

# Accuracy of Extension Professionals' and Farmers' Perceptions regarding Privatization and Commercialization of Agricultural Extension Services

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Abstract

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This study examined the accuracy between extension professionals and farmers regarding their perceptions of privatization and commercialization of agricultural extension services. The study was carried out in Delta State, Nigeria and it had a sample size of 224 respondents comprising of 134 extension professionals of the Delta State Agricultural Programme (DTADP) and 90 farmers that were randomly selected. Data for the study were collected from the respondents through the use of validated questionnaire and interview schedule. The questionnaire was used for the extension professionals, while the interview schedule was used for the farmers. Spearman's rank order correlation coefficient was used to determine the accuracy in perceptions of respondents. Results of the study show that extension professionals estimated farmers' perception with a high degree of accuracy ( $r = 0.80$ ), while farmers estimated extension professionals' perception with low accuracy ( $r = 0.22$ ). The inability of farmers to accurately estimate extension professionals' perception could be due to differences in their background and knowledge of issues relating to privatization and commercialization of agricultural extension services. The study recommends that farmers' knowledge of issues relating to privatization and commercialization should be enhanced through seminars and workshops organized by the appropriate extension agency. [Ajieh , Patrick Chuks. Accuracy of Extension Professionals' and Farmers' Perceptions regarding Privatization and Commercialization of Agricultural Extension Services. *International Journal of Agricultural Science, Research and Technology in Extension and Education Systems*, 2013; 3(1):1-6].

**Keywords:** Extension professionals, Farmers perceptions, Privatization, Commercialization, Agricultural extension services

## 1. Introduction

Relational communication models provide a framework for identifying the relationship between individuals or groups in a communication process. The models acknowledge that communication is a delicate process evolving from the joining of two participants into a relationship that is more than the sum of its parts. They clearly illustrate the central role of message interpretation and reciprocal perceptions between parties in a communication process.

A relationship in interpersonal communication has been defined as a set of expectation which two parties have for each other's behaviour and feelings. It is the connection that exists when: a) the interactants are aware of each other and take each other into account; b) there is some exchange of influence; and c) there is some agreement about what the nature of relationship is and what the appropriate behaviours are, given the nature of the relationship (Berko, Rosenfeld and samovar,1997)

The best known example of relational communication is the coorientation model (Littlejohn, 1992). According to Gruning and Hunt (1984), the coorientation model identifies three critical relationships between participants in a communication process. These are accuracy, congruency and agreement. Figure 1 shows that accuracy relationship can be estimated between person 'A' and 'B' by comparing their estimates of one another's perception with their actual perceptions, while congruency relationship can be determined by comparing each person's perception with his/her estimate of the other person's perception. Agreement relationship on the other hand, is determined by comparing the similarity in the perceptions of persons 'A' and 'B'.

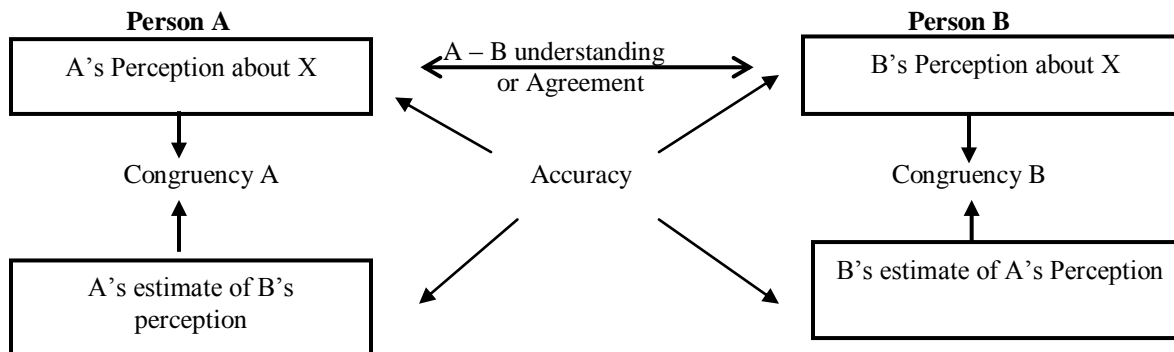


Figure 1. Relationships in co-orientation  
Source: (Chaffee and McLeod, 1973, p 483)

