

Infrastructural development and transformation agenda in Nigeria: Roles of National Fadama Development Project (NFDP) III in Osun State

Alawode O. O.

Department of Agricultural Economics, University of Ibadan, Ibadan, Nigeria.

E-mail: busolaferanmi@gmail.com

Accepted 20th December, 2013

Abstract. The National Fadama Development Project (NFDP) III, popularly known as Fadama III Project which is being implemented in 658 Local Government Areas across the States of the Federation is expected to play significant roles in infrastructural support and acquisition of productive assets by able bodied groups, women, unemployed youths and other vulnerable groups. This paper examined the extent of support for rural infrastructure among Fadama Community Associations (FCAs) and productive assets by Fadama User Groups (FUGs) in Osun State. Primary data were generated from a survey of forty-one FCAs that have benefited from infrastructural support and three hundred and twenty seven FUGs across the twenty Fadama III Local Government Areas and Ife East Area Office in Osun State. Descriptive statistics were used to analyse the collected data. The findings showed that FCAs benefited in infrastructural support ranging from construction of rural markets, borehole, cold room store, and roads, to enhance production, processing, storage and marketing of farm produce and products. It was concluded that NFDP III has contributed immensely to employment generation among vulnerable groups (FUGs), acquisition of productive assets by able-bodied FUGs for income generation, and brought about transformation of agriculture in Osun State. The project is contributing to the achievement of a key millennium development goal of eradicating extreme poverty and hunger by enhancing income generation of the FUGs, and thereby reducing rural poverty through the enhanced agricultural enterprises.

Keywords: Fadama User Group, Fadama Community Association, vulnerable groups, group owned pilot assets, community owned infrastructure.

INTRODUCTION

'Fadama' is the Hausa name for irrigable land, usually low-lying plains underlain by shallow aquifers found along Nigeria's major river systems. Such lands are especially suitable for irrigated crop production and fishing, and traditionally provide feed and water for livestock. The enormous potential of this land is partially developed. The Fadama I and II projects successfully refined approaches for improved utilization of these lands. Fadama II implemented an innovative Local Development Plan (LDP) tool, and building on the success of the Community Driven Development mechanisms, the cumulative impact

of this earlier successful World Bank-assisted Projects attests to the robustness of the small scale and community based approach to Fadama development in an environmentally sensitive manner.

The Project Development Objective (PDO) of Fadama III is to increase the incomes of users of rural land and water resources and reduce rural poverty, increase food security and contribute to the achievement of a key Millennium Development Goal (MDG) of eradicating extreme poverty and hunger. The total cost of the project is USD450 m with contributions from different stakeholders

Table 1. Cost of the Project.

Stakeholder	Contribution	%
World Bank	USD250m	55.6
Federal Government of Nigeria	USD23m	5.1
State Governments	USD77m	17.1
Local Government Areas	USD40m	8.9
Communities	USD60m	13.3
Total	USD450m	100.0

as presented in Table 1.

The Federal Ministry of Agriculture and Water Resources (FMAWR) has the overall responsibility for project execution through National Food Reserve Agency (NFRA). At the state level, the State Ministry of Agriculture has delegated day-to-day operations to the State Fadama Coordination Office (SFCO) and decision-making is decentralized and demand-driven.

According to the Project Implementation Manual of Fadama III (PIM, 2009), the strategic objectives of Fadama III are to enhance growth in all sectors other than oil in order to achieve increased food security, reduce poverty, and create employment in the rural areas. Also, Fadama III is to increase opportunities for rural economic development, and contribute to the realization of the agenda for a secured future. The target population of NFDP III includes 2.2 million rural farming households including smallholder male and female farmers, pastoralists, fisher folks, traders, processors, hunters and gatherers, the disadvantaged and physically challenged groups [widows/widowers, the handicapped, the unemployed youths, aged, PLWHIV (people living with HIV/AIDS), and so on). Others are service providers, including government agencies, private operators and professional/semi-professional associations operating in the project.

