

*Original research paper

Leadership Effectiveness among Farmers' Self-Help Groups in Central Agricultural Zone of Delta State, Nigeria and its Implication for Agricultural Extension Service

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ABSTRACT

This study was conducted in Delta Central Agricultural Zone to determine the effectiveness of the leadership of farmers' self-help groups. Seven of the registered farmers groups were randomly selected. Ten percent (10%) of the members of each selected group were also randomly selected to give 68 respondents that were used for the study. Primary data were collected from the respondents with the use of questionnaire and interview schedule while secondary data were collected from the records of the selected farmers' groups. Data collected were subjected to statistical analysis by using mean derived from 4-point Likert-type scale, frequency counts and percentages. The hypotheses were addressed with the use of Spearman's rank order correlation. Leaderships were rated low in qualities of leaders and were found to be fairly effective creating access to credit, organizing group for price determination and direct sale of produce to consumers. Generally the performance of the members was poor as they did not attend meetings regularly too. Owing to this, leadership performance is adjudged as being generally ineffective. The implication for extension delivery service is that regular training should be organized for leadership of farmers' groups..

Keywords: Farmers' groups, leadership effectiveness, Group cohesion, multiple linkage theory, Self-help.

Comment [M1]: modify topic as suggested

Comment [M2]: give specific performance measures eg loan repayment, meeting attendance etc

Comment [M3]: do you mean Pearson correlation?

Comment [M4]: give mean percentage performance in selected criteria

Comment [M5]: make the conclusion with a recommendation, so recast the last statement

33 INTRODUCTION

34 Leadership is seen as the process whereby an individual directs, guides, influences or
35 controls the thoughts of other members in a social system (Deekor and Nnodim, 2005; Ekong,
36 2003). Jibowo (1992) conceptualizes leadership as dominant personality traits of an individual
37 over the receptive trait of other individuals in the performance of group function in an effort to
38 achieve group goals. These concepts afore referred connote that there is someone who leads in
39 the social system – leader. These concepts all point to the fact that leadership is a group
40 phenomenon on which occurs in an interactive situation between a group of people, the
41 leader/leaders, the challenges or problems or tasks and possible solutions. Farmers' groups are
42 instrumental social groups. These are groups that are formed to accomplish specified objectives.
43 Farmers in general take membership these kinds of groups because they can use such
44 membership to accomplish goals that are related to their farming business.

45 In farmers' group, the leader elicits and encourages the members to harness their
46 financial resources for use by members. Ofuoku and Urang (2009) observed that belonging to
47 such group serves many functions to the individual members. Through such group individuals
48 satisfy their wants. These wants include access to extension service, direct marketing of produce,
49 price determinations, access to inputs at cheap price, access to credit and exchange of
50 ideas/experiences; though access to credit constitutes the major reason. The wants or needs direct
51 us to the goals of these groups.

52 These groups have leaders who drive the leadership process. The leaders are required to
53 have the ability to be empathic, emotionally stable, selfless, and loyal to group ideals and goals.
54 In measuring leadership effectiveness these qualities ought to be considered more importantly,
55 leadership effectiveness by the members can be measured by the extent to which the leaders
56 achieve the group goals such as access to credit, extension service, cheap input, exchange of
57 ideas and experiences as perceived by the members of the group, but if the perception of the
58 members are used, it may not be reliable as perceptions are relative to the individuals. For this
59 reason, the multiple linkage theory is considered useful. This theory utilizes a model of group
60 performance to explain leadership effectiveness. As Agbarevo and Obinne (2010) explain, the
61 performance of the group is an index of leadership effectiveness. This implies that if a group's
62 performance is poor, then the leadership of such group is not effective.

Comment [M6]: justify the use of this theory by discussion in a short paragraph the origin, merits demerits and applications with examples of researcher who used the theory.

63 There are indicators of group performance in farmers' groups. These include frequency
64 of attendance to meetings, regularity of payment of dues, frequency of participation in group
65 activities and amount of credit accessed. The last one may be difficult to have access to as it is
66 one of the confidential records of the groups.

