RURAL INSTITUTIONS IN AGRICULTURAL AND RURAL DEVELOPMENT: A CASE STUDY OF THE IMPLEMENTATION OF THE SECOND NATIONAL FADAMA DEVELOPMENT PROJECT IN NIGERIA

by

OLALEKAN TEMOWO

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ABSTRACT

RURAL INSTITUTIONS IN AGRICULTURAL AND RURAL DEVELOPMENT: A CASE STUDY OF THE IMPLEMENTATION OF THE SECOND NATIONAL FADAMA DEVELOPMENT PROJECT IN NIGERIA

Olalekan Temowo

Advisor: Dr. Helen Hambly

Odame

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The thesis explores the relevance, strengths, weaknesses, opportunities, results and lessons learned in the involvement rural institutions in the implementation of the Second National Fadama Development Project (NFDPII) in Ogun State, Nigeria.

The research aims to improve the understanding of agricultural extension delivery services in Nigeria, using the implementation of the NFDPII as a case study. Data was collected using a mixed methods approach including focus group discussions, key informant interviews, a farmer questionnaire and secondary documentation.

The research identified the community-driven approach of NFDPII to be germane to ensure project ownership by farmer groups. Rural institutions were found to contribute significantly to NFDPII through development of social cohesion and inclusiveness.

The conclusions of the study underscore the importance of collaborating with rural institutions before delivering any intervention. Members of rural communities may not have substantial resources, but they have capacity that ensures continuity of externally supported interventions.
ACKNOWLEDGEMENTS

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Finally, I would like to thank all the research participants, the officers of the selected Fadama Community Associations (FCAs), Fadama Users Groups (FUGs), fadama officers, community facilitators for welcoming me and sharing their sincere experiences in the implementation of NFDP II in Ogun State, Nigeria. It is my sincere hope and desire that you will in some way benefit from this work.
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ADP</td>
<td>Agricultural Development Programme</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>BLP</td>
<td>Better Life Programme</td>
</tr>
<tr>
<td>CDD</td>
<td>Community Driven Development</td>
</tr>
<tr>
<td>FACU</td>
<td>Federal Agricultural Coordinating Unit</td>
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<tr>
<td>FCA</td>
<td>Fadama Community Association</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FCT</td>
<td>Federal Capital Territory</td>
</tr>
<tr>
<td>FUG</td>
<td>Fadama User Group</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
</tr>
<tr>
<td>FSP</td>
<td>Family Support Programme</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GR</td>
<td>Green Revolution</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>KII</td>
<td>Key Informant Interview</td>
</tr>
<tr>
<td>LDP</td>
<td>Local Development Plan</td>
</tr>
<tr>
<td>LFDC</td>
<td>Local Fadama Development Committee</td>
</tr>
<tr>
<td>NAFPP</td>
<td>National Accelerated Food Production Programme</td>
</tr>
<tr>
<td>NALDA</td>
<td>National Agricultural Land Development Authority</td>
</tr>
<tr>
<td>NFDP II</td>
<td>National Fadama Development Programme Phase II</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>OFN</td>
<td>Operation Feed the Nation</td>
</tr>
<tr>
<td>OPEC</td>
<td>Organization of Petroleum Exporting Countries</td>
</tr>
<tr>
<td>PAD</td>
<td>Project Appraisal Document</td>
</tr>
<tr>
<td>PIM</td>
<td>Project Implementation Manual</td>
</tr>
<tr>
<td>PLWHA</td>
<td>People Living with HIV/AIDS</td>
</tr>
<tr>
<td>RTEP</td>
<td>Root and Tuber Expansion Programme</td>
</tr>
<tr>
<td>SFCO</td>
<td>State Fadama Coordination Office</td>
</tr>
<tr>
<td>SPF</td>
<td>Special Programme on Food Security</td>
</tr>
<tr>
<td>T&amp;V</td>
<td>Training and Visit</td>
</tr>
<tr>
<td>UAES</td>
<td>Unified Agricultural Extension System</td>
</tr>
<tr>
<td>VCDP</td>
<td>Value Chain Development Programme</td>
</tr>
<tr>
<td>VIP</td>
<td>Ventilated Improved Latrine</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WIA</td>
<td>Women in Agriculture</td>
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CHAPTER ONE: INTRODUCTION

1.0 Background

In addition to vast and fertile agricultural land, Nigeria has the largest market for goods and services in Africa and it produces and exports crude oil. In fact, Nigeria is the world’s seventh largest exporter of crude oil and the sixth largest producer in the Organisation of Petroleum Exporting Countries (OPEC), in addition to being endowed with gas and solid mineral resources (Adam and Madi, 2015). It is argued that Nigeria has a good potential for effective poverty reduction, and possibly, eradication of absolute poverty, but unfortunately, in a country with a population of nearly 200 million people, the majority of the population live in abject poverty (Adam and Madi, 2001; Thomas and Canagaraga, 2004).

Previous attempts have failed by successive Nigerian governments to develop and implement agricultural policies that can achieve sustainable food security and reduce poverty among small scale farmers. The reasons for failure include inadequate funding, lack of effective coordination, control and monitoring, and in some cases, lack of commitment to agreed-upon procedures in the agricultural and rural development strategy and program resulting in a top-down approach to policy implementation (Adam and Madi, 2015).

The Food and Agricultural Organisation (FAO) of the United Nations (2007) emphasises that effective institutional frameworks and efficient organisations are critical for increasing agricultural productivity and profitability aimed at reducing poverty around the globe. Agencies such as Nigeria’s Federal Agricultural Coordinating Unit (FACU) are propelled to affirm that sustainable rural development can only be achieved through the mobilization of resources in the rural sector (FACU, 2001). Such resource mobilization involves building strong networks of associations and farmers’ groups that will allow rural people to share in decision making, relate to and contribute towards agricultural and rural development projects. Through a group approach, as it is commonly referred to, farmers are empowered to commit to and control the results of policy and programs aimed at benefitting them. Rural institutions formalize farmer groups, and therefore, enhance the ability of the government to pool together and utilize both human and material resources in the rural sector for agricultural and rural development purposes.
For more than 40 years, successive governments in Nigeria have searched for an effective policy for agriculture and rural development that ensures food security and poverty alleviation. These programs seek to ensure that the rural population have meaningful livelihoods and sources of income from small scale farming. This led the Nigerian government to come up with a range of such policies and programs/projects outlined in

Table 1.1 Major Post-Independence Food Security and Rural Poverty Reduction Policies and Programs in Nigeria (1970s-1990s)

<table>
<thead>
<tr>
<th>Year Initiated</th>
<th>Policy Framework</th>
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<tbody>
<tr>
<td>1973</td>
<td>National Accelerated Food Production Programme (NAFPP)</td>
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<tr>
<td>1975</td>
<td>Agricultural Development Programme (T&amp;V)</td>
</tr>
<tr>
<td>1976</td>
<td>Operation Feed the Nation (OFN)</td>
</tr>
<tr>
<td>1976</td>
<td>River Basin Development Authority (RBDAs)</td>
</tr>
<tr>
<td>1980</td>
<td>Green Revolution Programme</td>
</tr>
<tr>
<td>1989</td>
<td>Peoples’ Bank and Community Banks</td>
</tr>
<tr>
<td>1992</td>
<td>First National Fadama Project (NFDPI)</td>
</tr>
</tbody>
</table>

Source: author

In the late 1990s, many donor agencies such as the World Bank (WB), International Fund for Agricultural Development (IFAD), United Nation Children’s Fund (UNICEF), Food and Agricultural Organisation (FAO) etc. advised nations such as Nigeria to focus on the needs and aspirations of resource-poor rural people and hence promote the formation and use of organisations and farmers’ groups in extension service delivery and consequently, building social capital. In many of the 20th century initiatives listed above, and well into the early part of the 21st century, agricultural and rural service delivery used individual contact farmers as the focal point for project implementation and delivery. In other words, agricultural knowledge, inputs and support services were disseminated to a demonstration site or contact farm with the assumption that improved technologies and know-how would then diffuse to other farmers (Rogers, 1989). Many agricultural experts, researchers and international donor agencies, however, have seriously questioned such top-down approaches and the public sector-based approach to the funding and implementation of agricultural projects in Nigeria (Adam and Mudi, 2015). Diffusion of new knowledge and improved technologies have not been adopted. Small scale farmers were often ignored in favour of larger wealthier producers. These problems were largely responsible for the failures and wastages in the agricultural
sector and also served as a blockade to serving as a means to poverty alleviation to the rural populace (Adam and Mudi, 2015).

In 2000, the performance of extension in Nigeria was negatively assessed because the ratio of the extension agents to farm families ranged between 1:1500 in Niger State and 1:5800 in Lagos State with an overall national average of 1:1968 a range well above the ratio of 1:500 recommended by FAO (Okoye and Ihumodu, 2004). The Nigerian government turned its attention to a new set of agricultural policies aimed at investment in infrastructure, reforming agricultural and rural research and enhancing advisory services and access to rural financial services for farmers and their organizations. The first phase of the National Fadama Development Project (NFDPI) in the early 1990s and was designed to bring basic irrigation and productive support to farmers in selected Nigerian states. The core states where the initial Fadama Project was implemented were Bauchi, Gombe, Jigawa, Kano, Kebbi, Sokoto and Zamfara. The approach adopted was top-down, building on the earlier government-led Agricultural Development Programme with heavy emphasis on small scale infrastructure investment. The NFDPI basically focused on crop production paying little or no attention to postharvest activities such as processing, preservation, and marketing.

In 2004, the initial Fadama Project was reformed and renamed as the Second National Fadama Development Project (NFDPII). NFDPII was expected to restructure the project’s implementation agencies at all levels of governance and to institutionalize a farmer group approach in order to ensure effective coordination, monitoring of project results and engage farmers and their communities as stakeholders in the project’s formulation process and implementation. NFDPII represented, at that time, the influence of theories and strategies associated with community-driven development and participatory extension.

This research examines the NFDPII strategy a case in point of Nigerian agricultural and rural development policy and programming that puts farmers’ organizations first and seeks to achieve the needs of both farmers and extension. The existing literature suggests that Nigeria has tried to overcome past problems and challenges for achieving food security and poverty alleviation by engaging with rural institutions that represent smallholder farmers. It would be beyond the scope of a single study to assess the massive context of agricultural policies and extension services across a country as large as Nigeria, or to even examine NFDPII in all states in which it was implemented. Rather, this study proposed to focus on Ogun State, an active state in NFDPII and a major agricultural producing area of Nigeria.
The focus of the study is specifically on the group approach to extension services delivery and limited to NFDPII implementation during the period of 2004-2009. The study proposed to examine the following research questions:

1. What are the rural institutions and why are they relevant in the implementation of an agricultural extension programme such as NFDPII?
2. What were the strengths, weaknesses, opportunities of farmer groups’ involvement in the implementation of NFDPII?
3. What were the results and lessons learnt in their involvement in the implementation of the NFDPII?
4. What were the Nigerian Government’s efforts past and present interventions at involving rural institutions in agriculture and rural development in the country?

1.1 Research Goal and Objectives

The goal of the research is to improve an understanding of the involvement of rural institutions in the implementation of agricultural extension services, and specifically NFDPII in Ogun State, Nigeria. The study had four objectives:

1. To examine the relevance of rural institutions in the implementation of NFDPII in Ogun State, Nigeria;
2. To identify the strengths and weaknesses of involving rural institutions in the implementation of NFDPII;
3. To document the opportunities and lessons learned about involving of rural institutions in the implementation of NFDPII; and
4. To consider the relevance of the NFDP II to the Nigerian Government efforts past and present for the involvement of rural institutions in agriculture and rural development interventions.

1.2 Significance of Study

There has been tremendous and continuous emphasis on the involvement of rural institutions for promoting agriculture and rural development around the world, not only in industrialised nations, but also, in Asia and Africa (Blackburn, 1989; Leewis, 2004; Jibowo, 2005). This study aims to shed light on how agencies and development partners in Ogun State, Nigeria promoted the use of farmers’ groups as a medium for delivering agricultural interventions and support services. Hence the study seeks to explore the group approach to extension and to
analyse the relevance of farmer groups as rural institutions for the implementation of NFDPII policy and programming (2004-2009).

In light of the above, the findings from this research could guide development partners, government, international and national NGOs and other relevant rural development stakeholders, on the critical milestones or factors that should be given attention when involving farmer groups and rural institutions in agricultural and rural development interventions in Nigeria.

1.3 Limitations of the Study

There are some limitations to this study. The main limitation was inadequate time. The field visits undertaken coincided with the period the farmers were clearing land and preparing for dry season farming. Most of the farmers returned late in the day to their homes in the villages. As a result, most of the interviews had to be conducted in the evening with insufficient time for discussion and participation. A further limitation is the focus on only one area of Nigeria, Ogun State. The results reported here may be similar in other parts of the country, but they cannot be extrapolated to the rest of Nigeria due to the small and non-representative sampling strategy. There is also substantial agro-ecological and social variation within Nigeria that would account for NFDPII experiencing different results in the other 17 states in which it was implemented. Furthermore, the scope of the NFDPII case study was limited to 2004-2009. Farmer recall methods are not always entirely reliable. There may also be difficulty for participants, including key informants to distinguish between project outcomes in the second phase of the Fadama Project and the most recent third phase. This limitation was addressed by ensuring that the researcher always referred back to NFDPII in the questions and discussions.

1.4 Overview of the Thesis

This paper is divided into six chapters. Chapter Two presents an overview of the main agricultural policies in the country from the colonial period to date. In addition, there is a review of the agro-ecological zones in Nigeria. This contextual information is followed by a description of the area in Nigeria, Ogun State, where the case study was conducted. Chapter Two presents the background, basic structure, goal and objectives of the NFDPII. It briefly discusses the eligibility criteria for farmer group involvement, the potential rural infrastructure investment and pilot asset acquisition support funded under the project.
Chapter Three explores the relevant literature including the basic concepts of agricultural extension, extension principles, procedures, and the difference between extension education and formal education. Extension methods used in reaching rural communities are summarized. Subsequently, there is a review on the reasons why 21st century extension shifted to the use of the group approach, the various advantages of the group approach, different types of farmers groups and the common properties of groups. There is also a discussion of the community-driven development strategy to working with farmer groups and the concept of participation, its principles and advantages for extension work. The last part of Chapter Three provides the conceptual framework for the study. The conceptual framework highlights the need to explore the relevance, strengths, weaknesses, opportunities and lessons learned in the involvement of rural institutions in NFDP II with a view to understanding both the advantages and also the limitations of a group approach in agriculture and rural interventions.

Chapter Four then outlines the methodological approach to the research. The qualitative and quantitative methods for data collection and the different respondent groups are presented. The research tools used were Focus Group Discussion, Key Informant Interview, and a Farmer Questionnaire. Secondary documentation was obtained from project reports and relevant websites.

Chapter Five presents the study findings and discussion. These results are organized according to the four objectives of the study. This chapter subsequently discusses the research findings including an analysis of the findings in relation to the goal of the study and the contribution to the wider body of knowledge regarding agricultural extension and policies using the group approach.

Finally, chapter six delivers the final summary, main conclusions and recommendations of the study.
CHAPTER TWO: RESEARCH CONTEXT

2.0 Introduction
This chapter provides contextual information for understanding the research topic and the selected research area of Ogun State as situated within Nigeria’s larger geographic, political, socio-economic, and cultural environment. The first section provides an overview of Nigeria and its agricultural sector and agro-ecological zones. The second section of the chapter presents an overview of major agricultural policies in Nigeria. The third section describes the political, cultural and socio-economic environment of Ogun State where the research took place. The final section outlines the First and Second National Fadama Development Projects. In addition, this section includes a review of eligibility criteria of farmer groups’ participation in the NFDP II and a list of subprojects funded under NFDP II.

2.1 Nigeria’s Agricultural Sector
The Federal Republic of Nigeria is located on the southern coast of West Africa and is bordered by the nations of Benin, Cameroon, Chad and Niger. The country has an area of 923,768 km\(^2\) which is almost four times of the size of the United Kingdom (UK) or slightly more than twice the size of the state of California in the United State of America. The country’s major rivers are the Niger, from which it derives its name and the Benue, the principal tributary of the Niger.

