

*Original Research Article*

## **An assessment of leadership training needs of executive members of farmer-groups in Oyo State, Nigeria**

Kemi Funmilayo **Omotesho**, Adeniyi Felix **Akinrinde**, Kafayat Adeshike **Laaro**, Joseph Oluwadare **Olugbeja**

*Department of Agricultural Extension and Rural Development, University of Ilorin, Ilorin, Nigeria*

**Correspondence to:**

**K. F. Omotesho**, Department of Agricultural Extension and Rural Development, University of Ilorin, Ilorin, Nigeria; e-mail: omotesho.kf@unilorin.edu.ng, kfomotesho@gmail.com

### **Abstract**

The failure of farmers' associations in Nigeria has been linked to leadership incompetency. In this study we investigated the leadership training needs of executives of farmers' associations in Oyo State. Specifically, we examined the importance associated with the leadership roles by the executives, investigated their competence levels and identified the constraints they face in carrying out their roles. A two-stage sampling procedure was used to select 195 respondents on which an interview schedule was administered. The obtained data were analysed using descriptive statistics, the Borich's Needs Assessment Model and the Pearson's Product Moment Correlation. The respondents were middle-aged (52 years) with an average of 26 years farming experience and seven years of farmer-group membership. About 66% had no formal education. Only 36.9% of the groups originated out of felt needs, 44.1% of the leaders emerged by selection, and the average group size was 28. Although the respondents affirmed the importance of all the 15 identified leadership roles, their competence level in 11 of the roles was low. Areas of training needs identified include resource mobilization and control, and the establishment of linkages with major stakeholders in agriculture. At  $P < 0.05$  some personal and group characteristics of the respondents were related to their training needs. Inadequate knowledge of the roles and poor cooperation of members were the most severe constraints to effective leadership of the associations. The study concluded that the leaders of farmer-groups in the state had training needs which must be addressed to ensure the sustainability of the groups.

**Keywords:** Borich's model; competency; farmer-groups; leadership; roles; training need.

### **INTRODUCTION**

Agricultural sector is a major source of employment and it has added massively to the national economy. It has been instrumental in the alleviation of poverty, rapid industrialization and diversification of foreign exchange earnings as well as food security (FAO, 2017). This is particularly so in developing countries such as Nigeria where agriculture remains the mainstay of the rural economy and provides employment for about 70% of the work force (Manyong et al., 2015). In spite of the growing awareness of the unique relationship between agricultural and economic development in the country, the agricultural sector remains severely challenged. This is evident from the poor level of commercialization, continued reliance on family labour, the small and fragmented nature of farm holdings and the low level of commercialization (Omotesho et al., 2016). The dominance of the agricultural production sector by millions of small-scale resource-poor farmers and the poor funding of agricultural extension system

in the country raised the extension agent-to-farmer ratio in the country to as high as one to 1,500. This perhaps is one of the most important considerations for the emphasis on farmer-groups in the Nigerian agricultural extension scene.

The provision of extension services to farmers in groups enables the extension workers to reach more farmers. In addition, most agricultural developmental programmes (including those of international funding bodies) have made farmer-groups the bases through which farmers are identified and reached. Farmer-groups are socio-economic groups formed to accomplish some common social and economic goals in relation to members' farming activities. Farmers subscribe to such groups because they can use the membership to accomplish their social and economic goals (Ofuoku and Chukwuji, 2012). Many small-scale farmers feel powerless to change their lives and thus see farmers' associations as a strong, vibrant and viable economic alternative. These associations

are based on the idea that together people can achieve goals that none of them can achieve individually. Farmers' association encourage members to engage in joint cultivation, purchase farm inputs at subsidized price and negotiate better prices for their farm products (Effiom, 2014). In view of the low financial capacity and high level of under-development, an individual farmer cannot achieve the desires for large-scale production. It is therefore in the farmers' interest that resources are pulled together so as to gain a tremendous collective advantage and thus widening the industrial base of the economy and the management techniques (Anigbogu et al., 2016). There are several registered farmer groups in rural communities across Nigeria but not many have optimized the potentials of group membership (CRS and MEAS, 2015).

