Assessment of Cassava Multiplication Programme Among Rural Farmers In North Central Nigeria

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ABSTRACT
The study sought to assess cassava multiplication programme among rural farmers in north central Nigeria. Three research questions were answered and three null hypotheses were tested at 0.05 level of significance. The study made use of survey research design. The population for the study was 120,122 respondents. A sample of 390 made up of 295 farmers and 105 facilitators in north central Nigeria was drawn using multistage sampling technique. A 27-item questionnaire titled ‘Cassava Multiplication Programme Assessment Questionnaire (CMPAQ) was used for data collection. The CMPAQ was validated by five experts, two experts in Agricultural Education, two in crop production and one in Agricultural Extension and Communication, all from the Federal University of Agriculture, Makurdi, Benue State. Cronbach alpha reliability method was used to determine the internal consistency of the instrument. A reliability coefficient of 0.84 was obtained. Mean was used to answer the research questions and t-test statistics was used to test the null hypotheses at 0.05 level of alpha. It was found that the future of Cassava Multiplication Programme is bright because of the involvement of the Federal Government and IFAD in the programme, the resources for the successful implementation of the Cassava Multiplication Programme were inadequate and that some government policies have affected the Cassava Multiplication Programme positively while others have not. It was recommended among others that Adequate resources should be provided by Agricultural Development Programmes (ADP’s) and Federal Ministry of Agriculture and Rural Development (FMARD) in north central Nigeria to ensure effective implementation of the Cassava multiplication Programme

