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## DELIVERY CASE STUDY

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Halimatou Hima/World Bank

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## THE NIGERIA FADAMA NATIONAL DEVELOPMENT SERIES

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HOW TO BUILD A PILOT INTO A NATIONAL PROGRAM  
 THROUGH LEARNING AND ADAPTATION

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# **The Nigeria Fadama National Development Series: How to Build a Pilot Into a National Program Through Learning and Adaptation**

**Cover:** Halimatou Hima, Fadama User Group (FUG)

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This case study was written by Halimatou Hima, Claudio Santibanez, Sabrina Roshan, and Roland Lomme as part of the Delivery Case Studies produced by the World Bank's Nigeria Country Team. It was drafted under the supervision of Katherine Bain and Adetunji Oredipe. The Delivery Case Studies series—part of the Doing Development Differently initiative—aims to generate knowledge on what works in Nigeria and why. The authors are grateful to Indira Konjhodzic for comments and support on earlier drafts. They also acknowledge the invaluable feedback from the Fadama team in Abuja, as well as editorial support from Amanda Green. This case study does not represent the views of the World Bank's board of directors, and any errors are those of the authors alone.

# Contents

<b>EXECUTIVE SUMMARY</b>	<b>v</b>
Introduction	v
Tracing the Design and Implementation Process	v
Program Achievements	v
Lessons Learned	vi
<b>INTRODUCTION</b>	<b>1</b>
Development Challenge: Reducing Poverty and Improving the Livelihoods of Rural Dwellers by Building Local Capacity to Fulfill the Country's Agricultural Potential	1
Post-Independence Poverty Reduction in Nigeria	1
Nigeria's Agricultural Sector	1
The National Fadama Development Project Series: Piloting, Adapting, and Scaling	4
Case Study Research Framework	4
Delivery Challenge: Adapting Rural Development Interventions by Learning from Experience and Scaling Up Gradually	4
A Short Overview: 20 Years of Implementation and Adaptation	4
Delivering Sustainable Change in Nigeria's Agricultural Sector	6
<b>TRACING THE DESIGN AND IMPLEMENTATION PROCESS</b>	<b>7</b>
Fadama I Design: Building a Pilot from Previous Experiences, Marginal Changes, and Continual Experimentation	7
Fadama I Implementation: An Experiment in Piloting and Learning	8
Fadama II Preparation: Adapting to Changing Social and Political Conditions, Responding to Growing Demands, and Incorporating International Best Practices	9
Fadama II Design: Tailoring the Community-Driven Development Approach to Rural Conditions in Nigeria and Introducing Institutional Capacity Building at the Local Level	11
Fadama II Implementation: A Learning Experience in Adopting Community-Driven Development and Creating Social and Economic Capital in Rural Areas	13
Fadama III Design: The Challenges of Replicating a Successful Formula Nationwide	16
Fadama III Implementation: Continued Progress Despite Stretched Capacity	17
<b>LESSONS LEARNED</b>	<b>19</b>
The Way Forward	22
<b>ANNEXES</b>	
Annex A: Full Description of Fadama Project Life	23
Annex B: CDD Lessons and Fadama Responses	24
<b>BIBLIOGRAPHY</b>	<b>25</b>
<b>LIST OF FIGURES</b>	
Figure 1: Poverty Headcount Ratio (% of population) and GDP Growth (annual %)	2
Figure 2: Rural vs. Urban Poverty Levels: Nigeria, 1986 and 2004	2
Figure 3: Population and Agricultural Growth Rates: Nigeria, 1982–96	3

## LIST OF TABLES

Table 1:	Overview of the Fadama Project Series	5
Table 2:	Learning and Adaptation over 20 Years of Fadama Project Implementation	7

# Executive Summary

## INTRODUCTION

**Over the last 20 years, poor rural farmers in Nigeria have seen the benefits of community organization as a tool for local economic development under the National Fadama Development Project series.** They have witnessed improvements in rural areas that have embraced a more inclusive and participatory model of local economic decision making. Many communities have come together under the umbrella of new institutional arrangements for addressing local issues. These arrangements have visibly improved economic conditions, boosted agricultural incomes, and helped reduce rural poverty. This transformation has taken place in challenging environments, where basic agriculture remains the principal source of livelihoods and where rural stakeholders have not traditionally participated in cooperative local economic arrangements.