In 2018, Nigeria had an estimated population of 192 million people (United Nations, 2017). This makes Nigeria the seventh most populous country in the world. The nation is divided into thirty-six states and a Federal Capital Territory. The Federal Capital City is Abuja located in the centre of the nation, while Lagos is the country’s primary port, economic hub and largest city. The main spoken languages are English (official), Hausa, Igbo, and Yoruba, although the country is estimated to have about 250 different ethno-linguistic groups. Nigeria’s socio-cultural context is defined by the population’s major religions affiliations namely Islam (41%) and Christianity (58%).

Nigeria is the third richest country in Africa and a regional power. Nigeria is also one of the fastest growing economies on the African continent (Nellow, 2008). The majority of the Nigerian population is however impoverished with 84 per cent of the population living on less than US$2.00 a day and 64.4 per cent living below US$1.00 a day (UNDP, 2009). According to the 2009 Human Development Index Report, Nigeria ranked 158\(^{th}\) of 182
countries. Inequality between women and men is significant. Nigeria ranks 130th out of 155 countries according to the UN Gender Development Index (GDI) (UNDP, 2009).

Overall, despite its rich petroleum and mineral resources, Nigeria has a low Gross Domestic Product (GDP) per capita. The rural areas are characterized as having widespread poverty, inequitable land distribution and a low level of education, particularly for girls and women. The long lasting effects of poverty and inequality are endemic among landless small scale farmers, unskilled casual labourers, female headed household and pastoralists (Okije, 1991).

Agriculture is crucial in Nigeria because it provides sector of Nigerian economy providing employment for 30% of the population (Nigeria Bureau of Statistics, 2010). Rural livelihoods in Nigeria are also influenced by ecological context. Nigeria has six agro-ecological zones: Coastal, Forest, Southern Guinea, Northern Guinea, Sudan and Sahel Savannah zones (Figure 2.1). Agro-ecological zones are normally defined by three conditions: on the growing period for crops, total rainfall and temperature. The features of the different zones are characterized as follows.

1. **Coastal Vegetation Zone**
   This zone lies near the coast and is under the influence of brackish water commonly found in the Niger Delta. The coastal swamp area is not widely cultivated except for swamp rice in places where they are stabilized and non-saline.

2. **Humid Tropical High Forest Zone**
   This area is characterized by a prolonged rainy season, resulting in high annual rainfall above 2000mm, thereby ensuring an adequate supply of water and promoting perennial tree growth. This luxuriant vegetation belt stretches from the western border of Nigeria to Benin Republic. This zone is the major sources of timber used for large construction and furniture making industry. In this zone the following economic cash crops are cultivated. They include oil palm (*Elias guineensis*), cocoa (*Theombroma cacao*), rubber (*Hevea brasiliensis*) banana/plantain (*Musa* sp) and kola nut (*Cola nitida*). The following principal staple food crops such as yam, cocoyam, sweet potato, maize, rice, cowpea as well as fruity trees like

Figure 2.1: Map of Nigeria showing the Agro Ecological Zones

Source: IITA (2015)
citrus, mango, and guava are cultivated in this zone. The zone is very important in food production and timber for construction and cabinet making.

3. Derived Guinea Savannah Zone

This zone is found immediately after the tropical rainforest zone. The average annual rainfall and temperature are 1314mm and 26.5°C respectively. The zone is covered with scattered trees and tall grasses. Maize, Cassava, Yam and Rice are the major crops grown in this zone. It has an enormous potential for food production. Bush burning and erosion as a result of overgrazing by animal especially cattle constitute a major problem to agricultural production in the zone.

4. Guinea Savannah Zone

The Guinea Savannah is located in the middle of the country. It is most extensive ecological zone in Nigeria covering nearly half of the country. Guinea savannah zone has a unimodal rainfall with annual temperature and rainfall of 27.3°C and 1051.7mm respectively. The zone
is characterized by low rainfall and long dry period, which call for alternative water supply (irrigation) to enhance full utilization of the zone’s potential in agricultural production.

5. Sudan Savannah Zone
The Sudan Savannah zone is found in the Northwest stretching from Sokoto plains in the west through the Northern sections of the Central highland. It spans almost the entire Northern States bordering the Niger Republic and covers over one quarter of Nigeria’s total area. It has low average annual rainfall of 657.3mm and a prolonged dry season (6-9months). Abundant short grasses of 1.5-2m in height characterize the Sudan Savannah Zone. The important economic crops cultivated in the area are sorghum, millet, maize, and wheat. It is an excellent zone for rearing and breeding of ruminant livestock i.e. cattle, goats, sheep, donkeys, horses and camels.

6. Sahel Savannah Zone
This ecological zone lies in proximity to the fringes of the fast-encroaching Saharan desert. It occupies about 18130 square kilometre of the extreme Northeast corner of Nigeria. The vegetation is sparse and grasses are very short. As a rule, this zone is not cultivated without irrigation. The total average annual rainfall is hardly up to 700mm. The dry season in the zone lasts for up to 9months. The people found in this zone are nomadic herdsmen, and they are careful not to burn the grass found because sparse as it is it provides the only pasture available for their grazing livestock. The area is dominated by several varieties of the Acacia and date palms.

2.2 Major Agricultural Policies in Nigeria
The Government of Nigeria’s perception of the role of agriculture in its development has changed considerably over time because each government administration has viewed agriculture differently and developed their own strategies for this crucial sector of the economy and livelihood of its rural poor. The different strategies adopted by the country frequently overlapped and have reflected a range of policies which were designed under a number of quite distinct national development plans (Adubi,2004). Over time, some of these agricultural policies and programmes have been quickly abandoned, whilst others have been restructured and some remain in place.

According to Olayemi (1998) the agricultural development strategies adopted in Nigeria in the period slightly before, and since independence (1960), can be categorised into four

a) Exploitative Strategy (Pre-Early 1960’s)
In the late colonial period and very early years of independence agriculture was in need of modernization in order to direct resources from the rural periphery to the growing urban core. Myint’s (1958) “Vent-for-Surplus” theory saw a developing economy as comprising two parts: a “modern sector” that was largely non-agricultural, and a “subsistence agricultural sector” made up of peasant farmers. The subsistence sector was viewed as unproductive, full of underutilized resources but it was also expected to feed the modern sector. Further, the subsistence sector could be taxed to finance the development of the modern sector and to force labour off-farm to work in low-paying employment in the urban areas. This notion formed the basis of Nigerian’s agricultural strategy in the 1950s and the early 1960s. Export crops were levied to provide revenue for the government to develop the modern sector (Adubi, 2004). The government established institutions such as an agricultural marketing board system to boost revenue generation efforts and facilitate the taxing of peasant farmers who were urged to produce export crops such as cocoa, groundnut, palm products, cotton, etc. during this period. There was little, if any, support to small scale agricultural production for rural food security.

b) Agricultural Development Project Strategy (1960 to 1968)
The Agricultural Development Project Strategy coincided with the time of internal self-government, or up until 1968, when Nigerian government interventions in agriculture was minimal. Small scale farmers in Nigeria were the focus of agricultural development efforts during this period (Egwu and Akubuilo, 2007). Agriculture was seen as a sector that given its linkage to other sectors needed what is referred to as forward and backward linkages, to improve the economy (Hirschman, 2015). These included forward project investment (e.g. research or training) to support subsequent stages of production, and backward investments in areas such as infrastructure and facilities to support current production.

This period saw a regionalization of agriculture policy with the establishment of post-independence agricultural extension programs and research institutes. Regional public funds were invested in agriculture and new schemes such as farm settlement programs were established to create modern, literate farmers and promote agricultural development. Other public investments included plantations, small farmers’ credit schemes and an Agricultural
Development Corporation projects established to promote development of export crops. These initiatives had close ties to the earlier colonial strategies and to international donor agencies.

c) **Direct Government Production Strategy (1972-1975)**

This phase started in 1970 and coincided with the oil-boom in Nigeria. It was merely a deepening of the earlier process of direct government intervention and investment in agriculture. The over dependence on agriculture supporting the economy and then the subsequent neglect of the small scale agricultural sector in Nigeria, had a negative impact on the country. As a result, from 1975 the government used the oil revenues or government loans based on oil revenues to become directly involved in several large scale agricultural projects. Nigeria, wanted to increase its specialised production of grains, livestock, dairy products and animal feeds in order to rehabilitate and resuscitate the agriculture sector. Increased production was also needed to reduce the food crisis witnessed during and immediately after the Biafra war.

Given limited capacity in the private sector, agricultural policy during this period demanded immediate significant investment from the government and attracted resources from international agencies. Furthermore, the world context of the time then favoured direct involvement of governments in directing investment in agricultural businesses and related activities continues to the present-day in Nigeria (Adubi, 2004). The establishment of schemes and research institutes such as the National Accelerated Food Production Programme (NAFPP), and the Nigerian Agricultural Cooperative Bank (NACB) occurred in this period.

d) **Integrated Rural Development Strategy (1975-1980)**

By the late 1970s, the Nigerian government and donor agencies realized that the strategy of direct agricultural production stimulation was not yielding the desired results. As a result, Nigeria, like many developing countries was encouraged to make a gradual shift to an approach that involved the adoption of an integrated rural development strategy. This strategy addresses rural development from a holistic perspective with agricultural development problems forming only part of a wider rural development policy.

Putting agriculture under rural policy, led to multipurpose rural development projects, and institutions such as the Agricultural Development Projects (ADPs), River Basin Development Authority (RBDAs) 1976, Directorate of Food Road and Rural Infrastructure (DFRRI) 1986,
the National Agricultural Land Development Authority (NALDA) 1992, Operation Feed the Nation (OFN) 1976, Green Revolution (GR) 1980, and partnerships with centres of the CGIAR. Nigeria adopted an integrated rural development strategy just prior to the beginning of the 1980s Structural Adjustment Programme (SAP) era. Under successive years of SAPs, fiscal constraints were imposed on developing countries. Large post loans had incurred massive debt. Agencies such as IMF and World Bank demanded repayment along with liberalization of government held assets. Significant changes in institutional design, the intensity of project activities and modes of operation in the rural/agricultural sector were therefore required with massive cuts to public programs.

e) New Millennium Agricultural Policies (1999-present)

With the beginning of a new democratic government administration in May 1999, several institutional changes were made in Nigeria to realise agriculture policy objectives that, improved economic development was not possible without enabling the agricultural sector to respond to a new and emerging  global economic order of private sector involvement and investment and government efficiencies. The institutional changes made during this period included the relocation of the Department of Cooperatives of the Ministry of Labour and its merger with the Agricultural Co-operatives Division of the Ministry of Agriculture. Also, the transfer of the Department of Rural Development from the Ministry of Water Resources to the Ministry of Agriculture (all of which occurred before 1999. The National Agricultural Land Development Authority (NALDA) was closed and its functions merged with the rural development department. The Federal Coordination Unit (FACU) and the Agricultural Projects Monitoring and Evaluation Unit (APMEU) were closed. The Projects’ Coordination Unit (PCU) was set up and transformed into the National Food Reserve Agency (NFRA). Other changes included the streamlining of the institutions for agricultural credit delivery with the emergence of the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) out of the merger of the Nigeria Agricultural and Cooperative Bank (NACB) and the Peoples’ Bank and the Family Economic Advancement Programme (FEAP).

This new millennial agricultural policy had a very different and clear statement of objectives. The priorities were self-sustaining growth in agriculture and a structural transformation for the wider socio-economic development of the country. Improving the country’s overall quality of life was possible by recognizing agriculture as a vital sector which is crucial to the
wider poverty alleviation policy and programmes in Nigeria. According to Pronto (2016) the Nigerian government also sought to pursue the following five objectives:

“1. Attainment of self-sufficiency in basic food commodities with particular reference to those which consume considerable share of Nigeria’s foreign exchange and for which the country has comparative advantage in local production

2. Increase in local production of agricultural raw materials to meet the growth of an expanding industrial sector.

3. Increase in production and processing of exportable commodities with a view to increasing their foreign exchange earning capacity and further diversifying the country’s export base and sources of foreign exchange earnings;

4. Modernisation of agricultural production, processing, storage and distribution through the infusion of improved technologies and management so that agriculture can be more responsive to the demand of other sectors of the Nigerian economy; an

5. Creation of more agricultural and rural employment opportunities to increase the income of farmers and rural dwellers and productively absorb an increasing labour force in the nation.” (Pronto, 2016:3)

From the first decade of the new millennium, several initiatives were put in place to step-up agricultural development and ensure food security in Nigeria. These included the Root and Tuber Expansion Programme, National Cocoa Development Committee, Special Programme on Food Security (SPFS) and National Fadama Projects (Phase I II and eventually III). Table 2.1 summarizes the continuum of the Fadama Projects, and this paper will explain NFDPII in further detail. The current Fadama Project (NFDPIII) is not addressed in this paper, and will be a topic for future research. Additional programs in Nigeria during this recent era of agricultural and rural development policy include the Fish Farm Estate Development Project, initiatives for increased agricultural production, South-South cooperation initiatives with countries such as China, and the Nigeria-France project on agricultural development.

To this day, some analysts argue that the latest era of agricultural policies are working, with a drastic reduction in food imports from 14.5 percent to five percent (Pronto, 2016). There has been Presidential Initiatives on specific agricultural commodities (primarily cassava and rice). Overall, the policy and programs, including the Fadama Projects are considered “on track” to generate three billion Naira annually from agricultural exports. Another indicator of success is that many Public Private Partnerships (PPPs) were formed including the development of agricultural marketing systems as well as the promotion of some new integrated rural development initiatives attracting funding from international donor agencies.
Table 2.1: Learning and Adaptation over 20 Years of Fadama Project Implementation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation:</td>
<td>Observation:</td>
<td>Observation:</td>
<td>Observation:</td>
<td>Observation:</td>
</tr>
<tr>
<td>Exceptional outcomes in fadama areas</td>
<td>Conflicts between fadama area users intensified</td>
<td>Demands from communities</td>
<td>Not yet identified</td>
<td>Too early/in progress</td>
</tr>
<tr>
<td>Learning: Recommendations for greater investments in small-scale irrigation</td>
<td>Learning: adopt a Contextually tailored community-driven Development (CDD) approach through local development plans (LDP)</td>
<td>Learning: Need a more inclusive model to respond to conflicts in some fadama communities</td>
<td>Learning: Need for a more sustainable model that build on the social and financial capital in communities</td>
<td>Learning: Focus on crops with export potential in line with government’s Agricultural Transformation Agenda</td>
</tr>
<tr>
<td>Adaptation: Start Fadama in six core States with the greatest potential for productivity growth</td>
<td>Adaptation: Expand Fadama: create and strengthen the Fadama Community Associations (FCAs)</td>
<td>Adaptation: Adopt a CDD approach using LDPs</td>
<td>Adaptation: Institute the Fadama Users’ Equity Fund (FUEF) account to create saving banks for FUGs and FCAs</td>
<td>Adaptation: Focus on six states and select crops with Comparative advantage in production in the selected states</td>
</tr>
</tbody>
</table>


2.3 Research Context: Ogun State, Southwest Nigeria

Ogun State was carved out of the old Western State of Nigeria in February 1976. It borders Lagos State to the south, Oyo and Osun state to the north, Ondo to the east and the Republic of Benin to the west. The state is also known as the “Gateway State” in recognition of its primary role in education, medicine, law, agriculture. In 2018, Ogun State has a population of 5,217,716 people (National Bureau of Statistics, 2013).
The capital of Ogun State is Abeokuta. The major ethnic groups are Egba, Ijebu, Remo, Awori, Yewa and Egun each with its own cultural-linguistic traditions. It is divided into three senatorial districts namely: Ogun East, Ogun West and Ogun Central. Ogun has 20 Local Government Areas (LGAs). Ogun State is entirely in the tropical rainforest zone of Nigeria. The total land area of the state is 16,409.26 square kilometre.