67 Farmers' groups are ubiquitous, yet the level of production among farmers is still
68 inadequate. Iwala et al. (2006) observes that up till now, Nigeria is yet to achieve 5% total
69 caloric intake of non-starchy crops recommended by Food and Agriculture Organization (FAO).
70 Unless there are strong farmers' groups, leadership that create access to adequate amount of
71 credit and relevant information for farmers, agricultural production targets will not be attained.

72 **Objective of the Study**

73 The major objective of the study was to assess the performance of farmers' groups
74 leadership in Central Agricultural Zones of Delta State, Nigeria. Specifically the objectives were
75 to:

- 76 (i) ascertain farmers' assessment of the leadership of farmers' groups;
- 77 (ii) determine the level of meeting attendance;
- 78 (iii) ascertain group performance with respect to payment of dues;
- 79 (iv) identify the challenges which leaders of the farmers' groups face.
- 80 (v) Discuss implication of that findings for agricultural extension service.

82 **Hypothesis**

83 Ho₁: Farmers' group members' assessment of their leadership does not influence the
84 performance of the farmers' groups.

85 Ho₂: Qualities of group leadership have no relationship with their effectiveness.

87 **METHODOLOGY**

88 The study area is Delta Central Agricultural Zone of Delta State, Nigeria. The area is
89 located in the central part of Delta State, Nigeria. It is made up of Ethiope East, and West,
90 Ughelli North and South, Okpe, Sapele, Uvwie, Udu and Isoko North and Isoko South local
91 government areas. It is bounded on the north by Ukwuani, Ndokwa West and East Local
92 Government Areas of Delta North Agricultural Zone. On the south by Warri South, Warri South

Comment [M7]: I quite agree that these are performance indicators but as a scientific paper, try to beatify this paper by citing literature which has used these indicators as measures of performance of groups especially agricultural micro credit groups, and include the average performance score if possible in each literature to be cited. You can use the internet, believe you me, you will be surprise by the number of literature available on this issue.

Comment [M8]: Hypotheses

93 – West, Warri North, Bomadi and Patani Local Government Areas of Delta South Agricultural
 94 Zone, on the east by Ndokwa East Local Government Area and River Niger and on the West by
 95 Orhiomwon Local Government Area of Edo State.

Comment [M9]: Include the location of the study area using longitudes and latitudes

96 The area is situated in the fresh water and rain forest vegetation belt. It is blessed with
 97 fresh water sources and forest resources. The people are predominantly farmers who are into
 98 arable and tree crops farming and livestock farming.

99 The study population includes the leadership of all the farmers' groups in Delta Central
 100 Agricultural Zone. Out of the 27 farmers' groups in the zone registered with Delta State
 101 Agricultural Development Programme (DTADP), 10 were randomly selected to constitute the
 102 study sample as shown in Table 1, this gave rise to 68 respondents.

103
 104 **Table 1:** Selection of farmers' groups and respondents

Farmers' Group Selected	Membership	10 percent
Cassava Farmers' Association, Eku	77	8
Farmers' Association, Kokori	70	7
Elume Farmers' Association	81	8
Fish Farmers' Association, Otor-Udu	79	8
Jesse Farmers' Union	221	22
Ughelli Poultry Farmers Association	85	9
Isoko Fish Farmers' Association	64	6
Total	677	68

105
 106 Primary data were collected from the selected respondents while secondary data were
 107 collected from the records of the selected farmers' groups. The primary data were collected with
 108 the use of interview schedule administered to non-formally educated respondents while
 109 questionnaire was used for those who were formally educated. Objective (i) was treated with
 110 means derived from 4 – point likert's type scale of strongly agree = 4, agree = 3, disagree = 2
 111 and strongly disagree = 1. Objectives (ii), (iii) and (iv) were addressed with the application of
 112 percentages.

