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Market Price Dissemination and Farmers' Response: A case study from Ogun State of Nigeria

OLUFEMI OLUDIMU
Department of Agricultural Economics,
University of Ife,
Ile-Ife, Nigeria.

Abstract

Some aspects of news dissemination on market prices and supplies in Ogun State of Nigeria were studied. Primary and secondary data were utilised in identifying the flow of information and the problems faced by farmers with regard to the market intelligence aspect of their farming operations. It was found that farming did not receive as much attention as the other major programmes transmitted on the radio which is the most comon medium through which farmers obtained information. It is suggested that higher levels of response to agricultural production call for greater improvements in communicating farm and market news to farmers.

Introduction

Low farm productivity in developing countries is often explained by factors such as lack of mechanisation, inadequate supplies of fertilisers, natural disasters and poor cultural practices. However, one very fundamental problem frequently overlooked is inaccessibility to knowledge about market opportunities. Yet the transmitting of market information is of considerable importance for efficient food-crop production and effective food marketing. It is also important for rural development in general. Buntjer (1975) opined that the introduction of new knowledge into a community has ramifying effects on the community, touching on its social structure and social activities. He stated that "interest and intensities of contact are important in the actual stage of dissemination of market news within a community".

Inadequate knowledge of market and cultural requirements in surrounding areas can cause the failure of production objectives. Indeed, lack of information on market signals, especially price levels, for agricultural commodities leaves the farmers in a weak bargaining position and gives them nothing on which to make production decisions.

It is noteworthy that a stated objective of agricultural policy in Nigeria is the assurance of food in adequate quantity and quality to keep pace with increased population and urbanisation. With respect to politico-economic as well as socio-physical changes, Akinbode (1979) pointed out that different sources of information do have varying influences in communicating necessary changes. However, only very little work has been done on market intelligence aspects of food-crops production in developing countries.

In view of the above, there is a need for systematic studies that can shed light on market price dissemination as a stimulus for greater agricultural production. The present study therefore examined aspects of the processes of dissemination of news on market prices and supplies in Ogun State of Nigeria. The specific objectives were:

(i) To study the actual dissemination of information on prices and supplies to farmers.

(ii) To identify the problems faced by farmers in obtaining necessary market information for production planning purposes.

Materials and Methods:

Original data for the study were collected between April and June 1981 from sample farmers in eight villages. The multi-stage stratified sampling procedure was employed, that is stratified sampling at two or more stages.

The frame, Ogun State, was sub-divided into four socio-cultural divisions: Egba, Egbado, Remo and Ijebu. From each division, two villages were chosen and information collected from sample farmers in these villages. Selection of farms (and farmers) was based on criteria such as the size of farm and the proportion of farm hectarage actually devoted to food crops production. It was posited that export crop producers would normally have a lot of information supplied them by government extension workers.

Sample farmers were interviewed directly by trained enumerators using structured questionnaires. Fifty farmers were scheduled to be interviewed in each of the four zones namely Egba, Egbado, Remo and Ijebu. However, seven farmers could not be reached in the Ijebu Waterside due to inaccessibility and transportation problems. Data collected from ten other farmers were discarded especially as the questionnaires returned on them were either incompletely or wrongly filled. Table 1 shows the resultant distribution of sampled farmers.

TABLE 1: DISTRIBUTION OF SAMPLED FARMERS BY SOCIO-CULTURAL ZONES IN OGUN STATE

Zone	No of Respondents	%
Egba	45	24.59
Egbado	48	26.23
Remo	47	25.68
Ijebu	43	23.50
Total	**183**	**100.00**

Investigations were carried out on the extent to which the farmers exposed themselves to agricultural information. The farmer-respondents were asked whether they purposely "searched" for information on market prices and supplies or waited for such information to be brought to them.

