



Effectiveness of print media in technology transfer among rural farm households in Imo state, Nigeria

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Abstract

The study analyzed the effectiveness of print media in technology transfer among rural farm households in Imo State, Nigeria. Multi-stage random sampling technique was used to select 126 farm households for the study. Data were collected with a structured questionnaire and analyzed using descriptive statistics and ordinary least square multiple regression model. Results revealed that 51.6% of the respondents were female and 81.8% were married with a mean age, household size, farming experience, monthly income and years of schooling of 43 years, 5 persons, 29 years, ₦31,573.80 and 14 years respectively. Majority (83.1%) of the respondents had access to posters which is also the most frequently used ($x = 2.90$) print media for technology transfer in the study area. The result indicated that the highest mean score of the technologies transferred was cassava/yam/maize/melon intercrop. While irrigation crop techniques with the least mean score ($x = 1.38$), was not effective. This high effectiveness of print media in transferring most of the technologies implies that extension system had competent workers who were effective in their jobs. The coefficient of age, cost, farming experience, farm size household size, frequency of extension contacts and access to print media significantly influenced the use of print media in technology transfer. Time consuming ($= 2.80$), high cost ($= 2.60$), limited space ($= 2.60$) and inaccessible roads, ($= 2.30$) were serious constraints to the use of print media in technology transfer. The study concluded that socio-economic characteristics of the farmers affect the use of print media in technology transfer that could improve their farm activities. Therefore, farming households should be enlightened on the use of print media in rural areas to enrich their knowledge of improved technologies. Policies aimed at access and use of agricultural information extension teaching and learning that has higher return on agricultural productivity should be advocated.

Key words: Access, Use, Print-media, Technology transfer, farmers.

Introduction

Sustainable agriculture depends on availability and adoption of appropriate agricultural technologies developed by research and promoted by extension agents to increase agricultural productivity especially in rural communities (Chukwu, 2017). Improving appropriate methods of transferring farming technologies have become necessary to make farmers utilize technologies, take appropriate decisions and increase agricultural production (Ifenkwe, 2013).

Technology refers to an idea, practice or object perceived as new by an individual. Technologies transferred include information and knowledge on agricultural, nutrition, health and environmental management practices (Mgbada, 2010). Agricultural technologies consist of both physical objects such as seeds, fertilizer and farming practice information relating to techniques of applying fertilizers, insecticides, fungicides, improved methods of cultivation, soil conservation methods, harvesting and storage of crops,

animal husbandry, processing and marketing of agricultural products. The transfer of improved technologies to rural farmers is important towards increasing agricultural production (Ukoha and Nzeakor, 2016).

Mgbada, (2010) defined technology transfer as the dissemination of agricultural technologies to farmers in a codified and understandable message through appropriate channel. Technology transfer is the movement of an idea, practice, object, tacit knowledge, technical knowhow, discovery and intellectual property from research into an environment where it can lead to social and commercial benefits (Lwoga, 2010). For the rural farmers to adopt the new technologies, the new ideas must reach their farms and homes through mass media channel (Egbule and Mathew-Njoku, 2011). Print media channels used to disseminate message to audience in an attempt to influence them in a variety of ways. Many media are used to transfer technologies to farmers among them is the print media. Media methods are effective ways of reaching a very large number of people (Nnadi, 2019). They are very effective in creating awareness of the existence of a new product, idea or practice and in sustaining interest of the farmers (Akubuilu, 2018). Print media is effective where the people are literate and where the people are willing to reach them (Ani and Baba, 2009). Even in a predominantly illiterate communities, print media are still effective as teaching tool because literate farmers can always read them and pass the information contained therein to the less fortunate ones (Ariyo, *etal*, 2013).

The printed materials have enduring quality which neither radio nor television message have. These print materials in form of newspapers, magazines, posters, flyers, journals, pamphlets, leaf lets, phone books, labels, technical reports, and menus among others can be read and re-read at conveniences thereby allowing for better understanding and

preservation of the materials (Bello and Obinne, 2012).

The print media are valuable for their use in disseminating agricultural information to farmers (Halakatti, *et al*, 2010). Print media are important tools for the transfer of technologies to both literate and non-literate (Maku, 2012). Print media can be useful to illiterate farmers who have children and neighbours who have educated relatives. Nigeria has at least 213 newspapers of which 191 are privately owned and 22 are owned by governments. Some of these newspapers have regular agricultural columns on specific days of the week. Similarly, there are 90 magazines of which 84 are owned by private enterprises and 6 are government owned in addition to several agricultural institutions based pamphlets, periodicals and publications (Nigeria Press Council, 2017).

