



EFFECTS OF SOCIO-DEMOGRAPHIC CHARACTERISTICS OF NPFS BENEFICIARIES AND PERCEIVED EFFECTIVENESS OF NPFS GROUP-RELATED FACTORS ON FARM PRODUCTION IN SOUTHWEST, NIGERIA



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Abstract: National Programme for Food Security (NPFS) is one of the efforts of government to alleviate poverty and improve food sustainability in Nigeria. NPFS operates group approach to achieve its objectives across the senatorial districts in Nigeria. The extent to which NPFS programme was successful has been attributed to dynamics of group effectiveness. This study therefore investigated the perceived effectiveness of group-related factors on food production among beneficiaries of NPFS in Southwest, Nigeria. Multi-stage sampling procedure was used to draw sample for this study. Oyo, Ondo and Lagos states were purposively selected based on availability of sustainable fund and management committees for NPFS in line with its set objectives and 494 respondents were randomly selected. Data were collected through the use of structured interview schedule. Data were analysed using descriptive (frequency counts, charts and percentages) and inferential (Chi-square, Pearson Product Moment Correlation (PPMC), at $p < 0.05$). Results showed that the mean age of the farmers was 52.4 years. Most (62.3%) of them were male and 87.9% had farming as primary occupation. Maize and cassava were major crops grown by 84.0 and 81.2% of the farmers respectively. A large proportion (89.9%) indicated willingness to share knowledge and responsibility while 89.3% indicated size of group as factors that facilitated group cohesion. Above half (54.9%) farmers had favourable perception of effectiveness of NPFS strategies on their production. Significant relationship existed between sex ($\chi^2=3.508$), and perceived effectiveness of NPFS group-related factors. Group cohesion factors such as favourable atmosphere ($r=0.142$), attitude of members to group activities ($r=0.186$) and severity of entry requirements ($r=0.128$) were significantly related to perceived effectiveness of NPFS group-related factors.

Keywords: NPFS, perception, effectiveness, production, group factors

Introduction

Agriculture has been the mainstay of the economy since independence and despite several bottlenecks; it remains a resilient sustainer of the populace. According to the Central Intelligence Agency (CIA) (2013), agriculture contributes 40 percent of the Gross Domestic Product (GDP) and employs about 70 percent of the working population in Nigeria. Also, Central Bank of Nigeria (2012) stated that between 1960 and 2011, an average of 83.5 percent of agriculture GDP was contributed by the crop production subsector making it the key source of the growth of agricultural sector. The food production role of Agriculture Sector depends largely on this subsector as all the staples consumed in the nation comes from crop production, 90 percent of which is accounted for by small-scale, subsistent farmers. With agriculture serving as a source of food for the populace, high prospect for employment generation, source of income, a major foreign exchange earner among others, it follows that it is crucial to the Nigerian economy and of most developing countries. These are aided by the diversity of favourable climatic conditions, the richness of soil types and abundant water sources, and the high population density; thus, providing great potentials for crop, livestock, fishery and forestry production (Onwualu, 2012).

Three components of food security were recognized. These are: food availability, food accessibility and food utilisation. Food availability is achieved when sufficient quantities of foods are consistently available to all individuals within a country. Food accessibility is achieved when people have sufficient resources to obtain applicable foods for a nutritious diet. Food utilisation connotes applicable use of food based on knowledge of basic nutrition and care.

Dahlberg (1998), as cited in Emmanuel and Peter (2012) identified four global threats to food security of cities via population explosion, global warming, loss of biodiversity and the threat of poverty and globalization of injustice. Ojo and Adebayo (2012) stated that whatever the sources of threats to food security, the weak and the poor (including poor

cities and states) are becoming more vulnerable than ever to powerful economic forces and structures. They added that since the poor state of food security emanates mainly from poor access to food, there is the need to implement policies that are capable of raising the income of the low-income group, thereby empowering them to access available food supplies. Policies aimed at improving food security must likewise address the three components of food security (Kodamaya, 2011).