Keywords: Agriculture, Cassava Multiplication, Programme, Farmer and Assessment

INTRODUCTION
Agriculture is an important sector of the Nigerian economy because of its relevance to national development especially in the area of food sufficiency, generation of foreign exchange earnings and its ever increasing role in providing employment opportunities for the unemployed persons in this country. It was in the realization of this, that the Nigerian government through its various development programmes encouraged individuals including farmers to engage in both animal and food crop production (Federal Ministry of Agriculture and Rural Development FMARD, 2009). One of the programmes introduced by the Federal Government to alleviate poverty among farmers is cassava multiplication programme. Cassava (Manihot esculenta Crantz) has its origin in Latin America where it has been grown by the indigenous Indian population for at least 4000 years (Akinpelu, Amamgbo, Olojede & Oyekale, 2011).After the discovery of Cassava by the Americans, European traders took the crop to Africa as a potentially useful food crop; later it was also taken to Asia to be grown as a food security crop and for the extraction of starch. Okogbenin, Marin, and Fregene (2006) reported that cassava is native to tropical America and were introduced to Africa by the Portuguese in the sixteenth century. Nigeria is currently the largest producer of cassava in the world with an annual output of over 34 million tonnes of tuberous roots (Adeniji, 2000). Cassava production has been increasing for the past 20 or more years in area cultivated and in yield per hectare. On average, the harvested land area was over 80 percent higher during 1990–1993 than during 1974–1977 (Okogbenin et al., 2006). Cassava is one of the dietary food energy for many people living in the tropics. In the view of Anga (2005), cassava has high carbohydrate content and
as such provides greater proportion of energy for low income households than any other food item. The
author went further to state that cassava is used in the preparation of several household foods and
derivatives such as paste, biscuits, bread and so many other products. In industries, cassava is used for
thickening agents, baby food, jelly, custard powders, glucose and other confectioneries. These uses of
cassava and cassava bye products made its multiplication important to increase its production.
Multiplication according to Aniagolu, (2012) means a “large increase in size, amount, or number of
something”. Multiplication of cassava needs to be increased to meet up with the demand in the processing
and utilization of cassava and cassava products. According to International Institute for Tropical
Agriculture (2002), the objectives of multiplication and distribution of improved planting material of
cassava are to: establish and improve cassava multiplication systems and to develop effective and
sustainable systems of delivery of improved varieties to farmers.
In order to boost cassava production in Nigeria, the Federal Government and International Fund for
Agricultural Development (IFAD) jointly initiated the cassava multiplication Programme with the aim of
promoting cassava utilization as a commodity-based approach against food insecurity (Adeniji, 2000).
The aim cassava multiplication Programme is to alleviate poverty and increase income among farmers.
Human and material resources have been put into this programme so as to facilitate its implementation
and ensure the development of farmers.
A farmer in the opinion of Olaitan, Ifeanyieze and Eze (2012), is a person who grows plants or rears
animals for the benefit of mankind. It is an individual who owns or manages a crop or an animal farm. In
this study, a farmer is an individual that grows cassava for the sustenance of their livelihood and for
economic benefits to man. In Nigeria, the bulk of farmers are concentrated in rural areas where there is
vast piece of land for them to carry out their farming activities (Aniagolu, 2012). The word “rural” connotes a place with agricultural orientation; the houses are farm houses, barns, sheds
and other structures of similar purposes. In the opinion of Olisa (in Haruna, 2012), population is the main
characteristic that differentiates rural from urban areas, especially in the developing countries. In this
regard, in Nigeria, an area with a population of 20,000 people and below is classified as a rural area.
According to Olisa (in Haruna 2012), the main features of rural areas are depression, degradation and
deprivation. Many rural farmers are immersed in poverty so clearly that the people are the embodiment of
it. In most rural areas in Nigeria, basic infrastructure where they exist at all, are too inadequate for
meaningful development. In other words, the rural farmers lack virtually all the good things of life like
roads, medical and health facilities, portable water and electricity. In this case, the researcher believes that
sustainable development of rural farmers can be achieved through cassava multiplication programme
which is capable of generating income to enhance farmers’ standard of living.
According to Food and Agricultural Organization (FAO, 2002) food security is the availability of food
which individuals are entitled to and which they can actually access in the expected proportion and at the
right time. In this concept, food security is defined in terms of the household. A household is said to be
food secure when all its members have access to 2300 kcal of energy or more per day, all the year round,
or most times of the year, without facing the possibility of losing the access in the future. In order to
ensure food security among individuals including rural farmers, the federal government introduced
cassava multiplication Programme.
In the submission of Abbott (2014), a programme is a planned activity for achieving something. A
Programme is a comprehensive plan that includes objectives to be attained, specifications of resources
required and stages of work to be performed (Asiabaka, 2002). According to Olutunji (2005), a
programme is a collection of coordinated activities that are mutually directed towards the attainment of a
definite goal and it usually comprises of several segments or projects which can be separately pursued as
a component of the whole. The concept of programme implies that a goal is in focus and several activities
would be needed and co-ordinated to attain the goal. Cassava multiplication programme refers to the
activities and instructions, including human and materials involved in boosting Cassava Multiplication
and dissemination to rural farmers. These activities, and instructions aimed at boosting cassava
multiplication are often conveyed to the rural farmers through the facilitators.
Facilitators are people who make progress easier (Aniagolu, 2012). In this study, the facilitators involved are extension workers, Community Leaders (local chiefs), leaders of Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and Young Farmers Clubs (YFC). The facilitators helped in sensitizing the rural farmers on the relevance of cassava multiplication Programme, although the level of involvement of these facilitators may vary from state to state based on the resources available and hence there is need for an assessment of their level of involvement in sensitizing rural farmers on cassava multiplication programme.

Assessment refers to a variety of methods or tools that are used for evaluating, measuring and documenting the academic readiness, learning progress, skill acquisition, or general needs of the student (Abbott, 2014). In the context of this study assessment is the collection of information from farmers and extension agents and passing value judgement on farmers’ level of awareness of cassava multiplication Programme with a view to improving cassava productivity in north central Nigeria.

Cassava Multiplication Programme started in the year 2001 by the Federal Government of Nigeria with the aim of alleviating poverty and increasing income among farmers. After a pilot study conducted by the researcher in the area of, it was observed that many farmers were still using the old varieties of cassava that does not produce much and does not mature early as well. Why should farmers continue to plant the local varieties that do not produce much, mature late and not nutritious compared to the improved varieties that are highly productive, mature early and are more nutritious? This has prompted the researcher to assess the Cassava Multiplication Programme among Rural Farmers in North Central Nigeria.