Today, technologies are daily being diffused by research institutes, yet to attain and sustain self-sufficiency in food production. Most of these technologies are stacked in the shelves of the originating institutes while agricultural production continues to suffer setbacks due to the problem of disseminating the recommended practices to end-users (Marek, 2012). This shows that there is a gap between technology transferred by research and utilization by farmers to increase agricultural production. Agricultural information and technologies are very vital for agricultural development of any society, where they are poorly disseminated due to certain constraints, the community's agricultural development becomes highly impeded (Obike, 2011). Rural households are small groups of persons who share the same living accommodation and pool some or all of their income, wealth and services collectively, mainly house and food in rural areas and majority of them are small scale farmers (Ijioma, 2015). Rural households have become an integral social feature and emerged

economic phenomenon in rural communities of Nigeria. The farm households are endowed with varying amount of social, human, financial and physical resources and capabilities that equip them to participate in rural community activities (Okeke *et al*, 2020).

Food and Agriculture Organization (FAO) (2011) affirmed that adoption of improved technologies by rural farm households remains low. This is because, media used for information dissemination are not effective. The rural farmers need adequate exposure to the latest technologies and use the right methods to communicate relevant technologies to small-scale farmers. Agricultural extension services responsible for transfer of these technologies is affected with the challenges of technology transfer, quality advisory services, knowledge and timeliness. The ratio of extension staff to farmers is grossly poor making extension workers to reach an insignificant number of farmers (Mtega, 2012). The agricultural extension transformation agenda recommended an extension agent to 800-1000 farmers which is still high is not attainable. Moreover, the increasing criticism of the public extension service for ineffectiveness, inefficiency, poor coverage and low-cost effectiveness leaves doubt as to the appropriateness and sustainability of the approach. Rural farmers do not produce enough food, probably due to lack of access to timely and up-to-date information which would enable them attain optimal yield from their farms (Obidike, 2011). Effectiveness is the degree to which goals are attained (Akubuilu, 2008)

Print media have tremendous power that could be harnessed by extension agencies and other relevant stakeholders for the benefit of rural farmers to increase food production (Ekong, 2010). The strength of print media is of great assistance to extension workers in providing cost effective and efficient technology transfer to rural farmers and reduce

the workload by using print media. However, the print media involve one-way communication from innovation source to the receiver thereby providing limited and delayed feedback (Mohammed, 2015). Despite the valuable benefit of print media in information dissemination there is still very low productivity in the area. This gap between low food productivity and improved agricultural technologies transferred to rural farmers in Imo State is too worrisome. It is against this background that this study was designed to investigate the access and use of print media in technology transfer to rural farm households in Imo State, Nigeria. The specific objectives of the study are to;

- describe the socio-economic characteristics of the respondents
- determine the accessibility of print media to rural farm households
- determine the frequency of print media in technology transfer in the study area
- examine the perceived effectiveness of print media in technology transferred
- identify the constraints affecting the use of print media in the transfer of agricultural technologies in Imo State, and determine the factors influencing the use of print media in technology transfer among rural farmers in Imo State.

Methodology

This study was conducted in Imo State of Nigeria. The state lies between latitude 5⁰ 45' North and longitude 6⁰ 35' East of the Greenwich Meridian. The state is located within the rain forest belt Imo State has a population of 3,934,899 persons, with a total land area of 5,530km² (NPC, 2006). The state has a population density of 710 persons per square kilometer. The choice of this state was informed by the fact that small holder farmers dominated the rural areas of the state. It is bounded in the North West by Anambra State, South West by Rivers State and Abia State.

The temperature ranges between 20⁰C and 30⁰C (Imo-ADP 2018). The major food crops grown include cassava, yam, cocoyam, maize and melon while oil palm, rubber and forest trees like Iroko, mahogany and Obeche were cash crops mainly grown. Most farm households keep small ruminants, fishes and poultry. The population of the study consist of all rural farm households in the state.

Imo State is made up of three (3) agricultural zones namely Owerri, Okigwe and Orlu. Owerri agricultural zone have 11 extension blocks while Okigwe and Orlu have six (6) and ten (10) extension blocks respectively. Multi-stage random technique sampling was used in selecting extension blocks farm households used for the study. A multistage random sampling technique was used to select extension blocks, circles and respondents first, three (3) extension blocks namely: Ezinhitte mbaise, Orlu and Obowo out of 27 extension blocks in the study area.