The Federal Government of Nigeria initiated several agricultural policies and programmes in the past in an attempt to solve the problem of food production in the country. In most cases, all the set objectives of these programmes could not be achieved. One of the factors responsible for these programmes' failure was the inadequate level of production. Also, Onugu (2007) asserted that, basically, farmers' lacked the capital to expand their production, and this contributed to low production. Production generally is a measure of how efficient and effective resources are used as inputs to produce the products and services needed by society in the long run (Ukeje, 2000).

According to Emmanuel and Peter (2012), Nigeria is identified as one of the food-deficit countries in Sub-Saharan Africa. The objective of attaining food security and eliminating rural poverty in the country led the Federal Government into a technical collaboration with the Food and Agriculture Organisation to implement the National Programme for Food Security (NPFS) pilot phase in Kano in November 2001, success of the pilot scheme led to the nationwide coverage (NPFS, 2010), which was the first-phase of the programme. The second-phase spanned between 2007 and 2012. The main thrust of NPFS is to improve national food security and reduce poverty on an economically and environmentally sustainable basis through the diversification and sustainable use of national resources. It also enhanced farmers' and consumers' access to such services (such as extension, credit, nutrition, health education) and foster participation of the poorer section of the human population in

the development of their community. The NPFS employed an approach that gives ample opportunities to farmers to participate and form an integral part of the project management through consolidation of groups. Phil (2007) defined a group as the coming together on a free and voluntary basis with a spirit of co-operation expressed by mutual love and assistance, justice and honesty; to work together for mutual, social and economic benefits. Also, group is defined as the collection of individuals among whom a set of interdependent relationships exist (Windapo and Afolayan, 2005).

Working in groups can be more rewarding than operating individually; thus, making Rinnankoski (2001) to submit that organisations engage individuals on group basis in order to achieve goals and outcomes that might not be achieved by individuals working separately. Cohesiveness, on the other hand, is the ability of individuals to stick together. Cohesiveness can be said to be the resultant forces acting on all the members of a group to continue in the group (Cartwright, 1968) as cited in (Lambisia, Ngahu and Wagoki, 2016). Group cohesiveness is, therefore, the tendency for a group to stick together and remain united in order to achieve its goals and satisfy members' needs (Rinnankoski, 2001). Group cohesiveness measures the degree to which work groups are closely knitted (Harun and Mahmood, 2012). Suffice to say that if a person finds out that a group is able to satisfy his needs, he tends to demonstrate a sense of commitment to such a group and sticks to it, thereby promoting or engendering group cohesiveness.

Furthermore, the predicaments we found ourselves as of today can be traced to the low level of agricultural production. That is, inadequacy in terms of production resources is a major constraint to agricultural practice in developing countries, especially Nigeria. The Nigeria agricultural production sub-sector is constrained by several factors. The farming population for example comprises predominantly small scale, subsistence farmers or peasants, farming on average about two hectares of land and usually on scattered holdings (Ukeje, 2009). Farming activities are also carried out mainly with traditional, rudimentary technology consisting mainly of hoe and cutlass. In addition to these are low level of credit and poor incentives to farmers, poor infrastructures such as bad road network in rural areas, poor marketing and storage facilities and lack of insurance against future calamities result in income fluctuations.

However, the recent National Programme for Food Security (NPFS) has a particular component that is not embedded in past programmes and project in Nigeria which make it unique and different from others. This is called group-related factors. With this component, NPFS aims at reducing poverty and increasing the production in the economical and environmental sustainability. This uses a pragmatic approach to the dissemination of information to the farmers through grouping. This is because grouping tends to solve the problem of under-coverage of the vast small-holder farmers by the previous programmes. It also attempts to make extension delivery service sustainable to promote agricultural activities for food security because extension work can be carried out during group meetings either organised specifically for the selected purpose or by making use of meetings that were already organised for some other purposes (Anandajayasekaram *et al.*, 2008).