The failure of farmers' associations to make the desired impact on farmers' production and livelihood has been traced to poor leadership of the associations. Leaders are the driving force in cooperative endeavors. Leadership is the process whereby an individual (or a group of individuals) influence a group of people to attain a common goal (Northouse, 2010). The process of emergence of the leaders has also been severely criticized. Allegations of fraud, corruption, favoritism, and conflict of interest among other issues have been levelled against some executive members of many farmers' associations in Nigeria. While studies have revealed the need for training, particular areas of training need have not been identified. It is against this background that the study sought to determine the leadership training needs of executive members of farmers' associations in Oyo State, Nigeria. The specific objectives of the study were to:

1. describe the socio-economic characteristics of executive members of farmers' associations
2. describe the characteristics feature of the farmer-groups in the study area;
3. identify leadership roles where training is needed among respondents; and
4. identify the constraints encountered in carrying out leadership roles among farmer-groups in the study area.

The following null hypotheses were tested:

H<sub>01</sub>: there is no significant relationship between some selected socio-economic characteristics of leaders of farmer-groups and their leadership training need.

H<sub>02</sub>: there is no significant relationship between some selected group characteristics of farmer-groups and their leadership training need.

## MATERIALS AND METHODS

### Study area

The study area was Oyo State, Nigeria. The state is located in the South-western geopolitical zone of Nigeria and comprises 33 Local Government Areas covering 28,454 square kilometers. It has a population of about 5,580,894 people and a population density of about 198 people per square kilometer (National Population Commission, 2019). The state accounts for 3.97% of Nigeria's total population. It is bordered in the west by the Republic of Benin. With average daily temperature ranging from 19 °C to 26 °C the vegetation of the state is mainly derived savanna. The agricultural sector forms the base of the overall development thrust of the state. Crops largely grown include maize, yam, cassava, cocoyam, melon, cowpea, and vegetables under mixed cropping practices. As obtainable in other states of Nigeria, agricultural extension service delivery has been largely public and administered by the Oyo State Agricultural Development Projects (OYSADP) under the supervision of the State Ministry of Agriculture.

### Population of the study

The population of the study consisted of all executive members of farmer-groups in Oyo State. The list of registered farmers' associations obtained from the Oyo State Agricultural Development Programme (OYSADP) was used as the sampling frame for the study.

### Sampling procedure and sample size

A two-stage sampling technique was used to select the respondents for the study. The first stage involved the random selection of 20 percent of the 326 registered crop farmers' associations in Oyo State. The second stage involved the purposive selection of three executive members of the associations. This included the chairmen, secretaries and the treasurers of the associations. A total sample size of 195 was used for the study.

### Data collection and analytical technique

The instrument used for the data collection was a structured interview schedule. Descriptive statistics involving the use of frequency counts, percentages and means were used to describe the socio-economic characteristics of the respondents and the characteristics features of the groups. The Borich Needs Assessment Model as used by Omotesho (2012) was used for the assessment of training needs among executive members. This is based on an evaluation of the discrepancy between the perceived importance and competency of a given subject matter or skill. The model which was developed by Borich (which is taken as the mean weighted discrepancy score MWDS) can be calculated using the following formula:

**Training need (MWDS) = (Importance score – Competence score) × Mean of Importance.**

For the purpose of this study however, a threshold of two thirds (2/3) of the mean weighted discrepancy score (MWDS) was adopted for the establishment of respondents' need for training in any of the leadership roles. Hence, a respondent with MWDS of less than two third of the MWDS of the entire respondents in any of the leadership roles does not require training in such an area.

Likert scale and ranking were used to measure and present the respondents' perceived importance of the various leadership roles, respondents' level of competence in the roles, as well as the challenges faced in adequately performing leadership duties. On a scale of 5, a benchmark of 2.5 was set for the indication of importance of and competence in leadership roles.