In the second stage, two (2) cells each from the three (3) extension blocks giving a total of six(6) cells were randomly selected namely; Chokoneze, Obizi, Owerrebe iri, Ihioma, Alike and Uminogho, were selected for the study.

Thirdly three (3) sub cells each from the six (6) cells, giving a total of eighteen (18) sub cells were selected for the study. Lastly seven (7) farm household were selected giving a total of one hundred and twenty six (126) respondents. Data were analysed using descriptive statistics such as frequency distribution, percentage, mean scores and inferential statistics (multiple regression analysis measurement of variables.

Measurement of Variables

In order to describe the socio-economic characteristics of the respondents, frequency counts, percentage and means were used. In order to examine the perceived effectiveness of print media. In technology transferred, seven (7) item effectiveness/ performance statements

were measured on 3-point like type rating scale of not effective =1, effective =2 and very effective =3

Respondents mean scores were computed for each of effectiveness/ performance statements by adding the weights of 1 + 2 + 3. A mid-point was obtained thus, 3 + 2 + 1 = 6/3 =2.00. A mean score greater than or equal to 2.00 implied effective and otherwise not effective.

Data were collected using structured questionnaire and analyzed using both descriptive (frequency counts, percentage and means) and inferential (ordinary least square regression) statistics. While the inferential statistics used ordinary least square multiple regression the implicit functional form is specified as follows:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, + e_i) \dots$$

. equation 1

Where Y = Effectiveness measured in a 3-point likert type scale/score of not effective (1), effective (2) and very effective =3, of print media in technology transfer

X₁ = Age (years)

X₂ = cost of print media (₦)

X₃ = Farming experience (years)

X₄ = Farm size (hectare) ha

X₅ = Household size (number of children)

X₅ = Educational level (years in school)

X₆ = dummy for access to print media (yes = 1 otherwise = 0)

X₇ = Frequency of extension contact (number of occurrences)

X₈ = Other variables such as availability of print media; regular supply of print media (dummy)

e_i- stochastic error term

The explicit form is as follows; the linear function is expressed as in (Bala, *et al* 2020)

$$Y = b_0 + b_1X_1 + b_2 + b_2X_2 + b_3 + b_3X_3 + b_4 + b_4X_4 + b_5 + b_5X_5 + b_6 + b_6X_6 + b_7 + b_7X_7 + b_8 + b_8X_8 + u$$

Where Y = Effectiveness of print media in transfer of technology transfers (measured in a

3-point likert type scale/scores of not effective=1, effective=2, and very effective=3).

X_1-X_1 = Independent variable

$b_1.b_8$ = Regression coefficients

b_0 = constant

e = error term.

Results and Discussion

Socio-economic characteristics of farm households

The distribution of respondents by selected socio-economic characteristics is presented in Table 1. The table shows that average (48.4%) of the respondents were males while 51.6% of the respondents were females. This indicate that females constituted a higher proportion of the respondents engaged in farming activities in the study area. This is supposed to encourage their male counterparts to participate in farming activities. Result further indicate that most (66.7%) of the respondents were between 36years old with a mean age of 43 years. The finding implies that majority of the respondents were in their productive and active stage of their lives and were capable of engaging in farming activities. This finding agrees with Njoku (2016) who observed that younger people are economically productive population and more actively involved in farming and willing in sourcing for information through the print media. Result also shows that majority (81.8%) of the respondents were married. This supports the finding that most of them were of age and ready to have their own family (Table 1). This finding agreed with Nnadi (2019) who observed that majority of Nigerian population were engaged in agricultural production of various types regardless of their marital status. This could be because married people are

expected to source for technologies and information to increase their productivity and enhance their income for the welfare of their families. Result further indicate that majority (67.7%) of the respondents had 4-6 persons in their household with an average household size of 5 persons (Table 1). This finding indicated that a relatively large-sized households engage in farming in the study area. Result also shows that majority (91.3%) of the respondents had one form of formal education (Table 1). This implies that rural farm households in Imo State were educated and there is the likelihood of being receptive to new technologies. This is an advantage to the use of print media as a vital means of technology transfer to farmers in the study area. This finding agrees with Ani and Bada, (2009) who observed that farmers' education was found to enhance production among crops farmers in Anambra State of Nigeria.