The objectives of the study are:

- i) describe the socio-demographic characteristics of members of NPFS groups in the study areas;
- ii) ascertain the cohesion factors in the NPFS groups
- iii) highlight the beneficiaries' perception of effectiveness of NPFS group-related factors on farm production;
- iv) determine the level of production of NPFS members as a result of involvement in group active

The following hypotheses, stated in the null forms, were tested:

- i) There is no significant relationship between the selected socio-demographic characteristics of NPFS beneficiaries and their perceived of effectiveness of NPFS group-related factors on farm production using Chi-square analysis
- ii) There is no significant relationship between group cohesion factors and perceived effectiveness of NPFS group-related factors on farm production using PPMC analysis.

Materials and Methods

The study was conducted in South-west Nigeria. The area which is situated between latitude 5⁰ and 9⁰ north and longitude 2⁰ and 7⁰ east of the equator, consists of six states, namely, Ogun, Oyo, Osun, Ondo, Ekiti and Lagos. The majority of the people are Yoruba, while the predominant language spoken among residents is Yoruba and English. The target population consisted of all NPFS crop farmers in the study area.

Multi-stage sampling procedure was used to select respondents for the study (Table 1). The first stage involved purposive selection of Oyo, Ondo and Lagos states based on availability of sustainable fund and managements that are in line with the set objectives of NPFS; followed by selection of two-third of the senatorial districts in each of the states. The third stage involved a random selection of two-third of NPFS sites in each of the selected senatorial districts to give a sum of twelve (12) NPFS sites. The fourth stage involved a random selection of 10 percent of the NPFS groups in each of the selected NPFS sites and the fifth stage involved a random selection of 10 percent of the members in the selected NPFS groups. Sample size of 494 food crop farmers were selected from 4937 beneficiaries of NPFS which represent 10% of the population.

Table 1: Summary of sampling procedure and sample size and respondents' distribution in the study area

| State | Senatorial districts | Selected senatorial district | No of NPFS sites per senatorial district selected | NPFS sites selected 2/3(66.6%) | No of NPFS groups selected | NPFS groups selected (10%) | Total No of beneficiaries in selected groups | Sampled beneficiaries (10%) | Number of Respondents/ sample size |
|--------------|----------------------|------------------------------|---|---|----------------------------|----------------------------|--|-----------------------------|------------------------------------|
| Oyo | 3 | Oyo South | 3 | Araromi-Akufo (Ido LGA) | 64 | 6 | 867 | 87 | 237 |
| | | Oyo Central | 3 | Eruwa (Ibarapa East LGA) | 23 | 2 | 389 | 39 | |
| | | | | Fasola (Oyo west LGA) | 35 | 4 | 515 | 52 | |
| Ondo | 3 | Ondo North | 3 | Akinyele (Akinyele LGA) | 28 | 3 | 593 | 59 | 134 |
| | | Ondo Central | 3 | Oba Akoko (Akoko SW LGA) | 14 | 1 | 346 | 35 | |
| | | | | Okeluse (Ose LGA) | 26 | 3 | 312 | 31 | |
| Lagos | 3 | Lagos East | 3 | Ogbese Owode (Akure N LGA) | 12 | 1 | 317 | 32 | 123 |
| | | Lagos West | 3 | Bajare (Idanre LGA) | 18 | 2 | 364 | 36 | |
| | | | | Igbooye/Igbonla (Epe LGA) | 23 | 2 | 363 | 36 | |
| | | | | Ketu/Itoikin (Epe LGA) | 15 | 2 | 331 | 33 | |
| | | | | Ayobo/Ipaja (Alimosho LGA) | 18 | 2 | 232 | 23 | |
| | | | | Amuwo-Odofin/Festac (Amuwo- Odofin LGA) | 21 | 2 | 308 | 31 | |
| Total | 9 | 6 | 18 | 12 | 297 | 30 | 4937 | 494 | 494 |

Source: Field survey, 2019

Data were collected from the respondents through the use of interview schedule to elicit relevant information from NPFS beneficiaries. The study was validated using face and content validity of interview schedule while reliability of the instruments was tested using split-half test. The scores from both parts of the test are correlated and reliability coefficient of 0.70 was obtained. Chi-square analysis and PPMC analysis were used for the hypothesis while frequency count, percentages were used to ascertain the cohesion factors among the beneficiaries.