Ogun State has extensive fertile soils suitable for agriculture and the savannah land in the northwest part of the state is suitable for cattle rearing. It has vast forest reserves, rivers, lagoon, rocks, minerals deposit and an oceanfront which supports fisheries and transport. Ogun State is uniquely located making its export accessible to other parts of Nigeria by means of transportation including land, sea, and air. Lagos, the economic core of Nigeria, is only about 100km from Abeokuta. Lagos has a growing urban population presents agricultural and marketing opportunities for produce from the state.
The farming system is predominantly mixed farming. This entails crop husbandry, animal husbandry and fish culture. The cropping systems is mainly mixed cropping incorporating a minimum two types of crops on the field at the same time. The main cash crops grown in the state are cocoa, oil palm, kola nut, cashew and rubber. Other tree crops grown and popular in the state are citrus fruits, mango, sugarcane, guava and pineapple. Because of the favourable climatic condition, the different Local Government Areas of the state enjoys luxuriant vegetation. In addition, to the various species of indigenous timbers, the state also has eight forestry plantations across the state with prominent timber tree (i.e. Gmelina and Teak) production. The timber provides raw materials for wood-based industries. The following arable crops are cultivated in the state. This includes yam, cassava, cocoyam, maize, plantain/banana, rice, cowpea, pepper, tomatoes, and varieties of vegetables.

**Rural Institutions in Ogun State:** The state has many rural institutions spread across villages in all the Local Government Area of the state. While some rural institutions are formal others are non-formal. However, the Ministry of Community Development and Cooperative are in charge of the registration of rural institutions in the state. They have zonal offices where they have officers who coordinate and monitor activities of registered rural institutions across the state and in addition guide and support rural institutions to register and become formal organisation. They synergize with relevant sister organisation working with rural institutions across the state.

**2.4 The First and Second National Fadama Development Projects**

The First and Second National Fadama Development Projects, and eventually, the Third Fadama Project, were significant programming effort emerging from the Government of Nigeria’s New Millennium Agricultural Policies. Fadama is a Hausa word for low-lying flood plains usually having accessible shallow ground water (Ingawa et al, 2004). Fadama lands are normally waterlogged during the rainy season and retain moisture during the dry season. They have high potential for agricultural production if supported with proper infrastructure, productive assets and needed technologies (NFDPII,2003; Ingawa et al, 2004).

In order to tap the potential benefits of fadama resources in Nigeria, the National Fadama Development Project Phase I (NFDPI) was established in 1992 and functioned through 1999. The design of NFDPI aimed to encourage resource poor farmers to embark on dry season cropping in order to generate increased income and alleviate poverty (Ingawa et al, 2003; Bajoga 2007). The project focused on crop production, paying little or no attention to
postharvest activities such as processing, preservation and marketing. NFDPI also did not take into account the provision of rural infrastructure to ensure efficient transportation of farm output to markets (NFDPII, 2003).

Although the focus on crop production in NFDPI contributed to increased crop yields, it also led to reduced crop prices and increased storage losses (Ingawa et al, 2004). Primarily, the project employed a service-oriented and supply-driven strategy of agricultural extension which was essentially (a top-down strategy) of agricultural extension. In order to address the challenges faced in the design and implementation of NFDPI, a second strategy was initiated in 2003, known as NFDPII. NFDPII shifted from a public sector dominated service-oriented strategy (top-down) to a community-driven (bottom-up) development approach.

2.4.1 NFDPII Project Structure

NFDPII project activities centred on Fadama Users’ Groups (FUGs) and Fadama Community Associations (FCAs). The 2003 NFDPII project implementation manual defined an FUG as a group of persons (average between 15-20 individuals) who share a common economic interest, while an FCA is an apex organization of economic interest groups which derive their livelihood from the shared natural resources of the fadama land. This approach was unique to the project and the evolution of agricultural policies in Nigeria because collective economic action was argued to help overcome many problems faced by resource poor farmers in both the production and the marketing of agricultural commodities and agri-food. This “group approach” will be a focus of this research project.

The major enterprises the NFDPII supported included cropping, livestock production, agro-forestry, fishing and fish farming. It also supported non-productive activities directly connected with the productive activities such as agro-processing, rural marketing and financial management practices at the community level. As part of its targeting strategies, NFDPII also provided a special focus on social capital building for youth, women (especially widows), the physically challenged, the elderly and people with HIV/AIDS. All the project beneficiaries (both FCAs and FUGs) were encouraged to develop participatory and socially inclusive Local Development Plans (LDPs). This meant that all beneficiaries had a stake in the design and implementation of the NFDPII within the communities. The project did not support activities that could lead to the degradation of natural resources or to large-scale changes in land-use. Eighteen of the 36 states in Nigeria were selected to participate in NFDPII. The World Bank supported 12 states while the remaining six were supported by the
African Development Bank (AfDB), again in partnership with the Nigerian government and local communities. Ogun State was among the 12 participating states under the World Bank assisted programs. The other states were Adamawa, Bauchi, Gombe, Federal Capital Territory, Imo, Kaduna, Kebbi, Lagos, Niger, Oyo and Taraba (see Figure 2.3).

NFDPII operated for six years (2004-2009) with a goal of contributing to poverty reduction in Nigeria. The project set targets to achieve the following outcomes at the end of its six-year period.

---

Figure 2.3 Map of Nigeria Showing the 12 States Supported by the World Bank under NFDPII Implementation

Source: https://mapchart.net/africa-detailed.html

The Projects Development Objectives (PDOs) of NFDPII were:
• 50 per cent of male and female fadama resource users who benefit from the project supported activities should increase their average real income by at least 20 per cent compared to the baseline.

• At least 60 per cent of Fadama Community Associations (FCA) should successfully implement their Local Development Plans (LDPs) and other project supported activities.

• Conflict among fadama users should be reduced by at least 50 per cent compared to the baseline.” (NFDPII, 2003:pg 8)

Once established, the FCAs could establish projects for road improvements, the creation of water management infrastructure including irrigation systems and marketing facilities and infrastructure in their areas (see Appendix 3). In addition, the Pilot Asset Acquisition Sub-projects enabled the acquisition of production technology for direct use by the small groups of farmers (see Appendix 4).

Criteria for FCA and FUG inclusion were required in NFDPII. For the Fadama Community Association this included size of membership and formal recognition by local and state government, location, legal status and formal management practices. They also needed to adhere to the principles of Community Driven Development (CDD), the term used to refer to the promotion of socially-inclusive development processes in NFDPII (see Chapter 3 for a discussion of CDD).

To achieve these outcomes, four main components or areas of investment and activity were designed, as summarised in Table 2.2.

<table>
<thead>
<tr>
<th>NFDPII COMPONENTS</th>
<th>DESCRIPTION/ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Infrastructure Investment</td>
<td>The creation of productive economic infrastructure capable of improving the productivity of households using fadama resources. Beneficiary to pay ten per cent of the cost constructing rural infrastructure, including rural roads, culverts, market stalls, boreholes and irrigation infrastructure among others</td>
</tr>
<tr>
<td>Pilot Productive Asset Acquisition</td>
<td>To help improve productivity and income for fadama resource users; FUGs are encouraged to acquire productive assets by paying beneficiary contribution of thirty per cent of the cost of the productive assets acquired</td>
</tr>
<tr>
<td><strong>NFDP II COMPONENTS</strong></td>
<td><strong>DESCRIPTION/ACTIVITY</strong></td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Demand Responsive Advisory Services</td>
<td>To support project beneficiaries to access advisory services that would enable them to adopt appropriate technologies that would enhance both output and to access more profitable marketing practices in their enterprises</td>
</tr>
<tr>
<td>Capacity Development</td>
<td>To enhance the ability of beneficiaries to assess their needs, participate in planning and implementation, manage economic activities and to increase the capacity of project coordinators to monitor and evaluate projects. This component provided participants training through provision of thorough facilitators. In addition, FUG members were trained to negotiate and manage contracts and to conduct financial analysis</td>
</tr>
</tbody>
</table>

Source: Adapted from Ogun SFDO (2004)

Farmer groups were integral to the implementation of NFDP II. Specific criteria were established for the FCAs and FUGs as summarized in Table 2.3 and Table 2.4, respectively.

Table 2.3 Eligibility Criteria for Fadama Community Associations (FCAs)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formation</td>
<td>Participating FCA are formed between 10 and 25 on voluntary membership basis with formal endorsement and recognition by the local government and state as civil organisations and eligible beneficiaries.</td>
</tr>
<tr>
<td>Membership</td>
<td>Members of FCAs are from the same local government/state.</td>
</tr>
<tr>
<td>Legal Status</td>
<td>FCA must be duly legalised by registering and obtaining certificate with the Ministry of Community Development&amp; Cooperatives.</td>
</tr>
<tr>
<td>Management</td>
<td>FCA has established a management committee having at least three democratically officers i.e. President, Secretary and Treasurer.</td>
</tr>
<tr>
<td>Organisation</td>
<td>FCA have statutory meeting, hold meetings, keep group records and have other statutory cooperative record books.</td>
</tr>
<tr>
<td>Bank Account</td>
<td>FCA has opened a bank or saving account</td>
</tr>
<tr>
<td>Adherence to CDD</td>
<td>FCA proves commitment to adhere to the CDD principles and participatory and socially- inclusive process of development.</td>
</tr>
<tr>
<td>Funding</td>
<td>FCA are prepared to comply with other requirement made through a specific subproject financing agreement in relation to the use of grants or matching grants received from the project.</td>
</tr>
</tbody>
</table>
Source: NFDP II (2003)

Table 2.4 Eligibility Criteria for Fadama Users Groups (FUGs)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formation</td>
<td>Participating FUG are formed between 10 and 20 households on voluntary basis with formal endorsement and recognition of the local government as eligible economic interest groups and beneficiaries.</td>
</tr>
<tr>
<td>Membership</td>
<td>Members are from the same local government.</td>
</tr>
<tr>
<td>Legal Status</td>
<td>FUG must be duly legalised by registering and certification by the Ministry of Community Development &amp; Cooperatives.</td>
</tr>
<tr>
<td>Management</td>
<td>FUG has elected leadership, having at least three designated authorities (President, Secretary and Treasurer).</td>
</tr>
<tr>
<td>Organisation</td>
<td>FUG has statutory meeting, hold meeting, keep records and have required cooperatives book.</td>
</tr>
<tr>
<td>Bank Account</td>
<td>FUG must have a bank or saving account</td>
</tr>
<tr>
<td>Adherence to CDD Principles</td>
<td>FUG proves commitment to adhere to the projects CDD principles and participatory and socially inclusive process.</td>
</tr>
<tr>
<td>Funding</td>
<td>FUGs are prepared to comply with other requirements made through a specific subproject financing agreement in relation to the use of grants or matching grants received from the project.</td>
</tr>
</tbody>
</table>

Source: NFDP II (2003)

The criteria for eligibility of FCAs and FUGs, and the extent to which the criteria were relevant to the involvement of rural institutions in NFDP II will be discussed in further detail in Chapter 5 following presentation of the research findings from NFDP II implementation in Ogun State.

2.5 Summary

This chapter presents an overview of Nigeria and the policy context for this study. Nigeria has six agro ecological zones which are defined by specific rainfall and temperature parameters, and consequently, the type of crops that can be grown in each zone. The discussion of the historical evolution of agricultural and rural development policies and programs in Nigeria indicates that there had been changes in the implementation approach to policy aimed at poverty reduction and boosting food security. NFDP II was introduced in this chapter with an explanation of the project structure and eligibility criteria for participating FCAs and FUGs. Ogun State, which is the site for the case study in this paper was also introduced. This study area was active in NFDP II. Ogun is in the rainforest zone of the
country and the state has great potential for agricultural production. The results of this case study on NFDPII implementation in Ogun State will be identified and discussed in Chapter 5. First, the relevant literature and conceptual framework for the case study and its methodology will be presented in Chapter 3 and 4, respectively.
CHAPTER THREE: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

3.0 Introduction

This chapter provides an overview of the relevant literature for this study, namely the field of agricultural extension and participatory approaches to agriculture and rural development. The chapter begins with a discussion on the concept of agricultural extension and its principles. This discussion explains the important differences between formal education and extension education, and it reviews key extension teaching methods. This section explains the relevance of group approach and its advantages in extension services delivery. Subsequently, a discussion of the concept of Community Driven Development (CDD) Approach follows to explain how the approach was adopted in the case study of the NFDPII implementation. The review identifies the features of the CDD approach and the key principles for supporting effective and sustainable CDD initiatives. One other concept relevant to this study is participatory development. The literature regarding the principles of participatory development and its relevance to agricultural extension service delivery is briefly discussed. Finally, the chapter concludes by explaining the conceptual framework based on the role of rural institutions and their relevance to extension interventions, particularly the participatory aspect of this work.

3.1 Concepts and Basic Principles of Agricultural Extension

Various scholars have defined the term “agricultural extension” according to their interest, experience, and training.

1. Extension work is the process of teaching rural people how to live better by learning ways that improve their farms, home and community institutions. (Leagan, 1961);
2. Extension is a program and a process of helping village people to help themselves increase their production and to raise their general standard of living (Ensminger, 1961);
3. Extension is an educational process that brings about improvement in farming methods and techniques which leads to increasing farmers’ production efficiency and income (Saito and Weideman, 1990).

The term extension education refers to a non-formal “out of school” system of education designed to help rural people to satisfy their needs, interests and desires (Adereti and Ajayi, 2005). Extension is a system of education that involves adult learners. Extension work is
therefore considered as a type of adult education (i.e. andragogy) because it prepares its clientele to tackle day-to-day problems in order to improve their livelihood on an ongoing basis (Blackburn, 1989). In contrast, formal education prepares its students for life after the school years without necessarily developing life skills. Table 3.1 summarizes major differences between formal education and extension education.

Table 3.1 Differences between Formal Education and Extension Education

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Formal Education</th>
<th>Extension Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory / Practice</td>
<td>Teachers start with theory and then work to practice</td>
<td>Extension worker starts with practice and may take up theory later</td>
</tr>
<tr>
<td>Issues</td>
<td>Students study subjects</td>
<td>Farmers study problems</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Students adapt themselves to fixed curriculum</td>
<td>No fixed curriculum, farmers help to formulate curriculum</td>
</tr>
<tr>
<td>Authority</td>
<td>Authority rests on the teacher</td>
<td>Authority rests with farmer</td>
</tr>
<tr>
<td>Attendance</td>
<td>Class attendance is compulsory</td>
<td>Participation is voluntary</td>
</tr>
<tr>
<td>Instructor</td>
<td>Teacher is the only instructor</td>
<td>Teaching is also through local leader</td>
</tr>
<tr>
<td>Teaching</td>
<td>Teaching is mainly vertical</td>
<td>Teaching is horizontal</td>
</tr>
<tr>
<td>Scope of Teaching</td>
<td>The teacher instruct student</td>
<td>The teacher teaches and also learn from the farmer</td>
</tr>
<tr>
<td>Form</td>
<td>It is rigid or highly structured learning</td>
<td>It is flexible or semi-structured learning</td>
</tr>
<tr>
<td>Audience/Target</td>
<td>The teacher has more or less homogeneous audience/target</td>
<td>The extension agent has heterogeneous audience/target</td>
</tr>
<tr>
<td>Program</td>
<td>It has pre-planned and pre-decided programs</td>
<td>It has freedom to develop programs locally and they are based on the needs and expressed desires of the people</td>
</tr>
<tr>
<td>Focus</td>
<td>It is more theoretical</td>
<td>It is more practical and intended for immediate application in the solution of problem</td>
</tr>
</tbody>
</table>

Source: Adapted from (Edullanti, 2015)

The essence of extension work is that as an educational process it involves the following, as summarized by (Obibuaku, 1983).

- Working with rural people along the lines of their immediate and felt needs and interest which frequently involves making a living, enhancing their level of living and improving their physical surrounding.
- Conducting worthwhile and acceptable activities in the spirit of co-operation and mutual respect between the extension worker and the rural people.
- Utilizing supporting activities to bring extension work and extension staff up-to-date through use of subject-matter specialists, resource persons, in-service training, conferences and the like;
- Utilizing certain teaching techniques in attaining the educational objectives of extension.

According to Oakley and Garforth (1985), there are five key principles of contemporary extension and these are also principles relevant to extension education. The first principle is that “extension works with people not for them” (Oakley and Garforth, 1985). This means that an extension agent should not make decisions on behalf of the farmers; the farmers should do it themselves. The notion of farmer self-reliance suggests that an extension program of delivery of services by an extension agent should only provide as complete and well-founded information as possible, uptake of some, all or none of this information is up to the farmer. By relying on their own selves, the farmers obtain self-confidence, maintain autonomy and develop critical thinking skills.