To achieve the strategic objectives of NFDP III and to reach the target population, viable FUGs and their apex FCAs were formed through which supports were provided for acquisition of group-owned productive assets, inputs and rural infrastructure through the community driven development (CDD) approach. For FUGs to benefit in this project, upfront payment of 30% beneficiary contribution for productive assets is required for 70% matching grants by the project, and 50% matching grant on inputs. On the other hand, vulnerable FUGs enjoy 100% matching grant for both productive assets and inputs and 15% repayment from proceeds of activity is expected from them. For FCAs to benefit in infrastructural support, 10% beneficiary contribution is required for 90% matching grant by the project.

The project covers 36 states plus Federal Capital Territory. There are not more than twenty Local Government Areas per State and not more than ten Fadama Community Associations (FCAs) per Local Government Area. The Fadama Community Association

is an apex organization of economic interest groups (FUGs) which derive their livelihood from the shared natural resources of the fadama land, 10 to 15 Fadama User Groups (FUGs) form an FCA. Fadama User Group (FUG) is a group of persons (average of 10-15) who share common economic interest such as crop production, animal production, agro-processing, agricultural marketing, and so on. In Osun State, on the average, there are seven FCAs per each of the twenty Local Government Area covered by Fadama III and Ife East Area Office, Modakeke Ife.

In order for any FCA/FUG to benefit from the project, certain guidelines are put in place by the Osun state Fadama Coordination Office (OSSFCO). These include:

- i) Payment of counterpart fund (10% for rural infrastructure, 30% for pilot asset acquisition and 50% for input support). This makes the farmers to have sense of belonging and attracts the supervision that the project deserves from the farmers
- ii) Farmers are instructed first to pay their counterpart funds to Service Providers that would execute such projects and inspection would be done before the counterpart fund from the NFDP III is released. This is to avoid abandonment of projects at the implementation stage.
- iii) It is ensured that FUGs/FCAs open bank accounts for FUEF (Fadama Users Equity Fund) savings and pay into such accounts once operations of activities commence. This is to ensure the sustainability of the project.
- iv) There is efficient monitoring and evaluation as well as record keeping. This is to ensure a sound database for the project and for national planning.

According to the National Planning Commission (NPC, 2012), Nigeria's development efforts have over the years been characterized by lack of continuity, consistency and commitment to agreed policies, programmes and projects, as well as an absence of a long-term perspective. Due to this, there has not been much improvement in the overall welfare of Nigerian citizens because of rising unemployment, inequality and poverty (National Planning Commission (NPC), 2012). Despite this assertion, the National Fadama Development Project (NFDP) III has played significant roles in infrastructural support and acquisition of productive (income generating) assets by able-bodied groups, women, unemployed youths and other vulnerable groups in Nigeria. This paper

Table 2. Participating Local Governments in Osun State.

S/N	LG	LG Headquarter
1.	Atakunmosa East	Iperindo
2.	Atakunmosa West	Osu
3.	Boripe	Iragbiji
4.	Boluwaduro	Otan-Ayegbaju
5.	Ede North	Ede (OjaTimi)
6.	Egbedore	Awo
7.	Ifelodun	Ikirun
8.	Ife Central	Ile-Ife
9.	Ife East	OkeOgbo, Ile-Ife
10.	IfeEast Area Office	Modakeke, Ife
11.	Ife South	Ifetedo
12.	Ila	Ila-Orangun
13.	Irepodun	Ilobu
14.	Irewole	Ikire
15.	Isokan	Apomu
16.	Iwo	Iwo
17.	Odo-Otin	Okuku
18.	Ola-Oluwa	Bode-Osi
19.	Olorunda	Igbona
20.	Oriade	Ijebu-jesa
21.	Orolu	Ifon-Osun

Source: Osun State Fadama Coordination Office (OSSFCO), 2012

therefore examined the extent of the support received by FCAs and FUGs (including vulnerable groups) in Osun State in acquiring community owned infrastructures and group owned pilot assets.

Objectives of the study

The objectives of this study are:

- i) To identify different enterprises found among Fadama User Groups (FUGs) in Osun State.
- ii) To examine the extent of support for pilot assets acquisition among FUGs.
- iii) To examine the extent of support for rural infrastructure among FCAs.
- iv) To identify the priority needs of FCAs.
- v) To examine the employment generating capacity of NFDP III project among the vulnerable groups.