In Nigeria, *fadama* is a Hausa name for irrigable land—usually low-lying plains underlaid with the shallow aquifers found along major river systems.<sup>1</sup>

**Beginning in 1990 with a pilot agricultural project (Fadama I) designed to bring basic irrigation and productive support to farmers in selected Nigerian states, the Fadama series has evolved through two subsequent innovative and adaptive projects (Fadama II and III) that are now well established nationally.** Fadama II, launched in 2003, introduced a groundbreaking community-driven development (CDD) model to Nigeria's rural areas and helped institutionalize local stakeholder engagement in community decision making. In Fadama III, the program has expanded geographically and become a well-known national brand of local agricultural development.

## TRACING THE DESIGN AND IMPLEMENTATION PROCESS

**Nigeria's experience with the Fadama project series provides a wealth of knowledge on the challenges of delivering development at the local level.** This case study traces the evolution of the project's design and implementation to demonstrate its adaptive capacity for promoting local agriculture and rural income generation. Before Fadama, most rural projects in Nigeria were managed centrally, with decisions made at higher levels

of government. Today, a large number of communities are responsible for their own local development planning and participate actively in identifying needed infrastructure and supportive services. Fadama's community groups are joint stakeholders in many community assets.

**This case study aims to show how learning and adaptation have been important to the success of the Fadama project, and how lessons learned can help inform new operations in agricultural reform and rural development more broadly.** The case study explores the following question: How did the Fadama project learn and adapt to changing circumstances, including the social and political context, as it evolved from a pilot program to a successful national project? The chronological review looks at how the program's success can be attributed to its capacity to build on existing knowledge of local conditions, to pilot and learn before scaling up, to incorporate and test global practices, and to build important new institutional structures at the local level. This case study also examines how the evolving institutional structure ultimately led to a change in the social contract among farmers, other stakeholders, and different levels of government, resulting in a cultural shift in the process of local development. This shift was prompted in part by a transfer of global knowledge and adaptation of prevailing global practices.

## PROGRAM ACHIEVEMENTS

**Fadama's experiment in constructing social capital for development emerged from the lessons learned through the implementation of various agricultural and rural development projects over the years.** The conscious process of learning and adaptation has supported efforts to overcome the challenges faced by rural communities. As the program has evolved, its objectives and implementation modalities have been refined and have now reached an advanced level of sophistication:

- Fadama is both highly decentralized (with funded projects designed by small groups of beneficiaries and selected on the basis of their intrinsic merit) and supported by a dense pyramidal and multilayered institutional structure. This structure involves multiple agents—formal (such as local governments) and

<sup>1</sup> For more information, visit <http://www.worldbank.org/en/news/feature/2010/07/28/fadama-iii-rural-agriculture-project-fast-becoming-a-household-name-in-nigeria>.

informal (including traditional rulers)—and ensures close monitoring and effective checks and balances through inclusive and active participation among a wide range of stakeholders.

- The program's institutional framework has been deemed effective enough in strengthening local governance that it has been emulated and mainstreamed to complement the efforts of local governments (for example, through the establishment of Community Government Councils in Imo State).
- Fadama has reached beyond its initial targets (both assisting more farmers than expected and moving outside the agricultural sector itself) to benefit indirect beneficiaries (including through the creation of local public assets) and marginalized groups (women, youth, physically challenged people, and internally displaced people). It has tried to balance economic return and social inclusion. Under Fadama III, for example, individual contributions have been waived for vulnerable groups such as women, young people, and those who are physically challenged.
- Fadama has not only generated income, as initially intended, but also significantly enhanced social capital, including through job creation.
- The program has proved effective in micro-level conflict prevention and resolution (within groups of beneficiaries and between those who are and are not beneficiaries). It has recently extended its reach to the victims of insecurity in conflict-affected areas.
- Fadama has to some extent managed to garner political support while fending off unwanted political interference.
- The program has been mobilized effectively for a rapid response to an emergency situation—specifically to contribute to the recovery of livelihoods among those victimized by political violence and insecurity in northeastern Nigeria.