The second principle mentioned by Oakley and Garforth (1985) is that “extension is accountable to its clients.” Extension services and agents are certainly accountable to their senior officers and to the government department that decides on agriculture and rural development policies. However, extension has an obligation to meet the needs of rural people or farmers. As a result, extension programs are based on understanding and addressing farmers’ needs, in addition to the requirements of the technical and institutional context.

The third principle is that “extension is a two-way link” (Oakley and Garforth, 1985). Extension is a process where research findings and ideas find their way to the farmer. The process cannot be one-way from the extension services to the farmers; it should also be the other way around from the farmer to the extension agents and all other stakeholders (e.g. scientists, private sector or NGOs) listening to the farmers for their ideas, suggestions or advice suggests an approach referred to as “ask don’t tell.” This effort helps to understand farmers and their context for decision-making. Stakeholders are in a better position to respond to farmers’ needs.

Oakley and Garforth (1985) suggests a fourth principle summarized as “extension cooperates with other rural development organization.” Extension services are just one characteristic of numerous economic, social, and political activities that look for improvement in rural society. Consequently, extension has to work with organizations no matter if they happen to be government or non-governmental organizations or rural institutions such as farmers’ groups and associations.
Finally, the fifth principle of extension is that “extension recognizes different target groups” (Oakley and Garforth, 1985). Farmers in one area might have different problems, for example, one farmer may have more land than others and is ready to put new ideas into effect while another farmer who has fewer resources available is likely to be more careful. Therefore, extension should recognize all different groups and plan the programs according to each target group.

3.2 Procedures and Methods in Agricultural Extension Delivery

Four different factors characterize the procedures or underlying process of extension delivery. The relevant literature suggests that the first factor is building knowledge and skills. Through extension farmers gain access to information and use it to build knowledge which they do not have (Blackburn, 1989).

For example, this could be practical information about pest control, how dung can be used as fertilizer or why their cow is not coming into heat. This new information might support the farmer to learn new skills, for example technical skills of how to use new technology or farm management skills for keeping records of cow’s milk production. Extension develops learning, communication and problem-solving processes to facilitate information sharing, knowledge exchange and skills development.

Secondly, through extension farmers get hands-on technical advice and information. This helps farmers to make decisions and allow them to put knowledge into action (Oakley and Garforth, 1985; Röling, 1988). Technical advice for crop production activities may involve demonstrations away from or on the farm.

Thirdly, farmers require a form of organization through which they can show their interests (Rivera, 1997). In addition, the organization provides the farmers a way for taking joint action and building social capital that cannot be obtained individually (Rivera, 1997). Due to this procedural element, extension seeks to assist farmers to set up a group structure and develop organizations, which share knowledge, and facilitates or develops skills. Group processes also support asset acquisition (shared bank account, implements) and increases the potential for collective action (e.g. bargaining, voice and representation).

Fourth and finally, the literature suggests motivation and self-confidence are extremely important in order for resource-poor farmers to be able to overcome challenges and escape
poverty. Extension agents need to encourage farmers to change and make decisions in addition to assisting them to try new initiatives (Oakley and Garforth, 1985).

The literature in extension has an extensive discussion of relevant methods (Jasani, 2009). As media and technologies evolve, the methods of extension have also changed. Extension methods are the tools and techniques used to create a situation in which communication takes place between rural people and the extension worker. They are the methods of extending new knowledge and skills to the rural people by drawing their attention towards them, arousing their interests and helping them to have a successful experience of the new practice. A proper understanding of these methods and their selection for a particular type of work are necessary. One way of classifying the extension teaching method is according to their use and nature of contact. Table 3.2 summarizes key methods used in extension according to use.

Table 3.2 Extension Methods Organized According to Use

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Contact</td>
<td>This method provides opportunities for face-to-face or person-to-person contact between the rural people and extension worker. Methods are effective in teaching new skills and creating good will between farmers and the extension worker.</td>
<td>Farm and Home visits, Office calls, Telephone calls, personal letters, minikit - trials, e-mail</td>
</tr>
<tr>
<td>Group Contact</td>
<td>Rural people or farmers are contacted in a group which usually consist of between 20-25 persons. Groups are usually formed around a common interest. Method also include a face-to-face contact with the people and provide opportunity for the exchange of ideas, discussion on problems and technical recommendation and finally for deciding the future course of action.</td>
<td>Method &amp;Result demonstration, meetings, national demonstrations, conferences, discussion, workshops, Field trips, brainstorming, tours, field days, symposium, farmer field school (FFS)</td>
</tr>
<tr>
<td>Mass Contact</td>
<td>An approach that facilitates dissemination of new information to a large number of people and helping them to use information. More useful for making people aware of new technologies quickly.</td>
<td>Bulletins, fact sheets, leaflets, Posters, Billboards, Television, Radio, Fairs, Face book, Twitter, Instagram, campaigns, bulletins</td>
</tr>
</tbody>
</table>

Source: Adapted from Jasani (2009)

One can classify extension education methods according to their form. This includes written, spoken, audio, and visual methods. This classification is important in countries such as Nigeria where written literacy or numeracy may be limited among farmers. In such situations,
extension education seeks to use multiple methods or methods suited to oral cultures. Table 3.3 provides examples of extension methods organized according to form.

Table 3.3 Extension Methods Organized According to Form

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written</td>
<td>Messages are put together on papers, boards, transmitted electronically etc.</td>
<td>Leaflets, Folders, New articles, Personal letters, Circular letters, Text messages, Bulletins, Posters, Fact Sheets.</td>
</tr>
<tr>
<td>Spoken(Audio)</td>
<td>Messages are put together through human voice, microphone, and other means of sound transmission.</td>
<td>Telephone calls, smart phone calls, radio, podcasts, Television, Video, Office calls, Farm &amp; Home visits, General &amp; Special Meetings.</td>
</tr>
<tr>
<td>Visual</td>
<td>Messages are put together through means which it can be seen.</td>
<td>Charts, Posters, Model, Exhibits, Television, Video, Movies, Cinema, Fairs, Demonstrations (Permanent, Temporary).</td>
</tr>
</tbody>
</table>

Source: Adapted from (Jasani, 2009)

3.3 The Group Approach

The recent literature argues that the age-old practice of extension using the Individual Contact Method although very effective, is expensive and unsustainable as the sole means of reaching farmers with agricultural knowledge and technology (Madukwe, 2006). The ratio of extension workers to farmers is typically high with the one-to-one contact method. In Nigeria, the Training and Visit (T&V) system has also been used in the Agricultural Development Programme (1983 - 1999). T&V is an individual approach that relies on one extension worker working with one farmer who is a leader or demonstration farmer to other farmers. This approach has since been identified as benefitting larger, wealthier and male farmers over all other farmers (Okoye and Ihumodu, 2004). Not surprisingly, the T&V focus on one extension worker to one farmer who would indirectly influence other farmers, was actually a decrease in the ratio of extension agents to farmers. The alternative was to a shift to the Group Approach in agricultural extension delivery. Before considering this approach it is necessary to define what is meant by a farmers’ group.

A farmers’ group is defined as a collection of farmers interacting with one another towards achieving a common goal (Madukwe, 2006). A group is a collection of farmers amongst whom a set of interdependent relationship exists (i.e. the individuals influence each other)
The following advantages are apparent in the use of farmers’ cooperatives and associations in extension delivery, according to Ladele (1995).

- “Increased coverage of farming community leading to improved dissemination of extension messages and agricultural innovation among farmers;
- Dealing with groups for extension work confers advantage of saving in time and reduction in costs per head;
- It allows for participation of more people;
- Enhances self-improvement due to skill acquisition and educational opportunities offered through adult education and literacy programmes;
- Provision of supportive service to compliment education functions of extension.” (Ladele, 1995: pg3)

The Group Approach enhances the sustainability of development efforts by farmers if the groups are sufficient cohesive or strong enough to be involved in the acquisition and delivery of essential agricultural support services such as credit, farm inputs and collective efforts for marketing and transportation (Ladele, 1995).

According to Baxter (1987), a further benefit of group extension is that farmers’ groups are often an effective means of identifying local production constraints and for identifying development priorities. This characteristic is particularly relevant to participatory approach to extension, as discussed in this next section of this chapter. Baxter (1987) defines different types of farmers’ groups include the following: a) Formal Farmers Cooperatives b) Informal Groups c) Multipurpose Groups, and d) National Farmers’ Cooperative Groups. The main differences between Formal and Informal Groups in agricultural extension delivery is that many informal groups are not certified or registered with local or state government, and consequently, they do not have legal status. Legal status is needed to operate group bank accounts and for contractual purposes. Formal groups, on the other hand, are registered and have legal status. Typically, informal groups are usually small in size while the formal group are usually larger in size. Many formal groups operate accounts with the bank but the informal may have bank accounts in the name of one member (e.g. a group leader) or keep resources individually, and not as a group. Furthermore, the literature defines certain properties which help both informal and formal farmers’ groups operate effectively and efficiently (see Table 3.4).

Table 3.4 Properties of Farmers’ Groups

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group norms</td>
<td>Unspoken and often written set of informal rules that govern individual behaviour in a group; it varies based on the group</td>
</tr>
<tr>
<td>Property</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Status</td>
<td>Relates to whether the group is registered and recognized by the government/local councils</td>
</tr>
<tr>
<td>Cohesiveness</td>
<td>This refers to the extent of unity in the group and is reflected in members conformity to the norms of the group</td>
</tr>
<tr>
<td>Goals</td>
<td>Relates to the focus of the group which is the basis for the establishment and existence of the group</td>
</tr>
<tr>
<td>Internal Elements</td>
<td>Relates to the different committees working with the group to enable the group achieve its goals</td>
</tr>
<tr>
<td>Spontaneous Cooperation</td>
<td>There is unity among group members because they all have a common goal hence there is urgent response to directives from within and outside the group</td>
</tr>
<tr>
<td>Discipline</td>
<td>The group is guiding by a by-law which spells out sanctions on any misbehaviour or action as well as rules guiding the group</td>
</tr>
<tr>
<td>Belonging</td>
<td>The members of a group are guided by a common interest</td>
</tr>
</tbody>
</table>

Source: Adapted from (Ladele, 2005)

### 3.4 The Community Driven Development Approach

Having identified the definitions and principles of farmers’ groups, the relevance of how farmers’ groups as rural institutions were involved in the NFDPII are briefly introduced.

Specifically, this approach was referred to as the Community Driven Development (CDD). In Nigeria, NFDPII promoted only the use of formal groups in its operations. The groups who were willing to participate under NFDPII were required to register and obtain a certificate of registration from the Ministry of Cooperative and Community Development. This approach consequently makes them have legal status before benefitting under the project. Further, they were required to have bank account and the necessary record keeping books before they could benefit under the project.

The NFDPII project was based on a Community Driven Development (CDD) Approach that attempted to empower local communities to have a voice in decision making and take control over their development activities (Dasgupta and Beard, 2007; Dongier et al, 2001). This strategy operated in different ways from earlier agricultural programs and projects that considered target beneficiaries as simply passive aid recipients (Labonnet et al, 2007).

According to Dasgupta and Beard (2007) and Labonne et al (2007) most community-driven development (CDD) projects focus on participants’ active involvement in poverty reduction and demonstrate five main characteristics, as summarized in Table 3.5.

Table 3.5 Community Driven Development Principles
<table>
<thead>
<tr>
<th>Principles</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment of local communities&amp; authority</td>
<td>Give power to local communities and local authorities to participate fully in decision-making and gain control over their development priorities. Strategy also strengthens the capacity of the local community to manage planning and implementation of development projects.</td>
</tr>
<tr>
<td>Demand driven design</td>
<td>Projects operate based on the need of local communities and governments which allows them to determine what types of development activities the project should include to make it effective for them as beneficiaries.</td>
</tr>
<tr>
<td>Social Inclusion</td>
<td>Involve vulnerable groups such as women, youth etc. into the mainstream of their activities Project normally focuses on poverty reduction involving the poor and vulnerable.</td>
</tr>
<tr>
<td>Collective Action</td>
<td>Implement projects collectively through community members by consensus. The beneficiaries plan and implement project activities collectively. CDD projects are also supported by public funding from central governments or that support the communities or local authority. CDD projects may not be successful if the beneficiaries have significant income inequalities and other poverty related indicators.</td>
</tr>
<tr>
<td>Support from External Institutions and Organizations</td>
<td>Most CDD projects receive support from outside their communities (i.e. from government and donor agencies). These characteristic differentiates the CDD approach from the strategies used by community-based organisation (CBOs). Support includes empowering the beneficiaries to plan, implement and take control of development activities.</td>
</tr>
</tbody>
</table>


In 2001, the World Bank identified additional key principles for supporting effective and sustainable CDD initiatives (Dongier et al, 2002; Wong, 2012). The seven principles identified were:

1. Building participatory mechanisms for community control and stakeholders involvement
2. Investing in building the capacity of community-based organizations
3. Facilitating community access to information (to mitigate the risk of manipulation by external interested parties)
4. Developing simple rules and strong incentives, supported by monitoring and evaluation
5. Maintaining flexibility in design
6. Designing for scaling up
7. Investing in an exit strategy

The literature suggests that CDD projects can achieve improvements in social and economic well-being, improved social cohesion and improved governance (Bennet and D’Onofrio, 2014). The approach has, however, received significant criticism (Mansuri and Rao, 2004; Bennet and D’Onofrio 2014). This scholarship suggests no compelling evidence that CDD can in general, deliver governance and social cohesion. There are also related changes to the wider society needed in order to ensure CDD projects improvements in economic outcomes. Because of the tangible and sustainability results obtained in involving rural dwellers in their development agenda many development partners there is a paradigm shift to operationalizing the concepts of participatory development in programs such as NFDPII.

3.6 Participatory Development

Mansuri and Rao (2013) confirm the need for serious and sustained engagement in building local capacity as a condition for creating social capital. This is one of the key elements for NFDP II to operationalize. The literature on participatory development is extensive and is not reviewed, in full, in this paper. Table 3.6 offers a brief summary. Based on Sinkaiye (2005), the table highlights ten principles as germane to the practice of active participation of farmers in their development process.

Table 3.6 Principles of Participatory Development

<table>
<thead>
<tr>
<th>Principles</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn from the farmers</td>
<td>Participatory methodology promotes the knowledge of rural people as the starting point for intervention; rural people as partners in development</td>
</tr>
<tr>
<td>Discuss and share experience</td>
<td>Farmers/rural dwellers are the subject rather than the object of the study; actions are agreed upon by different interests groups</td>
</tr>
<tr>
<td>Must involve all groups in a community</td>
<td>Foster inclusions amongst members of rural community; this action reduces conflicts among members of the rural community</td>
</tr>
<tr>
<td>Extension facilitates and does not lecture</td>
<td>The extension worker creates a learning environment and enables members of the community take action themselves; extension only facilitates the process</td>
</tr>
<tr>
<td>Practical orientation</td>
<td>Promote technologies useful to members of the community; emphasis is on the applicability of learning</td>
</tr>
<tr>
<td>Triangulation of information</td>
<td>Promote checking of same information using different tools to validate the results</td>
</tr>
<tr>
<td>Avoid biases</td>
<td>Selection of appropriate participatory methods</td>
</tr>
</tbody>
</table>
helps to eliminate biases

Optimize results

Relate the costs of learning to the useful truth of information, with trade-off between quantity, relevance, accuracy and timeliness

Learn from mistakes

Learn from mistakes as each tool has its advantages and disadvantages, adapt and develop tools/techniques in the field

On-going and continuous in practice

It is an on-going and continuous process

Source: Adapted from Sinkaiye, (2005).

The use of participatory approaches in agricultural extension delivery expanded after the late 1980s as the decentralization of government agricultural and rural services occurred in most countries (Blackburn, 1989). The literature suggests that there were also flaws in the conventional “top down” approaches that worked against continuity of project activities on farms and in communities (Pretty and Vouche, 1997). Over the years, agricultural institutions, including in the CDD approach, tended to rely on the use of questionnaire survey and quick rural visits (rapid rural appraisal) to collect information for program planning. This had not efficiently addressed the needs of the rural dwellers or created impact. This is because the designers of such questionnaires do not really know what issues are paramount in the village before setting out to administer such questionnaires in rural communities. Consequently, extractive research and needs assessment that did not actively involve the project beneficiaries continued. Conventional methods are now being superseded by community-led investigation and analysis by local people themselves using participatory methods. Further, the participatory process is one in which the farmers themselves can define their interests, bring forward their contributions and develop procedures to better meet their development needs such that the extension organization and farmers benefit from the process of participation. These potential benefits are listed in Table 3.7.

