



A REVIEW OF THE IMPACT OF THE NATIONAL FADAMA PROJECTS IN NIGERIA

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ABSTRACT

The national fadama development project is one of the programmes that is aimed at reducing poverty among the rural populace in Nigeria. The project is also aimed at all year round crop production hence increasing food production and farmers' income. The paper reviewed the impact of fadama II and III on food production and farmers income. The review revealed that there was an increase in the income, crop yield and farmers productive asset of the fadama beneficiaries. Some of the studies reported that there was no increase in the income of beneficiaries and non-beneficiaries of the project. Based on the review it is concluded that the fadama project has made positive effect on the beneficiaries. It is recommended that the project should be sustained by encouraging the beneficiaries to continue using facilities that have been put in place and the technologies they have adopted.

Keyword: Fadama II, II and III, Food Production, Farmers Income, Nigeria

INTRODUCTION

Despite the fact that Nigeria is a most important producer of oil in the African region, agriculture remains the backbone of the national economy. The agricultural sector is one of the most key non-oil sector in Nigeria and it is the largest employer of 70% labour force (NBS, 2012). Although Nigeria is endowed with natural resources, the country is still poor (Ingawa, 2004). Most of the poor people live in rural area which forms most of the workforce in the agriculture being the backbone of the population. Nigeria's agricultural sector has a high potential for further growth (Phillip *et al.*, 2009).

The National Bureau of Statistics states that in the early sixties, agriculture accounted for about 70-80% of the nation's foreign exchange (Phillip et al., 2009). But with the advent of oil in Nigeria. agriculture was neglected, thereby leading to food shortages. This has made government spend huge amount of money on importation of food items supplement the food requirement of the country. To provide food security for the nation, several projects have been established and implemented including National Fadama I, II and III Programme (Girei et al., 2013). This paper is intended to review the fadama projects with the aim of highlighting the achievements of the projects.

Overview of Fadama Projects in Nigeria

"Fadama" is a Hausa name for irrigation landusually low lying plains underlay by shallow aquifers found along Nigeria's major river systems (Ingawa et al. 2004, Iman, 2009). Such lands are especially suitable for irrigated production and fishing, and traditionally provide feed and water for livestock. According to FSO (1999) the huge potential of this land is only very partially developed. Nigeria has great potential for the production of cereals, legumes, vegetables and tubers during the dry seasons. This is because the country is endowed with Fadama land. Nkoya et al. (2008) stressed that Fadama has been the source of income to several users as farmers, pastoralists, fishermen, and hunters etc. who depend directly or indirectly on the Fadama resources for their lively hood.

Fadama I

The Fadama I project was the first phase of the project which focused on supplementary water supply for irrigation and other uses. The objectives of the Fadama1 project according to Ingawa (1998) were:

- construction of about 50,000 shallow tube wells in fadama land for small scale irrigation
- simplifying drilling technology for shallow tube wells
- construction of Fadama infrastructure such as roads, culverts, storage sheds, etc.
- organization of Fadama farmers for irrigation management, cost recovery and easy management of credit, marketing products, etc

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- carrying out aquifer studies
- monitoring and upgrading of irrigation technologies; and
- completion of environmental assessment of future Fadama development activities

According to the World Bank project (2003b), National fadama 1 was adjudged successful both at national and international level and that culminated in the Federal Government of Nigeria requesting the World Bank for the preparation of a follow—up project.

Fadama II

Fadama II is a follow - up to Fadama I (phase I of the National Fadama Development project) which was implemented during the period 1993-1999. Fadama I focused mainly on crop production and largely neglected support of post production activities such as commodity processing, storage and marketing (downstream agricultural sector). The emphasis was on providing boreholes and pumps to crop farmers through simple credit arrangements aimed at boosting aggregate crop output (Nkonya et al, 2008). The Second National Fadama Development Project is one of the major instruments for achieving overall development of the agricultural sector in Nigeria. Fadama II was designed to operate for six years (2004-2010) with a goal of contributing to poverty reduction in Nigeria. The project set a target of 50 percent of male and female Fadama resource users who benefit from the project-supported activities.