**The Fadama project series stands out as a success within a country portfolio that faces numerous implementation challenges.** It has come of age through a long process of adaptation and innovation. This process is expected to continue under additional financing for Fadama III, which focuses on developing key agricultural value chain products with export potential, narrowly targeting communities in six chosen states. In many ways, the program has come full circle, once again piloting new approaches to test the model's adaptability to more modern commercial agricultural development.

## LESSONS LEARNED

- **Maintain presence and continuity.** The team's perseverance in devoting financial and, more important, advisory assistance at various levels over the project's 20-year time span has been one of

the most important ingredients of its development success.

- **Embrace adaptive learning.** Design of the Fadama project has embraced a model of trial, error, and adaptation. From piloting targeted small-scale community investments to introducing fundamentally new mechanisms for community participation in agricultural development, the project has been a laboratory of experiments. This process of adaptive learning has encouraged innovation at every stage, enhancing project results and sustainability.
- **Tailor best practices to local conditions.** The Fadama series of projects is a clear example of how country-level projects can benefit from international experience. The broad acceptance of the emerging CDD model within Nigeria resulted in part from information gathered on how similar projects had succeeded in other environments, together with careful tailoring to the Nigerian context and use of existing institutional arrangements.
- **Build consensus and attention to process.** In-depth consultation with Nigerian counterparts and communities facilitated the move away from centrally led, top-down approaches toward a locally led participatory approach. Of particular importance in fostering community support were proactive efforts to involve traditional institutions; constant communication between the implementation team and communities; and regular, targeted technical assistance and logistical support.
- **Promote participation to strengthen social capital.** An effective institutional structure at the local level was critical to organizing community participation and engagement. The core organizational element of Fadama lay in the formation of stakeholder groups according to their interests, a participatory process that helped build social capital, local governance, and community decision-making capacity, thereby enhancing the sustainability of outcomes.
- **Foster inclusiveness.** By recognizing indirect beneficiaries (such as fishers, pastoralists, and hunters/gatherers) as legitimate users of shared resources such as scarce land and water, Fadama II developed a culture of inclusiveness and helped communities become more sensitive to the needs of all stakeholders as well as the impacts of their actions on others and the environment.
- **Create organizational capacity through investments in staff.** The Fadama project series has invested heavily in capacity building, recruiting highly qualified staff from the private and public sectors, paying them competitively, and deploying a large network of trained facilitators to provide ongoing training and technical assistance to participating community groups around the country.
- **Cultivate a culture of joint responsibility.** Required counterpart contributions of cash, materials, or labor

have improved group cohesion and introduced a system of oversight to ensure the integrity of the flow of funds at the community level. These institutional arrangements have helped create a culture of contribution, joint ownership, and commitment to subprojects—essential elements of sustainability.

- **Ensure sustainability through well-designed incentives.** The project's financial incentives, together with the central role of beneficiary contributions and capital investments, have strengthened the continuity of community subprojects and isolated them from political funding cycles. Because of the financial stakes involved, local Fadama activities have continued even when local government counterpart funds have been delayed or absent.
- **Create institutional change by scaling up through national-level standardization with local-level flexibility.** Once rolled out at the national level, the project's organizational structure became more standardized to facilitate cross-country management. Yet Fadama's design has preserved the flexibility granted to communities in preparing and implementing their own development plans. The internalization of Fadama delivery mechanisms has had a lasting institutional effect.
- **Improve local governance through decentralized implementation arrangements.** The considerable decision-making and implementation autonomy granted to states under Fadama has been exceptional among federal-level projects in Nigeria and has enabled an autonomous and highly accountable local governance structure through opportunities for capacity building at the subnational level and stronger links between communities and their local governments.
- **Introduce flexibility as a means of reducing political interference.** Fadama's flexible delivery mechanisms have allowed solutions to be tailored to diverse local

contexts, strengthening local-level decision making and reducing political interference.

