = \frac{\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[(\Sigma X^2 - (\Sigma X)^2)(\Sigma Y^2 - (\Sigma Y)^2)]}} \]

Were
r = correlation coefficient
X = level of satisfaction
Y = group cohesiveness
N = number of respondents

3. RESULTS AND DISCUSSION

Table 2 indicates the purpose of farmers to subscribe the membership of farmers’ groups including access to credits facilities (100%), access to extension service (98%) access to benefits of government empowerment programmes (96.79%) and opportunity to exchange information, knowledge with other farmers (94.87%). All the purpose for joining farmers’ groups among the farmers is all important for the agribusiness activities of the farmers Jensen et al. (2012) found positive significant nexus between the farmers’ willingness to participate in groups and their socio-economic attributes. Farmers are desirous of subscribing to groups in order to reach some goals which they perceive as very difficult for them to achieve solely (Hua et al., 2004).

There is a unfixed subscription fee that members pay every month. This is how they harness financial resources. From the common purse, they grant credit to members on very interest rate as self-help and functional groups. This is in consonance with Ofuoku and Agbamu (2012) who observed that farmers’ groups grant loan to their members as a form of financial assistance. Most of them do not have the collateral with which to access credit from financial institutions.

| Purpose                          | Frequency | Percentage |
|----------------------------------|-----------|------------|
| Access to Extension Service Information | 154       | 98.72      |
| Access to Credit Facilities      | 156       | 100        |
| Access to government empowerment benefits | 151       | 96.79      |
| Exchange of Ideas, knowledge and information | 148       | 94.87      |

Owing to the poor ratio of extension agents to farmers extension services are carried out in groups. That is the reason for the farmers’ groups are specialized farmers’ groups. This is congruent with the findings of Ofuoku et al. (2008) and Ofuoku and Agbamu (2012) in their studies of Southern Nigeria and Delta State respectively. When governments embark on empowerment programmes, the benefits are given to individual farmers through their various self-help groups.

Farmers, especially in specializing groups encounter similar problems relating to their agribusiness operations. In their various groups, they exchange ideas, knowledge and information needed with respect to such problems among themselves in order to solve such problems. That is why these groups are seen as clearing houses for ideas, knowledge and information. All the purpose for subscribing to farmers; groups among the farmers are related to Rogers’ protection motivation theory (PMT). Human beings behave in a desirable way when situations appeal to their fears (Munro et al., 2007). Here there are the tri-focal aspects of arousal of fear which are propagated; these according to Rogers (1975) include the degree of undesirable experience with a stated event; the likelihood of occurrence of such event and how efficacious the protective response is. It is
stated by Stroebe (2000) that this combined factors influence the intensity of protection motivation. Rogers (1975) states that this results to activities) taking place because of the desire to protect oneself from danger. This theory, in the extinct wider perspective of cognition clearly utilizes the cost and benefits of existing and described behaviour to forecast the likelihood of change (Gebhardt and Maes, 2001). In summary, farmers joined their respective groups for fear of losing much when they operate in isolation (without subscribing to farmers group membership).

3.1. Cohesiveness of farmers’ groups
All the farmers’ groups involved in this study were highly cohesive as they had pooled means of > 2.50, except Warri south west farmers which had a pool mean of 2.48 indicating that it is fairly cohesive. The mean index of 0.70 implies that 70% of the farmers’ groups cohesiveness were accounted for by the parameters for measuring cohesion of the groups.

The results confirm the findings of Ofuoku and Agbamu (2012), Ofuoku and Urang (2012) and Ofuoku et al. (2008), who found various farmers groups studied to be highly cohesive. The high level of cohesion of the groups is connected with the level of satisfaction of group members. This implies that the level of cohesiveness of the farmers groups an index of group members in satisfaction. This also implies that the members’ goals were congruent with the goals of the groups.