It was posited that a direct causat relationship did exist between the process of picking up news and the information source used, among other things. Katz and Lazersfeld (1972) had argued that between a news medium and its audience, five variables operate namely, the degree of exposure, interpersonal relations, the content of the communication, the pre-disposition of the listener to news which is relevant to his needs and the medium through which the material is transmitted.

Efforts were made to compute programme coverage of major items including farming, from the programme schedules of Ogun State Broadcasting Corporation, Oyo State Broadcasting Corporation, Ondo State Broadcasting Corporation and Federal Radio Corporation of Nigeria in Lagos for the sixteen quarters between January 1977 and December 1980. The data obtained were used to test the following assumptions:

(i) the four radio stations examined paid similar attention to farming during the period investigated.
(ii) the attention paid to farming was not different from that paid to other major block-items (religion, music and news) during the same period.

In testing the hypotheses, the analysis of variance technique was employed.

To learn about the effects of the various information methods on how farmers react, respondents were asked about the degree of influence of market information on their farm production decisions. They were asked to single out the most important influencing factor on their production decisions arising from the information methods used. It was posited that famers' perception of the relative movement in input and output prices greatly affected their price and income expectation and consequently influenced their planting response.

Results and Discussion:

Socio-economic characteristics of the respondents

Of the 183 farmers interviewed, 18 were females. The farming experience of the farmers ranged between one and fifty years. Fifteen (8.2%) of the respondents had farming experience of 1–10 years, 54 (29.5%) had 11–20 years, 44 (24%) had 21–30 years, 61 (33%) had 31–40 years, and 9 (5%) had between 41 and 50 years.

The age distribution of the respondents was found to be skewed towards the upper age brackets. While none of them was under 20 years only three (1.6%) were in the 20–29 years age group. Forty-eight (26.3%) were in the 30–39 years age group, 54 (29.5%) in 40–49 years, 58 (31.7%) in 50–59 years, and the remaining twenty (10.9%) claimed to be above 60 years of age. This shows that the farming population is ageing.

In an era when most educated youths migrate to urban centres to look for white-collar jobs, the supply of an enlightened labour force on the farm is limited. Most of the farmers remaining in the rural areas have little or no education. In this survey, illiteracy level was measured along the line of farmers' ability to read and write Yoruba and English as shown in Table 2.

About 50% of the farmers could only speak in Yoruba while about 95.6% could neither read nor write English. They could probably not benefit from any literature on improved practices and market news if such were not written in Yoruba. However, two of the farmers (10%) had attended higher institutions of learning. One of them had been to a Teacher Training college while the other was once at a School of Agriculture. Both of them, now full-time farmers, would be expected to seek and utilise farm and market literature. Experts are in agreement that, in general, the extent to which farmers voluntarily expose themselves to farm information is a measure of their desire to benefit from learning experiences (Obibuaku and Hursch, 1974).

TABLE 2: LITERACY AMONG RICE/MAIZE FARMER-RESPONDENTS IN OGUN STATE, NIGERIA.

Literacy level	Number Responding	%
Can only speak Yoruba	91	49.7
Can only speak and read Yoruba	42	22.9
Can only speak, read and write Yoruba	17	9.3
Can speak Yoruba and English	25	13.7
Can speak and read Yoruba and English	6	3.3
Can speak, read and write Yoruba and English	2	1.1
Total	**183**	**100.0**

Note: The English spoken is not necessarily Queen's English: pidgin English is a variety of English widely spoken in Southern Nigeria.

Individuals benefit also from personal and occupational experiences. In this survey, some respondents mentioned that they were engaging in secondary occupations apart from farming. One hundred and twenty-three respondents (67.2%) derived income from non-farm occupations such as commerce and trade, skilled occupations (cloth-weaving and tailoring), unskilled manual work as labourers, semi-specialised religious activities (gospelling, herbal – and native-medicine) and others including palmwine-tapping. Those engaged in commerce and trade were the largest groups, accounting for 27.6% of respondents engaged in secondary occupations (Table 3).

