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Evaluation of the effectiveness of agricultural shows in Oyo and Ondo States of Nigeria

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Abstract

The purpose of the study was to evaluate the effectiveness of agricultural shows in Oyo and Ondo States. Data were obtained from 75 farmers who had participated in agricultural shows before, and 98 who had not, between September and November 1981, through interviews. Findings revealed that agricultural shows were effective in terms of imparting knowledge to the participants in the major areas of agriculture namely, crop, animal, fishery, and forestry management, but application of such knowledge was most frequent in crop management. The University of Ife had not been effective in attracting many participants to its booths, although it had been effective in passing knowledge of its exhibits to those who visited its booths, and such knowledge had been largely applied, except of Ife Brown cowpeas, the cultivation of which needed to be encouraged among the participants..

Effective use of teaching methods, and special drives to stimulate farmers to attend the shows needed to be encouraged to enhance effectiveness. The significant relationship between characteristics such as income and contact with extension agents, and participation should assist the extension agents in identifying and encouraging potential participants, while farmers with less of the characteristics are also not ignored.

Introduction

Agricultural show is an extension method which allows agricultural scientists, practitioners, and commercial concerns to exhibit their existing and new products, and try to explain to farmers how to utilize these to increase agricultural production. The cardinal essence is to enable farmers become aware of, and hopefully benefit from, scientific and technical advancements in agriculture.

The first agricultural show in Nigeria was held at Lagos in 1903 (Alao, 1968). In the old Western Region, agricultural shows were held on provincial basis, that is, in the Ondo, Ibadan and Abeokuta provin-

ces. With the creation of states in 1967, and later in 1976, Lagos, Ogun Oyo and Ondo States organised and held separate agricultural shows through the efforts of the officials of the Ministry of Agriculture and Natural Resources. Ondo State has held agricultural shows annually since its creation in 1976 till 1980. Since 1980, the Oyo State Farmers' Union has been charged with the sole responsibility of organising agricultural shows in the state under the supervision of the officials of the Ministry of Agriculture and Natural Resources. The State government has provided heavy financial support for the shows through the same ministry.

The first national agricultural show was held on April 7–11, 1981 at Kaduna, Kaduna State. Some states have adopted the policy of retaining the state shows as well as participating in the national show. The practice in Ondo State, for instance, has been to select the best farmers in the state shows to participate in the national show.

The University of Ife, through its Faculty of Agriculture and the Institute of Agricultural Research and Training, has adopted the policy of participating, and has actually participated in many of the agriculturals shows held in Lagos, Oyo, Ogun, Ondo and Kwara States, since the establishment of the University in 1962. Some years after participating, however, there were growing concerns among members of the Faculty of Agriculture's Agricultural Show Committee, about the need for their continued participation in the shows. For instance, in the meeting held on 15th February, 1973, members suggested that the committee should consider putting an end to any further participation of the Faculty in Agricultural Shows. The feeling continued until November 1978, when the committee, decided to study the effectiveness of Agricultural Shows.[1] This assignment therefore constituted the major purpose of this study. The study specifically determined (a) the areas from which farmers gained knowledge of improved farm practices through agricultural shows; (b) the areas of such knowledge gained which were applied for their farm improvement; (c) the effectiveness of teaching methods to which participants were exposed; (d) the booths visited by farmers; (c) the agencies seen at the shows; (f) the years and days farmers attended the shows; and (g) products exhibited by farmers. Findings from the above should highlight the effectiveness of agricultural shows in assisting farmers to acquire knowledge and skill of improved agricultural practices.

The study also determined the organisation of agricltural shows in terms of (a) sources of information on agricultural shows; (b) farmers' preferences in aspects like location, organising body, frequencies, months and days of shows, and awards for outstanding exhibits. This

1. Source: Agricultural show committee file, Department of Agricultural Extension and Rural Sociology, University of Ife, Ile-Ife.

exercise is to furnish data for improving the organisation, and hopefully effectiveness of future agricultural shows.