**Purpose of the Study**
The purpose of this study is to assess cassava multiplication programme among rural farmers in north central Nigeria. Specifically, the study sought to:
1. Determine the prospect of the Cassava Multiplication Programme among rural farmers in North Central Nigeria.
2. Ascertain the adequacy of resources for the implementation of the Cassava Multiplication Programme among rural farmers in North Central Nigeria.
3. Find out the extent to which government policies affect the implementation of Cassava Multiplication Programme among rural farmers in North Central Nigeria.

**Research Questions**
1. What is the prospect of the Cassava Multiplication Programme among rural farmers in North Central Nigeria?
2. How adequate are the human and material resources for implementation of the Cassava Multiplication Programme among rural farmers in North Central Nigeria?
3. To what extent does government policies affect the Cassava Multiplication Programme in North Central Nigeria?

**Hypotheses**
1. There is no significant difference between the mean ratings of the responses of farmers and facilitators on the prospect of the Cassava Multiplication Programme among rural farmers in North Central Nigeria;
2. There is no significant difference between the mean ratings of the responses of farmers and facilitators on adequacy of human and material resources for implementation of the Cassava Multiplication Programme among rural farmers in North Central Nigeria;
3. There is no significant difference between the mean ratings of the responses of farmers and facilitators on extent to which government policies affect the implementation of Cassava Multiplication Programme among rural farmers in North Central Nigeria.

**METHODOLOGY**
The study adopted survey research design. This design was considered suitable because the opinion of a representative sample of respondents was sought using questionnaire and the finding was generalized on
the entire population of farmers and Facilitators in North Central Nigeria. The area of the study is North Central Nigeria which comprises six states and the Federal Capital Territory Abuja namely; Benue, Kogi, Kwara, Nasarawa, Niger, Plateau and the Federal Capital Territory, Abuja. The area is suitable for the study because the major occupation of the people in this region is basically farming with cassava as one of the major crops produced in this area. The population for the study was 120,122 respondents consisting of 120,021 registered farmers from North Central Nigeria (National Integrated Survey of Household; NISH, 2009) and 101 facilitators (Federal Ministry of Agriculture and Rural Development, 2009) The sample for this study was 390 comprising 295 farmers and 105 facilitators in north central Nigeria. This is determined using Taro Yamane formula for a finite population. Multi-stage sampling technique was be used for sample selection. This is because sampling was done in stages using different techniques. In arriving at the sample size, the entire population was stratified into seven (each state represents a stratum) using Stratified proportionate sampling technique. In each of the stratum, simple random sampling technique was be used to select the respondents according to the proportion in each of the states since there is a comprehensive list of the entire population of the respondents with their respective state. The instrument for data collection was a 29 - item questionnaire titled ‘Cassava Multiplication Programme Assessment Questionnaire (CMPAQ). The instrument has 8 items on prospects of cassava multiplication programme; 9 items on adequacy of resources for implementation of cassava multiplication programme and 10 items on extent to which government policies affects cassava multiplication programme in north central Nigeria. The questionnaire had four-point response options of strongly agreed (SA), agreed (A), disagreed (D) and strongly disagreed (SD) with a corresponding nominal value of 4, 3, 2 and 1 respectively. The CMPAQ was validated by five experts, two experts in Agricultural Education, two in crop production and one in Agricultural Extension and Communication, all from the Federal University of Agriculture, Makurdi, Benue State. Their corrections and suggestions were incorporated before producing the final copy of the questionnaire that was used for data collection Cronbach alpha reliability method was utilized to determine the internal consistency of the instrument which yielded a reliability coefficient of 0.84, indicating that the instrument is reliable for the study. Three research assistants which are familiar with the study area were given orientation and used to administer the questionnaire to the respondents. Three hundred and ninety copies of the questionnaire were administered to the respondents and were all retrieved representing a retrieval rate of 100 percent. Mean was used to answer the research questions, while t-test statistics was used to test the hypotheses of no significant difference at 0.05 level of significance. In answering the research questions, any item with a mean rating of 2.50 or above was regarded as agreed/adequate while any item with a mean rating less than 2.50 was regarded as disagreed/inadequate for research questions 1, and 2 respectively while the real limits of number was used for answering research questions 3 thus;

Very Great Extent = 3.50 – 4,
High Extent = 2.50 – 3.49
Moderate extent = 1.50 – 2.49
Low extent = 1.00 – 1.49

In testing the null hypotheses, a hypothesis of no significant difference was not rejected for any item whose p-value is equal to or greater than alpha value of 0.05 while it was rejected for any item whose p-value is less than alpha value of 0.05.