113 Hypotheses 1 and 2 were addressed with the application of Spearman's rank order
 114 correlation coefficient. The formula is stated as follows:

$$\rho = \frac{1 - 6\sum d^2}{N(N^2 - 1)}$$

Where:

N = Number of observation

rho = The difference between the two ranks associated with observations

Code numbers, FG₁ – FG₇ were used to represent the farmers' groups to maintain the anonymity required by the secretaries of the groups who give the authors access to the required records in strict confidence. The limitation encountered was that none of the groups allowed the authors to have access to most of their financial records.

RESULTS AND DISCUSSION

Respondents' Assessment of their Leadership

Table 2 indicates that the leadership of farmers' groups was generally not empathic, not emotionally stable, was not selfless and did not exhibit loyalty to group ideals and goals. They generally also did not exhibit integrity.

In the area of effectiveness, the leaderships were only effective in providing access to credit, organizing for price determination, and direct marketing of farm produce. This implies that the leaderships of farmers groups were generally not effective. This can create a negative feeling in the members and can lead to withdrawal of members from the groups. Farmers would like to remain in their various groups if their needs are satisfied (Ofuoku *et al*, 2008, Ofuoku and Urang, 2009). Once the individual farmers' needs are satisfied, the group remains cohesive (Ofuoku and Chukwuji, 2012). Generally, the respondents rate their leaderships poorly.

Comment [M10]: use Person correlation. Try to see Koutsouyinnais –Theory of Econometrics , your data is not suited for Spearman and also the result you presented is of Pearson.

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Table 2: Respondents' Assessment of their Leadership

Leadership Quality	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Score	Mean
1. Empathic	16 (64)	13 (39)	23 (46)	16 (16)	165	2.42
2. Emotionally stable	18 (72)	13 (39)	20 (40)	17 (17)	168	2.47
3. Selfless	12 (48)	12 (36)	33 (66)	11 (11)	161	2.36
4. Loyal to group ideals and goals	16 (64)	14 (42)	25 (50)	13 (13)	169	2.48
5. Exhibit integrity	11 (44)	17 (51)	19 (38)	21 (21)	154	2.26
6. Provides access to credit	19 (76)	19 (57)	19 (38)	11 (11)	182	2.68*
7. Organize regular extension/farmers meetings	14 (56)	16 (48)	21 (42)	17 (17)	163	2.39
8. Organize group meetings regularly	16 (64)	12 (36)	25 (50)	15 (15)	166	2.42
9. Creates opportunities to access cheap inputs	8 (32)	12 (36)	32 (64)	16 (16)	116	1.70
10. Organizes for price determination	18 (72)	20 (60)	14 (28)	16 (16)	176	2.59*
11. Organizes for direct marketing of farm produce	20 (80)	17 (51)	16 (32)	15 (15)	178	2.62*

147 Cut-off Score = 2.5 (≥ 2.5 = Good Leadership quality/effectiveness; < 2.5 = Poor leadership
 148 quality/effectiveness).

149

150 **Members' performance with respect to meeting attendance (participation in group**
 151 **activities)**

152 Table 3 indicates that apart from FG₁, FG₂ and FG₇ that had average performances, with respect
 153 to meeting attendance, the other groups performed poorly. Most of the members were not
 154 attending meetings regularly. Though this may be attributed to interference by domestic and

155 other responsibilities, the major reason was that most of the members were dissatisfied with their
156 leaderships. Ofuoku and Chukwuji (2012) observed that many farmers' groups lost their
157 members due to dissatisfaction. Dissatisfaction inhibits cohesion in groups. As long as most
158 members are not satisfied, they will handle the issue of meeting attendance with levity. Ogionwo
159 and Eke (1999) opined that democratic leadership which facilitates group's performance
160 enhances group cohesion. If members of groups are satisfied, they will always make provision
161 for the meetings in terms of time.