Pearson's Product Moment Correlation (PPMC) was used to test the hypotheses of the study. The correlation equation for the purpose of the study is presented as:

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{n(\sum x^2) - (\sum x)^2} \sqrt{n(\sum y^2) - (\sum y)^2}}$$

Where: n = number of pairs of score  
 x = socio-economic characteristics of leaders of farmer-groups/ group characteristics of farmer-groups  
 y = Leadership Training Needs  
 r = coefficient of correlation.

## RESULTS AND DISCUSSION

### Socio-economic characteristics of respondents

This section presents the socio-economic characteristics of executive members of farmer-groups in the study area. The results are presented in Table 1.

The result in Table 1 shows that the mean age of the respondents was 52.2 years with a standard deviation of 12.6. This implies that leaders of farmers group in Oyo State were not youths. The choice for older members to lead the group could be born out of respect for their age, or the belief that they would be more responsible or better experienced (Murithi, 2012). It could also be assumed that older people are more likely to be obeyed. The majority (94.9%) of the respondents were married. Most (65.6%) of the respondents had no formal education and a larger percentage of the educated ones had only the primary level of education. This finding is likely to have implications for leadership ability, level of awareness, disposition to new innovation and training needs (Uaiene et al., 2009). The result reveals that the majority (96.9%) of the respondents were full time farmers and the average annual income of the respondents was ₦316,841 (₦361 = \$1). The mean year of farming experience was 26.4 years; hence the farmers were highly experienced in farming.

**Table 1.** Socio-economic characteristics of respondents

Variables	Frequency	Percentages	Mean
<b>Age (in years)</b>			
≤ 25	4	2.1	52.2
26–45	66	33.8	
46–65	95	48.7	
66–85	29	14.9	
>85	1	0.5	
<b>Marital status</b>			
Married	185	94.9	
Otherwise	10	5.1	
<b>Religion</b>			
Traditional	18	9.2	
Islam	69	35.4	
Christianity	108	55.4	
<b>Level of education</b>			
No formal education	128	65.6	
Quranic education	9	4.6	
Primary education	34	17.4	
Secondary education	16	8.2	
Tertiary education	8	4.1	
<b>Primary occupation</b>			
Farming	189	96.9	
Otherwise	6	3.1	
<b>Annual income (₦)</b>			
≤100,000	23	11.8	316,841
100,001–350,000	112	57.4	
350,001–600,000	40	20.5	
600,001–850,000	15	7.7	
850,001–1,100,000	3	1.5	
>1,100,000	2	1.0	
<b>Farming experience (years)</b>			
≤10	10	5.1	26.4
11–20	45	23.5	
21–30	93	47.7	
31–40	26	13.3	
41–50	19	9.7	
>50	2	1.0	
<b>Farm size(acres)</b>			
≤10	32	16.4	19.3
11–20	85	43.6	
21–30	64	32.8	
31–40	11	5.6	
41–50	2	1.0	
Above 51	1	0.5	
<b>Household size (members)</b>			
≤5	99	50.8	5.7
6–10	87	44.6	
11–15	9	4.6	
<b>Extension contact</b>			
≤5	55	28.2	8.1
6–10	73	37.4	
11–15	56	28.7	
≥16	11	5.6	
<b>Membership (years)</b>			
≤5	36	18.5	7
6–10	128	65.6	
11–15	25	12.8	
16–20	4	2.1	
≥21	2	1.0	

Source: Field Survey, 2017.

**Characteristics of farmer-groups in the study area**

This section presents the characteristics of farmer-groups in the study area. The results are presented in Table 2.