RESULTS
The results of the study were obtained from the research questions answered and the hypotheses tested through data collected and analyzed.

Research Question 1
What is the prospect of the Cassava Multiplication Programme among rural farmers in North Central Nigeria?
Table 1: Mean and standard deviation of respondents on prospect of the cassava multiplication programme among rural farmers (N=392:291 Farmers and 101 Facilitators)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>(X_1)</th>
<th>SD (_1)</th>
<th>(X_2)</th>
<th>SD (_2)</th>
<th>(X_g)</th>
<th>SD (_g)</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>With the introduction of the federal government’s cassava transformation agenda, the future programme in Nigeria looks very bright.</td>
<td>3.33</td>
<td>.78</td>
<td>3.66</td>
<td>.47</td>
<td>3.41</td>
<td>.73</td>
<td>Agreed</td>
</tr>
<tr>
<td>2</td>
<td>Government will support cassava multiplication programme because it will boost the economic status of both the rural farmers and the nation.</td>
<td>3.45</td>
<td>.63</td>
<td>3.54</td>
<td>.50</td>
<td>3.47</td>
<td>.60</td>
<td>Agreed</td>
</tr>
<tr>
<td>3</td>
<td>Cassava multiplication programme will be sustained because it is cheaper to multiply cassava than other crops.</td>
<td>3.23</td>
<td>.62</td>
<td>3.22</td>
<td>.41</td>
<td>3.22</td>
<td>.57</td>
<td>Agreed</td>
</tr>
<tr>
<td>4</td>
<td>Rural farmers will be encouraged to boost cassava production because it can be processed locally into many products.</td>
<td>3.38</td>
<td>.75</td>
<td>3.34</td>
<td>.47</td>
<td>3.36</td>
<td>.69</td>
<td>Agreed</td>
</tr>
<tr>
<td>5</td>
<td>Cassava can thrive on almost every available soil irrespective of the soil’s status, this will boost cassava production.</td>
<td>3.16</td>
<td>.57</td>
<td>2.78</td>
<td>.41</td>
<td>3.06</td>
<td>.56</td>
<td>Agreed</td>
</tr>
<tr>
<td>6</td>
<td>The crop is perceived as a catalyst for development because of its contribution to food security, poverty alleviation, improvement in income distribution and gender equity.</td>
<td>3.23</td>
<td>.58</td>
<td>3.33</td>
<td>.47</td>
<td>3.26</td>
<td>.56</td>
<td>Agreed</td>
</tr>
<tr>
<td>7</td>
<td>By using better planting materials, increasing the level of education, accessibility to credit and increased extension contacts, the productivity of cassava is expected to increase.</td>
<td>3.41</td>
<td>.58</td>
<td>3.21</td>
<td>.41</td>
<td>3.36</td>
<td>.55</td>
<td>Agreed</td>
</tr>
<tr>
<td>8</td>
<td>The use of cassava for production of starch and animal feed will boost cassava production.</td>
<td>3.36</td>
<td>.78</td>
<td>3.54</td>
<td>.50</td>
<td>3.41</td>
<td>.72</td>
<td>Agreed</td>
</tr>
</tbody>
</table>

Data in Table 1 showed that all the 8 items had their mean values ranged from 3.06 to 3.47 which were above the cutoff point of 2.50. This showed that the respondents agreed that all the 8 items were the prospects of Cassava Multiplication Programme among rural farmers in north central Nigeria. The standard deviation ranged from .55 to .73 which was an indication that the respondents were not far from the mean and from one another in their responses on the prospects of the Cassava Multiplication Programme among rural farmers in north central Nigeria.