Objectives and strategies of Fadama II Project
By the end of year six, it is expected that the
following key performance indicators are to be
realized:

- 50 percent of male and female Fadama resource users, who benefit from project – supported activities, have increased their average real incomes by at least 20 percent compared to the baseline.
- At least 60 percent of Fadama Community Associations (FCAs) have successfully implemented their LDPs and other project – supported activities
- Conflicts among Fadama Users have been reduced by at least 80 percent compared to the baseline.

Fadama III Project

The Fadama III project is comprehensive five-year action programme developed by the Federal

Ministry of Agriculture and Water Resources (FMAWR) in close collaboration with Federal Ministry of Environment (FME) and other federal and state government ministries, local government stakeholders (donors, private and key operations and NGOs) to raise productivity and incomes of Fademia land users emphasizing approach to and holistic comprehensive agricultural operations. The approach is centered on the community-driven model and include building. publ in capacity investing infrastructure, inputs, adaptive research, extensiservices, knowledge transfer, and group-owing productive asset through matching grand services. improvements, and mechanism to avoid or resoluconflicts among Fadama resource users. The fir Fadama project focused on these systems have Fadama III drawing on the successes recorded Fadama II moves beyond flood plain system cover a diverse range of agro-ecosysten productive activities, land uses and enduring sustainability (lke, 2012). Again, the programm will empower communities by giving the resources that will enhance productivity in the include fields. The beneficiaries farmer fishermen, beekeepers, pastoralists, hunters a poultry farmers. Other are bull keepers, ag processors, windows, youths, handicapped people living with HIV/AID. (Ike, 2012).

Objectives and strategies of Fadama III Project According to Ike (2012), objectives and strategor of Fadama III project is to increase the income Fadama land and water resources users or sustainable basis. The project will support financing and implementation of five resources the beneficiary group in:

- Institutional and social development
- Physical infrastructure for productive use
- Transfer and adoption of technology expand productivity, improve value-added conserve land quality
- Support extension and applied research;
- Provide matching grants to access asset income generation and lively improvements.

The project supports the government's straight objectives to enhance growth of sectors other the oil sector. This is to achieve increased security, reduce poverty, create employment improved opportunities in rural areas.

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More specifically the project will contribute to achieve Nigeria's stated rural development and environmental objectives. The basic strategy of the project is the CDD approach with a strong emphasis on stakeholder's participation, especially at the community level.

Beneficiaries of Fadama III Project

According to Ike (2013), the project will be active in all 36 states and the FCT. The target groups include.

- The rural poor engaged in economic activities (farmers, pastoralists, fishermen, nomads, traders, processors, hunters, and gatherers as well as other economic interest groups)
- Relative disadvantaged groups (women including widows) such handicapped, the sick including people living with HIV/AIDs and the youth); and
- Service providers, including government agencies, private operators and professional/semi-professional associations operating in the projects area.

Key Performance Indicators of the fadama III project

According to NFDP III (2013) the key indicators and targets allow tracking progress towards the Project Development Objective and include:

- Income of participating households: 75 percent of Fadama user households, who benefit directly from the project supported activities, have increased their average real income by 40 percent by 2013.
- Yields of primary agricultural of participating households: 20 percent increase in yield of primary agricultural products of participating households.
- Saving participating groups: 10 percent of the replacement value of the common asset used for income-generating activities of the FUGs is saved annually (with effect from year two).
- Physical verification of operations, maintenance and utility of assets at the mid-term and at project closing by surveys of random selected sites.
- Surveys at mid-term and at project closing to show that at least 75 percent of Fadama users are satisfied with operations, maintenance and utilization of community owned infrastructure and capital assets acquired through the project.