METHODOLOGY

Osun state comprised thirty local government areas and Ife East Area Office. Twenty local government areas and Ife East Area Office were covered by NFDP III. FCAs and FUGs were purposely chosen for their participation and qualification to receive support from Fadama III projects by observing all the guidelines involved and the payment

of counterpart fund by the groups. FCAs benefit from rural infrastructure while FUGs benefit from group owned pilot assets and input support. The FCAs and able-bodied FUGs that received assistance from Fadama III based on their payment of counterpart fund (10% of project cost for rural infrastructure for FCAs, 30% of project cost for group owned pilot assets and 50% on input support for FUGs) were identified from the local governments and the Ife East area office. Also, vulnerable groups that benefited from 100% matching grants were identified. Based on their participation and qualification, a total of 327 FUGs and 41 FCAs were found to have received support in the State. Therefore, data were generated on these FUGs and FCAs on the types of enterprises on which they received assistance from NFDP III and rural infrastructure types from which they benefited.

Data were also obtained from the Osun State Fadama Coordination Office, Iwo (OSSFCO, 2012) on Fadama III Local Governments and the FUGs and FCAs that benefited from the project. Table 2 shows the list of participating local governments in NFDP III in Osun State and their various headquarters.

Data collected was analysed using frequency counts and percentages and the results were presented in frequency distribution tables to show the distribution of FCAs and FUGs based on the different rural infrastructural types and pilot assets for different enterprises. Also, data collected were analysed to highlight vulnerable FUGs that benefited from NFDP III

Table 3. Enterprises found among Fadama User Groups (FUGs) in Osun State.

S/N	LG	C	A	AgP	H	M	Ar	Total
1.	Atakunmosa East	1	3	0	0	0	0	4
2.	Atakunmosa West	3	1	0	0	2	1	7
3.	Boripe	2	5	12	3	2	0	24
4.	Boluwaduro	4	10	5	10	3	1	33
5.	Ede North	17	6	4	0	0	0	27
6.	Egbedore	2	4	2	2	1	0	11
7.	Ifelodun	1	4	0	1	0	0	6
8.	Ife Central	0	6	5	1	5	1	18
9.	Ife East	1	3	5	0	0	0	9
10.	IfeEast Area Office	0	5	3	0	0	0	8
11.	Ife South	5	0	4	0	0	0	9
12.	Ila	5	0	7	0	0	0	12
13.	Irepodun	2	3	1	2	12	0	20
14.	Irewole	13	3	6	0	6	0	28
15.	Isokan	5	0	5	0	0	0	10
16.	Iwo	8	15	3	0	5	0	31
17.	Odo-Otin	5	8	4	0	0	2	19
18.	Ola-Oluwa	1	6	4	1	0	1	13
19.	Olorunda	1	16	8	2	0	0	27
20.	Oriade	2	2	3	0	0	0	7
21.	Orolu	0	4	0	0	0	0	4
	Total	78	104	81	22	36	6	327
	%	23.9	31.8	24.8	6.7	11.0	1.8	100
	Ranking	3 rd	1 st	2 nd	5 th	4 th	6 th	

LG, Local Government; C, Crop enterprise (yam, maize, cassava, pepper, rice, tomatoes, vegetables, etc); A, Animal enterprise (fish, poultry-egg, meat, piggery, sheep and goat, snailery, etc); AgP, Agroprocessing (palm oil processing, pepper grinding, maize milling, rice milling, gaari/cassava/starch processing, palm kernel oil extraction, food drink processing – soyamilk 'sobo', 'kunnun', etc); H, Honey production; M, Marketing enterprise (value addition in preservation and storage, slaughter slab and sales points, etc); Ar, Artisans (non-agricultural enterprises – shoemaking, rental services, computer service centres, catering services, etc for vulnerable groups, especially the physically challenged and the aged). Source: Data Analysis, 2013.

by type of vulnerability and by enterprises engaged in. Ranking of different enterprises was done to show the preferences of the FUGs for the enterprises.