The study finally determined the factors associated with participation in agricultural shows. It therefore tested the hypothesis that there was no significant relationship between the personal, social and economic characteristics of farmers and participation in agricultural shows.

Evaluating the effectiveness of Agricultural Shows:

Agricultural show effectiveness could be evaluated by determining the extent to which the shows have accomplished their objectives. The objectives of agricultural shows as stated by Alao (1968) were: (i) to bring farmers together in a relaxed atomosphere; (ii) to create an awareness in farmers of new developments in agriculture; (iii) to create an awareness of proven research results; (iv) to encourage farmers to adopt new agricultural practices which give better yields and increase income; (v) to teach farmers through method demonstrations; (vi) to show farmers results of recommended agricultural practices through result demonstrations; (vii) to instill a sense of achievement in farmers; (viii) to familiarize farmers with extension staff; and (ix) to bring farmers in contact with agricultural industries and the facilities they offer. Agricultural shows could also (x) foster agricultural publicity and (xi) generate a healthy rivalry among the participants, which could lead to increased levels and efficiency of production

To attain the above objectives, various agricultural institutions such as the Ministry of Agriculture and Natural Resources from the State, the Research Institutes, the Faculty of Agriculture, specifically of the Ife University, Farmers' Associations, Individual farmers and agrochemical manufacturing and sales companies, attend the shows to exhibit their products. These include (i) root crops and tubers; (ii) grains; (iii) beans, nuts and oil-crops; (iv) vegetables; (v) fruits; (vi) prepared products; (vii) livestock and poultry; (viii) fish; (ix) fibre crops; (x) handicrafts and (xi) home economics products.

The exhibits are arranged at the shows by agencies rather than classes of products. Each agency therefore exhibited all its products together.

Representatives of each agency and the extension workers explained the significance, techniques for using, and the features of each exhibit to the farmers and other participants. Various teaching methods such as method and result demonstrations, lectures, questions and answers, slides, motion pictures, photo-graphs, and charts were used in the process. The participants had various characteristics such as age, educa-

tion, income which could determine their participation and hence the effectiveness of the shows.

To facilitate effectiveness, the shows were planned with farmer representatives by the officials of the Ministry of Agriculture and Natural Resources. To ensure coverage of each state, the shows were rotated on divitional or zonal basis. Each show lasted three to four days. Shows were normally held once a year between December and March. Farmers with good exhibits were often given prizes. Food vendors and entertainers were often in attendance. The opening ceremony was often performed by the political head of the Ministry of Africulture and Natural Resources to lend an air of importance to the occasion.

Regardless of the organized efforts, problems such as inadequate transport facilities, publicity, interruption by rainfall, have been experienced. Sometimes agricultural shows end dramatically with social parties to enrich the festive mood and make the occasion linger on in the memory of the participants. An adequate framework for evaluating an agricultural show should focus on the vital dimensions discussed above.

Methodology

Data collection took place between September and November, 1981 from 75 farmers who had participated in agricultural shows prior to the study, and 98 who had never, for comparative purpose. Respondents were chosen from villages in the neighbourhood of the towns where agricultural shows had been held previously. The towns included Ile-Ife, Ilesha, Iwo, Ede and Ibadan in Oyo State; Ondo, Akure, Owo and Ado-Ekiti in Ondo State. Participants were identified by asking the respondents if they had ever attended any agricultural shows and farmers festivals organized in their states. To confirm their responses, they were asked to name the towns where the shows took place, the agencies and exhibits seen. The names of the towns were checked with official records. The non-participants were chosen from the heads of households all over each village by identifying each house and making selections through simple random sampling.