The result in Table 2 shows the characteristic features of farmer-groups in the study area. It reveals that all of the sampled groups were not limited by size. This implies that there was no definite or specified maximum number of group members. Membership was also open for all the groups. This will encourage farmers to be duly registered as members of one farmers group or the other based on their commodity specialization. Only 36.9% of the respondents indicated that their groups were formed by reason of felt needs. This implies that more of the groups were put together for the purpose of accessing benefits from government or donor agencies and not out of shared needs. This result agrees with the findings of Ofuoku and Chukwuji (2012). Hence such groups are often named after specific developmental intervention programmes and may not outlive such programmes. About 55.9% of the respondents indicated that the mode of leaders' emergence in their group was by election while 44.1% indicated that leaders' emergence was by selection. Result implies that both selection and electioneering procedures were used in the farmer-group for leader's emergence. Since democracy is always encouraged in groups to encourage we-feeling, leadership emergence by selection may have negative implications for the well-being of the group and the level of cooperation among members. The average group size was 28.2 members.

**Table 2.** Characteristic features of farmers groups

Variables	Frequency	Percentages
<b>Association limited by size</b>		
Yes	0	0
No	195	100
<b>Association membership</b>		
Open	195	100
Closed	0	0
<b>Mode of formation of group</b>		
Felt needs	72	36.9
Others	123	63.1
<b>Leaders mode of emergence</b>		
Selection	86	44.1
Election	109	55.9
<b>Group size</b>		
Below 15	18	9.2
16-25	58	29.7
26-35	82	42.1
36-45	30	15.4
46-55	5	2.6
Above 56	2	1.0
<b>Mean = 28.2</b>		

Source: Field Survey, 2017

**Leadership training need**

This section summarizes the results of the training need of executive members of farmer-groups on leadership roles. The results are presented in Table 3.

Table 3 shows that all the listed leadership roles were perceived to be important by leaders of farmer-groups in the study area. This corroborates with the findings of Nakazi et al. (2017). This is based on the earlier set benchmark of 2.50. The mean score on importance for all the roles as shown in the table are higher than 2.50. This finding shows that the leaders of farmer-groups in the study area have a good understanding of the significance of setting vision, mission and long-term goals for the association, making plans that will achieve the stated goals, guiding decision-making, making and enforcing policies, rules and regulations that guide the association, monitoring financial performance of the association, ensuring the group earns or raises enough money, ensuring accountability, ensuring that the association has the correct resources and equipment, ensuring that all the resources are well used and their use is monitored and controlled (efficient and transparent use of resources), ensuring adequate record-keeping, task allocation, making sure that all the members are motivated and satisfied so that the group can be productive, giving out work, ensuring the work is done, giving positive feedback for work well done, ensuring that people take up their responsibilities with commitment, ensuring effective communication among members, and arranging for linkages with other stakeholders such as input suppliers, or extension.

However, despite the leaders' recognition of the importance of these roles, Table 3 further shows that leaders were not competent in making and enforcing policies, rules and regulations that guide the association, monitoring financial performance of the association, ensuring accountability, ensuring that the association has the correct resources and equipment, ensuring that all the resources are well used and their use is monitored and controlled (efficient and transparent use of resources), ensuring adequate record-keeping, task allocation, making sure that all the members are motivated and satisfied so that the group can be productive, giving out work, ensuring the work is done, giving positive feedback for work well done, ensuring that people take up their responsibilities with commitment, ensuring effective communication among members, and arranging for linkages with other stakeholders such as input suppliers/extension. Again, this is based on the benchmark of 2.50 set as the minimum mean that denotes competency in the roles.