The result revealed that 37.3% had farming experience of 20-29 years as 25.40% had 30-39 years and 20.6% had 10-19 years with a mean farming experience of 29 years. This implies that the respondents had enough farming experience which could be because of their eagerness to remain viable and relevant in their economic activities. Most (60.3%) of the respondents earned ₦6000-30,000 per annum with an average income of ₦31,573.80. This implies that farmers received low income when compared with the current economy and family size responsibilities. This finding was in consonance with that Onyewusi and Atasi (2011) who observed that socio-economic characteristics of the respondents affects information source of technologies used in agricultural development in Abia State of Nigeria.

Table 1: Respondents' Socio-economic Characteristics

Variables	Frequency	Percentage (%)	Mean
Gender			
Male	61	48.4	
Female	65	51.6	
Age (years)			
26-35	14	11.1	
36-45	4	66.7	
46-55	20	15.9	43 years
50-65	8	6.3	
Marital status			
Single	23	18.25	
Married	103	81.78	
House hold size (number)			
1-3	18	14.3	
4-6	85	67.5	5 persons
7-9	23	18.3	
Educational Level			
No formal	11	8.7	
Primary	69	54.8	
Secondary	37	29.4	14 years
Tertiary	9	7.1	
Farming experience (years)			
10-19	26	20.6	
20-29	47	37.3	29 years
30-39	32		
40-49	14	11.1	
50-59	7	5.6	
Income (₦)			
6000-30,000	76	60.32	
30012-54,000	33	26.19	
54012-90,000	17	13.49	31,573.8

Source: field survey, 2020

Respondents' Accessibility to Print Media

Table 2 shows that posters (= 2.92), flyers (= 2.43), leaflets (= 2.33) and pamphlets (= 2.00) were the print media the respondents had most access to in the study area. This finding agrees with Ani and Baba (2009) who noted that newspapers, magazine and posters were the most common print media used in promoting agricultural innovation in the area. This finding supports the assertion by Njoku (2016) who observed that illiteracy is not a

barrier in disseminating agricultural information since many farmers can read and understand many print media passed to them by their friends and relatives who are literate. The implication of this finding could be as a result of high cost of newspapers and magazine while most of the rural farmers could have access to posters and leaflets because they can receive access it free from agricultural institutes.

Table 2: Distribution of Rural Farm households Level of Accessibility to Print Media

Print media	High	Low	Not at All	Mean
Newspaper	0 (0.00)	110 (87.3)	16 (12.7)	1.97
Magazine	7 (5.6)	100 (79.4)	19 (15.1)	1.90
Posters	111 (83.1)	10 (7.9)	15 (11.9)	2.92
Flyers	80 (63.5)	20 (15.9)	26 (20.6)	2.43
Pamphlets	50 (39.7)	26 (20.6)	50 (39.7)	2.00
Leaflets	70 (55.6)	28 (22.2)	28 (22.1)	2.33
Agricultural journals	42 (33.3)	24 (19.0)	60 (47.6)	1.86

Source: Field Survey, 2020

Respondents' Frequency of Using Print Media

Table 3 revealed that flyers (= 2.90), posters (= 2.84), newspapers (= 2.80) and pamphlets (= 2.78) were the most frequently used print media by the respondents. The implications of this finding would be that the farm households most frequently used print education was flyers information and

knowledge about the improved technologies transferred to them. This finding agreed with Akubילו (2008) who observed that posters and flyers were the most commonly used print media although this finding disagreed with Ani and Baba (2009) who observed that newspapers and magazine were the most frequently used print media because of their credibility and clarity.

Tables 3: Distribution of Rural Farmers Frequency of Print Media Use

Print Media			Not at all	
Newspaper	105 (83.3)	20 (15.9)	1 (0.8)	2.8
Magazine	115 (12.7)	65 (51.6)	45 (33.7)	1.8
Posters	115 (91.3)	117 (3.9)	4 (3.2)	2.84
Flyers	117 (92.9)	6 (4.8)	3 (2.4)	2.9
Pamphlets	98 (77.8)	22 (17.5)	6 (4.8)	2.7
Leaflets	70 (55.6)	52 (41.3)	4 (3.2)	2.5
journals	6 (4.8)	25 (19.8)	95 (75.4)	1.3