The interview schedule was the instrument for data collection. Effectiveness of agricultural shows was measured through knowledge gained from agricultural shows and knowledge applied on their farms, teaching methods experienced, booths and exhibits visited, years and

days of participation, and products exhibited by farmers. Information on organisation of agricultural shows such as sources of information, problems encountered, preferences for location, duration, organising body, frequencies of agricultural shows as well as awards for outstanding farmers, was also sought. Finally data on some personal, social, and economic characteristics of respondents such as age, years of schooling, contact with extension agents and income, were also solicited.

To ensure face validity , the instrument was pretested by interviewing three farmers who had attended agricultural shows and two who had not, on the basis of which the phraseologies of some areas were modified. Content validity was also ensured by adequately covering all the areas implied by the objectives, and making necessary additions after pretesting. Data were quantified with frequency counts. Organisational participation score was computed by assigning values of 1, 2, and 3 for each membership, committee membership and officership of organisations, while the hypothesis was tested with chi-square analysis to compare participants and non-participants in agricultural shows on the bases of some categorized characteristics.

Results and Discussion

Knowledge gained and knowledge applied:

Majority of respondents who attended agricultural shows gained knowledge of crop, animals, fishery, forestry, and soil management, as well as marketing of agricultural products. Only some people gained knowledge of cooperative society management, home economics, rural development and leadership activities (See Table I).

However, majority of participants applied such knowledge only in crop management, crop pest and disease control, to improve their farms. A careful observation of the Table shows that more than 50% of the participants who gained knowledge in the above two areas as well as marketing of products, soil and cooperative management, home economics, rural development, and leadership activities indicated that they actually applied such knowledge in improving their farms. Less than 50% of those who gained knowledge in animal, fishery and forestry management did not apply it. This suggested that the extension activities in these subject-matter areas have not been effective.

TABLE 1: DISTRIBUTION OF FARMERS BY KNOWLEDGE GAINED FROM AGRICULTURAL SHOWS AND KNOWLEDGE APPLIED ON THEIR FARMS.

Subject - matter area	Knowledge gained		Knowledge applied	
	No. (N – 75)	%	No. N – 75)	%
Crop management	70	93.3	64 –	85.3
Crop pest and disease control	62	82.7	52	69.3
Animal Management	54	72.0	26	35.0
Fishery Management	50	66.6	23	30.7
Marketing of products	44	58.7	33	44.0
Forestry management	41	54.7	20	26.7
Soil management	41	54.7	22	29.3
Cooperative management	35	46.7	22	29.3
Home economics	29	38.6	25	33.3
Rural Development	23	30.7	20	26.7
Leadership activities	16	21.3	13	17.3
Others 12	16.0	2	2.7	

The University of Ife booths: Knowledge gained and knowledge applied

Only 22 out of the 75 participants (29.3%) visited the booths mounted by the University of Ife. Of these, majority gained knowledge in only three subject-matter areas, namely, crop management (90.9%), soil management (72.9%), and animal management (63.6%). Only few participants gained knowledge in marketing of products, rural development, home economics, cooperative organisation and leadership activities. Application of acquired knowledge in farm improvement was limited to the area of crop management by 81.8 percent. Although majority of the respondents did not apply the knowledge gained from the other subject-matter areas, majority of those who acquired such knowledge applied it, except in soil management (See Table 2)

TABLE 2: DISTRIBUTION OF FARMERS BY KNOWLEDGE GAINED FROM THE UNIVERSITY OF IFE BOOTHS DURING AGRICULTURAL SHOWS AND KNOWLEDGE APPLIED IN IMPROVING THEIR FARMS.