Table 3 also shows the ranking of the leadership roles in order of severity of training need. According to the table, the most important area of training need was group resources mobilization, monitoring and control. The table also reveals that with a MWDS of 4.37,

Table 3. Training need on leadership roles

Roles	Level of Importance		Level of Competence		MWDS	
	Mean	Remark	Mean	Remark	MWDS	Rank
Setting vision, mission and long term goals for the association	3.39	Important	2.54	Competent	<b>2.88</b>	12 <sup>th</sup>
Making plans that will achieve the stated goals	3.50	Important	2.51	Competent	<b>3.47</b>	11 <sup>th</sup>
Guiding decision-making	3.60	Important	2.86	Competent	<b>2.66</b>	13 <sup>th</sup>
Making and enforcing policies, rules and regulations that guide the association	3.51	Important	2.43	Not competent	<b>3.79</b>	9 <sup>th</sup>
Monitoring financial performance of the association	3.57	Important	2.48	Not competent	<b>3.89</b>	7 <sup>th</sup>
Ensuring the group earns or raises enough money	3.53	Important	2.51	Competent	<b>3.60</b>	9 <sup>th</sup>
Ensuring accountability	3.57	Important	2.44	Not competent	<b>4.31</b>	5 <sup>th</sup>
Ensuring that the association has the correct resources and equipment	3.81	Important	2.49	Not competent	<b>5.03</b>	1 <sup>st</sup>
Ensuring that all the resources are well used and their use is monitored and controlled (efficient and transparent use of resources)	3.59	Important	2.30	Not competent	<b>4.63</b>	3 <sup>rd</sup>
Ensuring adequate record-keeping	3.54	Important	2.37	Not competent	<b>4.14</b>	6 <sup>th</sup>
Task allocation	3.43	Important	2.33	Not competent	<b>3.77</b>	8 <sup>th</sup>
Making sure that all the members are motivated and satisfied so that the group can be productive	3.41	Important	2.27	Not competent	<b>3.89</b>	7 <sup>th</sup>
Giving out work, ensuring the work is done, giving positive feedback for work well done, ensuring that people take up their responsibilities with commitment	3.57	Important	2.25	Not competent	<b>4.71</b>	2 <sup>nd</sup>
Ensuring effective communication among members	3.45	Important	2.41	Not competent	<b>3.59</b>	10 <sup>th</sup>
Arranging for linkages with other stakeholders such as input suppliers, extension etc.	3.55	Important	2.32	Not competent	<b>4.37</b>	4 <sup>th</sup>

Source: Field Survey, 2017 MWDS (Mean Weighted Discrepancy Score)

the leaders were severely challenged in the creation of linkages between the farmers and other stakeholders in the sector. Other identified areas of need include; assigning work, ensuring their performance, giving feedback for work done, ensuring accountability, adequate record-keeping; ensuring that members are motivated and satisfied so that the group can be productive; making and enforcing policies, rules and regulations that guide the association; and ensuring effective communication among members. Mourão (2018) also opined that training and development is relevant for the farmers themselves, the community and in a more macro-view, also for the country.

**Challenges to effective leadership among farmer-groups**

This section discusses the constraints to effective delivery of leadership roles by executive members of farmer-groups. The results are presented in Table 4.

The results presented in Table 4 show that the most severe challenge to leadership of farmer-groups in the study area was inadequate knowledge of the leadership roles (mean = 3.27). This was followed in severity by poor cooperation received from members of the group (mean = 3.0). Incompetence (mean = 2.90) and corruption (mean = 2.53) were also identified as severe challenges. Ojo and Adebayo (2012) also reported similar findings.

**Test of hypotheses**

Table 5 shows the result of correlation analysis of the relationship between selected social-economic characteristics of leaders of farmer-groups and their leadership training needs. The result shows that level of education ( $r = 0.208, P < 0.01$ ), and number of extension contact ( $r = -0.381, P < 0.01$ ) had significant relationships with the leadership training need of executive members. Similar results were reported by