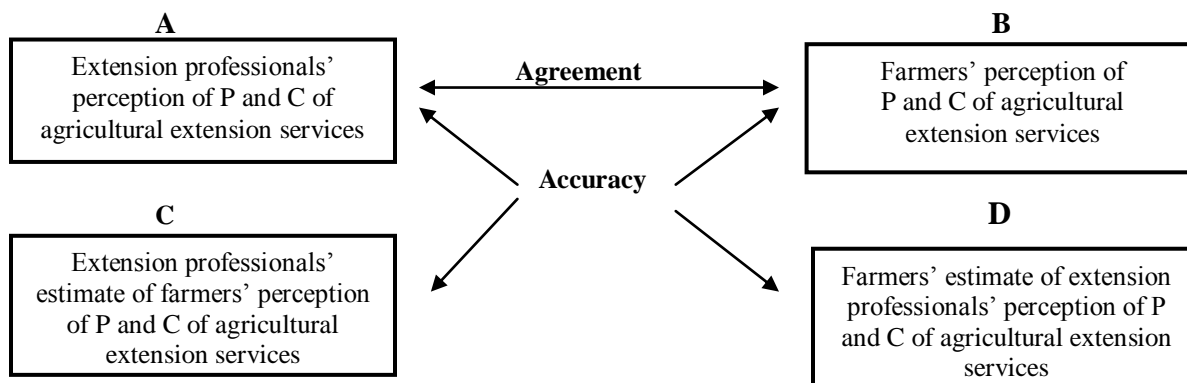


Figure 2. Conceptual framework for analyzing the accuracy relationship between extension professionals and farmers

Co-orientational studies have been reported among researchers, extension workers and farmers regarding attributes of plant cultivars (Groot, 1970; Dolly, 1997), community consensus building (Broom, 1977; Meiller, 1975), listening behaviour states (Buchili and Pearce, 1974) and shared behaviour among rational partners (Gantz, Carrico and Kroon, 1995). The co-orientation model has, also, been used to compare the views of community leaders and local residents regarding Hudson River ecosystem restoration in New York State (Connelly and Knuth, 2002).

This study examined the accuracy between extension professionals and farmers regarding their perceptions of privatization and commercialization (P and C) of agricultural extension services. In applying the co-orientation model, the conceptualization of the accuracy relationships in the perceptions of extension professionals and farmers is shown in Figure 2.

In determining the accuracy of extension professionals in estimating farmers' perception, measures between boxes B and C were compared, while measures between boxes A and D were compared to determine farmers' accuracy in estimating extension professionals' perception.

## 2. Materials and methods

The study was carried out in Delta State, Nigeria. Extension professionals of the Delta State Agricultural Development Programme (DTADP) and farmers in the state formed the population from which sample was drawn. Extension professionals of the DTADP were composed of 150 extension agents (EAs); 25 block extension agents (BEAs), 25 block extension supervisors (BESs); 12 subject matter specialists (SMS) three zonal extension officers (ZEO); 3 zonal managers (ZMs); 10 directors of sub programmes; 29 heads of component programmes and one programme manager (PM). For the purpose

of the study, the PM, ZEOs and ZMs were involved in the study, because they were few in number. For the others, 50% proportionate random sample was drawn. This sampling procedure gave a total of 134 extension professionals involved in the study.

For the farmers, a multistage sampling technique was used in selecting respondents. In the first stage, three extension blocks were randomly selected from each of the agricultural zones in the state, giving a total of nine extension blocks. In the second stage, two extension cells were randomly selected from each of the nine extension blocks, giving a total of 18 extension cells. In the third stage, five farmers in contact with extension were randomly selected from the list provided by the extension agents in each of selected extension cells. This gave a total of 90 farmers that were sampled. In all, 224 respondents comprising of 134 extension professionals and 90 farmers were used for the study.

A set of questionnaire and structured interview schedule were used for data collection. The questionnaire was used for extension professionals, while the interview schedule was used for the farmers because of their low educational status. Content validation of the research instruments were done by a team of experts in agricultural extension system. The instruments were pilot tested before administration to test for reliability. Trained assistants in addition to the researcher collected data for the study.