Comment [M11]: discuss the table 3 and also use literature to compare your results

162 **Table 3: Members' Performance with Respect to Aggregate Meeting Attendance**

163 **Level of Meeting Attendance**

Farmers' Group	2002		2003		2004		2005		2006		2007		2008		2009		2010		2011		Total	Percentage (%) attendance
	E	A	E	A	E	A	E	A	E	A	E	A	E	A	E	A	E	A	E	A		
FG ₁	972	504	972	612	852	360	876	528	828	516	756	456	888	612	900	696	912	552	924	385	5221	58.80
FG ₂	960	600	936	480	720	240	720	276	720	228	792	300	804	312	912	372	876	324	840	492	3624	43.77
FG ₃	756	264	804	348	864	348	948	372	1020	432	1020	384	1044	420	996	396	972	252	972	252	3468	36.91
FG ₄	984	384	100	372	103	408	102	300	1020	456	984	432	966	384	966	408	948	372	948	420	3936	39.85
FG ₅	277 2	636	277	612	276	492	276	552	2712	408	2760	420	2760	516	2652	492	2652	480	265	504	5112	18.16
FG ₆	115 2	492	115	456	115	480	104	432	1032	420	1032	432	1032	360	1020	384	1056	432	102	372	4260	39.80
FG ₇	840	396	840	372	804	360	792	312	780	336	780	312	816	324	768	336	768	288	768	300	3336	41.93

164 **Source:** Various Farmers' Groups

165 E= expected total attendance ; A= actual total attendance

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167 **Performance with respect to payment of dues**

168 It was observed that all the farmers' groups had no fixed rate of financial subscription,
 169 but the rate paid depended on the perceived capability of the individual subscriber. Each
 170 subscriber fixed his/her own subscription (Table 4). There were increased performance between
 171 2002 and 2006 generally, but the groups, experienced dwindling performance between 2007 and
 172 2011. This is attributed to dissatisfaction of the members of the groups. Most of the members
 173 expressed their by reducing their financial subscriptions to their respective groups. The
 174 dissatisfaction was due to delay in receiving loans applied for and sometimes when received, the
 175 desired amount is not released at once. Some of the leaders also did not carry most of their
 176 members along in accessing cheap inputs through group purchase and extension services.
 177 Ofuoku *et al* (2006) discovered that fish farmers subscribed to self-help groups in order to have
 178 access to cheap inputs, credit facility and extension service.

179 **Table 4: Members' Performance with Respect to Subscription (million Naira)**

Farmers' Group	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	% diff. between 2002 & 2011
FG ₁	1.10	1.24	1.39	2.01	1.71	1.33	1.31	1.18	1.16	1.16	5.45
FG ₂	1.23	1.20	1.31	1.39	1.38	1.41	1.42	1.30	1.21	1.20	-2.44
FG ₃	1.81	1.81	1.81	1.91	2.03	1.80	1.48	1.43	1.42	1.33	-26.52
FG ₄	1.45	1.53	1.57	1.61	2.11	1.99	1.96	1.63	1.40	1.40	-3.45
FG ₅	2.31	2.28	2.11	2.11	2.31	2.34	2.20	2.20	2.00	2.00	-13.42
FG ₆	2.27	2.30	2.36	2.13	2.26	2.00	1.89	1.92	1.91	1.42	-37.44
FG ₇	1.31	1.31	1.35	1.33	1.41	1.45	1.32	1.36	1.31	1.12	-14.50

180 **Source:** Various Farmers' Groups

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182 The credit enables them to expand and improve on their farm holdings. Ofuoku et al
 183 (2006) discovered significant difference between scale of production of fish farmers who
 184 subscribed to cooperative societies and non-subscribers to cooperative societies. The difference
 185 was as a result of the access the subscribers had to cheap inputs and credit facilities. In situations
 186 where members of groups do not have access to such credit facilities and cheap inputs, they are
 187 bound to express their dissatisfaction by either withdrawing their membership or reducing their
 188 subscriptions (Ofuoku and Chukwuji, 2012).

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190

Comment [M12]: discuss the table 4 and also use literature to compare your results

Comment [M13]: What are possible reasons and implications of the reduction?