- **Demonstrate results to inform adaptation, build recognition, and strengthen demand.** The most important evidence developed by Fadama has been that community projects can address rural conditions in Nigeria. The project's effectiveness in generating improved economic conditions and achieving greater community participation has widened public acceptance of the underlying model, and steady implementation progress has allowed communities to recognize the merits of the approach and to participate more actively in community development.

For the World Bank, the Fadama project series has demonstrated the importance of consensus building and local ownership, the utility of exposing national teams to international best practice, the need for heavy investment (of time and money) in project supervision, and the importance of keeping promises early on to build trust and obtain buy-in from communities.

**Despite the Fadama project's widely recognized success, challenges remain in ensuring the institutional and financial sustainability of the experiment.**

Community development has been supported by ad hoc institutional mechanisms and resource mobilization. Some beneficiaries have had to flee areas affected by the insurgency in the northeast, losing assets created under the project. Insecurity therefore needs to be factored into the project's risk management framework. Following the closure of the Fadama project series, expected at the end of 2017, formal institutions will need to take over the "inducement" (Mansuri and Rao 2013) of community development and give communities access to the financing they need to grow further. Political structures have not been altered by the Fadama project, which remains vulnerable to political capture or neglect.





# Introduction

## DEVELOPMENT CHALLENGE: REDUCING POVERTY AND IMPROVING THE LIVELIHOODS OF RURAL DWELLERS BY BUILDING LOCAL CAPACITY TO FULFILL THE COUNTRY'S AGRICULTURAL POTENTIAL

Amina Isa meticulously records in her books how many bags of shea nuts were sold, how many *mudu*<sup>2</sup> of shea butter were processed, and how many jars of hair pomade were packaged. She later checks the bags of shea nuts behind a door marked “Storage Room.” She explains that this excess production will be sold when the market prices improve. Next to the Storage Room is the “Packaging Centre,” where the jars of pomade are kept before being sent across town and to other parts of Nigeria. “Women love our products,” she says. “The hair pomade is a best-seller, and so is the all-natural soap.”

Shortly afterward, Amina records and calculates how much her Fadama User Group (FUG) made that week: they sold five bags of shea butter for ₦30,000 each and about 12 jars of pomade for ₦500 each. One-tenth of that revenue will be saved for future investments, loans to FUG members, and emergencies in the community. Amina is treasurer of the Tswata Mukote FUG Fadama III in Kutigi, Niger State. Like her mother and grandmother, she is in the shea butter business. However, Amina now processes more shea butter in less time with the use of machinery, and she has made a recognizable design for the pomade jars she is selling to an expanding customer base. These innovations have led to tangible changes in her life: she has raised her income, managed to send her children to school, and even saved enough to start second-generation businesses, selling palm oil, melon, and kuli-kuli (a peanut-based snack).

### Post-Independence Poverty Reduction in Nigeria

Nigeria's independence in 1960 brought with it high expectations, including for the expansion of agriculture. In 1959 a *West African Review* article referred to Nigeria as “Africa's Giant in the Sun” (Baxter 1959). As Africa's largest nation, Nigeria had considerable development potential

commensurate with its vast resource-rich territory. It was home to more than 250 ethnic groups, who lived mostly in poor rural areas. Their future depended on a more vibrant agricultural sector.

The early post-independence experience, however, marked by a succession of ineffective governments, slowly eroded Nigerians' aspirations that institutions could deliver, particularly for poor people.<sup>3</sup> A series of failed political attempts followed by military rule, as well as rampant corruption, privileged structures, and noninclusive cultural norms, hindered the development potential of Nigeria's economy. Erratic political transitions affected policy continuity and precluded long-term reform. Inconsistent policies eventually had sharply negative effects on poverty levels.

Overall, efforts by early governments to reduce poverty did not bear fruit. Relative poverty actually worsened in the 1980s, even in the midst of economic growth. By 1992, 62 percent of the population was living below the poverty line (\$1.25 a day), and 80 percent on less than \$2 a day (figure 1).<sup>4</sup>

The challenges were even greater in trying to address living standards in rural areas, where the incidence of poverty was almost twice as high as in urban areas (figure 2). More than 70 percent of Nigeria's poor population lived in rural areas. Despite the massive resources committed to alleviating rural poverty (Aderonmu 2010), gains were slow.