Source, Field Survey, 2020

The distribution of farmers by perceived effectiveness of print media in transferring technologies is presented in Table 4. The table shows that seven item statements were investigated and rated by individual respondents on the perceived effectiveness in transferring technologies to the rural farmers. Result showed that out of (7) seven technologies investigated, (6) six were considered to be effectively transferred through the print media. These effective

transferred technologies included. Cassava/yam/melon intercrop (x=2.84) poultry management technologies (x=2.83), Home stead fish pond construction (x=2.24)], soil conservative method (x=2.14) and imported cassava processing methods (x=2.04)

Results also showed that (88.9) of the farmers indicated that cassava/yam/media inter-crops was very effective while (88.09%) attested that weed control methods was effective. Result also indicated that print media

was not effective in transferring irrigation crop techniques with the least mean score ($x=1.38$). This high effectiveness of print media in transferring most of the technologies implies that extension system had competent workers who were effective in their jobs. This finding agreed that Njoku (2016) that strong link exists

between competent and job performance. The finding on effectiveness of use of print media in agricultural technology transferred to farmers was in consonance with those of Ifene (2013) that most farmers confirmed that Newspapers was effective in technology transfer to farmers.

Table 4: Effectiveness of print media in transferring improved technologies to Rural farmers

Technologies	Farmers Response			
	Not effective	Effective	Very Effective	mean SD
Transferred Performance rate on crop techniques	84(66.7)	34(2.3)	6(4.8)	1.38
Rate performance on Cassava processing	10(7.98)	96(76.2)	20(15.9)	2.07
Rate performance on soil conservation method	3(2.38)	102(80.95)	21(16(16.7)	2.14
Rate performance on poultry management	1(0.8)	20(15.9)	105(83.3)	2.83
Rate performance on weed control	(3.96)	111(88.09)	10(7.93)	2.04
Rate performance on cassava/yam/maize/ melon intercrop.	6(4.8)	8(6.34)	112(88.89)	2.84

Source: Field Survey, 2020.

Determinants of the Use of Print Media

Distribution of respondents by determinants of the use of print media in technology transfer to farmers is presented in Table 5. Result of the analysis shows that four functional forms of linear, semi-log, double log and exponential were performed and the semi-log⁺ functional form was chosen as the lead equation. This was based on the magnitude of the coefficient of multiple determination (R^2)., The R^0 value of 85.7% was explained by explanatory variables included in the model while 14.3% was due to error terms and other factors outside the model.

Number of significant variables and the conformity of the signs borne by the variables to apriority expectation. It has an R^2 value of

0.857 which implies that 85.7% of the variations in the use of print media in technology transfer was explained by the included variables. Age of the respondents was positively related to use of print media at 1% level of significance which implies that an increase in age would increase usage of print media. This conforms to apriority expectation. This finding implies that the older the age of the respondents, the more they make use of the print media. The reason could be that as their age increases, their responsibilities also increases and they are more eager to search for information to meet their farming challenges. Farm size was positive and related to use of print media at 10% level of significance, which implies that farmers with larger farm size make more use of print media than their counter

parts with smaller farm size. Farming experience, educational level, frequency of extension contacts, cost of print media, access to print media and other variables were negative and significance at 10%. This finding implies that the more experience the less the use of print media. This could be related to the fact that farmers with higher experience are assumed to be able to handle their farming problems unaided. Educational status had positive and significant at 1% level to the use of print media. The positive signs in the variables indicates that the variables increased the determinants of print media in technology transfer while the negative signs showed a decrease or neutrality of the variables in the use of print media in technology transfer to

farmers. This indicated that with higher education, farmers are willing to use of print media. This could be due to the fact that there were no new programmes transmitted to them. Frequency to extension contact was negative and related to use of print media and significant at 1% level of probability. The finding implies that farmers with higher number of contacts with extension agents used less of print media to search for agricultural information. This finding agreed with Nnadi (2019) who observed that educated and professionals need less use of print media for their agricultural information. This is because most of them were, experimentally experienced and informed in modern farming technologies.

