Analysis of Farmers’ Poor Involvement in Extension Programme Planning in Imo State, Nigeria

Iwuagwu, E.N., A.O. Chukwu, J.A. Aju, E.O. Okoroma, L. Orisakwe and E. Emerhirhi

1Department of Agricultural Economics, Extension and Rural Development, Imo State University Owerri, Nigeria.
2Department of Agricultural Extension, Federal University of Technology, P.M.B. 1526, Owerri, Nigeria.
3Department of Agricultural Education, Federal College of Education (Technical), Omoku Rivers State, Nigeria.

ABSTRACT
The study analyzed farmers’ poor involvement in extension programme planning in Imo State, Nigeria. The specifics of the study were to ascertain extension programmes available in the area; assess farmers’ extent of participation in extension programme planning process; determine the perceived effects of farmers’ participation in planning extension programme on agriculture in the area; examine factors affecting farmers’ participation in extension programme planning. The study population comprised all contact farmers in Imo State. Data for the study were collected from 180 contact farmers sampled through multistage sampling procedure. Percentage, mean score and standard deviation were used in analyzing the study data. Result indicated that majority (80.6%) of the farmers identified food security programme among the extension programmes implemented in the area. The farmers were not involved in any of the extension programme planning process as none of the items recorded a mean score up to 2.0. The result also revealed that when farmers are involved in planning extension programme their participation is capable of producing programmes that are acceptable to farmers (mean = 3.4); extension programmes that are not too technical to apply (mean = 3.2), increasing implementation of extension programme (mean = 3.1), generating location specific agricultural programmes (mean = 3.0), increasing farmers’ output (mean = 2.6), and producing extension programmes that are feasible within the resources and time of farmers (mean = 2.5). The study concludes that farmers were not involved in planning extension programmes in Imo State, and therefore recommends that organizational structure of extension which still retains most of its originality as designed by World Bank should be reviewed and tailored to meet farmers’ peculiarities at State levels.

Keywords: extension programme planning, farmers, participation, Imo State

Introduction
Extension programme is a content of information, skills/techniques, inputs, lined up and presented to extension clientele, particularly farmers in a way that knowledge or skill gained enable them identify their problem as well as improve their livelihood, vocation, institution and enterprise (Mgbada, 2010). It provides a roadmap for teaching and training farmers by defining activities to be undertaken; the number of farmers targeted; the period/time frame; facilitators and their prescribed roles (Dimelu and Nwonu, 2011). It is intently articulated and lined up with corresponding expectations of what the farmers are expected to acquire or do at the end of the day.

It suffices to state that effective extension programme delivery predicates on the adequacy of its planning. This entails conceiving a consciously and clearly defined set of objectives achieved through adequate situational analysis (Nwachukwu, 2008). This is critical since farmers are more inclined to support extension programmes emanated from their needs. Farmers usually see such programmes as their own, thereby promoting and supporting it to work (Anaeto, 2003). Implicitly, the planning process must adequately involve the farmers to participate in determining what constitute the felt needs of the farmers; identify specific actions that must be taken for positive outcome; chart a course of action and
effectively mobilize the needed capital, land, labor and entrepreneurship for the implementation of the action plan towards increased productivity of farmers.

As against the trend in the defective top-down programme planning approach, mobilizing farmers to participate in planning extension programme entails putting responsibility in the hands of farmers to determine extension activities, such as technology packages, dissemination channels and methods capable of addressing soil problems, pests and diseases attacks, agronomic practices and post harvest challenges specific to the farmers’ locations (Asiabaka, 2010). According to Kimaro et al. (2010), the purpose of farmers’ participation is to make extension service delivery more responsive to local conditions, more sustainable and demand driven, more accountable to farmers who are the ultimate target of extension service delivery. Thus, participation enables farmers to identify and solve their own problem, identify resources and opportunities, identify constraints and negative forces, increase commitment by taking ownership of extension programme, provide for cross fertilization of ideas and experiences (Sinkaiye, 2011).

Poor involvement of farmers in extension programme planning has significantly caused farmers’ outright rejection or discontinuance of innovations birthed by such programmes for lack of compatibility and needfulness. For instance, for failing to involve farmers in the planning process, the Imo State integrated community farm programme and Palm for palm programme (Ikula nkwo) implemented in 2015 were short lived as farmers jettisoned and maligned the programme to political stunts bereft of farmers interest. The resultant inactivity that spanned the implementation period of 2015 to 2019 exacerbated poverty in the State, particularly among oil palm farmers through declined productivity. Previous studies such as works by Nwachukwu, 2008; Asiabaka, 2010; Ani, 2013; Nnadi and Anaeto (2013) emphasized on how the needs of farmers are often assumed and subsumed without recourse to cultural variation and location differentials creating a knowledge gap on effects of nonparticipation of farmers, institutional and farmer related factors undermining participation and how to leverage them for greater participation.