Subject-matter area	Knowledge gained		Knowledge applied	
	No. (N –	% 22)	No. (N =	% 22)
Crop Management	20	90.9	18	81.8
Soil Management	16	72.7	7	31.8
Animal management	14	63.6	7	31.8
Marketing of products	4	18.2	2	9.1
Rural development	4	18.2	2	9.1
Home economics	3	13.6	2	9.1
Cooperative organisation	2	9.1	2	9.1
Leadership activities	2	9.1	2	9.1
Others	1	4.5	1	0.5

Knowledge gained from specific exhibits of the University of Ife and knowledge applied

From the specific exhibits mounted by the University of Ife, 50% or more of those who visited them gained knowledge of Ife Brown cowpeas, Ife plum tomatoes, fertilizer application, poultry disease infestation and control. Majority did not gain knowledge of fertiliser types, soil types, yam pounder use, maize dryer construction, sheep and goat management and marketing of products. Unfortunately most of the respondents did not apply the various knowledge gained in their farm improvement. It should be noted that majority of the visitors gained knowledge from the major scientific agricultural innovations released to the farmers by the University, namely the Ife Brown cowpea and the Ife Plum tomatoes, although such knowledge was scarcely applied.

Agencies seen and visited

Majority of the farmers saw (97.3%), and visited (96%) the booths mounted by the States' Ministry of Agriculture and Natural Resources, 86.7% and 82.7% saw and visited respectively, those mounted by

farmers' associations; 73.3% and 66.7% respectively saw and visited those of agro-chemical companies; 37.3% saw those of the University of Ife; as previously stated, only 29.3% visited the booths. Only a few respondents saw (5.3%) and visited (4%) the booths of other agencies. Farmers therefore saw and spent some time at the booths mounted by many of the agricultural agencies through visiting the booths.

Effectiveness of teaching methods

Majority of the participants identified method demonstration, result demonstration and question and answer methods as those to which they were exposed in learning at agricultural shows. Most participants did not identify the other methods (See Table 4). However, only lecture was identified by majority, and in fact all those who were exposed to it, as most effective in learning. The other methods were not identified as most effective by majority of the participants who were exposed to them.

TABLE 3: DISTRIBUTION OF PARTICIPANTS WHO VISITED THE UNIVERSITY OF IFE BOOTHS BY KNOWLEDGE GAINED FROM SPECIFIC EXHIBITS AND KNOWLEDGE APPLIED ON THEIR FARMS

Exhibit	Knowledge gained		Knowledge applied	
	No. (N = 22)	%	No. (N = 22)	%
Ife Brown cowpeas	14	63.6	6	27.3
Ife Plum tomatoes	11	50.0	7	31.8
Slides on how to fertilize crops	11	50.0	8	36.4
Slides on poultry diseases	11	50.0	8	36.4
Samples of various soil types	11	50.0	3	13.6
Samples of fertilizers	8	36.4	5	23.7
Yam pounder demonstration	7	31.8	0	0
Slides on maize dryer construction	7	31.8	0	0
Sheep and goat management	7	31.8	0	0
Charts on marketing of products	3	13.6	1	4.6
Others	1	4.6	0	0

TABLE 4: DISTRIBUTION OF FARMERS BY TEACHING METHODS TO WHICH THEY WERE EXPOSED AND THOSE RANKED AS MOST EFFECTIVE IN LEARNING AT AGRICULTURAL SHOWS

Teaching Methods	Exposed		Most Effective	
	No. (N =	% 75)	No. (N =	% 75)
Method demonstration	39	52	18	24
Result demonstration	38	51	12	16
Question and Answer	38	51	5	7
Lecture	32	43	32	43
Real object	17	23	1	1
Photographs	15	20	0	0
Slides	10	13	1	1
Motion pictures	10	13	1	1
Ordinary charts	9	12	1	1
Flip charts	8	11	0	0

Period of participation

Majority (57.3%) of the participants indicated that they had previously attended 1–3 agricultural shows; 26.7% had attended 4–6 shows; few respondents (6.7%) mentioned 7–9 shows; 9.3% had attended 10 or more shows. Most of the respondents therefore had previously attended a mean of 4 agricultural shows.

Participants (44.4%) had previously spent 1–3 days in attending agricultural shows; 13.3% spent 4–6 days; 45.3% spent 7 days and over. Participants had therefore spent a mean of 5 days in attending agricultural shows.