**Table 4.** Constraint to effective delivery of leadership roles

Constraints	N.C F (%)	N.S F (%)	M.S F (%)	S F (%)	V.S F (%)	Mean Score	Ranking
Poor cooperation from member	11(5.6)	40(20.5)	47(29.2)	82(42.1)	5(2.6)	3.0	2 <sup>nd</sup>
Inadequate knowledge of leadership roles	9(4.6)	32(16.4)	52(26.7)	101(51.8)	1(0.5)	3.27	1 <sup>st</sup>
Lack of capability to carry out some roles	12(6.2)	38(19.5)	102(52.3)	43(22.1)	0(0)	2.90	3 <sup>rd</sup>
Fear of offending certain members	91(46.7)	57(29.2)	43(22.1)	3(1.5)	1(0.5)	1.80	10 <sup>th</sup>
Bye-law does not provide adequate authority to leaders	81(41.5)	59(50.3)	47(24.1)	8(4.1)	0(0)	1.91	9 <sup>th</sup>
Poor access to resources	55(28.2)	54(27.7)	39(20.0)	47(24.1)	0(0)	2.4	5 <sup>th</sup>
Corrupt practices among members and other executive members	40(20.5)	58(29.7)	53(27.2)	42(21.5)	2(1)	2.53	4 <sup>th</sup>
Conflict of interest	43(22.1)	87(44.6)	50(25.6)	14(6.7)	2(11)	2.22	8 <sup>th</sup>
Undue influence of power brokers within the group	35(17.9)	97(49.7)	43(22.1)	18(9.2)	2(1)	2.26	7 <sup>th</sup>
Negative interference of local leaders	14(7.2)	133(68.2)	30(15.4)	17(8.7)	1(0.5)	2.27	6 <sup>th</sup>

Source: Field Survey, 2017. NC (Not a constraint), NS (Not severe), MS (Moderately severe), S (Severe), VS (Very severe)

**Table 5.** Correlation analysis showing the relationship between socio-economic characteristics of respondents and leadership training needs

Variables	r-value	p-value	Decision
Age	0.082	0.256	Not Significant
Level of education	0.208***	0.004	Significant
Primary occupation	0.119	0.099	Not Significant
Year of farming experience	0.032	0.659	Not Significant
Farm size	0.244***	0.101	Not Significant
Extension contact	-0.381***	0.000	Significant

\*\*\*. Correlation is significant at the 0.01 level (2-tailed)

**Table 6.** Correlation analysis showing the relationship between group characteristics and leadership training needs

Variables	r-value	p-value	Decision
Age of association	0.152**	0.034	Significant
Group size	0.227***	0.001	Significant
Frequency of meeting	0.095	0.186	Not significant
Mode of emergence of group	0.114	0.166	Not significant
Mode of leaders emergence	-0.195***	0.006	Significant

\*\*  $P < 0.05$  level (2-tailed), \*\*\*  $P < 0.01$  level (2-tailed)

Owona et al. (2010). The positive coefficient recorded for the level of education implies that the higher the level of education, the higher the training needs of the respondents. This is contrary to studies which suggest that educational attainment often have positive influence on variables such as awareness, knowledge and capabilities. It is possible that the not so literate farmers are able to reach and understand members better than the educated leaders. The negative coefficient for the number of extension contact reveals

that the higher the number of extension contact, the lower the respondents' training need.

Table 6 shows that age of association ( $r = 0.152$ ,  $P < 0.05$ ) and group size ( $r = 0.227$ ,  $P < 0.01$ ) had positively significant relationship with training needs. This implies that the older the groups, the more the leadership training need and the larger the group size, the more the training need. The fact that larger and older groups are likely to have more complex issues may explain this result. The mode of leader's emergence

( $r = -0.195, P < 0.01$ ) had inverse significant relationship with the leadership training need of executive members. Groups in which the leaders emerged by election showed less need for training. It is expected that groups which had the opportunity to decide their leaders in a democratic manner are more cooperative. Also, members have the opportunity to assess and elect leaders based on their leadership qualities. Grossman (2014) also concluded that democratically elected leaders are often significantly more responsive to group members, leading to cooperative behavior among members.

## CONCLUSION AND RECOMMENDATIONS

The study concluded that executive members of farmers association in Oyo State need training on several leadership roles to effectively perform their functions. The study also concluded that the educational level of leaders of farmer-groups, frequency of extension contact, age of association, group size and mode of leadership emergence had positive influence on the delivery of leadership roles by leaders of farmer groups.