Table 3.7 Benefits of Participatory Development

<table>
<thead>
<tr>
<th>Farmers Perspective</th>
<th>Project Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers are empowered to identify and solve their own problem</td>
<td>Improve project design through gathering information and identifying activities relevant to the needs of the farmers</td>
</tr>
<tr>
<td>Identify resources and potential opportunity</td>
<td>Understand farmers’ interests and priorities, particularly from gender and poverty perspectives</td>
</tr>
<tr>
<td>Increased commitment, identity and ownership of a project</td>
<td>Generate information which can improve policymakers’ awareness of issues important to farmers</td>
</tr>
</tbody>
</table>
Ensure views and participation of diverse groups are included in project design and implementation | Ensure sustainability of project

Provide forum for sharing experiences | Improve project impact and performance

Farmer needs are addressed | Extension needs are addressed

Source: Adapted from Clare Bishop-Sambrook (2001).

Taken altogether, the literature on agricultural and rural extension, particularly group and participatory approaches, inform the conceptual approach of this study. The focus on the relevance of rural institutions involved in the NFDPII brings forward questions that relate to the policy and program focus on the group approach, the role of FCAs and FUGs in NFDPII interventions and the inevitable strengths, weaknesses, opportunities of the group approach.

3.7 Conceptual Framework

The conceptual framework of the study is illustrated in Figure 3.1. This diagram shows the importance of the context of agricultural policy and its extension institutions on agricultural program delivery. The study focuses on the strategy to deliver NFDP II. In this conceptual framework it is argued that extension organizations are at the center of programming in order to deliver and implement the government policy. This, in the case of NFDPII is only possible through the use of a group approach. The principles of participatory development inform analysis of the project from the perspectives of farmers and extension. Consequently, this study is exploring the relevance strengths, weaknesses, opportunities and lessons learned about the relevance of rural institutions in NFDPII from the perspective of the groups (FUGs and FCAs) and key informants (extension). The conceptual framework helps to relate the research questions to the overall conceptual framework guiding the study.
Figure 3.1 Conceptual Framework

Notes:

RQ 1 - What is the relevance of rural institutions in the implementation of NFDP II in Ogun state, Nigeria?

RQ 2 - What are the strengths and weaknesses of involving rural institutions in the implementation of NFDP II?

RQ 3 – What are the opportunities and lessons learned from involving rural institutions in the implementation of NFDP II?

RQ 4 – What is the relevance of the NFDP II to the Nigerian Government’s past (present and possibly future) efforts for involving rural institutions in agriculture and rural development interventions?
3.8 Summary

This chapter reviewed relevant literature for the study. This includes the concept of agricultural extension, and its principles and procedures. This discussion emphasized that formal education is entirely different from extension education, which helps farmers who need knowledge, attitudes and skills to support their livelihoods. Extension has evolved to use a group approach to maximize the ratio of extension workers to farmers. This section discussed some of the advantages of the group approach, different categories of groups used in extension services delivery and the principles guiding group dynamics and cohesion. The chapter also focused on the concept of participation development, principles and its advantages over the conventional method of extension delivery. The last part of this chapter presents the study’s conceptual framework. The conceptual approach to this study sees extension as involving farmers’ group participation at the center of agricultural and rural development interventions such as NFDPII. The conceptual model anticipates strengths, weaknesses, opportunities and lessons learned from delivering NFDPII with its group approach.
CHAPTER FOUR: METHODOLOGY

4.0 Introduction

The previous chapter drew attention to the gap in the existing body of literature on the strengths, weaknesses, opportunities and the lessons learned in extension services using a group approach in agriculture and rural development interventions. This chapter explains the approach used to explore the case study of NFDPII. The research process had two phases: first, the descriptive phase, and second, the exploratory phase. The descriptive phase involved identifying the problem statement, reviewing relevant literature and project documentation, formulating research questions and revising them based on further review of literature and then finalizing the goal of the research and its objectives. This phase also identified the tentative sample size and tools to collect field level data. These decisions were confirmed in the exploratory phase of research which involved a field visit to collect further secondary documentation and original data from participants in NFDPII. This chapter begins with a brief reminder to the reader of the study area, the sample selection and research methods.

4.1 Descriptive Phase of Research

The descriptive phase of research was conducted in Canada and lasted approximately two months. This research activity involved collecting relevant literature and identifying the problem statement, reviewing, formulating research questions (see Chapter 2 and 3). NFDPII project documentation was required for identifying the project structure, components, criteria for farmer group involvement and all aspects of NFDPII policy and programming. Table 4.1 presents 14 main reports used for writing sections of the case study and addressing Research Question #4 and specifically, the historical background, policy and strategy of NFDPII, structure or components of the project and criteria for rural institutions.

Table 4.1 Key NFDPII Reports and Secondary Documentation

<table>
<thead>
<tr>
<th>Institution Providing</th>
<th>Type of Document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ogun State Fadama Coordination Office</td>
<td>World Bank Supervision Reports 2006; 2007; 2008; 2009</td>
</tr>
<tr>
<td>Ministry of Agriculture Ogun State</td>
<td>Update of Donor funded agencies in Ogun State Report 2008; 2009; 2010</td>
</tr>
</tbody>
</table>
While copies of some of these documents were available to the researcher prior to arriving in Nigeria, some were only available from representatives of the institutions involved in NFDPII, some of which participated in the exploratory phase of data collection.

The review of documentation also informed the project research design presented in Appendix 1.

4.2 Exploratory Phase of Research

4.2.1 The Study Area
The fieldwork for this study was conducted in Ogun State one of the 36 states in Nigeria (Figure 4.1). Ogun State is in the Southwestern part of Nigeria and was created in 1976. It borders Lagos State to the South, Oyo and Osun State to the North, Ondo to the East and Republic of Benin to the West. Ogun State has a total of 20 Local Government Areas and a total land area of 16,980.55 km$^2$ with a population of 5,217,716 people (National Bureau of Statistics, 2013).

I travelled from Canada to Nigeria between Monday October 30 to December 17, 2017. I held preliminary meetings November 1 - 3, 2017. The preliminary field visits to seek the FCA/FUG consents was conducted between November 7-14. The field visits for data collection was conducted November 20 – December 08, 2017. The photography in the appendices reveals some of the activities on the field.

The initial phase of the exploratory phase of fieldwork involved preliminary meetings and consultations were held with the officers of the Ogun State Fadama Coordination Office (OGSFCO). In these meetings the goals of the research and the objectives of the study were discussed and the research study design (Appendix 1) reconfirmed.
Figure 4.1 Map of Ogun State, Nigeria showing the Local Government Areas

### 4.2.2 FCA and FUG Sampling

Following the preliminary meetings and consultations with the officers of the Ogun State Fadama Coordination Office (OGSFCO) to discuss the goals of the research and its attendant research objectives, the FCA and FUG sample frame was selected. Purposive sampling was used to identify FCAs and FUGs invited to participate voluntarily in the research. A list of FCA and FUG who were invited to participate in the study is shown in Table 4.2 and Table 4.3, respectively. In total 10 FCAs and 10 FUGs were involved in the study.

Table 4.2 Sample of Fadama Community Associations, Location and Local Government Area

<table>
<thead>
<tr>
<th>Name of FCA</th>
<th>Location</th>
<th>Local Government Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ogo Oluwa FCA</td>
<td>Ago-Ika</td>
<td>Abeokuta North</td>
</tr>
<tr>
<td>Ososa FCA</td>
<td>Ososa</td>
<td>Odogbolu</td>
</tr>
<tr>
<td>Odan-Aje FCA</td>
<td>Idi-Iroko</td>
<td>Ijebu</td>
</tr>
<tr>
<td>Agbedotun FCA</td>
<td>Olubo</td>
<td>Obafemi-Owode</td>
</tr>
<tr>
<td>Iselogun-Ise FCA</td>
<td>Ago-Iwoye</td>
<td>Ijebu-North</td>
</tr>
<tr>
<td>Agbeloba FCA</td>
<td>Orile Ilugun</td>
<td>Odeda</td>
</tr>
<tr>
<td>Erunwon FCA</td>
<td>Erunwon</td>
<td>Ijebu North-East</td>
</tr>
<tr>
<td>Tobalase FCA</td>
<td>Ode-Omi</td>
<td>Ogun Water Side</td>
</tr>
<tr>
<td>Igborne-Robiyan FCA</td>
<td>Igborne-Robiyan</td>
<td>Ifo</td>
</tr>
<tr>
<td>Igbogila FCA</td>
<td>Igbogila</td>
<td>Yewa North</td>
</tr>
</tbody>
</table>
Table 4.3  Sample of Fadama Users’ Groups Location and Local Government Area.

<table>
<thead>
<tr>
<th>Name of FUG</th>
<th>Location</th>
<th>Local Government Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ire-Akari Vegetable FUG</td>
<td>Ago-Ika</td>
<td>Abeokuta North</td>
</tr>
<tr>
<td>Irepodu Vegetable FUG</td>
<td>Ososa</td>
<td>Odogbolu</td>
</tr>
<tr>
<td>Asejere Millers FUG</td>
<td>Idi-Iroko</td>
<td>Ipokia</td>
</tr>
<tr>
<td>Irepodun Crop FUG</td>
<td>Olubo</td>
<td>Obafemi Owode</td>
</tr>
<tr>
<td>God Grace Fish FUG</td>
<td>Ago-Iwoye</td>
<td>Ijebu-North</td>
</tr>
<tr>
<td>Oredegbe Sheep FUG</td>
<td>Orile-Ilugun</td>
<td>Odeda</td>
</tr>
<tr>
<td>Owolowo Processor FUG</td>
<td>Erunwon</td>
<td>Ijebu-North East</td>
</tr>
<tr>
<td>Toluwani Crops FUG</td>
<td>Ode-omi</td>
<td>Ogun Water-Side</td>
</tr>
<tr>
<td>Ife-Oluwa Bee FUG</td>
<td>Igbore-Robiyen</td>
<td>Ifo</td>
</tr>
<tr>
<td>Temidire Crop FUG</td>
<td>Igbogila</td>
<td>Yewa North</td>
</tr>
</tbody>
</table>

4.2.3 Focus Group Discussions with FCAs
Ten FCAs were selected in conjunction with the officers in the State Fadama Coordination office. After the selection, the community facilitators in charge of the LGAs assisted in scheduling preliminary meetings with officers of the FCAs. These meetings took place in their respective community on the scheduled dates. I (the researcher) introduced myself and gave a copy of the information and consent letter to them and requested their consent to participate in the study by joining a Focus Group Discussion (FGDs). I discussed the content of the letter with them and informed them about the voluntary participation in the exercise. Having concluded the preliminary meeting, we scheduled new dates for the conduct of the FGD exercise. The agreement for the conduct of focus group with the FCA officers was that four people should represent each FCA during the FGD exercise.

FGDs were joined by community facilitators who participated in NFDPII. I was assisted with local transportation by the Ogun State Fadama Coordination office. The list of guiding questions used for FCA Focus Group Discussions is in Appendix 5. Approximately one-third of the participants were female. The sex disaggregation of the members of the FCA involved in the Focus Group Discussions is summarized in Table 4.3.
Table 4.4 Sex disaggregation of FCA participants involved in FGD

<table>
<thead>
<tr>
<th>Participants</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCAs</td>
<td>28</td>
<td>12</td>
<td>40</td>
</tr>
</tbody>
</table>

4.2.4 Focus Group Discussions with FUGs

Ten FUGs were selected with input from discussions with the State Fadama Coordination office. The agreement with the FUG officers for the conduct of Focus Group Discussion was that four persons from each selected FUG would represent the FUG and participate in the study. The conduct of FCA FGDs was done during the same field visit as the FUG FGDs, but the participants did not overlap. The sex disaggregation of participants involved in the FUG FGDs is summarized in Table 4.4.

Table 4.5 Sex disaggregation of participants involved in FGD with FUG

<table>
<thead>
<tr>
<th>Participants</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUGs</td>
<td>25</td>
<td>15</td>
<td>40</td>
</tr>
</tbody>
</table>

4.2.5 Key Informant Interviews with NFDPII Officers

The study also conducted 10 Key Informant Interviews (KII). The 10 key informants were officers who participated in NFDPII implementation (2004-2009). These individuals were purposively identified and selected based on discussions with the management of the State Fadama Coordination office who gave permission for these officers to participate in the study. The key informants were officers who were either management staff from the NFDPII headquarters or NFDPII community facilitators in their Local Government Area headquarters office. Preliminary meetings with the officers involved three steps: 1) discussion of the objectives of the study, 2) providing the KII with a copy of the information and consent letter to seek and confirm their consent to participate in the research, and 3) to confirm a schedule for the KII involving my attendance at their respective offices and location to conduct the study. The guiding questions used for the conduct of the Key Informant Interview is found in Appendix 6. Three of the officers were female. All officers had worked with NFDPII. 6 out of the 10 officers were still working with the Fadama project.

Table 4.6 Sex-Disaggregation of NFDPII Officers Involved in KII

<table>
<thead>
<tr>
<th>Participants</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
</table>
Table 4.7 Sex-disaggregation of Farmers Involved in the Study

<table>
<thead>
<tr>
<th>Participants</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

4.2.6 Farmer Interview/Questionnaire
The study design sought to include information on farmers’ experiences with NFDPII, even if there was a limited scope and resources to conduct a full survey. As part of the exploratory approach, a Farmer Questionnaire was developed (Appendix 7). These questions were discussed one-on-one with 10 farmers who were purposively selected based on recommendations from the 10 FCAs. One farmer per FCA was selected, based on their availability to participate in the interview and their voluntary willingness to represent their FCA. Four women and six men were involved in the farmer interviews (Table 4.6).

4.3 Data Coding and Analysis
Following return from fieldwork, the researcher conducted using open coding methods to analyze the data collected from FGDs, KIIIs and farmer questionnaires. The data was mainly qualitative open-end statements initially categorized using priori codes derived from the Research Design Matrix (Appendix 1). Data categorized under the five “a priori” codes was then re-read, re-analyzed for thematic or pattern recognition and re-categorized into 28 more detailed “emergent” codes creating a Coding Framework (see Appendix 2). The data obtained from the Farmers Questionnaire was analyzed using simple frequency tables, percentages and charts (see Appendix 3 and Chapter 5).

4.4 Summary
This chapter explained the procedure and process of selecting participants in the study from FCAs, FUGs and the NFDPII Coordination Offices. Forty participants were involved in the study. The methods used in the study included Focus Group Discussions, Key Informant Interviews and a Farmer Questionnaire. The preliminary data was coded and categorized and summarized in the Coding Framework. Results from the Farmer Questionnaire were summarized with descriptive statistics and charts. Chapter 5 will report the findings from the
data collection, coding and analytical process. It also discusses the results of the study in relation to the goal and objectives of the study.
CHAPTER FIVE: FINDINGS & DISCUSSION

5. Introduction

5.0 Introduction

The previous chapter presented a review of literature on the topic of rural institutions in agriculture, information on the study area and conceptual framework and methods of data collection in this study. This chapter presents the results of the study and discusses these findings in terms of their relevance to the wider body of knowledge on agricultural extension and the group approach. The chapter begins with a discussion of the findings about farmers involved in the study and their farming activities. The findings from the collection of data from larger group discussions and key informant interviews regarding the strengths, weaknesses, opportunities and benefits of NFDP II are then presented. The final section is a discussion of these research results and how they might offer some lessons for future agricultural extension policy implementation in Nigeria.

5.1 Farmer and Farming Characteristics in the Study Area

Prior to examining the implementation of the project and its impacts, a brief summary of the principal characteristics of the farming population in the research area is provided from the farmers’ questionnaire administered during the study. Ten Fadama Community Association (FCA) representatives were chosen for questionnaire administration. The age of respondents (Table 5.1) ranged between 26-60 years of age with half of respondents below the age of 45. This indicates a fairly high proportion of older farmers were identified for involvement in the study, although the NFDP II tried to focus on youth in farming.