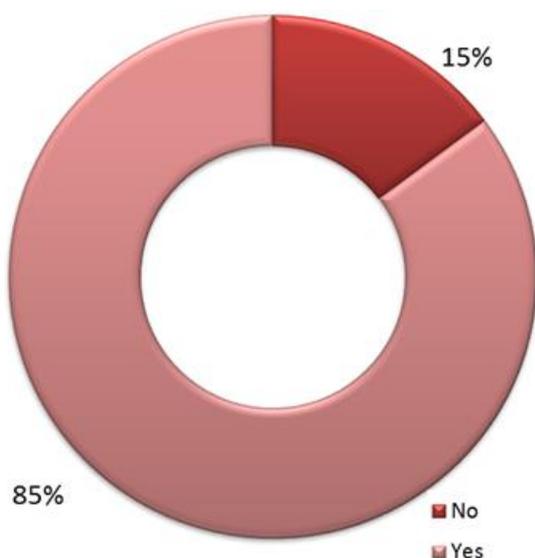
Results and discussion

The results of the analysis on Table 2 revealed that the mean age of the respondents was 52.41 years. Majority (91.0%) of NPFS beneficiaries were 40 years and above while 62.3% were male. This implies that beneficiaries are mature adults and were in their economically active age which may influence their adoption of new ideas within their groups in several ways. This result corroborates Onyemauwa *et al.* (2013) who found out that majority (78.0%) of NPFS beneficiaries were between 41 and 60 years with a mean age of about 56 years. Similarly, 86% were married and according to Jibowo (2000), the marital status of a farmer can tell how responsible such a farmer is, which may also have a bearing on the farmer's production; while 87.9% had farming as their primary activities. Also, (18.8%) of the NPFS beneficiaries had no formal education at all while 81.2% had formal education; 85.0% of the NPFS beneficiaries belonged to one social group or the other aside from NPFS related group. This finding is in line with result of the study carried out by Adeogun and Uwagboe (2008) where it was revealed that about 60% of farmers belong to one group or the other as indicated in Fig. 1.

Table 2: Distribution of Respondents Based on their Socio-demographic Characteristics (n=494)

| Variable | Frequency | Percentage | Mean |
|---------------------------|-----------|------------|-------|
| Age | | | 52.41 |
| 20-29 | 10 | 2.0 | |
| 30-39 | 35 | 7.0 | |
| 40-49 | 128 | 26.0 | |
| 50-59 | 189 | 38.0 | |
| 60 years and above | 132 | 27.0 | |
| Sex | | | |
| Male | 308 | 62.3 | |
| Female | 186 | 37.7 | |
| Marital Status | | | |
| Single | 26 | 5.3 | |
| Married | 425 | 86.0 | |
| Widowed | 35 | 7.1 | |
| Separated | 5 | 1.0 | |
| Divorced | 3 | 0.6 | |
| Religion | | | |
| Islam | 212 | 42.9 | |
| Christianity | 273 | 55.3 | |
| Traditional | 9 | 1.8 | |
| Primary Occupation | | | |
| Farming | 434 | 87.9 | |
| Artisan | 17 | 3.4 | |
| Trading | 24 | 4.9 | |
| Food processing | 13 | 2.6 | |
| Student | 1 | 0.2 | |
| Teaching | 1 | 0.2 | |
| Civil service | 4 | 0.8 | |

Source: Field survey, 2019



Membership of other social groups
Source: Field survey, 2019

Table 3: Distribution of beneficiaries based on attendance at group meetings (n=494)

| Frequency of meeting | Once | | Twice | | Thrice | |
|----------------------|------------|-------------|------------|-------------|-----------|-------------|
| | Freq. | % | Freq. | % | Freq. | % |
| Weekly | 54 | 10.9 | 22 | 4.5 | 0 | 0.0 |
| Monthly | 251 | 50.8 | 163 | 33.0 | 4 | 0.8 |
| Total | 305 | 61.7 | 185 | 37.5 | 04 | 0.08 |

Source: Field survey, 2019.