Based on the findings of the study, the following recommendations are put forward:

1. Executive members of all farmers' associations in Oyo State should be exposed to continuous training on leadership roles with particular emphasis on the older associations and the identified areas of training need.
2. Membership of farmers' associations should be kept at a manageable size for effective leadership. Larger associations can be split to allow for effective administration.
3. The negative influence of local leaders and power brokers within rural communities on the running of farmers' association should be eradicated by creating awareness through extension education by extension workers.

## REFERENCES

- Anigbogu T. U., Taiwo A. O., Nwachukwu O. F. (2016): Performance assessment of farmers multipurpose cooperative societies (FMCS) in marketing of members farm produce in Benue State, of Nigeria. *Cogent Social Sciences* 2: 1–8. Doi: 10.1080/23311886.2016.1219211
- CRS and MEAS (2015): Organizing and managing farmers' groups: A SMART Skills manual. Catholic Relief Services, Baltimore, MD, and Modernizing Extension and Advisory Services project, University of Illinois at Urbana-Champaign, IL.
- Effiom R. A. (2014): Impact of Cooperative Societies in National Development and the Nigerian Economy. *Global Journal of Social Sciences* 13: 19–29.
- FAO (2017): FAOSTAT. Food and Agriculture Organization of the United Nations, Rome, Italy
- Grossman G. (2014): Do selection rules affect leader responsiveness? Evidence from rural Uganda. *Quarterly Journal of Political Science* 9: 1–44.
- Manyong V. M., Ikpi J. K., Olayemi J. K., Yusuf S. A., Idachaba F.S. (2005): Agriculture in Nigeria: Identifying opportunities for increased commercialization and investment. IITA. Ibadan. Nigeria.
- Mourão L. (2018): The Role of Leadership in the Professional Development of Subordinates. Retrieved from <http://dx.doi.org/10.5772/intechopen.76056>.
- Murithi M. O. (2012): Factors influencing the effectiveness of farmer groups in the cereals market: the case of Imenti North District, Kenya. Unpublished MSc. thesis, Department of Project Planning and Management, University of Nairobi.
- Nakazi F., Aseete P., Katungi E., Ugen M. A. (2017): The potential and limits of farmers' groups as catalysts of women leaders. *Cogent Economics & Finance*, 5: 1–16. <https://doi.org/10.1080/23322039.2017.1348326>
- National Population Commission (NPC) (2016): National Population Census. Projected Provisional Census Figure for Oyo State, Nigeria.
- Northouse P. G. (2010): Leadership: Theory and practice (5<sup>th</sup> ed.). Thousand Oaks, CA: SAGE Publications.
- Ofuoku A. U., Chukwuji C. O. (2012): Farmers' groups growth trend in Delta State Nigeria. *Global Journal of Science Frontier Research – Agriculture and Biology* 12: 61–66.
- Ojo E. O., Adebayo P. F. (2012): Food Security in Nigeria: An Overview. *European Journal of Sustainable Development* 1: 199–222.
- Omotesho K. F., Ogunlade I., Muhammad-Lawal A. (2012): Information and communication technology training needs assessment of agricultural extension officers in Kwara State, Nigeria. *Nigerian Journal of Agriculture, Food and Environment* 8: 45–51.
- Omotesho K. F., Ogunlade I., Muhammad-Lawal A., Kehinde F. B. (2016): Determinant of Level of Participation of Farmers in Group Activities in Kwara State, Nigeria. *Journal of Agricultural Faculty of Gaziosmanpasa University* 33: 21–27.
- Owona N. P., Nyaka N. A., Ehabe E. E., Chambon-Poveda B., Bruneau J. C. (2010): Assessment of training needs of rubber farmers in the South-west region of Cameroon. *African Journal of Agricultural Research* 5: 2326–2331. ISSN 1991-637X
- Uaiene R. N., Arndt C., Masters W. A. (2009): Determinants of Agricultural Technology Adoption in Mozambique. Discussion Paper No. 67E. January, 2009.