191 **Membership challenges with groups' leaderships**

192 The important challenges members had with group leadership (Table 5), include
193 inadequate access to cheap farm inputs, irregular information on extension/farmers' meetings
194 and time of group meetings. The leaders often failed to make adequate arrangements for bulk
195 purchase of inputs for group members. The bulk purchase, when made even without the aid of
196 extension agents is cheaper. This is congruent with the findings of Ofuoku and Chukwuji (2012)
197 that discovered that inadequate access to input was one of the constraints of farmers' groups in
198 Delta State, Nigeria.

199 Meetings were more often than not fixed at times that were not conducive for majority of
200 the members, especially extension/farmers' meetings. It is through Such meetings that farmers
201 access extension service/interaction. Access to extension service is one of the important reasons
202 farmers subscribe to farmers' groups. This confirms the finding of Ofuoku *et al* (2008) who
203 discovered that fish farmers in Southern Nigeria pointed time of extension/farmers' meetings as
204 one of the constraints facing them.

205 Irregular information on such meetings was also pointed out by the members as one of
206 the challenges they had. Leaders failed on their part to disseminate information on such meetings
207 regularly to members of the groups. This is an indication of incompetence on the part of the
208 group leadership. Communication is very important in the affairs of groups. The pattern of
209 communication largely affects group performance (Agberevo and Obinne, 2010). Patterns of
210 communication are direction of flow between those involved. If the direction of flow is limited to
211 a few of the members, there will be communication breakdown. This often deprives receivers
212 (members of the group in this case), of the necessary information.

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221 **Table 5: Members' Challenges Unit Groups' Leaderships**

Challenges	Frequency	Percentage (%)
Inadequate access to credit	30	44.12
Inadequate access to cheap inputs	48	70.59
Time of group meetings	40	58.82
Irregular information on extension/farmers' group meetings	38	55.88
Failure to organize for produce price discrimination	30	44.12
Failure to achieve direct marketing of produce	31	45.59

222
223

224 **Relationship between Members' Assessment of Leadership and Members' Performance**

225 Table 7 indicates that farmers' groups members' assessment of farmers' groups
226 leadership has positive relationship with members' performance. Leadership effectiveness has
227 positive and significant relationships with meeting attendance ($\rho = 0.714$) and monthly
228 payment of subscription ($\rho = 0.543$). This implies that the higher the members' opinions are
229 about the leadership, the higher the members' performance. This invariably means that members
230 will perform better if they find their leadership as performing up to expectation. This has
231 implications for farmers' group cohesion. Democratic leadership which facilitates groups'
232 performance and attainment of group and individual goals enhance group cohesiveness
233 (Ogionwo and Eke, 1999). According to Ofuoku and Chukwuji (2012), in situation where
234 members do not have easy access to credit and inputs, the members are bound to express their
235 dissatisfaction in various ways.

236 **Table 6: Relationship between Members' Assessment of Leadership and their Performance**

Variables	Leadership effectiveness	Meeting attendance	Payment of dues
Leadership effectiveness	1.000	0.714*	0.543*
Meeting attendance	0.714*	1.000	0.544*
Payment of dues	0.543*	0.544*	1.000

Comment [M14]: this is Pearson correlation

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238
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Relationship between Quality and Effectiveness Assessment of Leadership by Members

There is positive and significant relationship between the quality and effectiveness assessment of the farmers' groups leaderships (Table 7). The implication is that their assessment of the leaderships is valid and reliable.

Table 7: Relationship between quality and effectiveness of leadership assessment by members

Variables	Quality	Effectiveness
Quality	1.000	0.700*
Effectiveness	0.700*	1.000

Comment [M15]: this is Pearson correlation

CONCLUSION

The leaderships of the farmers' groups were only found to have performed generally on the average in the aspects of provision of access to credit, organizing for price determination and direct marketing of farm produce. From the members' performance which is poor, judging from meeting attendance and payment of dues, the leaderships of the various groups are adjudged as not effective. This is so as they could not achieve most of the goals for which the farmers' groups were formed. This is in consonance with multiple linkage theory which portends that the performance of group members is an index of leadership effectiveness.