Table 3: Cohesiveness of farmers’ groups

| Farmers’ groups                                | Meeting Attendance (Mean) | Payment of dues (Mean) | Involvement in group Activities (Mean) | Need satisfaction (Mean) | Pooled Mean score |
|------------------------------------------------|---------------------------|------------------------|----------------------------------------|--------------------------|-------------------|
| **Delta North Agricultural Zone**              |                           |                        |                                        |                          |                   |
| Ubulu-Ukwu Farmers’ Union                      | 3.25                      | 2.81                   | 2.38                                   | 2.93                     | 2.84              |
| Obiaruku Farmers’ Association                  | 3.33                      | 2.95                   | 2.55                                   | 2.58                     | 2.85              |
| Delta North Poultry Association                | 3.51                      | 3.32                   | 2.36                                   | 2.81                     | 3                 |
| Abawo Farmers’ Association                     | 2.9                       | 2.56                   | 2.85                                   | 2.96                     | 2.82              |
| Ika Oil Palm Farmers’ Union                    | 3.1                       | 3.12                   | 2.37                                   | 2.62                     | 2.8               |
| **Delta Central Agricultural Zone**            |                           |                        |                                        |                          |                   |
| Rubber Producers Association, Eku Oil Palm     | 3.21                      | 2.85                   | 2.65                                   | 2.99                     | 2.93              |
| Farmers’ Union, Ethiope East                   | 3.73                      | 2.57                   | 2.59                                   | 2.63                     | 2.88              |
| Isoko Fish Farmers’ Association                | 3.85                      | 2.36                   | 2.51                                   | 2.86                     | 2.9               |
| Poultry Farmers’ Association (Zonal Branch)    | 3.5                       | 2.42                   | 2.77                                   | 2.94                     | 2.91              |
| Udu Farmers’ Association                       | 3.15                      | 2.39                   | 2.54                                   | 2.98                     | 2.77              |
| Jesse Cassava Farmers’ Union                   | 2.9                       | 2.23                   | 2.81                                   | 2.85                     | 2.7               |
| **Delta South Agricultural Zone**              |                           |                        |                                        |                          |                   |
| Potato Farmers’ Union Patani Plantain          | 3.15                      | 2.66                   | 2.53                                   | 2.76                     | 2.78              |
| Farmers’ Association (Patani LGA)              | 2.51                      | 2.33                   | 2.74                                   | 2.92                     | 2.63              |
| Fish Farmers’ Union of Patani LGA              | 2.58                      | 2.15                   | 2.9                                    | 3.52                     | 2.79              |
| Warri South-West Fish Farmers’ Union           | 2.35                      | 2.11                   | 2.59                                   | 2.87                     | 2.48              |
| **Total**                                      |                           |                        |                                        |                          | 42.08             |

Grand mean score = 2.81; Cohesion index = 0.70
Cut-off mean = 2.50 (> 2.50 = highly cohesive; 2.50 = cohesive; 2.30 - 2.49 = fairly cohesive; < 2.30 = not cohesive)
3.2. Level of satisfaction of farmers with group
Table 4 demonstrates that members of the farmers group were highly satisfied (mean ≥ 2.50) except members of Warri South West fish farmers union (mean = 2.45) who were fairly satisfied. This indicates that most of the farmers achieved their goals of access to credit, extension service/information, benefitted from government empowerment schemes and they regularly traded ideas, knowledge and information with each other and the leadership of the groups was proactive. Overall, the grand satisfactions mean score of 3.01 indicates that the farmers groups members were highly satisfied.

Table 4: Level of satisfaction of farmers with group

| Farmers Groups                                      | Score | Mean |
|-----------------------------------------------------|-------|------|
| Delta North Agricultural Zone                       |       |      |
| Ubulu-Ukwu Farmers’ Union (n=8)                     | 25    | 3.13 |
| Obiaruku Farmers’ Association (n=18)                | 64    | 3.56 |
| Delta North Poultry Association (n=22)              | 17    | 2.83 |
| Abavo Farmers’ Association (n-22)                   | 73    | 3.32 |
| Ika Oil Palm Farmers’ Union (n=4)                   | 11    | 2.75 |
| Delta Central Agricultural Zone                     |       |      |
| Rubber Production Association, Eku (n=2)            | 15    | 3    |
| Oil Palm Farmers’ Union, Ethiope-East (n=4)        | 13    | 3.25 |
| Isoko Fish Farmers’ Association (n=13)              | 45    | 3.46 |
| Poultry Farmers’ Association (Zonal Branch) (n=14)  | 49    | 3.5  |
| Udu Farmers’ Association (n=8)                      | 22    | 2.75 |
| Jesse Cassava Farmers’ Union (n=23)                 | 70    | 3.04 |
| Delta South Agricultural Zone                       |       |      |
| Potato Farmers’ Union, Patani (n=8)                 | 21    | 2.63 |
| Plantain Farmers’ Association (Patani LGA)         | 19    | 2.71 |
| Fish Farmers’ Union of Patani LGA (n=8)            | 23    | 2.88 |
| Warri South-West Fish Farmers’ Union (n=11)        | 27    | 2.45 |
| Total                                               |       | 45.26|