Objectives of the study

The study analyzed farmers’ poor involvement in extension programme planning in Imo State, Nigeria. The specifics of the study include to:

i. Ascertain extension programmes available in the area;

ii. Assess farmers’ extent of participation in extension programme planning process;

iii. Determine the perceived effects of farmers’ participation in planning extension programme on agriculture in the area;

iv. Examine factors affecting farmers’ participation in extension programme planning.

Methodology

The study was carried out in Imo State of Nigeria. Imo State is located in the South Eastern zone of Nigeria and lies between latitudes 5° 45´N and 6° 35´N of the equator and longitude 6° 35´E and 7° 28´ E of the Greenwich Meridian (Nwajiuba et al., 2008). The State is bordered by Abia State on the East and Northeast, Rivers State on the South, Anambra State to the North and Rivers State to the South. Imo State is divided into three agricultural zones of Owerri, Orlu and Okigwe and 27 Local Government Areas. With a total land area of 5,530 Km². The population of Imo State varies from 230 persons per Kilometer square in Oguta/Egbema areas to about 1400 persons per Kilometer square in Mbaise, Mbano, Orlu and Mbaite areas (Federal Republic of Nigeria Official Gazette, 2007). Imo ADP serves as the extension arm of the State Ministry of Agriculture established as a reorganized, disciplined and well supported Training and Visit (T&V) and to mobilize small-scale farmers for increased productivity and income (Imo ADP, 2002). Imo ADP is responsible in planning and designing extension programmes for onward implementation across the three zones of the State. The ADP maintains contact with farmer groups and Community Based Organizations (CBOs) through which it enlists farmers’ participation in extension.

The study population comprised all contact farmers in Imo State. Data were collected from 180 contact farmers sampled through multistage sampling procedure. The first stage involved the purposive selection of the three agricultural zones to achieve a well representative sample. In the second stage, out of the total 39 Extension Blocks in Imo, 36 blocks were purposively sampled based on the level of
extension activities in those areas. That is, 12 Blocks from each agricultural zone. Further, five circles were selected from each extension Block to give 180 circles. Finally, one contact farmer was randomly selected from each circle to give a total sample size of 180 respondents for the study.

Percentage, mean score and standard deviation were used in analyzing the study data. Specifically, objectives I was achieved using percentage score, while objectives II, III and IV were achieved using mean score. The mean scores were obtained by adding up the weighted values and dividing by the number of scales. The values of the likert scale rating were added together and then divided by the number of scales to obtain the discriminating index. Example, $4+3+2+1/4 = 2.5$, thus, the discriminating mean index was taken as 2.5 and above.

Result and Discussion

1. Extension activities/programme

Result in Table 1 shows the distribution of farmers based on extension programmes available in the study area. From the result, majority (80.6%) of the farmers identified food security programme among the extension programmes implemented in the area. This was followed by Cassava/maize/melon intercrop as indicated by 80.0% of the farmers. Alternate row planting technique was identified by 73.3%, while dissemination of improved fertilizer application and artificial brooding of local chicks were listed by 62.2% of the farmers among extension activities carried out in the study area. Others included Maize malt processing (54.4%), Conservation agriculture (53.3%), improved crop production methods (37.2%), Improved fisheries production practices (32.8%), Farm record keeping (23.9%), On Farm Adaptive Research (OFAR) (20.0%).

The result corroborated several findings on extension activities in Imo State. Studies by Chikezie et al., 2012; Okoroma and Anaeto 2013; Echetama et al., 2015; Godson-ibeiji et al., 2016; Nwaobiala and Ubor (2016) also identified the aforementioned among extension activities implemented towards attaining increased productivity in the State. The cassava/maize/melon intercrop is designed by extension to enable farmers achieve variety of crops as well as control pests and diseases in marginal lands. Artificial brooding of local chicks on the one hand, is designed to help farmers boost their poultry production by maximizing the prolific nature of local fowls and protecting them from predators like hawk. The maize malt processing is a food drink processed from maize to boost farmers’ income. Conservation agriculture is based on the principle of boosting production without depleting the environment. Tree planting, agroforestry, organic farming which also provides the farmer the