Table 4: Distribution of respondents based on factors affecting group cohesion (n=494)

| SN | Cohesion Factors | Facilitated | | No effect | | Hindered | |
|-----|--|-------------|------|-----------|------|----------|------|
| | | Freq. | % | Freq. | % | Freq. | % |
| 1. | Size of group | 441 | 89.3 | 51 | 10.3 | 2 | 0.4 |
| 2. | Time spent together by group members | 426 | 86.2 | 60 | 12.1 | 8 | 1.6 |
| 3. | Clear group identity | 375 | 75.9 | 117 | 23.7 | 2 | .4 |
| 4. | Good interpersonal identity | 414 | 83.8 | 74 | 15.0 | 6 | 1.2 |
| 5. | Style of leadership | 387 | 78.3 | 97 | 19.6 | 10 | 2.0 |
| 6. | Gender make-up of the group | 364 | 73.7 | 120 | 24.3 | 10 | 2.0 |
| 7. | Favourable/relaxed atmosphere | 352 | 71.3 | 132 | 26.7 | 10 | 2.0 |
| 8. | Level of satisfaction of group members | 406 | 82.2 | 79 | 16.0 | 9 | 1.8 |
| 9. | Level of cooperation and enthusiasm within group | 426 | 86.2 | 65 | 13.2 | 3 | 0.6 |
| 10. | Reward and punishment or sanctions | 353 | 71.5 | 89 | 18.0 | 52 | 10.5 |
| 11. | Upholding the principle 'an injury to one is an injury to all' | 325 | 65.8 | 135 | 27.3 | 34 | 6.9 |
| 12. | Willingness to share knowledge and responsibility | 444 | 89.9 | 48 | 9.7 | 2 | 0.4 |
| 13. | Attitude of group members to group activities | 369 | 74.7 | 68 | 13.8 | 57 | 11.5 |
| 14. | Similarities of group members' socioeconomic and cultural settings | 281 | 56.9 | 193 | 39.1 | 20 | 4.0 |
| 15. | Severity of initiative/entry requirements | 315 | 63.8 | 163 | 33.0 | 16 | 3.2 |

Source: Field survey, 2016

Group cohesiveness in NPFS groups

Table 5 shows more than half (53.8%) of the NPFS groups had high level of group cohesiveness while 46.2% fell within the lower category. This indicates that to some extent beneficiaries were able to operate as a group by sticking together and remaining united in order to achieve their goals and satisfy members' needs. When farmers are in groups, diffusion of new ideas and information that can bring about increase in yield becomes more rapid.

Table 3 presents how often beneficiaries attend group meetings. It was found that of majority (61.3%) of the respondents attend meetings at an average of once in a month, while 22.9% attended at an average of twice in a month. Those that claimed to attend meeting at an average of once in a week constitute 13.4% of the respondents. Only 2.0% of the respondents attended meetings at an average of twice in a week. This implies that on the average, the respondents attend meetings once in a month. This may be because most of the groups hold meeting once in a month and probably most members target extension agent's visitation day, which usually takes place on monthly basis.

Factors that contribute to group cohesiveness

Major group cohesion factors identified by majority of the beneficiaries as indicated in Table 4 were size of group (89.3%), willingness to share knowledge and responsibility (89.9%), time spent together (86.2%), level of cooperation and enthusiasm within group (86.2%), good interpersonal identity (83.8%), level of satisfaction of group members and style of leadership (78.3%). Working in groups can be more rewarding than operating individually since it tends to enhance decentralisation of activities, ensures greater inclusiveness of the rural poor in innovation development, foster effective representation of small farmers which is a key factor in achieving more rapid and sound rural development (Sanginga *et al.*, 2001; World Bank, 2000).