TABLE 3: SECONDARY OCCUPATIONS OF RESPONDENTS

Occupation*	No. of Respondents	%
Commerce and Trade	34	27.6
Skilled and Semi-Skilled Work	23	18.7
Manual (Non-Skilled Labourers)	23	18.7
Religious Occupations	14	11.4
Others	29	23.6
Total	**123**	**100.0**

* Religious occupations include gospelling and preaching, arabic and quoranic teaching, herbalist and native medicine.
Others include drumming, bicycle-repairing and wine-tapping.

A plausible explanation for the relatively large number of respondents (34) deriving income from the trading sector is the existence in Nigeria of several large markets held either daily or periodically, during the day time or in the night. The daily market is rather peculiar to the large towns while the periodic market is more widespread among the smaller towns and villages. The 1981 Ogun State Market-Calendar gave the total number of markets in the state as 212. Twenty-eight of which were daily markets, 5 were nightly markets and the other markets were held periodically in day time.

Farmers' Exposure to Information Sources

Eighty farmers (43.7%) mentioned that they went out to search for market information 'very frequently', 31 (17%) sought market information only occasionally while 72 (39.3%) picked up news on prices and supplies only when itinerant traders, village dealers and close relatives visit their farms.

In the study area, the most common medium though which news materials were transmitted was the radio. One hundred and fifty-five respondents (84.7%) either owned or had access to a radio set in their locality. Other sources of information included newspapers, village dealers, co-farmers, relatives, trade associations and extension workers. Extension workers did not come out as a major source of market information for farmers in Ogun State. Rather, more reliance was placed on the mass media and traders. While 91 respondents relied

on the radio for information, only 3 relied on extension workers as shown in Table 4. In an investigation of farmers' source of market news and information about new crops in Thailand, Dixon (1975) reported the very great reliance placed by Thai farmers on merchants and a general lack of trust in the market information given by extension service.

TABLE 4: SOURCES OF MARKET INFORMATION FOR SELECTED FARMERS IN OGUN STATE OF NIGERIA

Source	No. of Respondents (N = 183)	%
Radio	91	49.73
Newspaper (Daily/Weekly)	49	26.78
Urban/Itinerant Traders	36	19.67
Agric. Newsletters	28	15.30
Co-Farmers and Relatives (Non-Traders)	11	6.01
Village Dealers	8	4.37
Extension Workers	3	1.64

When asked why they did not use other sources of information adequately, the farmers gave reasons such as indifference or lack of time to seek other sources (accounting for 31.5% of total responses), ignorance about other information sources (6.5% of total responses) and the purported bias of certain information sources which accounted for 16.39% of total responses (Table 5).

In Ogun State, newspapers came second to the radio in order importance in terms of news dissemination. Some of the newspapers read by farmers were the Isokan, the Gbohungbohun and the Irohin Yoruba. They are published weekly in Yoruba language which is widely spoken in the areas of study. The three newspapers carry information on market days but do not offer any information about prevailing prices in particular markets.

TABLE 5: REASONS FOR PREFERENCE OF SELECTED OGUN STATE FARMERS FOR THE RADIO AS A MAJOR INFORMATION SOURCE COMPARED TO OTHER SOURCES

Reasons	Number of Respondents	%
Unopportuned/No time to seek out other sources	57	31.15
Unimpressed/Do not like other sources	45	24.59
Bias/Other sources do not often tell the truth	30	16.39
Financial Position/Other sources are expensive	18	9.84
Ignorance/Have not thought of checking other sources	12	6.56
Unsure or Indifferent/No response	21	11.47
Total	**183**	**100.00**

With regard to the radio, 61 respondents claimed that the Ogun Radio was their first-choice of radio stations. Seventeen respondents (18.7%) preferred Radio OYO, eleven respondents (12.1%) tuned in to Lagos while two respondents preferred programmes on the Ondo State radio station. Preference for Ogun Radio by the majority is understandable as this study was carried out in Ogun State.