| Extension activities/programme                        | Frequency | Percentage |
|--------------------------------------------------------|-----------|------------|
| i. Improved fisheries production practices             | 59        | 32.8       |
| ii. Improved crop production methods                   | 67        | 37.2       |
| iii. Improved livestock production                     | 33        | 18.3       |
| iv. Improved Agro-forestry                            | 31        | 17.2       |
| v. Agribusiness management                            | 22        | 12.2       |
| vi. Postharvest management techniques                  | 26        | 14.4       |
| vii. Safety measures in agrochemical application       | 18        | 10.0       |
| viii. Conservation agriculture                         | 96        | 53.3       |
| ix. Tuber crop expansion programme                     | 41        | 22.8       |
| x. Food security programme                            | 145       | 80.6       |
| xi. On Farm Adaptive Research (OFAR)                   | 36        | 20.0       |
| xii. On Farm Research (OFR)                            | 13        | 7.2        |
| xiii. Improved fertilizer application                  | 112       | 62.2       |
| xiv. Farm record keeping                              | 43        | 23.9       |
| xv. Result and Method demonstrations                   | 07        | 3.9        |
| xvi. Alley farming                                    | 16        | 8.9        |
| xvii. Cassava/maize/melon intercrop                    | 144       | 80.0       |
| xviii. Alternate row planting techniques               | 132       | 73.3       |
| xix. Artificial brooding of local chicks               | 112       | 62.2       |
| xx. Maize malt processing                             | 98        | 54.4       |

Source: Field survey data, 2019                             *Multiple responses recorded
opportunity of achieving the dual purpose of protecting the environment and generating income through agroforestry practices.

2. Extent of farmers’ participation in extension programmes planning process

Table 2 is the distribution farmers by extent of participation in extension programmes planning process. Judging by a discriminating index of 2.0 for participation the result indicated that the farmers were not involved in any of the extension programme planning process as none of the items recorded a mean score up to 2.0. The standard deviation value which ranged from 0.1 – 0.4 indicated that the farmers were in agreement in their opinions regarding the extent they participated in extension programme planning process. This result strongly confirmed the generally held view that extension programme planning follows a top-down approach which negates the potential roles and contributions of the farmers in the planning and implementation (Nwachukwu, 2008; Mgbada, 2010). Precisely, for extension programme planner to effectively do his job, there is need to gather data relevant to the area as that would enable the extensionist identify the felt needs of the people beckoning for attention. Ani (2013) noted that in doing this the extension worker must be thoroughly informed about the programme and the beneficiaries, hence, the need to rely on the farmers for insight into the problem of the area. This is the beginning point in winning the interest and confidence of the farmers who often see programmes so designed as their own. The implication of excluding the farmers at this stage will entail losing their interests and commitment. The farmers are expected to take part in the situational analysis by assisting the extension personnel in assembling, interpreting and organizing all social, economic cultural or educational facts generated in data collection with the aim of precipitating the major problems for onward intervention. In terms of excluding farmers in the process of problem definition, Asiabaka (2012) warned that failure to accommodates the farmers’ input will likely lead to a situation where the extension programme planner confuses the felt needs of the farmers for their real needs thereby misplacing priority. Allowing farmers evaluate extension programmes makes for greater independent assessment of the success or otherwise of the programme as poor evaluation obscures flaws and gives room for errors to be recycled in the next cycle of implementation (Ani, 2013).

Table 2: Distribution by extent of farmers’ participation in extension programmes planning process

| Extension programme planning process                  | Full participation | Moderate participation | No participation | Mean | SD  |
|--------------------------------------------------------|--------------------|------------------------|-----------------|------|-----|
| Data collection                                         | 12                 | 22                     | 146             | 1.3  | 0.2 |
| Situation analysis                                      | 4                  | 7                      | 169             | 1.1  | 0.3 |
| Problem definition                                      | 33                 | 52                     | 95              | 1.7  | 0.1 |
| Determining programme objective                        | 36                 | 44                     | 100             | 1.6  | 0.3 |
| Planning calendar of work                               | 35                 | 66                     | 79              | 1.8  | 0.2 |
| Work execution                                          | 23                 | 33                     | 124             | 1.4  | 0.4 |
| Progress determination                                  | 11                 | 28                     | 141             | 1.2  | 0.3 |
| Evaluation process                                      | 23                 | 64                     | 93              | 1.6  | 0.2 |
| Programme reconsideration                               | 18                 | 29                     | 133             | 1.4  | 0.4 |
| Beginning of next cycle                                 | 11                 | 26                     | 143             | 1.3  | 0.1 |

Source: Field survey data, 2019                      Discriminating Index = 2.0 and above