**Hypothesis 1**

There is no significant difference between the mean ratings of the responses of farmers and facilitators on the prospect of the Cassava Multiplication Programme among rural farmers in North Central Nigeria.
Table 2: t-test analysis mean rating of responses of farmers and facilitators on the prospect of cassava multiplication of programme among rural farmers in north central Nigeria

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Df</th>
<th>t-cal</th>
<th>Sig.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>291</td>
<td>3.33</td>
<td>.79</td>
<td>.05</td>
<td>390</td>
<td>-4.04</td>
<td>.049</td>
<td>NS, NR</td>
</tr>
<tr>
<td>Facilitators</td>
<td>101</td>
<td>3.67</td>
<td>.47</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Number of respondents, Std = Standard deviation, df = degree of freedom, t-cal = t-calculated, Sig. = P-value, significant at P≥0.05, NS = Not significant, NR = Not rejected.

Table 2 shows a p-value of .49 which is greater than the alpha value of 0.05. This indicates that there was no statistical significant difference in the mean ratings of farmers and facilitators on the prospects of Cassava Multiplication Programme among rural farmers in north central Nigeria. Therefore, the hypothesis of no significant difference for the two groups of respondents on the prospects of Cassava Multiplication Programme among rural farmers in north central Nigeria was not rejected. This implies that the occupational experiences of the respondent did not significantly influence their opinion on the prospects of Cassava Multiplication Programme among rural farmers in north central Nigeria.

Research Question 2

How adequate are the human and material resources for implementation of the Cassava Multiplication Programme among rural farmers in North Central Nigeria?

Table 3: Mean and standard deviation of respondents on the adequacy of human and material resources for implementation of cassava multiplication programme among rural farmers (N = 392; 291 Farmers and 101 facilitators)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>$\bar{x}_1$</th>
<th>SD1</th>
<th>$\bar{x}_2$</th>
<th>SD2</th>
<th>$\bar{x}_g$</th>
<th>SDg</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planting materials (Cassava stems)</td>
<td>2.89</td>
<td>.81</td>
<td>2.23</td>
<td>.78</td>
<td>2.32</td>
<td>.85</td>
<td>Inadequate</td>
</tr>
<tr>
<td>2</td>
<td>Vehicles for distributing stems to farmers</td>
<td>1.91</td>
<td>.73</td>
<td>1.89</td>
<td>.75</td>
<td>1.91</td>
<td>.73</td>
<td>Inadequate</td>
</tr>
<tr>
<td>3</td>
<td>Extension workers to guide farmers</td>
<td>1.81</td>
<td>.67</td>
<td>1.56</td>
<td>.50</td>
<td>1.75</td>
<td>.64</td>
<td>Inadequate</td>
</tr>
<tr>
<td>4</td>
<td>Access to loan to boost cassava production.</td>
<td>1.89</td>
<td>.80</td>
<td>1.44</td>
<td>.50</td>
<td>1.78</td>
<td>.77</td>
<td>Inadequate</td>
</tr>
<tr>
<td>5</td>
<td>Cottage industries for cassava processing</td>
<td>1.80</td>
<td>.74</td>
<td>1.78</td>
<td>.41</td>
<td>1.80</td>
<td>.68</td>
<td>Inadequate</td>
</tr>
<tr>
<td>6</td>
<td>Access roads to disseminate planting materials and other farm inputs</td>
<td>2.29</td>
<td>.95</td>
<td>1.66</td>
<td>.47</td>
<td>2.13</td>
<td>.89</td>
<td>Inadequate</td>
</tr>
<tr>
<td>7</td>
<td>Market outlets for sale of cassava products.</td>
<td>2.30</td>
<td>.72</td>
<td>2.44</td>
<td>.50</td>
<td>2.34</td>
<td>.68</td>
<td>Inadequate</td>
</tr>
<tr>
<td>8</td>
<td>Storage facilities</td>
<td>2.10</td>
<td>.69</td>
<td>1.44</td>
<td>.49</td>
<td>1.94</td>
<td>.71</td>
<td>Inadequate</td>
</tr>
<tr>
<td>9</td>
<td>Irrigation facilities</td>
<td>2.03</td>
<td>.89</td>
<td>1.22</td>
<td>.41</td>
<td>1.82</td>
<td>.87</td>
<td>Inadequate</td>
</tr>
</tbody>
</table>