Products exhibited by farmers

Only 27 participant farmers (36%) had ever exhibited farm products at agricultural shows; 64% had never. Of those who had, 96.2% had exhibited crops, 55.6% had exhibited animals in some agricultural shows. Some farmers exhibited both crops and animals.

Organization of agricultural shows: sources and chennels of information

The most important channel from which most farmers (78.6%) heard about agricultural shows was the radio. The other channels, namely, posters (6.7%) and newspapers (2.7%), as well as sources, namely, agricultural extension agents (5.3%), farmers cooperatives, salesmen (2.7%) and farmers not in cooperative societies (1.3%) were not as important. The importance of radio in creating awareness of forthcoming agricultural events was hereby demonstrated.

Problems in agricultural shows

Three major problems militating against effective planning and implementation of agricultural shows were identified by the respondents. These included inadequate transportation facilities (80%), publicity (74.7%), and farmer involvement in planning (65.3%). The other less frequently mentioned problems included rain interruption, mentioned by 41.3%; inadequate numberof extension agents, (40%); far distance of show grounds from farmers' homes, (36%); inadequate number of food sellers, (35%); inadequate number of exhibits, (26.7%); and too many side attractions, (17.3%).

Farmers' preferences in organisation of agricultural shows

Location: Most farmers (90.6%) preferred that hosting of agricultural shows be rotated throughout the states to give farmers in the various communities in each state the opportunity to attend. Only 6.7% indicated one location; 2.7% gave no response. While 3 of the 5 participants who indicated one location wished that to be the Local Government Headquarters, one indicated the state capital, and the other indicated other places. Many (45.6%) of those who wished that the shows be rotated indicated Local Government Headquarters; 38.2% mentioned other state towns; 13.2% named villages in their states; 3% gave no indication. Local Government Headquarters and other towns within the states were therefore favoured places for hosting agricultural shows. This should ease access to show grounds and provision of infrasturctural facilities such as electricity and pipe-borne water to participants.

Organising bodies

The Ministry of Agriculture and Natural Resources, and local farmers were preferred as the organizing bodies of agricultural shows by 38.8% of the participants; 24% mentioned the Ministry of Agriculture and Natural Resources alone; 20% mentioned the Ministry of Agriculture and Natural Resources and Local Government Council. The other bodies were nominated by few respondents. The farmers' cooperative and the farmers' union were mentioned by 6.7%, respectively; Local Government Council, (2.7%); local farmers (1.3%). These finding suggest that the Ministry of Agriculture and Natural Resources, in cooperation with the local farmers should be the principal organisers of agricultural shows, although they could receive assistance from the Local Government Council.

Frequency, months and days of holding agricultural shows

Most of the farmers (82.8%) indicated that agricultural shows should be held annually; 9.3% indicated every three years. Most (78.7%) respondents wished that each show should last for 3 days; 12% indicated 7 days. The month of December was suggested by 36% as most suitable for hosting agricultural shows; 14.7% suggested January; 13.3%, November; 10.7%, March; 9.3% April. The months of December and January were therefore most favoured for holding the shows. The reasons given were that those fall into periods that many crops which could be exhibited should have been harvested, and dry season, when there would be no interruption of shows by rainfall.

Award for outstanding farmers

The farmers were all agreed that free farm inputs such as improved seeds, livestock, pesticides and others should be given as awards for outstanding farmers. Ninety-one percent gave this indication. Cash was suggested by 45%; 37% mentioned certificate; 23% mentioned medals. Badge and citation were mentioned by only a few participants. Improvement of farming through the use of farm inputs appeared to be more important to farmers than the publicity associated with other awards such as badge or citation alone.

Factors associated with participation in agricultural shows

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personal characteristics, including age and years of schooling were significant at 0.01 and 0.05 levels, respectively. This meant that these characteristics were significantly associated with participation in agricultural shows. Majority (62.7%) of the participants were 41-60 years old, 34.7% of non-participants belong to this age category; 10.6% and 7.1% of participants and non-participants respectively were 60 years old and over; 26.7% and 58.2% were 21-40 years. The mean age was 47.4 years for participants and 40.4 years for non-participants.