### Nigeria's Agricultural Sector

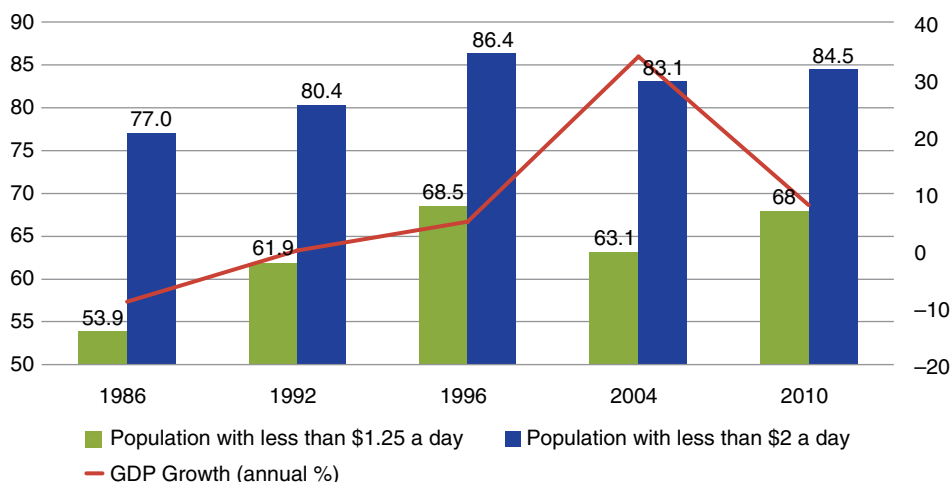
During the early post-independence period, agriculture remained the main source of livelihood for 80 percent of rural dwellers, who relied mostly on staples and subsistence farming. Proceeds from agriculture accounted for over two-thirds of rural economic activity. Yet agricultural production and incomes were volatile because farmers used traditional cultivation methods and rudimentary practices and tools. Rural households were vulnerable to economic shocks and had few means to manage risks. Production depended heavily on intermittent and erratic rainfall, particularly in the drier north. Land degradation was significant, and less than 1 percent of cropland was irrigated. Meanwhile, farmers faced poor access to markets, limited availability

2 A *mudu* is a unit of measurement that amounts to approximately 1.5 kilograms of shea nuts.

3 Several studies have pointed to corruption as the main determinant of citizens' distrust in government (Irohama 2012).

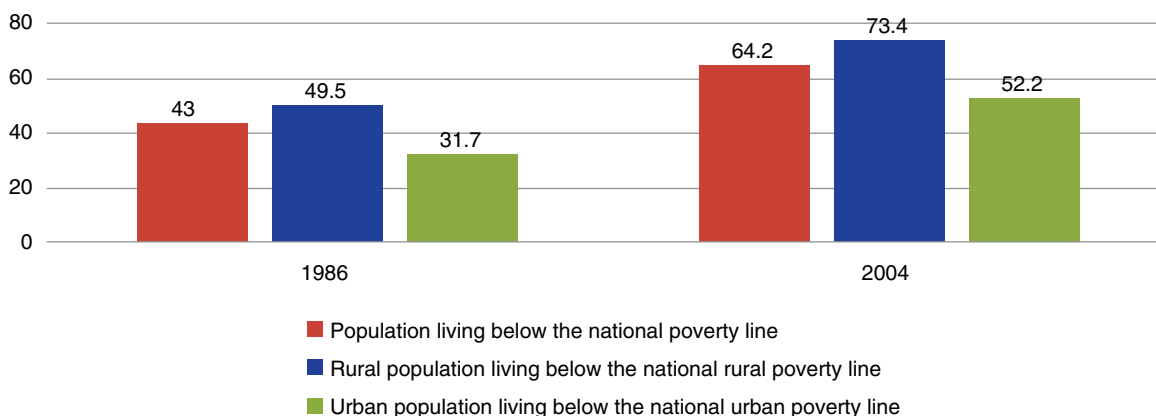
4 All dollar amounts are U.S. dollars unless otherwise indicated.