To determine accuracy in perceptions of extension professionals and farmers, 17 positive and negative statements regarding the features of P and C of agricultural extension services were framed through a review of literature and interviews with experts. Extension professionals and farmers were asked to indicate their level of agreement with the statements. They were also asked to estimate one another's perception. A 5 – point Likert type scale with values of strongly agree =5; agree=4; moderate=3; disagree=2; and strongly disagree=1 was used to determine respondents' level of agreement to the statements. Means of their responses were then used for analysis. Spearman's rank order correlation coefficient was computed for: (i) Accuracy of extension professionals' estimate of farmers' perception compared with farmers' own perception and (ii) Accuracy of farmers' estimate of extension professionals' perception compared with extension professionals' own perception.

### 3. Results and discussion

#### 3.1. Accuracy of extension professionals' estimate of farmers' perception and farmers' perception of P and C of agricultural extension services

Data in table 1 show the accuracy of extension professionals' estimate of farmers' perception compared with farmers' perception. Results of the analysis show that extension professionals estimated farmers' perception with a high level of accuracy. Spearman's rank correlation coefficient for the 17 statements was 0.80. This suggests that there was a similarity between what extension professionals think farmers perceive about P and C of agricultural extension services and the actual perception of farmers. The implication of this finding is that extension professionals had a good understanding of the farmers to the extent of accurately estimating their perceptions.

A closer look at the information in Table 1 further reveals that there were significant variations between the rank values of extension professionals' estimate and farmers' perception in only 7 statements. This, therefore, implies that extension professionals accurately estimated farmers' perception in the remaining 10 statements which include the following: P and C will make agricultural information delivery to become more effective; P and C will make extension services to be directed at specific needs of the people; P and C will break the monopoly of public extension services; P and C will create job opportunities, P and C will lead to job insecurity among public extension workers; P and C will encourage exploitation of farmers; and P and C will encourage foreign domination in the provision of extension services.

The issues involved in these statements are crucial to the success of any P and C programme. For instance, it is expected that P and C of agricultural extension services will make service delivery to become more efficient through an effective competition among service providers. Similarly, an effective P and C programme will create job opportunities and render services based on the needs of the people. The issue of farmers' exploitation and foreign domination are serious issues that could hamper the success of any P and C programme. They should therefore be avoided. The present situation whereby farmers are exploited during sale of fertilizer and other farm input should be discouraged. Local investors should be given necessary incentive to participate in the provision of agricultural extension services rather than allow foreign investors dominate.

Table 1. Accuracy of extension professionals' estimate of farmers' perception and farmers' perception of P and C of agricultural extension services and Spearman's rank correlation

Statements	Extension profs' estimate of farmers' perception	Rank	Farmers' perception	Rank
Privatization and commercialization will make it possible for more farmers to be reached.	3.16	1.5	3.04	9
Privatization and commercialization will provide opportunity for neglected areas of agric production to be attended to.	3.16	1.5	3.14	5. 5
Privatization and commercialization will make agricultural information delivery to become more effective	3.15	3	3.33	2
Privatization and commercialization will encourage competition among extension service providers.	3.14	4.5	3.44	1
Privatization and commercialization will improve linkages between research and extension	3.14	4.5	3.01	10
Privatization and commercialization will make extension services to be directed at specific needs of the people	3.13	6	3.19	4
Privatization and commercialization will increase priority areas of extension coverage	3.07	7	3.28	3
Privatization and commercialization will break the monopoly of public extension service	3.01	8	3.12	7. 5
Privatization and commercialization will help to reduce govt. financial burden on agriculture	2.99	9	3.14	5. 5
Privatization and commercialization will make agricultural extension services unaffordable by farmers	2.96	10	3.12	7. 5
Privatization and commercialization will create job opportunities	2.72	11	2.76	12
Privatization and commercialization will lead to job insecurity among public extension workers	2.65	12	2.92	11
Privatization and commercialization will encourage exploitation of farmers	2.60	13	2.72	13
Privatization and commercialization will encourage income inequality	2.56	14	1.98	16
Privatization and commercialization will encourage foreign domination in the provision of extension services	2.46	15	2.06	15
Privatization and commercialization will lead to poor capacity building	2.35	16	2.06 1.77	15 17
Privatization and commercialization will promote corruption and nepotism	2.22	17	2.21	14
Spearman's Rank Correlation Coefficient, corrected for ties = 0.80				