TABLE 5: SUMMARY OF THE RESULTS OF TESTING THE HYPOTHESIS RELATING SOME PERSONAL, SOCIAL AND ECONOMIC CHARACTERISTICS TO PARTICIPATION IN AGRICULTURAL SHOWS

Characteristics	Chi-square cvalue	Degree of freedom
Age	20.4	2
Years of schooling	6.49[b]	2
Organisation participation	2.27	4
Times farmers went to extension agent	21.37[a]	2
Times extension agents visited farmers	24.74[a]	2
Times farmers met agent on other farmers' farms	10.50[a]	2
Occupation	13.22[a]	1
Income	8.99[b]	2
Number of hired labour	1.42	2
Growing permanent or annual crops as major crops	6.70[a]	1
Size of land cultivated with annual crops	3.93	3
Size of land cultivated with permanent crops	8.52[b]	3
Size of uncultivated farmland possessed	12.84[a]	3

a = significant at 0.01 level
b = significant at 0.05 level

These findings showed that participants were older than non-participants. This is contrary to the findings in studies on adoption of farm innovations in which adopters are often younger than non-adopters (Lionberger, 1964). It seemed that most farmers in their forties and fifties have made up their mind to remain in farming, hence they were prepared to attend agricultural shows to learn more about their occupation, more than those who were younger or older and were passing away from their productive years of farming.

Most of the participants (65.3%) and non-participants (64.3%) had 1-6 years of schooling; 9.4% of the participants and no non-participant had 7-11 years. The percentage of illiterate non-participants (35.7%) was more than that of literates (25.3%). The mean years of schooling were 2.88 for participants and 1.65 for non-participants. This finding was consistent with those on adoption of farm innovations in which adopters had greater years of schooling than non-adopters (Lionberger, 1964). Formal schooling must have increased the propensity of participants to learn more about agricultural ideas and practices which could be available at agricultural shows. Furthermore, as most of the information at the shows were often written, literacy through schooling must have encouraged the participants to attend so as to benefit from such written information.

While organisational participation was not significantly related to participation in agricultural shows, the other social characteristics including number of times farmers went to the extension agents to discuss farming problems, and vice-versa and the number of times farmers met with extension agents on other farmers' farms, were significantly related to participation. The organisational participation score of 1-3 was obtained by 28% of participants and 23.5% of non-participants; 4-6 by 26.7% and 23.6% of participants and non-participants, respectively; 7-9 by 20% and 25.5%; 10 and above by 24% and 19.4%; zero by 1.3% and 3 percent. The means were 6.4 and 6.2. Although the respondents participated satisfactorily well in organisations, the lack of significant relationship between organisational participation and participation in agricultural shows was contrary to expectation, as organisational participation often pre-disposes adults to participation in other areas of community life (Douglah, 1965).

Participants visited extension agents more frequently than non-participants. Although majority (69.3%) of the participants and nearly all (93.9%) of the non-participants did not visit the extension agents on their own volition during the preceding one year, 16% of the participants and 2% of the non-participants paid 1–2 visits; 15.7% and 4.1%

of the participants and non-participants respectively, paid 3 or more visits. The means were 13 and 2 visits every 10 years.

The extension agents also visited participants more frequently than non-participants. While most non-participants (81.6%) and 48% of participants were not visited, 37.3% of participants and 13.3% of on-particiants were visited 1–2 times; 14.7% and 5.1% were visited 3 times and above. The means were 14 and 3 visits every 10 years.