N= number of respondent $\bar{x}_1$= mean of farmers, $\bar{x}_2$= mean of facilitators, SD = standard deviation, $\bar{x}_g$= grand mean of respondents SDg = grand Standard deviation.

Data in Table 3 showed that all the 9 items had their mean values ranged from 1.75 to 2.34 which is below he cut-off point of mean 2.50 This showed that the respondents agreed that all the 9 items on...
human and material resources for implementation of Cassava Multiplication Programme among rural farmers were inadequate in north central Nigeria. The standard deviation ranged from .64 to .89 which was an indication that the respondents were not too far from the mean and from one another in their responses on the adequacy of both human and material resources for implementation of Cassava Multiplication Programme among rural farmers in north central Nigeria.

**Hypothesis 2**

There is no significant difference between the mean ratings of the responses of farmers and facilitators on adequacy of human and material resources for implementation of the Cassava Multiplication Programme among rural farmers in North Central Nigeria.

**Table 4: t-test analysis of mean rating of responses of farmers and facilitators on adequacy of resources for implementation of cassava multiplication programme among rural farmers in North Central Nigeria**

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>Df</th>
<th>t-cal</th>
<th>Sig.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>291</td>
<td>2.89</td>
<td>.81</td>
<td>.045</td>
<td>390</td>
<td>-7.07</td>
<td>.091</td>
<td>NS, NR</td>
</tr>
<tr>
<td>Facilitators</td>
<td>101</td>
<td>2.23</td>
<td>.79</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Number of respondents, Std = Standard deviation, df = degree of freedom, t-cal = t-calculated, Sig. = P-value, significant at P≥0.05, NS = Not significant, NR = Not rejected.

Table 4 shows a p-value of .09 which is greater than the alpha value of 0.05. This indicates that there was no statistical significant difference in the mean ratings of farmers and facilitators on the adequacy of resources for implementation of Cassava Multiplication Programme among rural farmers in north central Nigeria. Therefore, the hypothesis of no significant difference for the two groups of respondents on the adequacy of resources for implementation of Cassava Multiplication Programme among rural farmers in north central Nigeria was not rejected.

**Research Question 3**

To what extent does government policy affect the Cassava Multiplication Programme in North Central Nigeria?