Table 5: Category of Respondents Based on Group Cohesion (n=494)

| Level | Freq | % | Min | Max | Mean | SD |
|-------------------|------------|--------------|-----|-----|-------|------|
| Low (15-18.98) | 228 | 46.2 | 15 | 30 | 18.99 | 3.97 |
| High (18.99-30.0) | 266 | 53.8 | | | | |
| Total | 494 | 100.0 | | | | |

SD = Standard Deviation; Max = Maximum; Min = Minimum; Freq = Frequency

Source: Field survey, 2019

Table 6: Level of Beneficiaries' Production (n=494)

| Production Level (kg) | Freq | % | Min (kg) | Max (kg) | Mean (kg) | Std. Dev. |
|-------------------------|------------|--------------|----------|----------|-----------|-----------|
| Low (308.0 – 2843.0) | 378 | 76.5 | 308.16 | 25000.00 | 2843.10 | 2349.97 |
| High (2843.1 – 25000.0) | 116 | 23.5 | | | | |
| Total | 494 | 100.0 | | | | |

Source: Field survey, 2019

Table 7: Level of Perceived Effectiveness of NPFS Group-related Factors on Farm Production (n=494)

| Perception category | Freq | % | Min | Max | Mean | SD |
|----------------------------------|------------|--------------|-------|--------|--------|-------|
| Unfavourable (Low) (51.0-125.76) | 223 | 45.1 | 51.00 | 163.00 | 125.77 | 15.42 |
| Favourable (High) (125.77-163.0) | 271 | 54.9 | | | | |
| Total | 494 | 100.0 | | | | |

Source: Field survey, 2019

Production of NPFS beneficiaries

The major crops grown were identified to be maize and cassava. Therefore, beneficiaries' production was captured by taking the output of both maize and cassava of the respondents in kilogramme (kg). The value of the output was categorised based on above and below mean criteria. In this case, a production value greater than or equal to mean value indicated high production, while a production value less than mean value indicated low production. The classification presented in Table 6 shows that 76.5% of the beneficiary had low production while 23.5% had high production. This shows that most respondents had relatively low production in their

enterprises. This might be due to high cost of inputs leading to increase in cost of production and absence of subsidy.

Level of perception of effectiveness of NPFS group-related factors on farm production

The results in Table 7 show the level of respondents' perceived effectiveness of NPFS group related factors. Generally, the level of effectiveness of NPFS strategies was perceived to be favourable by 54.9% of the beneficiaries while 45.1% perceived NPFS strategies to be unfavourable. This result is in line with the findings of Adeleke-Bello and Ashimolowo (2015) which showed that more than half of the respondents adjudged high perception while few had low perception about the need for the projects.

Hypotheses Testing

Hypothesis one: Chi-square analysis of selected socio-demographic characteristics of the beneficiaries

The result reveals that a significant association existed between sex and perceived effectiveness of NPFS group-related factors ($\chi^2 = 3.508$; $p \leq 0.05$); primary occupation ($\chi^2 = 23.060$; $p \leq 0.05$) implying that the primary occupation of the beneficiaries is associated with effectiveness of NPFS group-related factors. Farming, being the primary occupation of the most of the beneficiaries will influence their perception about effectiveness group-related factors. The relationship between marital status ($\chi^2 = 5.666$; $p > 0.05$), religion ($\chi^2 = 0.540$; $p \leq 0.05$), membership of social group ($\chi^2 = 1.063$; $p \leq 0.05$), nativity ($\chi^2 = 0.330$; $p \leq 0.05$), on one hand and perceived effectiveness of group-related factors is not significant, implying that perceived effectiveness of group-related factors is not associated with function of beneficiaries' marital status, religion, membership of social group, and nativity.