Satisfaction index 0.75
Cut-off mean = 2.50 (> 2.50 = highly satisfied; 2.50 = satisfied; 2.30 – 2.49 = fairly satisfied; < 2.30 = not satisfied)

This satisfaction index of 0.75 implies that 75% of the achievement of the reasons for which they subscribed to their various self-help groups accounted for their level of satisfaction. Lott and Lott (2001) argue that group members’ satisfaction with their group is related to the achievements of goals for which they subscribe to groups. Deckor and Nnodim (2005) state that group leadership performance is one of the variables that influence group members’ satisfaction. Agbarevo and Obinne (2010) stated that leadership is related to group performance and hence satisfaction of members of such groups. In a related study, Ofuoku and Agbamu (2013) found that satisfaction of members of self-help groups depends on leadership quality of such groups.

There is a strong positive relationship between farmers’ groups members satisfaction and group cohesion (r = 0.88). This implies that a unit increase in satisfaction of farmers’ group members’ most likely increases level of cohesion of such groups. The higher the level to which a group satisfies its members, the higher the level of cohesion of such group (Ogionwo and Eke, 1999; Lott and Lott, 2001; Ofuoku et al., 2008). The implication is that cohesiveness of farmers’ groups is an index of members’ level of satisfaction.
Table 5: Influence of members’ satisfaction on group cohesion

| Variable   | satisfaction | cohesion |
|------------|--------------|----------|
| Satisfaction | 1.000        | 0.88     |
| Cohesion    | 0.88         | 1.000    |

As the members’ continue to be satisfied with the group benefits, they will always want to continue to subscribe to such groups.

4. CONCLUSION

Members of the various farmers’ groups joined the membership of their respective groups for access to extensive services/information, government empowerment scheme benefits and exchange of ideas, knowledge and information. Most of the farmers’ groups were highly cohesive. Most of the members of the farmers’ groups were also highly satisfied with the group. Conclusively, cohesiveness of such farmers groups is an index of the level of satisfaction of the members of the groups.

4.1. Implication for agricultural development

Since the realization of agriculture as a viable mechanism by which the economy has to be revived, the efforts have been to encourage farmers, especially small scale farmers. These farmers are resource poor and constitute the highest population of farmers. As a result of their poor resource possession status, and the dearth of agricultural extension personnel, they formed various specialized agricultural groups with the major purpose of acquiring what they could not single handedly achieve. Through these groups farmers harness their financial resources with the objective of creating credit source for members who need credit to promote their farming activities. They are also able to access extensive services/information through the various respective formations. These groups constitute clearing houses for ideas knowledge and information. Government farmers’ related empowerment scheme opportunities are mostly extended to farmers not on an individual basis, but in specialized groups.

Taking cognizance of the aforementioned facts, farmers’ groups can be regarded as being important to the farmers and the governments. This therefore implies that cohesion of farmers’ groups is crucial for the achievement of agricultural development and hence the revival of the economy. As long as the farmers’ groups are cohesive and the farmers are satisfied with their variables respective groups, agricultural development is expected to be positively influenced and this will lead to reviving of the economy. In consideration of the afore mentioned facts, the following recommendations are suggested:

i) Cohesion of the farmers groups should be encouraged through the respective agricultural extension agents who have contact with the respective groups.

ii) Since the economy needs urgent revival, formation of other farmers’ groups should be encouraged and enhanced by agricultural extension agencies.

**Funding:** This study received no specific financial support.

**Competing Interests:** The author declares that s/he has no conflict of interests.

**Contributors/Acknowledgement:** All the designing and estimation of current research done by sole author.

Views and opinions expressed in this study are the views and opinions of the authors, Asian Journal of Agriculture and Rural Development shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.
References

Agbarevo, M. N. B., & Obinie, C. P. O. (2010). *Elements of rural sociology and agricultural extension*. Uwani-Enugu: Toe Publishers.

