



## 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 land-usually 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 Fadama I 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







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 ₦13,368.00 in 1997 when the first national fadama project started to ₦38,918.00 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 non-beneficiaries 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



fadama II project. Chow test analysis showed that the project contributed positively 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 II 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

in the income could be due to the... encountered by the farmers. Okwoche (2014) evaluated the effect of the national fadama development project among farmers in Kwande Local Government Area of Benue State, Nigeria. The researchers reported that farmers' participation in fadama III project has significantly increased their crop yield.

**CONCLUSION AND RECOMMENDATIONS**  
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 researchers 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 impact on the beneficiaries of the project. 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.

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