Table 2. Spearman's rank correlation showing the accuracy of farmers' estimate of extension professionals' perception and extension professionals' perception of P and C of agricultural extension services

Statements	Farmers' estimate of extension pros' perception	Rank	Extension pros' perception	Rank
Privatization and commercialization will improve linkages between research and extension	3.62	1	3.28	4
Privatization and commercialization will make agricultural extension services unaffordable by farmers	3.52	2	2.58	12
Privatization and commercialization will lead to poor capacity building	3.46	3	2.31	14
Privatization and commercialization will provide opportunity for neglected areas of agric production to be attended to	3.45	4	3.25	5
Privatization and commercialization will encourage competition among extension service providers	3.43	5	3.50	1
Privatization and commercialization will encourage foreign domination in the provision of extension services	3.41	6	2.04	16
Privatization and commercialization will break the monopoly of public extension service	3.38	7	3.21	6
Privatization and commercialization will make agricultural information delivery to become more effective	3.36	8	3.43	2
Privatization and commercialization will create job opportunities	3.32	9	2.94	10
Privatization and commercialization will encourage income inequality	3.22	10	1.93	17
Privatization and commercialization will increase priority areas of extension coverage	3.11	11	3.16	8
Privatization and commercialization will make extension services to be directed at specific needs of the people	3.10	12	3.18	7
Privatization and commercialization will make it possible for more farmers to be reached	3.04	13.5	3.30	3
Privatization and commercialization will help reduce govt. financial burden on agriculture	3.04	13.5	3.13	9
Privatization and commercialization will encourage exploitation of farmers	3.03	15	2.47	13
Privatization and commercialization will promote corruption and nepotism	2.84	16	2.10	15
Privatization and commercialization will lead to job insecurity among public extension workers	2.77	17	2.74	11
Spearman's Rank Correlation Coefficient, corrected for ties = 0.22				

### 3.2. Accuracy of farmers' estimate of extension professionals' perception and extension professionals' perception of P and C of agricultural extension services

Entries in table 2 show the accuracy of farmers' estimate of extension professionals' perception compared with the actual perception of extension professionals. Results of the analysis reveal that farmers estimated extension professionals' perception with a low level of accuracy. Spearman's rank correlation coefficient for the 17 statements was 0.22. A careful study of the information in Table 2 shows that there were significant variations between the rank values of farmers' estimate and extension professionals' actual perception in 12 statements. In other words, farmers accurately estimated extension professionals' perception in only 5 statements. These are: P and C will provide opportunity for neglected areas of agricultural production to be attended to; P and C will break the monopoly of public extension service; P and C will create job opportunities; P and C will encourage exploitation of farmers; and P and C will promote corruption and nepotism. All the 5 statements which farmers accurately estimated were among the 10 statements that extension professionals accurately estimated for the farmers. This similarity in the accuracy of estimate between extension professionals and farmers is an indication of co-orientation in their perceptions regarding the P and C of agricultural extension services.

Farmers' low accuracy in estimating extension professionals' perception could be as a result of differences in educational background and knowledge of issues underlying the P and C of agricultural extension services between extension professionals and farmers.

#### 4. Conclusion and Recommendations

The study examined the accuracy between extension professionals' and farmers' perceptions of P and C of agricultural extension services. Results of the study show that extension professionals estimated farmers' perception with a high degree of accuracy ( $r=0.80$ ), while farmers estimated extension professionals' perception with low accuracy ( $r=0.22$ ). The inability of farmers to accurately estimate extension professionals' perception could be due to differences in their background and knowledge of issues relating to P and C of agricultural extension services. The study recommends that farmers' knowledge of issues relating to P and C should be enhanced through seminars and workshops organized by the appropriate extension agency.

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