Although extension agents scarcely met farmers on other farmers' farms, this lack of contact was more serious with non-participants (89.8%) than participants 72%). Twenty percent of participants and 8.2% of non-participants were met 1–2 times; 8% and 2% were met 3 times and above. The means were 6 and 2 meetings every 10 years for participants and non-participants, respectively. There was a clearly higher frequency of contact betwen the extension agents and participants than non-participants. Such visits must have assisted the participants to develop a greater desire to participate in agricultural development activities such as agricultural shows, than non-participants. Although majority of participants were visited by the extension agents, the frequency of contact with both participants and non-participants was too inadequate for any effective extension work.

The economic characteristics, namely, occupation, income, growing permanent or annual crops as major crops, size of land cultivated with permanent crops, and size of unclultivated farmland possessed, were significantly associated with particiaption. However, number of hired labour and size of land cultivated with annual crops were not significantly associated.

A greater percentage of participants (80%) than non-participants (56.1%) were full-time farmers; 20% of participants and 43.9% of non-participants were part-time farmers. The interest of full-time farmers in improving their major occupation must have encouraged them to seek additional avenues for realizing such interest through attendance of agricultural shows. Participants earned higher incomes than non-participants. A greater percentage (36%) of the participants than non-participants (17.4%) earned ₦1,001 and over; 46.7% of the participants and 61.2% of the non-participants earned ₦501-1,000; 17.3% and 21.4% earned ₦1–500. The means were ₦1,494 for participants and ₦1,009 for non-participants. The participants were richer than non-participants possibly because a greater proportion of the former than the latter cultivated a greater area of permanent cash crops, as subsequently indicated.

A greater percentage (84.7%) of non-participants than participants (69.3%) cultivated permanent crops as their major crops; 15.3% and 30.7% cultivated annual crops. However, the total land area cultivated with permanent crops by participants was more than that of non-participants. Five hectares and above was cultivated by 45.4% of participants and 30.6% of non-participants; 3-4 ha. by 17.3% and 24.5%, 1–2 ha by 28% and 40.8%; zero by 9.3% and 4.1 percent. The means were 7.75 ha for participants and 6.57 ha for non-participants.

Participants possessed a greater area of uncultivated farmland than non-participants. The percentage of participants who had 5 ha. and over (22.7%) was more than 7.1% for non-participants. Seventeen percent of participants and 13.3% of non-participants had 3–4 ha; about the same percentage, 22.7% and 22.5% had 1–2 ha; majority of non-participants (57.1%) and 37.3% of participants had no unculvated farmland. The means were 3.8 ha and 1.8 ha for participants and non-participants, respectively. The expectation of trying some of the practices learned at agricultural shows on their farms when cultivated might have been greater among the participants than the non-participants.

The lack of significant relationship between size of annual crops cultivated and participation was because both participants and non-participants had about the same area of annual crops. About 23% of participants and 12% of non-participants cultivated 5 ha and above; 16% and 16.3% cultivated 3–4 ha; 48.1% and 54.1% cultivated 1–2 ha; 13.3% and 17.3% had no annual crops. The means were 2.96 ha and 3.3 ha respectively.

Similarly, the lack of significant relationship between number of hired labour and participation was because both participants and non-participants hired about the same number of labourers. About 47% of participants and 54.1% of non-participants hired 5 or more labourers; 45.3% and 40.8% hired 1–4; 8% and 5.1% hired none. The mean was 5 labourers for each of partipants and on-participants.

Conclusions and Implications

1. Agricultural shows were effective in terms of imparting knowledge to the participants in the major subject-matter areas of agriculture, namely, crop, animal, forestry and fishery management, as well as marketing of products. It was not effective in the same regard in other areas such as soil management, cooperative management, home economics, rural development and leadership activities. These latter

areas need greater emphasis in future organisation of agricultural shows.

2. Knowledge acquired from agricultural shows were applied in farm improvement by many of the partipants who acquired such knoledge. Such application of knowledge was most frequent in the areas of crop management and crop pest and disease control. The other areas were marketing of products, soil and cooperative management, home economics, rural development and leadership activities.