IMPLICATION FOR AGRICULTURAL EXTENSION SERVICE

One major problem of agricultural extension delivery in developing countries is the dearth of manpower to cope with large number of farmers that constitute 75 – 85% of the workforce (Agbarevo and Obinne, 2010). Agbamu (2005) puts extension worker: farmer ratio at 1:1189, while International Agricultural Centre (1989) suggests the ratio of 1:250. This implies that the number of farmers is too large for field extension agents to manage. In order to cope with this trend, agricultural extension activities are now being carried out in groups. The farmers are encouraged to form specialized groups to ease their interaction with field extension agents.

Farmers also have needs they would want to satisfy which they cannot solely satisfy unless they subscribe to such farmers' groups. These needs include, very importantly, access to extension service market /information, and access to credit facilities; etc (Ofuoku *et al*, 2008).

If the leadership of farmers' groups are ineffective, agricultural activities of the farmers are adversely affected. As this happens, food security is being inhibited. Therefore agricultural

extension services need to organize leadership training for farmers' groups at intervals. This training should be designed in a way that it will take care of the importance of adequate and early dissemination of information on meetings to members; importance of democratic fixation of meeting days and times; and the need to use various media to disseminate reminders of meeting to members. The training should also cover access to cheap inputs and the necessity of direct marketing of farm produce to consumers. The area of collective produce price determination should also be included in the leadership training programme for farmers' groups.

Comment [M16]: show the importance of group extension services and the value of your paper.

REFERENCES

Comment [M17]: Beef up the work using paper published especially in the internet.

- Agbamu, J.U.(2005). Prospects and Challenges of Agricultural Extension in Nigeria. In Adedoyin, S.F.(ed). *Agricultural Extension in Nigeria*. Ilorin: Agricultural Extension Society of Nigeria. Pp 65-76
- Agbarevo, M.N.B. and Obinne, C.P.O. (2010). *Elements of Rural Sociology and Agricultural Extension*. Uwani – Enugu: Toe Publishers.
- Deeker, H.L. and Nnodim, A.U. (2005). *Community Leadership and the Development Process*. Owerri: Springfield Publishers Ltd.
- Ekong, E.E. (2003). *An Introduction to Rural Sociology*. Uyo: Dove Educational Publishers.
- International Agricultural Centre (1989). Agricultural Extension Service in Africa and the Carribean. *Spore*. 23(2), 5- 7.
- Iwala, O.S., Okwulola, J.O. and Imodu, P.B. (2006). Productivity and Technical Efficiency of Oil Palm Production in Nigeria. *Journal of Food, Agriculture and Environment*, 2 (3&4), 181 – 185.
- Jibowo, A.A. (1992). *Essentials of Rural Sociology*. Abeaokuta: Gbemi Sodipo Press Ltd.
- Ofuoku, A.U., Uzokwe, U.N. and Ideh, V. (2006). Comparative Analysis of cooperative and Non-Cooperative Fish Farmers in Central Agricultural Zone of Delta State, Nigeria. *Extension Farming Systems Journal*, 2(1), 97 – 102.
- Ofuoku, A.U., Enaikel, M. and Nnodim, A.U. (2008). Cohesiveness of Fish Farmers' Groups South Nigeria. *Journal of Agricultural and Biological Sciences*, 3(4), 16 – 21.

297 Ofuoku, A.U. and Urang, E. (2009). Effect of Cohesion on Loan Repayment in Farmers'
298 Cooperative Societies in Delta State, Nigeria. *International Journal of Sociology and*
299 *Anthropology*, 1(4), 070 – 076.
300 Ofuoku, A.U. and Chuwuji, C.O. (2012). Farmers Group Growth Trend in Delta State, Nigeria.
301 *Global Journal of Science Frontier Research-Agriculture and Biology*, 12(3), 61 – 66.
302 Ogionwo, W. and Eke, P. (1999). *An Introduction to Social Psychology*. Owerri, Nigeria:
303 Springfield Publishers.
304 .

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