Table 5: Determinants of the Use of Print Media

Variables	Linear	Semi-log⁺	Double log	Exponential
Constant	-1.163 (-2.951)***	-15.871 (-4.918)***	-5.886 (-5.131)***	-0.495 (-2.857)***
Age (year)	0.102 (5.194)***	4.167 (4.051)***	1.326 (3.625)	0.035 (4.110)***
Cost of print media (N)	0.020 (-1.167)	00.701 (-0.189)	-0.146 (-0.461)***	0.002 (0.264)
Framing expresses	-0.212 (-0.946)*	-0.534 (-2.039)**	-0.203 (-2.181)**	-0.093 (-0.984)***
Farm size	0.171 (1.841)*	0.732 (1.085)	0.197 (0.821)	0.045 (1.166)
Education level	-0.509 (-0.772)***	-0.458 (-0.648)	-0.234 (-2.363)**	-0.919 (-4.135)
Access to print media	0.096 (-0.775)	-0.305 (-0.693)	-0.113 (-0.723)	0.047 (0.906)
Frequency of extension contact	-0.463 (-2.929)***	0.230 (0.802)	0.013 (0.105)	-0.134 (-1.987)**
Household size	8.739E.5 (1.290)	0.539 (1.165)	0.269 (1.634)	2.442E-5 (-1.865)
Other variables (X₈)	-0.499 (-1.550)	0.047 (0.757)	0.237 (1.138)	0.003 (2.538)***
R²	0.850	0.857	0.827	0.818
R² (adjusted)	0.837	0.840	0.808	0.801
F-ratio	63.172	50.858	45.627	49.331

Source: Field survey, 2020

*, **, and *** represent significant at 1%, 5% and 10% level of significance

Perceived Constraints to the Use of Print Media for Technology Transfer

The distribution of Rural farm households perceived constraints to the use of print media in technology transfer is presented in Table 6. The table shows that out of 10 possible constraints investigated in this study, eight (8) were considered to be serious constraints to use of print media in technology transfer among farm households in Imo State. These serious constraints were; time consuming (2.8) high cost of print media (2.6), limited space (= 2.6), political censor (= 2.6), no interaction (= 2.5), inaccessible roads (= 2.3), irregular supply message (- 2.1) and poor level of education (= 2.0). This finding implies that time consuming frustrated the reading and learning interest of the farmer. The decrease in time consuming will lead to increased interest

and consequently lead to improved utilization of improved technologies transferred through print media. The reason could be that the farmers would have learned and benefit from print media, which in turn affects their productivity. The findings of this study on high cost of print media agreed with those of Mtega (2012) that inability to ask questions and get feedback from the print media editor constituted barrier to print media. The table further revealed a grand mean constraint of 2.2*. The table showed that the standard deviations were closely packed and small. This implies that the data had high degree of uniformity and reliability of the result. This is in line with the finding of Onuh and Igwenma (2007) who explained that the smaller the standard deviation, the higher the degree of reliability of the estimates.

Table 6: Constraints to effective use of print media in technology transfer to farmers.

Constraints	Very serious	Serious	Not serious	()	Std Dev.
Poor level of education	32 (24.43)	71 (54.2)	28 (29.32)	2.0	0.4103
Table 6: Perceived Constraints to Use of Print Media in Technology Transfer	81 (64.3)	98 (22.2)	17 (13.5)	2.6	0.6198
Limited space					
Lack of incentive	6 (4.2)	89 (68.5)	39 (27.3)	1.8	0.4293
High cost of print materials	105 (70.9)	24 (16.22)	19 (12.84)	2.6	0.6957
Irregular supply by vendors	89 (69.1)	64 (50.8)	19 (11.9)	2.1	0.5321
Timeliness of message	22 (17.5)	59 (46.8)	45 (35.7)	1.8	0.4993
Un accessible roads	56 (10.40)	57 (45.2)	13 (40.3)	2.3	0.5321
Political censorship	87 (68.5)	23 (22.2)	12 (9.5)	2.6	0.4427
No interaction	80 (63.5)	19 (15.1)	27 (21.4)	2.5	0.6253
Time consuming	89 (82.4)	12 (11.1)	7 (6.5)	2.8	0.5619

Source: Field Survey, 2020

Conclusion and Recommendations

The resource poor farmers may not have the where withal to buy print media and therefore need to be encouraged and supported. Consequently, the findings of this research and the recommendation arising

from it will serve as an invaluable guide to government agencies and policy makers in Imo State in ensuring sustainable food production in the state. The study recommends that;

- Appropriate measures, which will

involve the use of demonstration farms, print media and other extension packages, which will ensure that farmers work in collaboration with extension agents to practice improved technologies disseminated using print media.

- An urgent technology dissemination policy should be put together for Imo State government such a policy should be derived from a comprehensive benchmark survey of the prevalent technology development and dissemination. And this will help extension agents in educating farmers.

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