Table 5.1 Age of Respondents

<table>
<thead>
<tr>
<th>Age categories</th>
<th>Frequency (No. of farmers)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 26</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26 -30</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>31 -35</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>36 -40</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>41 -45</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>46 -50</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>51 -55</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>56 -60</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field work 2017
The level of respondents’ education (Table 5.2) varied from primary education, to secondary and Islamic education with 60 per cent of respondents reporting having no formal schooling. This indicates that most farmers involved in the study were non-literate or semi-literate.

Table 5.2  **Level of Education of Respondents**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal Education</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Primary Education</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Islamic Education</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source Field work 2017

Respondents indicated a high level of practical experience in farming with a majority having more than 15 years experience (Table 5.3).

Table 5.3 Years of experience in farming of respondents

<table>
<thead>
<tr>
<th>Categories of Years of Farming Experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 -15</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>16-21</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>22-26</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source Fieldwork 2017

The existing farming system in the study area was that farmers were involved in mixed farming that combines crop production and animal husbandry. Farmers produce leafy and fruity vegetables for consumption and market sale. The leafy vegetables grown include the following *Amaranthus*, *Celosia*, *Corchorous*, *Telfaria*, *Solanum* etc. Other crops are tomatoes, pepper, watermelon, cucumber, lettuce, golden melon etc. Stable food crops cultivated include maize, cassava, yam, melon, rice, groundnuts, cowpea etc. Animal husbandry activities involve small livestock rearing of local chickens, pigs, sheep and goats. Inputs farmers used in their farming activities were sourced from the state agro services marketing centers as well as the open market. Produce was sold at farm gate as well as the open market.

Farmer questionnaires also indicate that they have access to some micro-credit. Credit sources for farming and off-farm activities were received from micro finance banks, community banks, Nigerian Agricultural Cooperative and Rural Development Bank.
(NACRDB) and Non-Governmental organizations such as Women’s Organization for Development of Communities (WODECO).

In the next section of the paper the research results from FGDs and KIIIs are presented.

These results begins with a presentation of the summarized results, based on the qualitative coding and categorization of the FGD and KII transcripts and researcher’s observations and field notes, of how NFDP II was implemented, the organizations involved, the emphasis on the group approach and the views of the respondents as to the activities and resources of NFDP II.
5.2 NFDP II Implementation

5.2.1 The role of rural institutions in NFDP II Implementation.
A central feature of the NFDP II project was the creation of Fadama Users Groups representing the different user economic interests in villages and contiguous villages and Fadama Community Association, an apex represented the village as a whole. Development activities under the project were planned and implemented under a Local Development Plan reflecting population needs. Figure 5.1 presents a summary of the needs process and linkages between the farmers groups as local institutions and the other institutions involved in implementation of NFDP II.
Identification of needs ----------------- FCAs/FUGs with guidance of facilitator

Local Development Plans (LDP) Submit to LFDO in the Local Govt Council

Local Government Councils Headquarters Review & approved by LFDC-----------------

State Fadama Coordination Office (SFCO) Check and approval to FCA

Fadama Community Associations (FCA) Approval to start implementation

Fadama Users Groups (FUG) Each subprojects in LDP initiated

Figure 5.1 Needs Process Diagram and Linkages in NFDP II.

All cleared Local Development Plans were subsequently sent to the State Fadama Coordination office (SFCO) for checking and releasing funds to the FCA and FUG bank accounts. It should be noted that funds were released in instalments depending on the subproject to be implemented. For example, subprojects involving Pilot Asset Acquisition Support (PAAS) where cassava processing machine, irrigation pumps, maize shellers were procured, the funds were only partially released because the FUGs was required to pay their own beneficiary contributions directly to the service provider. SFCO and FUGs also had to
procure the equipment from the service provider after evaluating quotations from different providers. A photocopy of the receipts received, copy of bank information showing the release of funds, and an accompanying letter from the FUG had to be confirmed by their FCA and forwarded to SFCO to release project contributions to the service provider. This process was necessary to ensure that potential collusion was reduced, and that transparency in the flow of funds in project implementation was demonstrated.

NFDP II created and supported relevant rural institutions through capacity building. The focus here was on the non-technical aspects of group development. This involved training in the area like record keeping, group dynamics, savings mobilization, group management and agricultural insurance information. Under this activity the FUGs and FCAs did have to manage the activity as payment to the service provider was routed through their accounts and they paid the service provider when the training was completed. From the above, we could see the relevance of the rural institutions in the implementation of NFDP II. Without rural institutions the project could not be implemented and would not have supported the opportunities and benefits, despite weaknesses of the project.

5.3 Fadama User Group and Community Association Views their Role in Project Implementation.

Both FUG and FCA representatives were asked to indicate their importance in NFDP II implementation. Focus group discussions with representatives of the Fadama Users’ Groups identified the following factors:

a. They were expected to form them into FUGs on the basis of common economic interest.

b. Membership would be strongest if FUG ranges between 10-25 persons.

c. Members of the FUGs were expected to live within the same or contiguous villages within the same Local Government Area.

d. The FUG was expected to register and obtain certificate of registration from the Ministry of Community Development and Cooperatives.

e. Each FUG is expected to have bank account. All were found to have bank accounts.

f. Requests for support from the project were mainly under Pilot Asset Acquisition, Capacity building, Demand responsive advisory services and input support to improve their economic activities and group activities.
g. The FUG must be under an FCA to receive support. This was achieved.

h. Identification of priority subprojects must be participatory and socially inclusive

i. The community facilitator was expected to guide the FUGs in the participatory process of identifying priority needs. This was the case

j. The FCA was to endorse the request of FUGs under them when sending their request for support.

k. Each FUG must have the following committees at the FUG level. The committees were procurement committee (three members), maintenance /monitoring committee (three members) environmental /safety guards committee (three members), in addition to the three principal executive members i.e. President, Secretary and Treasurer who were the management committee.

The FGDs conducted in this study found several ways in which the FCAs and FUGs (rural institutions) were relevant in the implementation of NFDP II. In particular, focus group discussions held with officers of the FCA indicated the following factors that influenced NFDP II implementation. Focus group meetings held with officers of the FCA indicated their roles in NFDP II implementation.

a. The FCA is expected to mobilize primary groups (FUGs) in their areas to form the apex. This did occur in all cases.

b. The standard for forming an FCA is that between 10-25 FUGs can aggregate to form FCA. This was upheld.

c. Each FUG should nominate three members from the FUG to represent them at the FCA. This was the case

d. The FCA is expected to register and obtain certificate of registration with the Ministry of Community Development and Cooperatives. All FCAs were registered accordingly.

e. The FCA is expected to open bank account to receive support from the project. All were found to have bank accounts
f. The FCA was expected to have the following committees: management committee (three persons), procurement committee (three persons), monitoring/maintenance committee (three persons) and environmental and safety guards committee (three persons) at the FCA level.

g. The subproject for implementation at the FCA level was mainly rural infrastructure investment (RII) that would benefit the entire community and surrounding areas.

h. The FCA was required to put together an LDP under the guidance of community facilitator to seek for support. The LDP contain the identified priorities of their constituent FUG as well as those of the FCA as the case may be.

5.4 Relevance of Rural Institutions in the Implementation of the Project. The Key Informant interviews conducted with Fadama Officers results are summarized as follows.

a. The rural institutions were the sole medium through which funds could be released under the Project. This approach ensured the group approach was implemented. It did not mean that funds were released without challenges as section 5.5 indicates.

b. The rural institutions were to produce a Local Development Plan which contained all the priority needs of its constituent Fadama Users Group as well as those of the Fadama Community Association. The Local Development Plans were to be produced under the guidance of Project community facilitators working in the area. This did occur.

c. The Community Driven Development (CDD) nature of the Project also made them relevant. The Project was a paradigm shift from the top-down to the bottom-up approach. T Fadama Officers confirmed that they were only to provide facilitation role and allow the members of the Fadama Community Association and Fadama User Groups to take action themselves.

In summary, the FCAs and FUGs were encouraged and guided to fulfil these requirements by the community facilitators sensitizing and mobilizing communities across the 10 participating Local Government Councils in Ogun State on the benefits and the requirements needed to receive support under the project. The factors identified by both groups emphasize the importance of formal structure and administrative procedures in the implementation process.
5.5 Main Strengths, Weaknesses, Opportunities, Benefits in NFDP II implementation

The study sought to identify the main strengths, weaknesses, opportunities and benefits resulting from project implementation. Focus groups and key informant interviews with management staff and facilitators at the state and local government were held to identify the strengths, weaknesses, opportunities and benefits encountered in the implementation of NFDP II. The topics identified are summarized in Table 5.4 and then discussed below.

Table 5.4 Summary of Strengths, Weaknesses, Opportunities and Benefits Identified by Farmer FGDs and KIIs

<table>
<thead>
<tr>
<th></th>
<th>Farmer Focus Group Discussions</th>
<th>Fadama Officer Key Informant Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td>Ownership</td>
<td>Empowerment</td>
</tr>
<tr>
<td></td>
<td>Sustainability</td>
<td>Monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stakeholder partnership</td>
</tr>
<tr>
<td><strong>Weaknesses</strong></td>
<td>Inadequate participant resources</td>
<td>Political interference</td>
</tr>
<tr>
<td></td>
<td>Apathy</td>
<td>Collusion in service provision</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inadequate technical capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elite capture</td>
</tr>
<tr>
<td><strong>Opportunities/Benefits</strong></td>
<td>Identification of vulnerable groups</td>
<td>Linkage to Local Government Councils</td>
</tr>
<tr>
<td></td>
<td>Credit / promotion of a saving culture</td>
<td>Capacity development of rural institutions</td>
</tr>
</tbody>
</table>


5.5.1 Strengths

There were apparent strengths identified in their involvement in NFDP II implementation, according to the results of focus group discussions and interviews.

Ownership/ Empowerment: The representatives of the Fadama Community Association and Fadama Users Group identify ownership as one of the strength inherent in their involvement under the Project. Unlike the previous projects where the government identified priority projects and then put in rural communities, this was not the case with the NFDP II. Consequently, they saw the subprojects as theirs and would guide the subproject implemented “jealously” with commitment and diligence. Similar to ownership, the Fadama Officers identified empowerment in totality as strength involving rural institutions. The rural institutions were given financial support directly which was unprecedented. In addition, they were given full opportunity for voice and self-governance under the Project.
**Sustainability:** The Focus Group Discussion identified sustainability as another strength, this was because under the implementation of NFDP II their capacity on procurement methods were built. They were also given the opportunity to hire and pay service providers. This arrangement helped them to sustain the sub-projects. This was because when there is need for repairs they know who to consult to effect repairs. This helped them in sustaining the subprojects project for them under the NFDP II Implementation. They were giving freedom to charge users fees and proceeds goes into the group bank account for maintenance.

**Monitoring:** overview of the activities and process of NFDP II was considered another strength identified through the Key Informant Interview. The rural institutions were to have different committees i.e. Monitoring/Maintenance, Procurement, Management, Environmental/Safeguards committees both at the Fadama Community Association and Fadama Users Group level. Members of these committees were involved in keeping track of the project in line with the duties of committee. This was another strength identified through the Key Informant Interview.

**Stakeholders’ Participation/Partnership:** strong involvement and collaboration was another strength identified by the Key Informant Interview. The Project saw the Fadama Community Association and Fadama User Group as stakeholder and not beneficiary. The Project recognized that members of the rural institutions may not be literate but had innate attributes/experiences which the project was tapping into. Consequently, they were treated as stakeholders’/partner under project implementation.

**5.5.2 Weaknesses**

Several weaknesses were identified in the involvement of rural institutions in NFDP II.

The FGD identified inadequate resources to pay the required beneficiary contribution as a weakness both at the FCA and FUG level. The representatives of the Fadama Community Association and Fadama Users Groups said they could not pay the beneficiary contribution of some of their request. This was because they had a wrong notion at the beginning that since some past interventions were provided free they thought this could also be free. But this was not so under the Fadama II Project. However, they stated that the low purchasing power of members was also responsible for this.

Another apparent weakness identified through Focus Group Discussion was apathy. The representatives of the Fadama Community Association and Fadama User Groups attributed
the apathy to recalling bitter experiences of rural dwellers when they had been “swindled” under past projects. The apathy was expressed by women and youths who were reluctant to participate in NFDP II at its early stage because NFDP I had largely ignored them

**Political Interference:** as a weakness under the project. The Local Government Councils who were the clearing house for Local Development Plans approvals looked out for Local Development Plans of groups in their areas for urgent approval at the expense of other communities Local Development Plans. We were told on the field that the supervisory councilors went into their wards to mobilize inhabitants to participate under the project.

They mobilized members belonging to their political party at the expense of other members of the community who do not belong to their political party.

**Collusion in Service Provision:** Another weakness identified by the KIIs was collusion between some executive members of the FCAs/FUGs and the service providers. The service providers colluded in many ways. Some of the ways that this was reported to have occurred involved not supplying the total quantities for items for which rural institutions received support. Another experience reported was supplying items which were less costly but inferior in quality to those agreed-upon goods for which funding received from the project.

Furthermore, there were reportedly inadequate technical capability and capacity to implement some identified subprojects. This weakness was common with processing equipment fabrication. The members of the rural institutions explained that because of their empowerment they now bought from local fabricators. Local fabricators also were empowered because they never had the experience of fabricating efficient and effective processing equipment. This resulted in their regular calls of the service provider for replacement and maintenance of equipment.

**Elite capture:** elite capture occurred in the project. This was another weakness identified through KIIs. Elite capture was noticed in communities with retired personnel or communities where some of the inhabitants were initially resident in the city and had decided to relocate to the communities to begin farming as a business. They provided support to members of their group to obtain assistance in terms of paying for cost of registration, beneficiary contribution, providing money to open group bank account etc. But by the time the assistance is obtained, they keep all the items in their care and request members of the groups to look for their part of the money to benefit in the use of the equipment. They were
eventually left at the mercy of the elite in their community who provided the initial support for them to receive funding under the project.

5.5.3 Opportunities and Benefits

There were some apparent opportunities and benefits identified in the research results.

Social inclusion: The FGDs identified social inclusion as an opportunity provided by their participation in NFDP II. The Local Development Plans must contain sub-projects of the following categories of people: widows, women, physically challenged, people living with HIV/AIDS. The facilitator of the FCA stated that they always asked for the location of these groups of people in the community. Further, this category of FUGs were offered to forego paying beneficiary contribution to the sub-project because they were typically economically impoverished.

Credit and Savings Culture: new sources of credit was another opportunity identified through the Focus Group Discussions. The representatives of the FUGs explained that NFDP II afforded them the opportunity to seek credit assistance from the bank. In some cases, beneficiary contributions were paid through credit obtained from the bank. They reported that they commenced repayment as soon as the equipment was put into use. However, it should that most of their credit sources were from community banks and microfinance banks and were limited in terms of the amount of available credit. But this still suffices for most of the FUG requests. The promotion of savings culture was another opportunity the involvement of rural institutions provided. Since they were required to pay beneficiary contributions, this encouraged members of the rural institutions to begin savings for their requests before they forward their requests for support under the Project.

Institutional Linkages: The KIIIs identified linkage with the Local Government Councils as an opportunity/benefit of involving rural institutions. The Local Government was the third tier of government and the closest to the people. Under the project implementation, the Local Government was given the role of clearing house for Local Development Plan (LDP) emanating from communities under their jurisdiction. This fostered synergy between the State Coordination Office and the Local Government Councils.

Capacity development: was another opportunity provided by the involvement of the rural institutions. The project provided capacity training for rural institutions in key areas; procurement procedure and methods, record keeping, maintenance of infrastructure, savings
mobilization, group dynamics, organizing meetings, fostering group cohesion among groups etc.

5.6 Discussion
This final section reviews in detail the findings from the study and explores their implications in relation to existing literature in agricultural extension studies.

5.6.1 Relevance of Rural Institutions in NFDPII

The Community Driven Development (CDD) Approach adopted in the implementation of NFDP II enhanced the relevance of rural institutions in the context of the Local Government Councils Areas in Ogun State. The findings of this study support Dasgupta and Beard (2007) and Labonne et al (2007), work which enumerated five key characteristics of a Community Driven Development Project (See Chapter3 Table 3.5). One of the key characteristics enumerated is the empowerment of local community and authority. NFDP II project gave power to local communities and local authority authorities to participate fully in decision making and gain control over their development priorities.