**FIGURE 1: Poverty Headcount Ratio (% of population) and GDP Growth (annual %)**



Source: World Development Indicators (database), World Bank, Washington, DC, <http://data.worldbank.org/products/wdi>.

**FIGURE 2: Rural vs. Urban Poverty Levels: Nigeria, 1986 and 2004**



Source: World Development Indicators (database), World Bank, Washington, DC, <http://data.worldbank.org/products/wdi>.

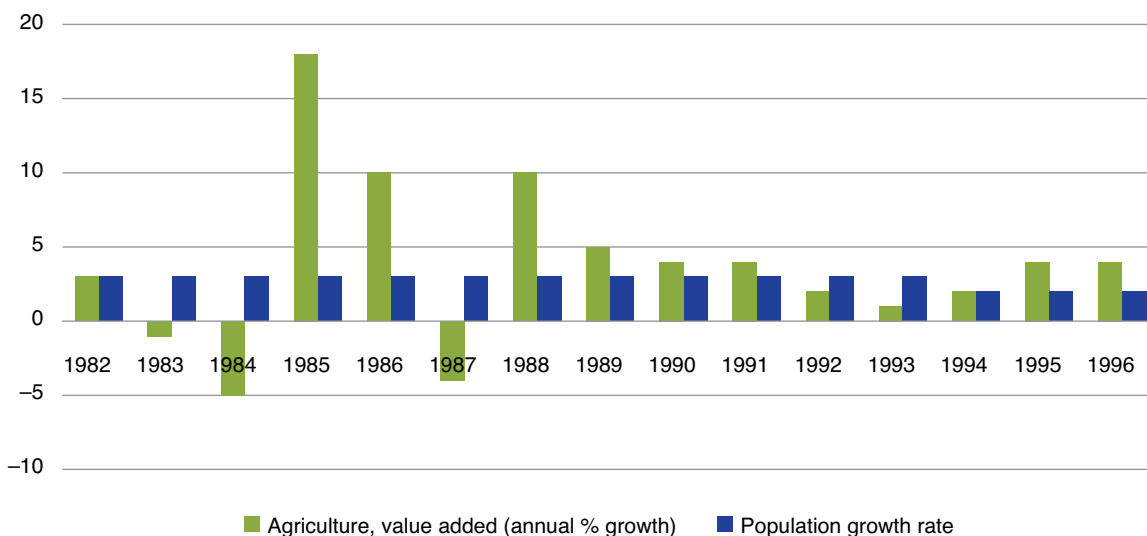
of credit, and deficient infrastructure. The difficulty and high cost of transporting produce to market significantly increased postharvest losses.

Despite its importance, the agricultural sector remained stagnant. Insufficient investment during the petroleum-driven development of the last few decades reduced agricultural productivity and competitiveness.<sup>5</sup> This

decline was exacerbated by low budgetary provisions for the operation and maintenance of storage facilities, input distribution systems, and processing facilities, and for road maintenance in farming areas. In addition, the agricultural sector—which employed nearly 70 percent of the economically active population—lacked access to financial services. As a result, growth in agricultural production did not keep pace with booming population

5 The oil sector has played an increasingly significant role in the Nigerian economy since the 1980s, and in some ways Nigeria exemplifies the consequences of the resource curse (see Lewis and Watts 2015).

**FIGURE 3: Population and Agricultural Growth Rates: Nigeria, 1982–96**



Source: World Development Indicators (database), World Bank, Washington, DC, <http://data.worldbank.org/products/wdi>.

growth (figure 3), leaving many Nigerians to face poverty and food insecurity. In fact, agricultural productivity decreased steadily for most of the post-independence period.<sup>6</sup> Even today, the country is a net importer of some key products and cereals. If Nigeria were to increase yields to levels comparable to those in other countries, it could more than double its agricultural production.