3. Knowledge acquired from animal, fishery and forestry management was not frequently applied in improving these areas. This suggests that the extension activities in these areas have not been effective, hence there is the need for improvement, if agricultural shows are to be effective in these subject-matter areas.
4. The University of Ife has not been effective in attracting many participants in agricultural shows to its booths. However, it has been effective in passing knowledge of the major subject-matter areas of agriculture, namely, crop, soil and, animal management to the few participants who visited its booths. It has not been effective in passing knowledge of rural development, marketing of products, home economics, cooperative organisation and leadership activities to the participants. Apart from the need to strengthen its exhibits and teaching of participants in these latter areas, the University should also make efforts to attract more particpants to its booths to improve its overall effectiveness.

5. Majority of the participants who acquired knowledge in the various subject-matter areas from the booths mounted by the University of Ife actually applied such knowledge in their farm improvement, except knowledge gained in soil management.

6. The University of Ife has been only moderately effective in assisting participants who visited its booths to acquire knowledge from its major specific exhibits, namely, Ife Brown Cowpeas, Ife plum tomatoes, slides on fertilizer application to crops, and slides on poultry diseases. Except for Ife Brown cowpeas, majority of the participants who gained such knowledge applied it on their farms. There is therefore, the need to popularise the planting of Ife Brown cowpeas through the extension service of the Ministry of Agriculture and Natural Resources. There is also the need to continue to exhibit all the products which have been exhibited in previous shows, because

their effectiveness in knowledge transfer to, and application by, farmers is still limited.

7. Farmers who attended agricultural shows had not exhibited effective overall participation over the years. Although most of them saw and visited the exhibits mounted by the Ministry of Agriculture and Natural Resources, farmers' associations, and agro-chemical companies, they had attended a mean of four agricultural shows, and had spent a mean of 5 days. These figures were considered as very low when it was remembered that agricultural shows had been held almost annually since Nigeria attained independence in 1960, and had lasted about 3--4 days per annum in each town where held. Most participants had never exhibited any farm product at agricultural shows. There is the need for a greater publicity of the shows among the farmers and a greater effort made by extension agents to encourage farmers to attend and exhibit farm products.
8. Majority of the farmers were exposed to method demonstration, result demonstration, question and answer methods of learning at agricultural shows. Only few farmers were exposed to lecture, photograph, slide, motion picture, and chart. Except lecture, none of the methods was regarded as most effective by majority of those who were exposed to them. There is therefore the need to intensify the effective use of the teaching methods at agricultural shows, particularly the visual aids.

9. The radio was the most frequently identified medium through which farmers heard about agricultural shows. Other media such as newspapers and posters, as well as sources such as extension agents and farmers' cooperatives were not as frequently used. To encourage and organise farmers to participate effectively in agricultural shows, there is still the need to intensify the use of personal sources such as extension agents and farmers' cooperatives.

10. Inadequate publicity, transportation facilities and farmers involvement in planning, were the major problems in agricultural shows. These called for intensified efforts towards solving the problems.

11. To facilitate effectiveness by accommodating farmers' preferences, agricultural shows should be hosted in rotation throughout the states' major towns and Local Government Headquarters· the organizing bodies should be the officials of the Ministry of Agriculture and Natural Resources in collaboration with the local farmers, while nece

ssary assistance should be obtained from the Local Government Council officials. The shows should continue to be held annually, with each show lasting 3 days during the month of December or January. Outstanding farmers should be given improved farming materials such as seeds, fertilizers, pesticides as awards. Cash could be given on only few occasions.

12. Participants in agricultural shows were older than non-participants, had greater years of schooling, number of contacts with extension agents, income, size of land cultivated with permanent crop, and size of uncultivated farmland, than non-participants. They were also more commonly fulltime farmers than non-participants. These distinguishing factors could be useful in locating and working with farmers who are likely to participate, while special efforts should be made to encourage the non-participants to attend.

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