RESULTS AND DISCUSSION

Enterprises found among Fadama User Groups in Osun State and support for pilot assets acquisition among FUGs

Table 3 shows the different enterprises found among FUGs in the 20 local governments and Ife East Area Office. The enterprises include:

i) Crop production (yam, maize, cassava, pepper, rice, tomatoes, vegetables, and so on): NFDP III assisted the farmers in procuring inputs; fertilizers, herbicides, insecticide, and pilot assets such as sprayers (with protective garments such as raincoats, rainboots, nose

and mouth guards to prevent the effects of chemicals on farmers), water pumping machines, irrigation equipment, storage structures such as maize cribs, maize shelling machines for processing at farm level, and so on. Farmers are also trained (advisory services) on use of chemicals and equipment to protect farmers' health and the environment. From Table 3, 23.9% of the FUGs were engaged in crop production and it ranked 3rd among the six enterprises found among the FUGs.

ii) Animal enterprise [fish, poultry (egg and meat), piggery, sheep and goat, snailery, and so on]: FUGs in this category were assisted in the construction of pens for animals, and ponds for fish. To be environmentally compliant, drain pits, foot dips, and manure pits were constructed along with the pens. Also, trees were planted round the pens and grassing of ponds was ensured. Other pen equipment such as feeders, drinkers, battery cages were also procured as were requested by different FUGs. NFDP III also assisted the FUGs in procuring feeds for their livestock, poultry and fish. From the results,

the highest percentage, 31.8% of the FUGs were involved in animal production and therefore animal production ranked 1st among the enterprises found among the FUGs.

iii) Agro-processing (palm oil processing, pepper grinding, maize milling, rice milling, gaari/cassava/starch processing, palm kernel oil extraction, food drink processing – soyamilk 'sobo', 'kunnu', and so on): The FUGs in this category add value to agricultural produce through processing, storage, preservation and selling either as raw material to other middlemen or to the final consumers. These Fadama users were mostly women and were assisted in construction of processing sheds, procurement and installation of processing machines, water storage facilities, deep wells, and storage and preservation equipment. The processing sheds were constructed with drain pits for efficient waste water management, and trees were planted. Machines have damped vibrations and ear plugs were provided against noise while nose and mouth guards against dust are also procured along with equipment.

Processing of locust beans using locust beans equipment (thresher) is one of the new innovations to the local women in NFDPIII in Osun State reducing fatigue of women processors and promoting production of high quality processed locust beans locally called 'iru' to the market. Also, women have shifted from the local methods of palm oil production to use of machines to extract palm oil and use of palm kernel crackers with separator for palm kernel processing at farm level. In Table 3, agro-processing ranked 2nd as 24.8% of the FUGs were found engaged in the business.

iii) Honey production: This enterprise ranked 5th because 6.7% of the FUGs were engaged in raising honey bees for honey production. Fadama users in this category were assisted in provision of bee hives, bee suits with rain boots and hand gloves, honey extractor, hive stands, hive covers, smokers and other equipment.

iv) Marketing enterprise (value addition in preservation and storage, slaughter slab and sales points, and so on): These made up 11% of the FUGs. Intervention from NFDPIII included renovation and construction of slaughter slabs with manure pits and drain pits, construction of sales points with nettings, deep wells, and sales sheds, procurement of storage freezers, and so on. The marketing enterprise ranked 4th among the enterprises engaged in by the FUGs.

v) Artisans (non-agricultural enterprises such as shoemaking, rental services, computer service centres, catering services, and so on, for vulnerable groups, especially the physically challenged and the aged): Intervention found in these areas included procurement of rental equipment, shoemaking equipment, computers and accessories, tailoring equipment, hairdressing equipment, and so on. These made up 1.8% of the FUGs. This ranked 6th among the enterprises found among the FUGs because they were specifically for

vulnerable groups who could not cope with the rigours of agricultural production.