Many targeted interventions were launched to address the challenges in Nigeria’s agricultural sector. These attempts focused initially on infrastructure investments, production support, credits, and market access. A few of these attempts approached rural development in an integrated, multisectoral manner. Later, in the 1970s and 1980s, the World Bank supported a series of agricultural development projects (ADPs) in Nigeria. Those projects were designed, as in many other countries, primarily to encourage increases in production through either the expansion of arable lands or more effective use of inputs. Land irrigation and supportive infrastructure, along with credit, were the main tools used. Responsibility for managing the ADPs and the overall support system resided mainly with the Department of Rural Development in the Ministry of Agriculture.

The mixed experience with ADPs during that period offered lessons for subsequent interventions, especially for the Fadama projects. The varying results and accumulated knowledge obtained from the ADPs contributed to a

better understanding of the most effective methods for dealing with particular climate and soil conditions. For example, the evidence from implementation revealed that improvements in production were significantly better in the northern states of Kano, Bauchi, and Sokoto, particularly in *fadama* areas (World Bank 1995).

An impact evaluation of the ADPs found that interventions in *fadama* areas generated much better outcomes than in other regions (World Bank 1995). Such lands are especially suitable for irrigated crop production and fishing, and traditionally provide feed and water for livestock. Early successes in the *fadama* areas thus created the knowledge base needed to compare the relative effectiveness of activities in distinct regions and to compare the results with those from other World Bank–financed projects that aimed to increase output along valley bottom areas of West Africa (World Bank 1995).

The World Bank’s 1989 Nigeria Strategy for Agricultural Growth built on these initial findings. It identified the replication of already successful low-cost, privately owned, small-scale irrigation as the most important source of growth for agriculture in the north (World Bank 1989). The ADPs’ achievements in northern areas stemmed in large part from developing small-scale irrigation through the extraction of shallow groundwater with low-cost petrol-driven pumps. It was estimated that

<sup>6</sup> Agricultural productivity is defined in general terms as the ratio of the value of total farm outputs to the value of total inputs used in farm production (Olayide and Heady 1982).

investments in small tube wells and pumps could expand the unexploited potential of the *fadama* flood plains by roughly 1 million hectares (World Bank 1989).

### **The National Fadama Development Project Series: Piloting, Adapting, and Scaling**

It was on the basis of the findings just noted that the first National Fadama Development Project (Fadama I) was conceived. Against the backdrop of falling agricultural productivity, erratic political transitions, inconsistent policies, and a general inability to address poverty, particularly among farmers in rural areas, there was a sense that new approaches were needed. Beginning with a pilot project launched in 1992 by the federal government of Nigeria, with support from the World Bank, this intervention evolved into two additional innovative and adaptive projects (Fadama II and Fadama III) and is now well established nationally, with broad support (see annex A).

As discussed shortly in greater detail, Fadama I focused on developing small-scale irrigation and included a component to help farmers organize into beneficiary farmer groups—Fadama Users Associations (FUAs)—to support irrigation management, cost recovery, and access to credit, marketing, and other services. Fadama II aimed to strengthen the capacity of Fadama Community Associations (FCAs) and their constituent Fadama User Groups and to provide financing directly to communities for small-scale infrastructure and asset acquisition. “Before Fadama II, the government decided what the communities needed. With Fadama, there has been a paradigm shift from top down to bottom up.”<sup>7</sup> Fadama III supports sustainable increases in the incomes of users of rural land and water resources in Nigeria.

### **Case Study Research Framework**

This case study aims to show how learning and adaptation within the Fadama projects bolstered their success, and how lessons learned can help inform new operations in agricultural reform and rural development more broadly. In doing so, it explores the following question: How did the Fadama program learn and adapt to changing circumstances, including the social and political context, as it evolved from a pilot program to a successful national project? The hypothesis is that for a project to have continued success it must adapt its design based on lessons learned from previous engagements, from targeted pilot interventions, and from global experiences.

The case study traces the evolution of the Fadama project series to highlight its capacity to learn, adapt,

and transform the design of delivery mechanisms in response to changing circumstances. The chronological review looks at how the program’s success can be attributed to its capacity to build on existing knowledge of local conditions, to pilot and learn before scaling up, to incorporate and test global practices, and to build important new institutional structures at the local level. The case study examines how the evolving institutional structure ultimately led to a change in the social contract among farmers, other stakeholders, and different levels of government, resulting in a cultural shift in the process of local development. This shift was prompted in part by a transfer of global knowledge and adaptation of prevailing global practices.