The programmes most often listened to were Arokobodunde which was the first choice of 34 respondents, Agbeonijeamodun (first choice for 14 respondents), Ogbo-Ologbon (first choice for 12 respondents) Edunokan (first choice for 11 respondents) and Aiyegbege (first choice for 11 respondents). Another group of eleven respondents preferred programmes on cooperatives and farming generally while ten respondents had no programme preferences.

An investigation of the proportion of air-time devoted to discussions on farming and farming-related activities by various radio stations showed that the average was less than 2%. Table 6 shows that the proportion of air-time devoted to farming averaged 1.93% percent (or 22 minutes per day); the proportion ranged between 0.96 on Monday to 4.87 on Saturday

TABLE 6: PROGRAMME COVERAGE OF MAJOR RADIO ITEMS IN SOUTH-WESTERN NIGERIA, 1977–80

Day	Religion (mins)	News (mins.)	Music (mins.)	Farming (mins.)	Other (mins.)	Total (mins)	Farming Programme as % of Total Air-time
Monday	55	185	323	11	576	1150	0.96
Tuesday	50	163	277	22	638	1150	1.91
Wednesday	43	162	287	22	637	1150	1.91
Thursday	58	176	344	12	560	1150	1.04
Friday	98	225	372	17	440	1150	1.48
Saturday	80	188	382	56	444	1150	4.67
Sunday	170	171	278	15	516	1150	1.30
Daily Average (mins.)	**78.86**	**181.29**	**323.29**	**22.44**	**544.42**	**1150**	**1.93**
% of Total Air-time	**6.86**	**15.76**	**28.11**	**1.93**	**47.34**	**100.00**	

Source: Computed from Programme Schedules of Ogun Radio, Radio Oyo, Ondo Radio and FRC, Lagos from the 1st Quarter, 1977 to the 4th Quarter, 1980.

Table 7 shows the analysis of variance and from it, it is clear that there were no significant differences between the radio stations with regard to the degree of attention paid to farming. Therefore, the hypothesis that the radio stations paid similar attention to farming is upheld.

TABLE 7: ANALYSIS OF VARIANCE TABLE ON RADIO COVERAGE OF MAJOR ITEMS IN SOUTH-WESTERN NIGERIA.

Source of Variation	Degree of freedom	Sum of squares	Mean square	F Ratio
Total	15	305,439.94		
Between means of radio stations	3	126,341.93	42,423.98	1.616 ns
Between means of major block items**	3	–413,659.27	137,886.42	5.291*

ns = not significant; * = signifficant at 5% ** religion, news, music and farming.

However, significant differenoes were found between the attention paid to the different items covered. Thus, the second hypothesis that as much attention was paid to farming as the other major items transmitted cannot be upheld.

Long-run and Short-run Responses

Twenty-seven respondents (14.8%) adjusted (increased) their land allocation to foodcrops on the basis of information received while 16 respondents (8.7%) claimed that their knowledge about market availability greatly affected their harvesting and processing responses (Table 8) In the broadest sense, however, farmers' production decisions were influenced by a gamut of complex and intricate forces.

Olatunbosun (1974) enumerated factors to be considered in appreciating farmers' response pattern to include farmers' perception of the significance of a new price change, the relative movement in input prices particularly labour wages, land availability, credit availability and its cost, and the relative prices of alternative crops. He remarked that "besides price (which is the most important variable), other factors such as decreasing impetus in disease control and pest removal, bad weather, refusal to follow yield-increasing recommendations, sloppy harvesting and processing could be responsible for a diminishing rate of production response." Thus, production decisions are the product of various long-run and short-run influences. It is evident that where farmers lack necessary information, they would have no solid basis on which to make realistic production decisions. That perhaps is the rationale behind respondents' desire for better improvements in the flow of information as evident from Table 9.