**Table 5: Mean And Standard Deviation Of Respondents On Extent To Which Government Policy Affects Cassava Multiplication Programme (N = 392: 291 Farmers and 101 facilitators)**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>(\bar{X}_1)</th>
<th>SD1</th>
<th>(\bar{X}_2)</th>
<th>SD2</th>
<th>(\bar{X}_g)</th>
<th>SDg</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enhance the quality of life of the rural poor.</td>
<td>2.78</td>
<td>.87</td>
<td>2.22</td>
<td>.41</td>
<td>2.63</td>
<td>.82</td>
<td>High Extent</td>
</tr>
<tr>
<td>2</td>
<td>Develop agro-allied industries especially in processing.</td>
<td>2.35</td>
<td>.94</td>
<td>2.22</td>
<td>.41</td>
<td>2.31</td>
<td>.84</td>
<td>Low Extent</td>
</tr>
<tr>
<td>3</td>
<td>Provide rural infrastructure.</td>
<td>2.27</td>
<td>.91</td>
<td>2.21</td>
<td>.41</td>
<td>2.26</td>
<td>.81</td>
<td>Low Extent</td>
</tr>
<tr>
<td>4</td>
<td>Provide agriculture extension services.</td>
<td>2.42</td>
<td>1.04</td>
<td>2.32</td>
<td>.95</td>
<td>2.39</td>
<td>1.01</td>
<td>Low Extent</td>
</tr>
<tr>
<td>5</td>
<td>Provide employment for an array of school leavers and graduates.</td>
<td>2.48</td>
<td>.92</td>
<td>2.31</td>
<td>.94</td>
<td>2.44</td>
<td>.94</td>
<td>Low Extent</td>
</tr>
<tr>
<td>6</td>
<td>Provide incentives for inputs in agriculture.</td>
<td>2.33</td>
<td>.80</td>
<td>2.43</td>
<td>.83</td>
<td>2.35</td>
<td>.81</td>
<td>Low Extent</td>
</tr>
<tr>
<td>7</td>
<td>Develop and encourage the use of simple agricultural implements.</td>
<td>2.74</td>
<td>.79</td>
<td>2.09</td>
<td>.57</td>
<td>2.57</td>
<td>.80</td>
<td>High Extent</td>
</tr>
<tr>
<td>8</td>
<td>Develop effective mechanisms to facilitate movement of food crops.</td>
<td>2.62</td>
<td>.86</td>
<td>2.22</td>
<td>.41</td>
<td>2.52</td>
<td>.79</td>
<td>High Extent</td>
</tr>
<tr>
<td>9</td>
<td>Improve food preservation/storage.</td>
<td>2.77</td>
<td>1.01</td>
<td>2.22</td>
<td>.92</td>
<td>2.63</td>
<td>1.02</td>
<td>High Extent</td>
</tr>
<tr>
<td>10</td>
<td>Reduce pre and post-harvest losses.</td>
<td>2.79</td>
<td>1.01</td>
<td>2.33</td>
<td>.81</td>
<td>2.68</td>
<td>.98</td>
<td>High Extent</td>
</tr>
</tbody>
</table>

N= number of respondents s=  \(\bar{X}_1\)= mean of farmers,  \(\bar{X}_2\)= mean of facilitators, SD = standard deviation,  \(\bar{X}_g\)= grand mean of respondents SDg = grand Standard deviation.
Data in Table 5 showed that 5 out of the 10 items had their mean values ranged from 2.52 to 2.68, indicating that their mean values were within the real limit of 2.50 and 3.00. This showed that the respondents agreed that to a high extent, government policy affects Cassava Multiplication Programme in 5 ways in north central Nigeria. The data also showed that 5 out of the ten items had their mean values ranged from 2.26 to 2.44 indicating that their mean values were within the real limit of 1.50 and 2.49. This showed that the respondents agreed that to a low extent, government policy affects Cassava Multiplication Programme in 5 ways in north central Nigeria. The standard deviation ranged from .79 to 1.02 which was an indication that the respondents were not too far from the mean and from one another in their responses on the extent to which government policy affect Cassava Multiplication Programme in north central Nigeria.

**Hypothesis 3**
There is no significant difference between the mean ratings of the responses of farmers and facilitators on extent to which government policies affect the implementation of Cassava Multiplication Programme among rural farmers in North Central Nigeria

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>df</th>
<th>t-cal</th>
<th>Sig.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>291</td>
<td>2.78</td>
<td>.87</td>
<td>.05</td>
<td>390</td>
<td>6.14</td>
<td>.000</td>
<td>S, R</td>
</tr>
<tr>
<td>Facilitators</td>
<td>101</td>
<td>2.22</td>
<td>.42</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Number of respondents, Std = Standard deviation, df = degree of freedom, t-cal = t-calculated, Sig. = P-value, significant at P≥0.05, S = Significant, R = Rejected.

Table 6 shows a p-value of .000 which is less than the alpha value of 0.05. This indicates that there was a statistical significant difference in the mean ratings of farmers and facilitators on the extent to which government policies affects Cassava Multiplication Programme among rural farmers in north central Nigeria. Therefore, the hypothesis of no significant difference for the two groups of respondents on the extent to which government policies affects Cassava Multiplication Programme among rural farmers in north central Nigeria was rejected. This disparity in the opinion of the respondents may have arisen due to sampling error.