A REVIEW OF EMPIRICAL STUDIES OF FADAMA II AND III

The analyses of fadama I. II and III revealed that the project had both positive and negative effects

(see Ayanwale and Alimi 2004, Adegbite, et al. (2008), Kudi et al (2008), Tanko et al., 2010, Adeoye et al., 2011, Simonyan and Omolehin, 2012, Bature et al., 2013, Agbarevo and Okwoche (2014). Ayanwale and Alimi (2004) studied the impact of national fadama in alleviating poverty. The researchers reported that the farm income obtained from fadama fields (mostly leafy vegetables) cultivation increased by about three times from N13,368.00 in 1997 when the first national fadama project started to N38,918.00 in 2004. The technical efficiency of the farmers range was 0.059 - 0.94 which implies that the farmers were relatively efficient. An assessment on the impact of fadama II on small-scale farmer's income in Ogun state with emphasis on the implication for agricultural financing in Nigeria was conducted by Adegbite, et al (2008). The researchers sampled beneficiaries and nonbeneficiaries in fadama endowed communities of Obafemi-Owade local government area of Ogun State. Their findings depict that there was no significant increase in the income of the fadama beneficiaries compared to non-beneficiaries of the fadama project in the study area. Kudi et al (2008) studied the impact of the fadama II on poverty alleviation among farmers in Giwa local government area of Kaduna State, especially how the project has affected the socioeconomic status of the farmers and production efficiency. The research revealed that there was a slight improvement in the income of farmers. Adeoye et al., (2011) conducted a study on rural infrastructure and profitability of farmers under fadama II project in Oyo state, the researchers applied the infrastructural index and gross margin. They compared the infrastructural development between fadama II local government areas and non- fadama II areas. They reported that, more than half of the villages in fadama II local government areas have more infrastructures than non fadama II villages. The researchers concluded that Fadama II project had contributed significantly to the development of infrastructures in Oyo state.

Simonyan and Omolehin (2012) studied the impact of fadama II project on beneficiary farmers income in Kaduna State, using a double difference method approach. The researchers reported that there was an increase in the net farm income of beneficiaries and non-beneficiaries of fadama II project. The double difference method analysis showed a positive mean income difference value between beneficiaries and non-beneficiaries after

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fadama II project. Chow test analysis showed that the project contributed positively to to increased income realized by the beneficiaries over that of the non-beneficiaries. Tanko et al., (2010) conducted a research on the impact of fadama H project on income of tomato farmers in Niger State, Nigeria. Production function analysis and Chow's analysis of covariance confirmed significant difference in production functions. heterogeneity in slopes and intercepts and factor bias was observed on the production functions of participating and non-participating farmers respectively. The study also revealed that the project exerted a positive significant impact on the income of the farmers. Bajoga et al (2006) studied the impact of the fadama project specifically on the living standard of dry season farmers who benefited from the fadama loans in Gombe state. The study showed that the project did not make any impact on the beneficiaries of the fadama loan by increasing their income. improving the living standard of an access to more personal belongings. Bature et al (2013) analysed the impact of national fadama III development project on beneficiaries income and wealth in FCT, Nigeria. The researchers reported an increase in the value of productive assets of the fadama beneficiaries although there was a decrease in the net farm income of fadama beneficiaries. The authors argued that the decrease

REFERENCES

Adegbite, D. A., Oloruntoba, A. O, Adubi, K. O, Oyekunle, O. and Sobanke, S. B., (2008). Impact of National Fadama Development Project II on Small Scale Farmers in Ogun State: Implication for Agricultural Financing inNigeria, Journal of Sustainable Development in Africa, Vol. 10, No.3 Clarion University, Pennsylvania.

Adeoye, A., Yusuf S. A. Balogun, O. L. and Carim-Sanni, A. (2011), Rural Infrastructural Development and Profitability of Farmers Under Fadama II Project in Oyo State, Nigeria, World Rural Observation: 3 (2), Science Publication.

Agbarevo, M. N. B. and Okwoche, A. V. (2014).

Evaluation of effect of the third national fadama development project (fadama III) on food production among farmers in Kwande local government area of Benue State, Nigeria. European Journal

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of Agriculture and Forestry Research. 2(2), 27-32.