Pilot assets have been provided through the assistance of NFDPIII to 327 FUGs in Osun State. Member FUGs pay 30% of their asset value and NFDPIII assisted with 70%. For vulnerable groups, member FUGs did not pay any counterpart fund for procuring pilot assets. Advisory services in form of training were provided to empower the FUGs in their operations. The needs for advisory services were identified by FUG members. Also, capacity building was provided for all the FUG members as their needs might be. The FUGs have been trained mostly in record keeping and business management to ensure feedback on the outcomes of the intervention of NFDPIII.

Support for rural infrastructure among FCAs

Table 4 shows provision of rural infrastructure among 41 FCAs across 17 LGAs in Osun State. The rural infrastructure types ranged from open market stalls to lock-up shops, culverts, bridges, boreholes, cold rooms, road construction, reservoir, deep well, and rice mill. Each FCA identified priority needs in line with production activities and paid 10% of the cost of rural infrastructure. In all, a total of ₦67,838,246 was disbursed on provision of rural infrastructure and the average cost per project per FCA is approximately ₦1,700,000.

It should be noted here that the environmental issues were also considered. Market facilities were constructed with toilets and water facilities, and incinerators to cater for proper waste disposal. Trees were also planted along constructed roads.

The priority needs of FCAs

It can also be seen from Table 4 that the most important priority needs of the FCAs was in the area of water provision/storage for agro-processing enterprises/irrigation such as boreholes and deep wells which accounted for 46.2% of the number of infrastructural projects. This was followed by marketing infrastructures such as blocks of open market stalls and lock-up shops which accounted for 31.3% of the projects of FCAs. Transportation (culverts, bridges and road construction) accounted for 17.9% of the projects of FCAs. Also, there were preservation facilities (coldroom - 3.0%) and processing facilities (rice mill – 1.5%).

Employment generating capacity of NFDPIII project among the vulnerable groups

Out of the 327 FUGs, 96 (29.4%) were vulnerable groups. Tables 5 and 6 show the employment generating

Table 4. Contd.

Ife East	37	Asejere	1										1,996,500
Oriade	38	Egboroparapo	1										1,537,000
	39	Oluwasowapo	1										1,351,140
Ila	40	Edemosi	1										1,800,000
	41	Orisunmibare	1										2,037,621
		Total	7	14	8	1	8	2	3	1	22	1	67,838,246
		% (by number)	10.4	20.9	11.9	1.5	11.9	3.0	4.5	1.5	32.8	1.5	100

OS, Open market stalls; LS, Lock-up shops; CU, Culverts; BR, Bridges; BO, Borehole; CR, coldroom; RC, Road construction; RS, Reservoir, DW, Deepwell; RM, Rice mill. Total number of infrastructural projects = 67. Average cost per project per FCA = ₦1,695,956, approximately ₦1,700,000. Source: Data Analysis, 2013.

Table 5. Employment generation to vulnerable groups by NFDPIII (by type).

S/N	LG	Widow	PC	Youth	Women	Aged	Total
1.	Atakunmosa West	3	0	0	0	0	3
2.	Boripe	3	0	7	4	1	15
3.	Boluwaduro	4	1	0	0	0	5
4.	Ede North	1	0	2	0	3	6
5.	Egbedore	0	0	1	0	0	1
6.	Ifelodun	0	0	2	0	0	2
7.	Ife Central	2	0	2	2	0	6
8.	Ife East	1	2	1	0	0	4
9.	Ife South	5	0	4	0	0	9
10.	Ila	2	0	0	4	1	7
11.	Irepodun	6	0	1	1	1	9
12.	Irewole	2	0	2	1	0	5
13.	Isokan	4	0	0	0	0	4
14.	Iwo	2	0	3	1	0	6
15.	Odo-Otin	2	2	0	0	0	4
16.	Ola-Oluwa	0	1	0	0	0	1
17.	Olorunda	0	0	4	0	0	4
18.	Oriade	1	0	2	0	0	3
19.	Orolu	0	0	2	0	0	2
20.	Total	38	6	33	13	6	96
21.	%	39.6	6.3	34.3	13.5	6.3	100

LG, Local Government; PC, Physically challenged. Source: Data Analysis, 2013.

potential of NFDPIII among the vulnerable groups. From Table 5, the highest percentage, 39.6% of vulnerable FUGs were widows, followed by unemployed youths (34.3%). Others were women (not widows) FUGs (13.5%), the aged (6.3%) and worthy of note are the FUGs of physically challenged persons (6.3%).