3. Effects of farmers’ involvement in planning extension programme

Table 3 shows the distribution of farmers based on effects of farmers’ involvement in planning extension programme. The result revealed that when farmers are involved in planning extension programme their participation is capable of producing programmes that are acceptable to farmers (mean = 3.4); extension programmes that are not too technical to apply (mean = 3.2), increasing implementation of extension programme (mean = 3.1), generating location specific agricultural programmes (mean = 3.0), increasing farmers’ output (mean = 2.6), and producing extension programmes that are feasible within the resources and time of farmers (mean = 2.5). The standard deviation value which varied from 0.3 – 1.1 implied that the farmers disagreed on some items that measured the effects of their involvement in extension programme planning. This finding lay credence to the submission of Ani (2013), in which he underscored the essence of involving farmers and
stakeholders in planning extension programmes. He noted that their participation enhances the legitimacy of the plans and decisions as well as foster political support from all concerned. Also, by involving the farmers, expertise of individuals, groups and existing community organizations like farmer groups, co-operatives, commodity associations, church groups, community development associations can be leveraged. Indigenous knowledge of the farmers is one of the virtues that come to bear when they are involved. According to Nwakwasi (2013), some indigenous methods, materials and practices which may not be found on any book page or archive are deposited in the memory of some experienced farmers. Such wealth of knowledge can be available and garnered through farmers’ participation.

Table 3: Distribution of farmers by effects of farmers’ involvement in planning extension programme

| Effects indicators                                                                 | Strongly Agree | Agree | Disagree | Strongly disagree | Mean  | SD  |
|-----------------------------------------------------------------------------------|----------------|-------|----------|-------------------|-------|-----|
| Farmers’ participation in extension programme planning can increase implementation of extension programme | 62             | 79    | 31       | 08                | 3.1*  | 0.4 |
| Farmers’ participation generates location specific agricultural programmes      | 55             | 88    | 22       | 15                | 3.0*  | 0.5 |
| Farmers’ participation produces extension programmes that are not too technical to apply | 94             | 42    | 31       | 13                | 3.2*  | 0.7 |
| Farmers’ participation produces extension programmes that are acceptable to farmers | 103            | 56    | 17       | 04                | 3.4*  | 0.3 |
| Farmers’ participation increases farmers’ output                                 | 46             | 63    | 43       | 28                | 2.6*  | 0.7 |
| Farmers’ participation produces extension programmes that are feasible within the resources and time of farmers | 41             | 57    | 33       | 49                | 2.5*  | 0.8 |
| Through farmers’ participation extension programmes can be tailored to meet the aspirations of both poor and rich farmers | 30             | 29    | 99       | 22                | 2.4   | 0.6 |
| Farmers’ participation produces extension programmes that are within the scope of extension agents | 28             | 41    | 73       | 38                | 2.1   | 0.8 |
| Farmers’ participation saves time and resources in implementing agricultural policy | 28             | 36    | 99       | 17                | 2.4   | 1.1 |
| Farmers’ participation creates effective linkage between and amongst agricultural stakeholders | 18             | 24    | 66       | 62                | 1.9   | 0.9 |

Source: Field survey data, 2019
Influence of farmers’ involvement in extension programme planning on the effects of the programme

Table 4 presents a measure of the relationship between the involvement of farmers in programme planning and effects of their involvement. The result revealed that the computed value of $X^2$ (7.8) exceeded the Critical value of $X^2$ (6.4) at 0.05 level of significance. The null hypothesis which states that farmers’ involvement in extension programme planning does not influence the effects of the programme is therefore rejected. The result confirms the assertion of Nwachukwu (2008) that the benefits of farmers strongly predicate on their involvement in defining the program objectives and selecting the contents of the programme.

Table 4: Chi-square analysis of the influence of farmers’ involvement in extension programme planning on the effects of the programme at $P<0.05$

| DF | P-value | $X^2_{tab}$ | $X^2_{cal}$ | Decision |
|----|---------|-------------|-------------|----------|
| 13 | 0.000   | 6.4         | 7.8         | Null is rejected |

Source: SPSS result of field survey data, 2019

Conclusion and Recommendations

The study concludes that there exists extension programmes implemented in the study area. However, farmers in the State are not involved in any of the extension programme planning process. The farmers perceived their participation capable of producing extension programmes that are acceptable to the generality of farmers. Farmers’ involvement in planning significantly influenced the effects of extension programme. Based on the findings of the study, the following recommendations were made:

1. The organizational structure of extension which still retains most of its originality as designed by World Bank should be reviewed and tailored to meet farmers’ peculiarities at State levels. For instance, a native language communication unit can be introduced to enable those constrained by language to communicate.
2. Extension programme planners should involve farmers through farmer-group clusters like cooperatives, commodity associations, social and religious organizations.
3. To end the perpetual top down problem that characterize extension programme, the Federal Government should encourage geopolitical zones and regions to generate extension programmes that best address their peculiarities. By so doing, extension programme will become location-specific and more effective.

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