Received February 23, 2018

Accepted after revisions: December 30, 2019

## APPENDIX

### DETAILS OF SAMPLED FARMER-GROUPS IN OYO STATE

S/N	NAME OF GROUP	LGA	COMMUNITY
1	Atewolara	Akinyele	Onidundu
2	Ifesowapo	Akinyele	Atan
3	Binukonu	Akinyele	Iware
4	Ifesowapo	Akinyele	Ikereku
5	Gods Foundation	Akinyele	Sasa
6	Ajewumi	Ibarapa East	Lanlate
7	Agbewumi	Ibarapa East	Maja
8	Agbedola	Ibarapa East	Maja
9	Ife sowapo	Ibarapa East	Lanlate
10	Akurolere	Ibarapa North	Igangan
11	Ifelanlo	Ibarapa North	Igangan
12	Erepupo	Ido	
13	Majiyagbe	Ido	
14	Aranse Oluwa	Ido	
15	Agbeloba	Ishin	Oke Eyin
16	Owolowo	Ishin	Fararomi
17	Iyaniwura	Ishin	Isalu
18	Asejere	Ishin	Isalu
19	Somidotun	Ishin	Isalu
20	Ladogan	Ishin	Oke Eyin
21	Itesiwaju	Ishin	Oke Eyin
22	Afurugbin	Lagelu	Olosun
23	Oluwalase	Lagelu	Olosun
24	Agbedoro	Lagelu	Olosun
25	Ibukun Oluwa	Lagelu	Olosun
26	Ajumose	Lagelu	Olosun
27	Ifeloju	Lagelu	Olosun
28	Itunnu	Lagelu	Olosun
29	Ifesowapo	Lagelu	Alaje
30	Itesiwaju	Lagelu	Atobaba
31	Ifelodun	Lagelu	Sagbe
32	Ifesowapo	Lagelu	Olodo
33	Ifesowapo	Lagelu	Kute
34	Ife-Dapo	Lagelu	Olorunda
35	Agbedire	Ogbomoso North	Akeikose
36	Ifesowapo	Ogbomoso North	Ikose
37	Agbeloba	Ogbomoso North	Ladiran
38	Agbelere	Ogo-Olowa	Pontele
39	Ola-Oluwa	Ogo-Olowa	Ayede
40	Ore-ofe	Ogo-Olowa	Eesede
41	Iwajowa	Ogo-Olowa	Idewure
42	Ife-lagba	Ogo-Olowa	Ajaawa
43	Ope-oluwa	Ogo-Olowa	Alaruru
44	Irewolede	Ogo-Olowa	Osupa-orile
45	Orisunmbare	Ogo-Olowa	Ajaawa
46	Bibire	Olorunsogo	Igbete
47	Olounjelagba	Oluyole	Aba-ibeji
48	Agbelere	Oluyole	Ayegun
49	Ifedapo	Oorelope	Igboho
50	Owolagba	Oorelope	Iyaa-Igboho
51	Agbedara	Oorelope	Igboho
52	Iyanro	Oorelope	Igbope Igboho
53	Agbediore	Oorelope	Modeke
54	Agbedara	Oorelope	Igboho
55	Ifedapo	Oorelope	Igboho
56	Ike Oluwa	Oyo East	Ile Oba
57	Ibukun Oluwa	Oyo East	Idi-iya
58	Irewolede	Oyo East	Ajagba
59	Agbeloba	Oyo West	Mogaji
60	Obaloko	Oyo West	Mogaji
61	Oorelope	Saki West	Tewu
62	Agbegbemi	Saki West	Tewu
63	Aanu olowapo	Saki West	Tewu
64	Ifelodun	Surulere	Iwafin
65	Ifesowapo	Surulere	Iresaadu