From Table 6, different enterprises were found among the vulnerable groups. Agro-processing was the most prominent enterprise (53.1%) found among the vulnerable groups probably because most (53.1%) of the FUGs were purely women groups (widows and women in Table 5). The youth groups (34.3%) were found in crop

production, animal production, and honey production, and partly in agro-processing (extraction of palm kernel oil). The physically challenged (6.3%) and the aged (6.3%) were found to be small scale marketers and artisans. They were considered not fit for tedious agricultural activities.

CONCLUSION

NFDPIII has been able to intervene in the areas of pilot assets acquisition for member FUGs in different enterprises

Table 6. Employment generation to vulnerable groups by NFDP III (by enterprise).

S/N	LG	C	A	AgP	H	M	Ar	Total
1.	Atakunmosa West	0	0	0	0	2	1	3
2.	Boripe	2	5	6	1	1	0	15
3.	Boluwaduro	0	2	2	0	0	1	5
4.	Ede North	1	1	4	0	0	0	6
5.	Egbedore	0	0	1	0	0	0	1
6.	Ifelodun	0	2	0	0	0	0	2
7.	Ife Central	0	0	6	0	0	0	6
8.	Ife East	1	0	2	0	0	1	4
9.	Ife South	5	0	4	0	0	0	9
10.	Ila	0	0	7	0	0	0	7
11.	Irepodun	0	0	6	0	2	1	9
12.	Irewole	0	0	2	0	3	0	5
13.	Isokan	0	0	4	0	0	0	4
14.	Iwo	0	1	1	0	3	1	6
15.	Odo-Otin	0	1	3	0	0	0	4
16.	Ola-Oluwa	0	0	0	0	0	1	1
17.	Olorunda	0	1	2	1	0	0	4
18.	Oriade	1	1	1	0	0	0	3
19.	Orolu	0	2	0	0	0	0	2
20.	Total	10	16	51	2	11	6	96
21.	%	10.4	16.7	53.1	2.1	11.4	6.3	100

LG, Local Government; C, Crop enterprise (yam, maize, cassava, pepper, rice, tomatoes, vegetables, etc); A, Animal enterprise (fish, poultry-egg, meat, piggery, sheep and goat, snailery, etc); AgP, Agroprocessing (palm oil processing, pepper grinding, maize milling, rice milling, gaari/cassava/starch processing, palm kernel oil extraction, food drink processing – soyamilk 'sobo', 'kunnu', etc); H, Honey production; M, Marketing enterprise (value addition in preservation and storage, sales points, etc); Ar, Artisans(non-agricultural enterprises – shoemaking, rental services, computer service centres, catering service, etc, especially the physically challenged and the aged who might not be physically fit for farm work). Source: Data Analysis, 2013

and rural infrastructure support for FCAs across the Fadama III local governments in Osun State. It has contributed immensely to employment generation among vulnerable groups (FUGs) - women, widows, unemployed youths, aged and the physically challenged by engaging them in economic activities rather than begging on the streets. All these activities contribute to income generation among members of FUGs and bring about transformation of agriculture in Osun State.

REFERENCES

- Fadama (2009).** Project Implementation Manual (PIM), Third National Fadama Development Project (NFDP III). Abuja, Nigeria 1:1 - 40.
- National Planning Commission (2012).** 'The Transformation Agenda (2011 – 2015): Summary of Federal Government's key priorities, programmes and projects. *NPC Documents* Nigeria p.1.
- OSSFCO (2012).** 'Comprehensive list of Completed and On-going projects in Osun State' *Fadama III Document*.Osun State Fadama Coordination Office (OSSFCO), Iwo. Nigeria pp.1-13.
- OSSFCO (2012).** 'Rural infrastructure types in Osun State Fadama III Projects' *Fadama III Document*.Osun State Fadama Coordination Office, IwoNigeria pp.1-83.