There was some evidence of the capacity of the local community to manage planning and implementation of development projects. It is not clear if these results will be sustained as NFDP II becomes NFDP III (NFDPII). Under the implementation of the project, the targets were the rural institutions in different communities in the participating Local Government Councils Area in Ogun State, Nigeria. At least on paper, analysis of two project documents, the Project Implementation Manual (PIM) and Project Appraisal Document (PAD), emphasized that all funds to be disbursed under the NFDP II project should move directly to the bank account of rural institutions. The identified /formed rural institutions were expected to open bank account, register and obtain a certificate of registration with the Ministry of Community Development and Cooperatives, they also had to obtain the required record books, and meet regularly. The findings of the study indicated local institutions understood and accepted these terms of implementation. Further, the rural institutions with the support of community facilitators recruited by the State Fadama Coordination Office, were expected to identified their priority needs through a participatory socially inclusive process and consequently put all their needs under the guidance of the facilitator together to generate a document referred to as Local Development Plan (LDP). The Local Development Plan
(LDP) was prepared for each Local Government Council Area and contained the needs of the different primary groups (FUG) and those of the secondary groups (FCA).

5.6.2 Strengths, Weaknesses, Opportunities and Benefits in NFDP II Implementation.

The first strength identified in the involvement of rural institutions in the implementation of NFDP II was ownership, also a very necessary element of extension services and extension education (Hami et al, 2016). Past experience in Nigeria for project implementation had the government through its officers or representatives, identify development interventions in communities. The next level was to engage the service provider themselves without involving members of the communities. For instance, the construction of borehole was located in the community without requesting any input from the community (see Annex Photo 1).

Government only involved members of the community when completed and handed to them for their use. However, as soon as such subprojects had challenges in fixing minor repairs, members of the community would not carry out any repairs until the government or its official came to fix such repairs. In some cases, where no one comes from the government office, the subprojects is allowed to deteriorate, abandoned or rot away. The community sees such intervention as owned by government.

This situation of dependency, well known in extension studies changed in the subprojects implemented by rural institutions under NFDP II. Communities were the one who identified the subproject as a priority. They then put the subproject into their Local Development Plan and forwarded the project idea and design for funding. When they received approval to execute the subproject, they were given freedom to collect quotations from three service provider and consequently evaluate the three quotations. FUGs and FCAs and chose the service providers to execute the jobs and monitor the service execution for the start to the end.

After completion, the subproject becomes the sole property of the communities. The study found that FUGs and FCAs realized if there are challenges/repairs they know who to consult to fix the problem. They saw the subprojects as theirs. The State Project Coordinator during the Key Informant Interview confirmed that a total of Sixty (60) boreholes were constructed under the projects between 2004 -2009. During the study visits to some sites we
found of the boreholes still working nearly a decade later. There were people put in charge and collecting money from sales of water from the location by the concerned Fadama Community Associations.

The ownership of collective action by FUGs and FCAs also relates to a second strength identified—that of sustainability. The rural institutions (FCAs for rural infrastructure investments subprojects, FUGs for pilot asset acquisition support subprojects) in the community opened separate accounts to keep money generated from their subprojects (i.e. borehole, markets, coldrooms, cassava processing equipment, maize shellers etc.) Money realized from the sales and use of processing equipments were kept in the bank and used to meet additional needs of the groups on an on-going basis. FCA interviewed, Ogo Oluwa Fadama Community Association took us to another site where they have begun the digging of another water point from the proceeds they realized from the sale of water. This was an evidence of sustainability of the project and creation of a protected water source for the community.

The third identified strength was the promotion of accountability at the community level. Under the implementation of NFDP II, funds were released directly to the rural institutions’ bank accounts. They were empowered to request bids from at least three service providers, evaluate the bids and award the contract to the most qualified service provider. Further, as discussed above, FUGs and FCAs were empowered to pay the service provider through the money released from the State Fadama Coordination Office (SFCO) into the rural institutions’ own bank account. This required detailed tasks but promoted accountability and integrity at the community level. Under the implementation of NFDP II all payments were made through bank cheques and no cash payment. Some of the officials of the FCAs confirmed that it was through the NFDP II they were made to see and sign cheques. They had never used banks in their day to day transactions in life. They were used to paying cash to artisans they engage in their private projects but under Fadama II that was not permitted. This helped in promoting the fiduciary responsibility enabling communities to trace the flow of funds under the project and ensure ethical practices in extension work (van de Bann, 1986).

Finally, the fourth strength identified was the promotion of partnership/stakeholders’ participation. This is in line with one of the principles guiding extension services delivery. According to Oakley and Garforth (1985) extension works with people and this means that an
extension worker should not make decisions on behalf of the farmers, the farmers should take decisions themselves. In the implementation of NFDPII the rural institutions were given the opportunities of voice and governance in addition to financial support. This fostered greater interaction between the project officers and the executive members of the rural institutions involved in subproject execution.

Furthermore, the study identified weaknesses common to the literature on agricultural extension. The most commonly cited limitation is the issue of lack of resources to pay beneficiary contributions to farmers groups. This was observed in NFDP II. This seriously constrained the full range of achievements of NFDP II.

For rural institutions to benefit under a funding regime such as NFDP II there are many implications for extension services that require equity contributions are a problem for resource -poor farmers. For example, in the Rural Infrastructure Investment (RII) window, the concerned secondary group (FCA) is expected to provide ten per cent (10%) cost of the total cost of the rural infrastructure. The 10 per cent may not necessarily be in cash as in kind is also accepted. For example members may choose to clear the site of the subproject as part of their beneficiary contribution. Others may choose the provision of labour while mixing concrete for the project or supply of laterite to fill the foundation of the subproject as part of or all of their beneficiary contributions while there was in-kind contributions, FCAs were not were not willing and able to pay and hence could not benefit under the Project.

Also under PAAS, the concerned FUGs were expected to pay equity of 50 per cent cost of the assets to be procured by the group. But we learnt from the members of the Fadama Users group (FUG) interviewed that this was at the beginning of the Project in the year2004. It was later reviewed down to 30% beneficiary contributions for the Fadama Users group by year2005. So the funding ratio regime changed to 70:30. The Project was expected to pay 70% cost of the tangible assets requested by the Fadama User group while he concerned group pays the remaining 30% to procure the equipment/asset. The State Project Coordinator while conducting the KII informed that the World Bank put this arrangement in the Project to ensure ownership and consequently sustainability. We were informed that in the third phase of the Project which commenced in the year2010, beneficiary FUG were in addition to paying their beneficiary contributions requested to open a special savings account called the Fadama Users Group Equity account (FUEF) before receiving support. The money realised from the use of the equipment were to be kept in their Fadama Users’ Group Equity Fund
(FUEF) account. They were expected to use the money to buy more of the equipment if needed as the Fadama Project cannot provide the total number of equipment requested by all the fadama users’ groups. For example, if they request for twenty (20) No cassava soaking vats, the project will provide ten (10). The Project expected them to buy the additional ten (10) vats from money realised when they start hiring the vats out to anyone who needs them. The introduction of the Fadama Users Group Equity (FUEF) account further promoted savings culture, frugality, and accountability.

With regards to the Advisory Services and Input Support subcomponent, the implementation arrangement under this subcomponent was that of technical capacity building to improve agricultural production techniques, processing and marketing practices. The farmers (rural institutions) were expected to pay ten per cent10% cost of the total cost of the conduct of such training program to the service provider they identified and commission to conduct the training while the balance 90% was released by the Project into their group account for onward payment to the service provider they gave the job to do after completion of the exercise. However, during the conduct of such training, officers/community facilitators from the SFCO do attend such training sessions. The payment of beneficiary contributions under this window was later in course of project implementation changed to nil contribution. In the procurement of agricultural inputs like seeds, fertilizers, herbicide, insecticide, fungicide and other category of inputs, the beneficiary FUGs were expected to pay 50% cost of the needed inputs requested. They were requested to pay their own 50% beneficiary contribution to the service provider they have identified to supply the inputs. The next step was to forward the copies of receipts obtained from the service provider, the bank account showing the movement of the fund from their account accompanied by the FUG letter head and those of their FCA requesting the SFCO to release the Project’s contributions either to their account or issue the cheque in the company name of the service provider for them to go to collect the agricultural inputs from their service provider or vice versa. This was another weakness identified in the project implementation as many of the farmers’ would request for inputs in their LDPs but when it was time to implement the activity they would not put up requests for the activity to be executed.

Among the other weaknesses and lessons to be learned from this study in relation to the wider literature is the importance of what is referred to as “elite capture”. This was seen in communities where even the more enlightened members of the communities pretended as if they were providing soft landing to enable the other members of groups to access benefits
under the Project. They do this by providing assistance in the payment of beneficiary contributions on behalf of the group, payment of the required fee to obtain certificate of registration from the Ministry of Cooperative and Community Development, provision of money to open group accounts etc. But when the support is received from the Project they ask the other members to go and bring their own contribution and consequently sit on the benefits received. The other members who cannot provide their own contributions are left at the mercy if this person.

The results of this study confirm that in agricultural extension, members of rural communities have been gullible to a lot of deceits, duping and swindling. They had been a lot of “poverty alleviation” strategies where they have been requested to pay for the collection of registration forms under different “poverty alleviation” programs which in most cases when their money was collected the “poverty alleviation” officials diffuses into the atmosphere with all their money. This bitter experience made the youths and women reluctant to participate early under NDFP II, and few youth names were put forward for the study. Possibly, by the time they realized the Project was real, it was almost getting to the end of the Project.

Dasgupta and Beard (2007) and Laborne et al (2007) enumerated empowerment of local communities and authority as one of the characteristics of Community Driven Development (CDD) Approach. The Community Driven Development (CDD) Approach gave power to the Local Government Councils through the Local Fadama Development Committee (LFDC) at the council level to review and approve Local Development Plans (LDPs) emanated from communities within their domain and consequently forward such to the State Fadama Coordination Office (SFCO) for funding. The politicians took advantage of the decentralization of power at the centre to forward Local Development Plans (LDP) emanating from their own communities and forwarded same to the State Fadama office for funding at the expense of other communities within the same Local Government Area. Consequently, there was an imbalance in subprojects execution across the Local Government Area. The challenges of political interference are linked to the findings of this study on other forms of accountability to farmers. For example, collusion between Service Providers and members of the executives FCA/FUG was a weakness of NFDP II. The executive members of the FUG especially members of the procurement committee colluded with the service providers in the procurement of agricultural equipment, purchase of agricultural inputs. In some cases, the total numbers of equipment procured were less than the amount of money released by the
Project. This was made possible because of the insincerity on the part of members of the procurement committee.

Finally, the extension literature indicates that lack of technical capacity and capability to implement identified subprojects is a major challenge (Blackburn, 1989). This was another weakness identified in the study. For example if they identify provision of portable water to enhance processing activities of women and water for feeding livestock as a priority subproject, many of members of such FCA do not have knowledge of what is involved in drilling a borehole/water points. Furthermore, some who identify a palm oil cracker as solution to aid in the processing of palm fruits harvested from oil palm plantation to palm oil, they end up identifying “quack” artisans who collects both their own beneficiary contributions and the Project contribution. The palm oil digester supplied was not efficient in removing oil from the nuts. The service provider kept coming to effect repairs regularly for the equipment to work. This was another weakness.

While the results of this study suggest important challenges to NFDP II, there were some benefits that inform future extension studies and policy. For example, Dasgupta and Beard (2007) and Labonne et al (2007) enumerated social inclusion as one of the key principles of a Community Driven Development (CDD). Community Driven Development Projects focus on poverty reduction normally include the poor and the vulnerable. The Fadama Project promoted inclusion of the following categories of vulnerable groups i.e. widows, women, elderly, orphans, physically challenged, unemployed youths, people living with HIV/AIDS (PLWHA). They were funded 100% under the Project. In addition the project gave a 30% ratio for their subprojects under the project implementation. They were given recognition and voice under the Project. This promoted social inclusion.

Better linkage and financial prudence on the Part of Local Government Administration was evident in NFDP II, based on the results of this study. This is important because in Nigeria, the Local Government Councils was the third tier of government and the closest to the people. They collect rates, levies and other forms of taxes from the people to provide social amenities and other services for improving in the quality of life of the people. But in reality most of these Local Councils are not forth coming in their roles and responsibilities. The activities funded under the Project especially the Rural Infrastructure Investment (RII) window were the responsibilities of the Local Government Councils. Under the Fadama II Project, they were the key stakeholder in the review and approval of the Local Development
Plans (LDP) through the Local Fadama Development Committee (LFDC). Since they knew and understood the benefits of Fadama II Project they paid the beneficiary contributions of some FCA in their Local Government Area. This facilitated better linkage and synergy between the Local Government Councils and the Project. In addition, there was financial prudence on the part of the Local Councils as they paid only 10% cost of the rural infrastructure investment as against 100% if they were to execute the subproject. This promoted financial prudence on the part of the Local Government Councils.

Finally, the study confirms the importance of extension involving a linkage to credit for farmers. One of the conditions for an FCA/ FUG to benefit from the Project was having an active bank account. This made the FCA/ FUG to open bank account in banks across the State. One of the conditions to access credit in most banks in Nigeria was to have bank account with the bank. This gave opportunities to the rural institutions to request for credit assistance from such banks. Some FUG seek for credit to pay their beneficiary contributions and consequently began off-setting such credit when they such equipment start operation. The proceeds from the use of cassava processing were deposited daily in the bank. It should be noted that most of the rural institutions opened bank account with the micro finance and community banks located close to their communities.

4) Promoted Savings Culture among the Rural Institutions: Since the FCA and the FUG had bank accounts, money realized from the use of their equipments were deposited in banks. In addition, their beneficiary contributions were kept in such banks before they pay their service providers. Money collected during group meetings were saved in such banks. This was one of the opportunities provided by involving rural institutions in the implementation of the NFDP II.

The subprojects executed under the Fadama II Projects were needs prioritized and agreed by consensus using the Participatory Rural Appraisal (PRA) techniques under the guidance of project community facilitator. They were given the opportunities to advertise for bids from service providers. The quotations received from the different service providers were evaluated by members of procurement committee using the standard procurement method in line with capacity building they had received under the Project. The execution of the subproject is awarded to the service provider of their choice. The members of the monitoring committee were expected to be with the service provider from beginning to the end of the execution of the subproject. The subproject is handed over to them after completion. The
arrangement allows the FCA to easily fix any repair. This consequently enhances sustenance and continuity of subprojects.

Ladele A.A. (1995) enumerated the provision of supportive services to compliment education function as one of the advantages inherent in the use of groups (rural institutions) in extension delivery. The FCA and their constituent FUGs discuss common problems like purchase of agricultural inputs e.g. seeds, fertilizers and agrochemicals. They pull resources (money) together and send representatives to buy in bulk these items and consequently share in accordance with the amount contributed by each member. This promoted the benefits of social capital.

The FCA and its constituent FUGs meet at least once in a month in accordance with the State Cooperative Policy. They send the itinerary of the yearly meeting dates ahead to the Ministry of Community Development and Cooperatives as well as the SFCO. They were expected to give account of money received, expended and other activities within the group in the preceding month. Also, if there was any support received from Fadama or other sources, such information were disclosed at the meeting. The original receipts obtained from the service provider, bank information and other group records were to be kept in safe custody by the management committee. However, copies of receipts, bank information relating to funds received and disbursed from the SFCO was forwarded to the Fadama office for their records and verification. The Ministry of Community Development and Cooperatives ensured that they hold their Annual General Meeting (AGM).

At the Annual General Meeting reports of the year is rendered and new executive members are elected to run the affairs of the association for another year. This promoted accountability and transparency at the community level. It should be noted that Fadama community facilitator, members of the State Fadama Coordination Office (SFCO) and the officers from the Ministry of Community Development and Cooperatives were at liberty to attend any of their meeting.