**DISCUSSION OF FINDINGS**
Based on the analysis of data, the following findings emerged; the future of Cassava Multiplication Programme is bright, because of the involvement of the Federal Government and IFAD in the programme, the resources for the successful implementation of the Cassava Multiplication Programme were inadequate and that some government policies have affected the Cassava Multiplication Programme positively while others have not.

The result that Cassava Multiplication Programme has a very bright future (prospects) such as it is easy and cheaper to multiply cassava than other crops, cassava can thrive on almost every available soil, irrespective of the soil’s status, and cassava can easily be processed locally into many products among others. This was further confirmed by results from hypothesis tested which revealed that there was no statistical significant difference in the mean responses of farmers and facilitators on the prospect of the cassava multiplication programme among rural farmers in north central Nigeria. The finding is in agreement with Arega, Khataza and Chibwana (2013) who stated that cassava has the prospect of increasing the Net income of most African nations especially countries like Malawi and Zambia. The frequency of consumption of cassava products is high in many states of the country because it is an excellent source of dietary energy (Tsegai, and Kormawa, 2002). Similarly, Kormawa and Akoroda (2003) stated that cassava is fast changing from an interior food to a necessity in Nigeria. Gari for instance is becoming the most popular form in which cassava is consumed.
The study also found that resources needed for the implementation of the Cassava Multiplication Programme are inadequate in north central Nigeria. These resources include land, labour, capital among others. There was no statistical significant difference in the mean rating of farmers and facilitators on the adequacy of resources for implementation of Cassava Multiplication Programme among rural farmers in north central Nigeria. The finding is in line with what all the farmers interviewed during Rapid Rural Appraisals in Benue, Imo and Ogun States in 1993 and 1995 mentioned capital as a major constraint in their agricultural enterprises. Nweke (2004) indicated that, it is expensive to transport cassava stems along poor access roads, as such without enough capital, farmers find it difficult to transport cassava stems along poor access roads.

The study also revealed that some government policies moderately affect cassava multiplication programmes on agricultural programmes while some does not. Some of these policies include provision of rural infrastructure, agricultural extension services, inputs to farmers, reduce pre and post-harvest losses among others. However, there was a statistical significant difference in the mean ratings of farmers and facilitators on extent to which government policies affects Cassava Multiplication Programme among rural farmers in north central Nigeria. This divergent response between the farmers and facilitators could be due to lack of proper interpretation of the instruments by the interpreters and the level of illiteracy of some respondents which really made it difficult for them to easily understand some of the items in the instrument and respond correctly. The finding is in line with what Ayoola (2001) wrote that, the predominant theme of development in the colonial era was the surplus extraction, philosophy or policy where by immense products were generated from the rural areas to satisfy the demand for raw materials in metropolitan Britain. This policy did not favour Nigerians. Emma (2011) also stated that policy approach that excluded the beneficiaries from participating in the project design, planning and implementation is not desirable. Recruitment of extension staff were not based on expertise and professionalism, but on political consideration, the three financiers; World Bank, Federal and State government of Nigeria do not make their contributions as and when due.

CONCLUSION
This study has revealed that the future of Cassava Multiplication Programme is bright. However, the human and material resources provided by the Federal, state and Local Governments such as providing planting materials, fertilizer, and herbicides among other inputs to boost Cassava Multiplication Programme are not adequate. Human resources like Extension Agents, technical people to meet the needs of the farmers are not sufficient. Government has introduced so many programmes and policies all geared towards boosting food production and improving the standard of living of farmers and the Nigerian populace at large. Such Policies on enhancing the quality of life of the rural poor, developing and encouraging the use of simple agricultural implements, improving food preservation and storage are among other policies that affect the rural farmers positively should be encouraged.

RECOMMENDATIONS
Based on the findings of this study the following recommendations were made:
1. Government should continuously support the achievement of the objectives of the Cassava Multiplication Programme to improve the standard of living of rural farmers.
2. Adequate resources should be provided by Agricultural Development Programmes (ADP’s) and Federal Ministry of Agriculture and Rural Development (FMARD) in north central Nigeria to ensure effective implementation of the Cassava multiplication Programme.

REFERENCES