TABLE 8: INFLUENCE OF INFORMATION METHODS ON FARM PRODUCTION DECISION OF SELECTED OGUN STATE FARMERS

Influence	No of Respondents	%
None	23	12.6
Little, almost insignificant	23	12.6
Somewhat, appreciable	44	24.0
A great deal in:		
(a) Increasing foodcrops hectarage	27	14.8
(b) Knowing about supply sources of farm inputs	7	3.8
(c) Learning about and actually trying new programmes	18	9.8
(d) Learning about potential areas or ways of disposing farm surplus	16	8.7
(e) Influencing own selling price	8	4.4
(f) Knowing time rain is expected to fall	5	2.7
(g) Knowing right time of planing	2	1.1
(h) Awareness of Government actions.	10	5.5
Total	**183**	**100.0**

TABLE 9: PROBLEMS FACED BY SELECTED FARMERS FROM OGUN STATE IN THE USE OF INFORMATION AND SUGGESTIONS FOR MAKING IMPROVEMENTS IN THEIR FARM OPERATIONS

Farmers' Response	No. of Respondents	%
Problems		
Often too late	62	33.9
Not really relevant, not directly useful	38	20.7
Not detailed enough	31	16.9
Not easy to understand	28	15.3
Not accurate	10	5.5
Too general, unspecific about government real intentions.	4	2.2
No response	10	5.5
Suggested Improvements		
Information to be made more timely	57	31.1
Greater direct role by extension service agents.	30	16.4
Need for adult/vocational education for ageing farmers	18	9.8
Repair of bad rural roads for easier access to and exit from information agencies.	18	9.3
Broadcast farming programmes more frequently and at good times (early evenings)	13	7.1
Need for accurate weather-forecasting	12	6.6
Supply of unbiased information untainted with politics	8	4.4
No response	10	5.5

Fifty-seven respondents (31.1%) would want information to be made more timely, 30 (16.4%) advocated that extension agents should play a more direct and positive role while 13 respondents would want radio broadcast of farming programmes to be more frequent. Indeed, it is of vital importance to improve rural-rural and urban-rural communications if farmers are to be made more aware of market and other forces affecting farming.

Conclusions:

The main objectives of this study were to identify the sources used and the problem faced by farmers in obtaining necessary market information for production planning purposes. It was found that there were not enough information stimuli relevant to and timely for the farmers to be greatly interested.

In countries such as Nigeria where agriculture is predominant, market information in very important in farm decision making. Lack of information on market signals, especially price levels, leaves the farmers in a weak bargaining position and gives them nothing on which to make production decisions.

For the attainment of higher levels of response to agricultural production, greater improvements in communicating agricultural news to farmers is essential so as to make them more aware of the market aspects of farming.

References;

Akinbode, I.A. 1979. Ruralite sources of Information about changes in South-Western Nigeria. *Ife J. of Agric.*, 1 (2): 291 – 304.

Buntjer, B.J. 1975. The dissemination of the new cotton prices in some agricultural communities in Zaria Province. *Seminar paper of the Rural Economy Research Unit*. Institute for Agricultural Research, Ahmadu Bello University, Zaria, 25 pp.

Dixon, C.J. 1975. Farmers' response to the market. Paper presented at the Agriccultural Marketing meeting organised by the Economist Intelligence Unit, London. 19th Feb. 1975 30 pp.

Katz, E. and Lazarsfeld, P.F. 1972. *Personal Influence: The part played by people in the flow of mass communications.* Free Press, New York, U.S.A. 400 pp.

Obibuaku, L.O. and Hursch, G. D. 1974. The effectiveness of selected extension methods in influencing farm improvements. *Niger. Agric. J.*, 11 (2): 143–149.

Olatunbosun, D. 1974. Pricing Policy and Supply Response in Cocoa Production: The Nigerian Case pp. 236 – 250. In R. A. Kotey, C. Okali and B.E. Rourke (Eds.) *Economics of cocoa production and marketing:* Institute of Statistical, Social and Economics Research, University of Ghana, Legon.