Ayanwale, A. B. and Alimi, T. (2004). The impact of Agricultural Development Project (ADP) in Nigeria. Journal of Social Science: 9(3): 157—161.

by encouraging the beneficiaries to continue using

facilities that have been put in place and the

technologies they have adopted.

Bajoga, Y. U. and Adebayo, A.A. (2006). In Impact of Fadama Development Project on the Living Standard of Dry Season Farmers of Gombe State. Journal Environment Vol. 81 (2006).

Bature, Y. M., Sanni, A. A. and Adebayo, E. (2013). Analysis of impact of National Fadama. Development Projects. Beneficiaries meome and wealth in Panalysis. Journal of Economic of Committee.

Girei, Dite. B. Hiya M.M., Salihu M. (2)

Analysis of Impact of National Fasiallia facility in Allexiation poverty on crop farmers in Adamawa State. New Global Journal of Agricultures Reserved 1(3)-pp.8-15

Proceedings of the National Conference of Agricultural Economists, Wudit, 2015

- Federal Office of Statistics. (1999). Poverty Profile for Nigeria 1980 1996, Lagos, http://www.odi.org.uk/play/resources/other/maps-potatoproduction-nigeria.pdf. Aug, 2012.
- Ike, P.C. (2012) Analysis of Impact of Fadama III on Poverty Alleviation in Delta State Nigeria. Assian. Journal of Agricultural Science 4(2), 158-164
- Ike, P.C. and Uzokwe U.N. (2011). Estimation of Poverty among Rural Farming Household in Delta State, Nigeria. Nigeria International Journal of Agriculture and Food Science Technology, 2(1):11-21.
- Iman I. (2009). Nigeria: World Bank Fadama III project to gulp \$ 440 million copy (c) right 2009. This day all Africa Global Media (allafricacom).
- Ingawa, S.A., Oredipe, A.A., Idefor, K. & Okafor, C. (Editors). 2004. Facilitators Project Implementation Manual. Second National Fadama Development Project (Fadama II). Abuja, Nigeria: Federal Ministry of Agriculture and Rural Development.
- Kudi, T. M., Usman, I., Akpo, J. G. & Banta, A. L. (2008), 'Analysis of the Impact of National Fadama Development Project II (NFDP-II) in Alleviating Poverty Among Farmers in Giwa Local Government of Kaduna State, Nigeria, Ozean Journal of Applied Science (1), I. 8, No 2.
- National Fadama Development Project (NFDP) III (2013). Impacts Profile for Nigeria 2009-2012, Plateau and Irish Potato. Investigations carried out by Daily Trust News Paper. pp. 1-3.

- NAFDO (2008). National Fadama Development office Poverty Reduction through increased productivity and empowerment; Abuja Nigeria.
- National Bureau of statistics (2012). Nigeria Poverty Assessment. National Bureau of Statistics (NBS)/World Bank, December 2007. pp 48-49.
- Nkonya, E., Pender, J., Jagger, P., Sserunkuuma, D., Kaizzi, C., Ssali, H.,2003. Strategies for Sustainable Development in Uganda. Research Report Manuscript (under review). International Food Policy Research Institute (IFPRI), Washington DC.
- Philip, D.E. Nkonya, J. Pender and Oni, O.A. (2009). Constraints to Increasing Agricultural Productivity in Nigeria. A Review of Nigeria Strategy Support Programme (NSSP) Background Paper 6. International Food Policy Research Institute, Washington D.C.
- Simonyan, J.B & Omolehin, R.A. (2012), Analysis of Impact of Fadama II Project on Beneficiary Farmers Income In Kaduna State: A Double Difference Method Approach, *International Journal* of Economics and Management Sciences, Vol. 1 No. 11, pp.01-08.
- Tanko, L., Jirgi, A. J. and Ogundeji, A. A. (2010). Impact of fadama II project on income of tomato farmers in Niger State, Nigeria. African Journal of Agricultural Research, 5(15), 1937-1942.