Table 8: Chi-square association between respondents' socio-demographic characteristics and their perception of effectiveness of NPFS group-related factors on farm production

| Variables | Degree of Freedom | χ^2 | CC | P-value | Decision |
|----------------------------|-------------------|----------|-------|---------|-----------------|
| Sex | 1 | 3.508 | 0.084 | 0.038 | Significant |
| Marital status | 4 | 5.666 | 0.106 | 0.274 | Not Significant |
| Religion | 2 | 0.540 | 0.033 | 0.763 | Not Significant |
| Primary occupation | 6 | 23.060 | 0.211 | 0.000 | Significant |
| Membership of social group | 1 | 1.063 | 0.046 | 0.183 | Not Significant |
| Nativity | 1 | 0.330 | 0.026 | 0.321 | Not Significant |

Significant at 0.05 level

Source: Field survey, 2019

Table 9: PPMC analysis between group cohesion factors and perception of effectiveness of NPFS Group-related factors on farm production

| Group cohesion factors | R-value | P-value | Decision |
|---|---------|---------|-----------------|
| Size of group | -0.028 | 0.538 | Not significant |
| Time spent together | -0.155 | 0.001 | Significant |
| Clear group identity | 0.078 | 0.084 | Not significant |
| Good interpersonal relationship | -0.060 | 0.186 | Not significant |
| Style of group leadership | -0.053 | 0.237 | Not significant |
| Gender make-up of group | -0.086 | 0.055 | Not significant |
| Favourable/relaxed atmosphere | 0.142 | 0.002 | Significant |
| Level of satisfaction of members | -0.053 | 0.238 | Not significant |
| Level of cooperation and enthusiasm | -0.125 | 0.005 | Significant |
| Reward and punishment to keep rules | -0.006 | 0.899 | Not significant |
| Upholding principle | 0.118 | 0.008 | Significant |
| Willingness to share knowledge and responsibility | -0.127 | 0.005 | Significant |
| Attitude of members to group activities | 0.186 | 0.000 | Significant |
| Homogeneity of SEC and cultural settings | 0.063 | 0.164 | Not significant |
| Severity of entry requirements | 0.128 | 0.004 | Significant |

Correlation coefficient significant at $p \leq 0.05$ level

Source: Field survey, 2019

Hypothesis two: There is no significant relationship between group cohesion factors and respondents' perception of effectiveness of NPFS group-related factors on farm production

The result reveals that the relationship between perceived effectiveness and group cohesion factors such as favourable/relaxed atmosphere ($r = 0.142$, $p \leq 0.05$); upholding principle ($r = 0.118$, $p \leq 0.05$); attitude of members to group activities ($r = 0.186$, $p \leq 0.05$) and severity of entry requirements ($r = 0.128$, $p \leq 0.05$) were significant. This implies that the aforementioned variables significantly determine beneficiaries' perceived effectiveness of NPFS group-related factors. However, the relationship was negatively significant for group cohesion factors such as time spent together ($r = -0.155$, $p \leq 0.05$), level of cooperation and enthusiasm ($r = -0.125$, $p \leq 0.05$), willingness to share knowledge and responsibility ($r = -0.127$, $p \leq 0.05$). This indicates that perceived effectiveness indirectly depends on the aforementioned group cohesion factors.

Conclusion

Based on the empirical analysis, results of this study revealed that the majority of NPFS beneficiaries were adults, males and were married. There was low level of literacy among the beneficiaries. Farming was the major occupation of NPFS beneficiaries while majority of the beneficiaries belonged to one group or the other with each of the groups not more than 10 years since establishment. Most of them attended meetings at an average of once in a month. There were significant associations between sex, primary occupation on one hand, and perceived effectiveness of NPFS group-related factors on the other hand. Size of group, willingness to share knowledge and responsibility and time spent together were identified as part of the factors that contribute to group cohesiveness. The level of participation in group activities among beneficiaries was recorded to be high but relatively low production was high.

Recommendations

Based on the findings of the study, the following recommendations were made:

- a. Since most of the farmers were adults and they are exceeding their active period of life, conscious efforts should be made by the NPFS authority to include or target younger farmers who possess more agility and energy for farming activities
- b. Groups in the study area should be consciously promoted so that they can be consistently used to facilitate future programmes as they have been used for the NPFS
- c. The NPFS programme should facilitate access to permanent land holdings to the beneficiaries in the study area so as to help promote their enterprises

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