Basorun, Y. O., & Olakulehim, J. O. (2002). The Lagos state fish farmers’ association. *LEISA*, 23(1), 10-11.

Deckor, H. L., & Nnondim, A. U. (2005). *Introduction to Community Leadership*. Owerri, Nigeria: Springfield Publishers.

DTADP - Delta State Agricultural Development Programme (2015). *Agricultural atlas of Delta State, Nigeria*. Asaba: DTADP.

Ebi, B. (2014). *Notes on cooperative societies*. Calabar, Cross River State, Nigeria: Department of Cooperative Societies, Ministry of Commerce and Industry, Nigeria.

Gebhardt, W. A., & Maes, S. (2001). Integrating social-psychological frame works for health behavior research. *American Journal of Health Behavior*, 25, 28-536.

Hua, W., Zulaf, C., & Sohngen, B. (2004). To adopt or not to adopt: consideration decisions and participation in watershed groups. Paper presented at the annual meeting of the American Agricultural Economics Association, Denver. [http://www.parl.umn.edu/20076](http://www.parl.umn.edu/20076).

Jensen, K. L. K., & English, B. C. (2012). Poultry farmers’ willingness to participate in energy audits. *Journal of Agricultural Extension*, 50(6), 1-12.

Lott, A., & Lott, B. (2001). *A learning theory approach to interpersonal attitudes*. Greenwald, New York: Academic Press.

Mensah, O. S., Jincai, Z., Isaac, A. B., & Patrick, A. (2017). The role of institutional policies in promoting agribusiness development in Rural China. *Agriculture and Food Sciences Research*, 4(2), 37-44.

Munro, S., Lewin S., Swart, T., & Volmink, J. (2007). A review of health behavior theories: how useful are these for developing interventions to promote long-term medication adherence for TB and HIV/AIDS? *Public Health*, 7, 104-113.

Nagarajan, S., & Ponnusamy, I. (2019). Mainstreaming women self-help groups to promote social and solidarity economy: lessons from rural areas of Tamil Nadu, India. New York: United Nation.

Ofuoku, A. U., & Ekorhi-Robinson, O. I. (2018). Social inclusion of landless farmers in extension services in Delta State, Nigeria: Implications for agricultural development. *Open Agriculture*, 3, 226-235.

Ofuoku, A. U., & Agbam, J. U. (2012). Influence of farmers group cohesion on adoption of climate change adaption strategies in delta state, Nigeria. *Agriculture and Veterinary Sciences*, 12(6), 29-35.

Ofuoku, A. U., & Agbam, J. U. (2013). Leadership and self-help groups in Nigeria-implications for agricultural extension. *Journal of Extension Systems*, 29(1), 65-75.

Ofuoku, A. U., & Chukwuji, C. O. (2012). Farmers’ group growth trend in Delta State, Nigeria. *Global Journal of Science Frontier Research (D): Agriculture and Biology*, 12(3), 63-68.

Ofuoku, A. U., & Urange, E. (2012). Effect of cohesion on loan repayment in farmers’ cooperative societies in Delta State, Nigeria. *Agricultura-Stintasi Practica*, 3-4(83-84), 131-139.

Ofuoku, A. U., Enaikeke, M., & Nnondim, A. U. (2008). Cohesiveness of fish Farmers’ Groups’ in Southern Nigeria. *Journal of Agricultural and Biological Science*, 3(4), 16-21.

Ogionwo, W., & Eke, P. (1999). *An introduction to social psychology*. Owerri, Nigeria: Springfield Publishers.

Olayinka, C. (2014). *ILO seeks adoption of cooperatives for sustainable development*. The Guardian Newspaper, [www.ngguardnews.com](http://www.ngguardnews.com), Tuesday July 8, 2014.

Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, 91, 93-114.

Rowland, A. E. (2014). Impact of cooperative societies in national development and the Nigeria Economy. *Global Journal of Social Sciences*, 13, 19-29.

Stroebe, W. (2000). *Social-psychology and health*. Buckingham: Open University Press.