5.6.3 Final Reflections on Rural Institutions in NFDP II Implementation
Based on my findings from the field in this research, the following lessons have been learned and should be the path which the Nigerian Government could follow in the implementation of agricultural and rural development projects now and in the future.
The first lesson learned is that Community Driven Development Approach could thrive in diverse localities. From the study we saw funds moving directly to the bank accounts of FCAs and FUGs in diverse communities across Ogun state and the funds were not diverted but directed to the purpose for which the funds were meant. Unlike previous experiences were funds were diverted and the projects were not executed. In view of the above, the government should entrench the principles of CDD in all its planning and execution process.

The second lesson learned was that the situation of dependence well known in extension study had changed in communities under NFDP II. The members and officials of participating FCAs and FUGs never waited for anyone to come and help shape their destiny. Once they get approval for the execution of subprojects, they knew what to do since the project had empowered them through regular capacity building training programs conducted from inception to mid-project, to completion of the project.

The third lesson learned was that members of rural communities may not be literate but they have hidden innate factors/potentials which should be exploited and tapped into to ensure continuity and prevent wastage of scarce resources.

Finally, the Nigerian government should sustain the social cohesion and inclusion which the project had created in communities across the state by supporting more capacity building for members of the FCAs and FUGs.

5.7 Summary

In this chapter reported the findings of the study. This included basic characteristics of farmers in the study area and some key aspects of implementation process and impact of the NFDP II. The study was undertaken in Ogun State, south west Nigeria, with a relatively high rainfall and mixed agriculture zone. The farmer respondents possessed a relatively low level of formal education and the majority possessing more than 15 years of experience in agriculture. The findings reported here indicated that NFDP II project implementation achieved the participatory identification of population needs from which was developed a formal implementation plan. Subprojects were identified and implemented by users groups in a formal administrative process which was designed to minimize the potential for mismanagement. The results indicated that the process had benefits of ownership, sustainability of subprojects. Other benefits enumerated were linkage to credit, linkage to Local Government administration. However, there were apparent weaknesses including
inadequate resources to pay beneficiary contribution, elite capture political interference, collusion between service provider and some executives of FCAs/FUGs. The results were discussed, in relation to the literature. The results of this study suggest similarities to identified strengths, weaknesses, opportunities, and lessons learned in agricultural extension. The next and final chapter of the thesis presents the final summary, conclusions and recommendations of the study.
CHAPTER SIX: FINAL SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Final Summary

This study has explored the relevance, strengths, weaknesses, opportunities, results and lessons learned in the involvement of farmers groups (i.e. FCA/FUG) in agricultural development programme like the NFDP II in Ogun state, south west of Nigeria.

The aim of the research was to improve an understanding of the involvement of rural institutions in the implementation of the agricultural development and extension activities in NFDP II. The research adopted a mixed method in its conduct. Qualitative and quantitative methods were used in data collection. The qualitative methods involved the conduct of Focus Group Discussion and Key Informant Interview with the different stakeholders involved in project implementation (i.e. the farmers groups FCA/FUG and fadama officers involved in the project. Some quantitative methods involved the use of a designed questionnaire to collect data.

The literature states that sustainable rural development can only be achieved through mobilization of resources in the rural sector (FACU, 2001). The mobilization of resources involves building strong networks of associations and farmers groups that will allow rural people to share in decision making, contribute towards and relate satisfactorily to development projects and hence have commitment and control over them and their results and benefits.

The research was an opportunity to improve an understanding of the relevance, strengths, weaknesses, opportunities, results and lessons learned in involving rural institutions (farmers’ groups) in agricultural projects delivered using the implementation approach of NFDP II as a case study in Ogun State South western Nigeria. This chapter summarizes the key findings, presents the main conclusions and provides recommendations for policy makers, and organizations working with rural dwellers and for future research. The chapter concludes with some final remarks.

The main findings of the study can be summarized as follows.

The NFDP II represents a pioneering effort at practically demonstrating a bottom-up approach to agriculture and rural planning and development in Nigeria using the community
driven development approach (CDD). NFDP II promoted the principles of social cohesion and inclusiveness. Social isolation is detrimental to intervention in rural development (Akinleye, et al, 2005). When development programme is socially exclusive it could lead to conflicts. Further, the isolated groups could collaborate to sabotage development. The project also developed strong mechanisms for sustainability and ownership of its subprojects. There was also room for enhanced interactions amongst the stakeholders’ which resulted in project staff dealing with rural dwellers as partners in development and not just beneficiaries. In addition, the project promoted a savings and banking culture amongst rural institutions. There was also a conscious effort at empowering the Local Government Councils to be aware of their roles as the third tier of government and be encouraged in their roles and responsibilities. The study saw the implementation of the concept of empowerment. The FCAs/FUGs were given both financial support and a space for governance and voice. This is what the principle of empowerment embraces.

Finally, the study also acknowledge some limitations, the first of which was limited resources (time and funds) to conduct a larger survey of farmers who participated in NFDP II.

6.2 Conclusions

The rural farmers in Nigeria have seen the benefits of community organization as a tool for local economic development under the NFDP II. They have also witnessed improvements in the rural areas that have embraced a more inclusive and participatory model of local economic decision making. Many communities have come under the umbrella of new institutional arrangement for addressing local issues. This transformation has taken place in a challenging environment where basic agriculture remains the principal source of livelihood, and where rural stakeholders have not traditionally participated in local cooperative economic arrangements. Future research may explore and compare the relevance, strengths, weaknesses, opportunities, results and lessons learned in the third phase of the Fadama project which started in 2011 with a view to further appraising the benefits of a community driven development approach in project implementation.

6.3 Recommendations

On the basis of lessons learned in the present study the following can be suggested for future work.
Government (local national and international) should better embrace the use of the community driven development approach to rural development because of the tangible benefits demonstrated in the approach. The capacity of the local institutions (such as FCA/FUG) should be further enhanced to improve the effectiveness demonstrated in current implementation.

International donors should try to ensure that their rural development frameworks are sustainable beyond the duration of the project. They should try to make sure that any new structures or institutions established continue to function rather than collapse upon the termination of support.
REFERENCES


Jasani, H. (2009) Agriculture Extension Agropedia.iitk.ac.in/content/agriculture


Appendix 1. Research Design Matrix

<table>
<thead>
<tr>
<th>Research Objectives</th>
<th>Research Questions</th>
<th>Methods</th>
<th>Sources of Information</th>
</tr>
</thead>
</table>
| 1. To examine the relevance of rural institutions in the implementation of NFDP II. | a. What are rural Institutions and why are they relevant in the implementation of an agricultural extension programme such as NFDP II? | • Focus Group Discussion  
• Key Informant Interview  
• Farmer Questionnaire | • Interview with members of FCA/FUG who were involved in the project  
• Interview with Fadama officers involved in the Project implementation  
• Reports from State Fadama Office |
| 2. To identify the strengths and weaknesses, opportunities associated with the involvement of rural institutions in NFDP II implementation. | c. What were the strength, weaknesses, opportunities of farmer’ groups involvement in the implementation of NFDP II? | • Focus Group Discussion  
• Key Informant Interview  
• Farmer Questionnaire | • Interview with members of FCA/FUG who were involved in the project  
• Interview with project staff |
| 3. To document the results and lessons learned in involving rural institutions in NFDP II Implementation. | e. What were the results and lessons learned in their involvement participation of rural institutions in NFDP II implementation? | • Focus Group Discussion  
• Key Informant Interview  
• Farmer Questionnaire | • Interview with representatives of FCA/FUG who participated in project Implementation  
• Interview with Fadama Officers involved in project Implementation |
| 4. To document Nigerian Government’s efforts past and present interventions at involving rural institutions in agriculture and rural development in the country. | g. What were the efforts of Nigerian Government’s efforts past and present interventions at involving rural institutions in their agriculture and rural development in the country? | • Focus Group Discussion  
• Key Informant Interview  
• Farmer Questionnaire | • Interview with representatives of the FCA/FUG website  
• Reports of the Ministry of Agriculture |

*FGD: Focus Group Discussion 10(FCA)(10FUG); KII: Key Informant Interview (10 Fadama Officers). See Appendix IV, V on Questions used in conducting the exercise.
### Appendix 2. Coding Framework

<table>
<thead>
<tr>
<th>A priori code</th>
<th>Emergent code</th>
</tr>
</thead>
</table>
| **1. Relevance**      | 1.1 Medium for Accessing Support  
                        | 1.2 Local Development Plans(LDP)  
                        | 1.3 Bank Account  
                        | 1.4 Registered (Legal Status)  
                        | 1.5 CDD Principles |
| **2. Strengths**      | 2.1 Ownership  
                        | 2.2 Sustainability  
                        | 2.3 Empowerment  
                        | 2.4 Monitoring  
                        | 2.5 Partnership/Stakeholder  
                        | 2.6 Identification with project |
| **3. Weaknesses**     | 3.1 Beneficiary contribution  
                        | 3.2 Elite capture  
                        | 3.3 Political Interference  
                        | 3.4 Collusion  
                        | 3.5 Apathy  
                        | 3.6 Technical capabilities |
| **4. Opportunities/Benefits** | 4.1 Social Inclusion  
                        | 4.2 Linkage with Local Government Administration  
                        | 4.3 Credit  
                        | 4.4 Capacity Development  
                        | 4.5 Savings Culture |
| **5. Nigerian Government Strategies/Efforts** | 5.1 Agricultural Development Programme (ADP)  
                        | 5.2 Value Chain Development Programme(VCDP)  
                        | 5.3 Root and Tuber Expansion Project (RTEP)  
                        | 5.4 Special Programme for Food Security (SPFS)  
                        | 5.5 Women in Agriculture (WIA)  
                        | 5.6 Fadama I, II III |

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Appendix 3. List of rural infrastructure investments

Road Improvement / Rehabilitation
- Fadama Road (5.5 width) including design + supervisor +training
- Access Road (5.5 width) including design + supervisor + training
- Culverts (900mm pipe) including design + supervisor + training
- Drifts
- Stock Route- delineate/ divert, plan live hedge at border with Fadama, provide water points
- Grazing Reserve- improvement of existing grazing reserve by demarcating with live hedge, provision of water points at 3 per grazing reserve module of 100 hectares and provision of appropriate grassing
- Services Centre @ one reserve per state.

Water Resources Infrastructure
- Dams and miscellaneous infrastructure; rehabilitation and maintenance of small earth dams
- Groundwater infrastructure
- Boreholes (up to 250m) without pump
- Resting points for stock route at 150km
- Veterinary clinic, feed store
- Reticulation assembly (borehole, pumping machine, overhead tank and water toughs)

Irrigation system Infrastructure
- Type A: Small size (0.1-1.0 Ha) surface irrigation system
- Type B: Small size, sprinkler (0.1-1.0 Ha) surface irrigation system
- Drainage Infrastructure
- Agriculture Land Drainage

Marketing Infrastructure
- Ventilated improved Pit(VIP) Latrine
- Water point borehole for 5 markets per state with pumps
- Cold storage rooms at the markets
- Cooling sheds (various) e.g. 9m x 3m
- Water pump for market boreholes submersible
- Rice production and harvesting equipment

Source: NFDP II (2003), Project Implementation manual
Appendix 4. Pilot Asset Acquisition Sub-Projects

- Tube wells, pumps, pipes, watering cans and sprinklers for irrigation,
- Hunting equipment and traps
- Fishing traps nets and canoes
- Agricultural machines such as power tillers and equipment
- Processing equipment and installations for local products, such as maize sheller, oil presses, rice threshers, drying platforms, gari processing set –up, fruit processing equipment and fish smoking installations
- Cattle herding installation and equipment
- Local storage structure including sheds and milk cooling equipment
- Milk processing equipment
- Honey collection and processing equipment
- Local transport equipment such as handcarts, ox carts, trailers for power tillers bicycles and
- Tools and equipment for building or servicing any of the above.

Source: NFDP II (2003), Project Implementation manual
Appendix 5. Focus Group Discussion Questions

1. What is the name of your Fadama Community Association/Fadama Users Group?
2. When was your association formed?
3. How many members are you in your association?
4. How many of your members are male and female?
5. What activities do your association engaged in?
6. Is your association registered with the Ministry of Community Development and Cooperatives?
7. Does your association have a bank account?
8. When is the meeting date of your association, venue and time of meeting?
9. Did your association participate in the Second National Fadama Development Project (NFDPII)?
10. What were the relevance/roles of your association under the implementation of the Second National Fadama Development Project (NFDPII)?
11. What were your strengths under the implementation of the Second National Fadama Development Project (NFDPII)?
12. What were the weaknesses your association encountered during the implementation of the project?
13. What were the opportunities/benefits derived by your association in participating in the project?
14. What were the lessons learnt in the participation of your association in the project?
15. What other projects had your association being involved in?
Appendix 6. Key Informant Interview (KII) Questions

1. How long have you been in the public service?
2. Did you participate in the implementation of the Second National Fadama Development Project (NFDPII)?
3. What was your position in the State Fadama Coordination Office (SFCO)?
4. What were the roles/responsibilities of the State Fadama Coordination Office?
5. What were the roles of your position in project implementation?
6. What was the relevance of the Fadama Community Association (FCA) and Fadama Users Groups (FUG) in the implementation of the Project?
7. What were the strengths inherent in the involvement of the Fadama Community Associations (FCA) and Fadama Users group (FUG) in the implementation of the Second National Fadama Development Project (NFDPII)?
8. What were the weaknesses identified in the involvement of Fadama Community Association (FCA) and Fadama Users Group (FUG) in project implementation?
9. What were the opportunities and benefits of their involvement in the project?
10. What were the lessons learnt in their involvement in the project?
11. Are there other projects in Nigeria that uses rural institutions in project implementation?
Appendix 7. Farmer Questionnaire

**Introduction**
This questionnaire is one of the data collection instruments for the study on the relevance and involvement of rural institutions in Agriculture and Rural Development.

The data obtained is required to put together an MSc thesis as part of the requirements for obtaining MSc degree in Capacity Development & Extension at the University of Guelph, Ontario Canada.

Please feel free to provide sincere information to enrich the data for the study.

Thank you for your cooperation.

1. Name of Fadama Community Association
2. Name of Fadama Users Group
3. Date of group establishment
4. Registration Status
5. Name of Agency registered with
6. Registration No and Date of Registration
7. Location of Fadama Community Association/Fadama Users Group

8. Local Government Area
9. Gender of Respondent
10. Age of Respondent
11. Religion
12. Educational level

13. Position in the association
14. Years of Experience in Farming
15. Farming Systems Adopted

16. Crops cultivated

17. Sources of farm input
18. Outlets for sales of farm produce
19. Sources of credit for farming

20. Other relevant information
### Appendix 8 Nigerian Government Agricultural Development Programmes

<table>
<thead>
<tr>
<th>Year</th>
<th>Programme</th>
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<tbody>
<tr>
<td>1973</td>
<td>National Accelerated Food Production Project</td>
</tr>
<tr>
<td>1976</td>
<td>Operation Feed the Nation</td>
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<tr>
<td>1976</td>
<td>River Basin Development Authority</td>
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<tr>
<td>1975</td>
<td>Agricultural Development Programme</td>
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<tr>
<td>1980</td>
<td>Green Revolution</td>
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<tr>
<td>1986</td>
<td>Directorate of Food, Road and Rural Infrastructure</td>
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<tr>
<td>1987</td>
<td>Better Life for Rural Women/Family Support Programme</td>
</tr>
<tr>
<td>1989</td>
<td>Peoples’ Bank</td>
</tr>
<tr>
<td>1990</td>
<td>Special Programme on Food Security</td>
</tr>
<tr>
<td>2015</td>
<td>Value Chain Development Project</td>
</tr>
</tbody>
</table>
Appendix 9.  

Pictures of Field Activities

Typical bed with vegetables planted
Focus Group Discussion with officers of Pastoralist FUG Abeokuta North Local Govt
Focus Group Discussion exercise with officers of Odan Aje FCA Ipokia Local Government Area
Group photograph with members of Odan Aje FCA Ipokia Local Government
Group Photographs with members of Ayedade FCA Ipokia Local Government
Signboard of the Local Fadama Desk Office in Abeokuta North Local Government
Photograph with members of Agbedotun Fadama Community Association
Photograph with Facilitators who assisted in the study.
Interaction with Ogo Oluwa FCA officers who wanted me to see the distance covered by their Canoe FUG drivers on water