### **DELIVERY CHALLENGE: ADAPTING RURAL DEVELOPMENT INTERVENTIONS BY LEARNING FROM EXPERIENCE AND SCALING UP GRADUALLY**

Although many evaluations have been conducted of Nigeria’s experience with the Fadama project series (Ibeawuchi and Nwachuckwu 2010; Kudi et al. 2008; Nkonya et al. 2008; World Bank 2000, 2010, 2014), one important element has not received much attention: the process of learning and adaptation to address development challenges that emerged during the implementation and regional expansion of the three Fadama projects. Yet the projects’ experimentations with various types of support to rural communities has yielded a wealth of knowledge on the results, both positive and negative, of different delivery mechanisms. As such, the Fadama project series serves as an important test case on the adaptation of interventions through learning, with important lessons for future rural sector interventions.

### **A Short Overview: 20 Years of Implementation and Adaptation**

A brief overview of the National Fadama Development Project series shows how the design and objectives of each project evolved over time (table 1). The series began with a regional pilot, extending to 12 states in the second phase before being rolled out nationally in its third phase. The process of scaling up Fadama occurred through three separate investment projects during this period. Fadama I (1992–99) piloted new responses to lessons learned under previous ADPs in seven arid northern states. Fadama II (2003–09) fundamentally changed the project’s delivery model, moving from a more traditional top-down approach to a more inclusive bottom-up model that cultivated community ownership and participation.

7 Interview with the Lagos State project coordinator, January 2015.

**TABLE 1: Overview of the Fadama Project Series**

Fadama (1992–99)—Fadama Building on Local Innovations from the Agricultural Development Projects (ADPs)
<ul style="list-style-type: none"> <li>• Project (ID: P002148) approved for a loan of \$67.5 million in March 1992, effective in February 1993, closed in March 1999, and fully disbursed in September 1999</li> <li>• <b>Approach:</b> Top-down, building on the ADPs with a heavy emphasis on infrastructure investment</li> <li>• <b>Scope:</b> Fadama I focused on <i>fadama</i> areas in seven core states (Bauchi, Gombe, Jigawa, Kano, Kebbi, Sokoto, and Zamfara) and invested heavily in small-scale infrastructure</li> <li>• <b>Results:</b> Objectives substantially achieved</li> <li>• <b>Political context:</b> Military rule</li> </ul>
Fadama II (2003–09)—Bottom-Up Approach: Power to Fadama Users
<ul style="list-style-type: none"> <li>• Project (ID: P063622) approved on a credit in the amount of \$69.9 million in December 2003, reviewed in June 2007, and closed in December 2009</li> <li>• <b>Approach:</b> Bottom-up, building on Fadama I with the incorporation of local development plans (LDPs) for a more inclusive model</li> <li>• <b>Scope:</b> Fadama II was implemented in 11 states (Adamawa, Bauchi, Gombe, Imo, Kaduna, Kebbi, Lagos, Niger, Ogun, Oyo, and Taraba) and the Federal Capital Territory (FCT), with the African Development Bank covering six additional states (Borno, Katsina, Kogi, Kwara, Plateau, and Jigawa), bringing the total to 18</li> <li>• <b>Results:</b> Objectives substantially achieved</li> <li>• <b>Political context:</b> End of military rule and transition to democratic rule</li> </ul>
Fadama III (2008–17)—Scaling Fadama Nationwide
<ul style="list-style-type: none"> <li>• Project (ID: P096572) approved in July 2008 in the amount of \$250 million, effective and still ongoing; scheduled to close in December 2017</li> <li>• <b>Approach:</b> Bottom-up, building on Fadama II with the incorporation of the Fadama Users' Equity Fund (FUEF) for a more sustainable model</li> <li>• <b>Scope:</b> All 36 states and the FCT</li> <li>• <b>Results:</b> On track to achieving project targets</li> <li>• <b>Political context:</b> Democratic rule</li> </ul>
Fadama AF (2013–17)—Focusing on Select Crops and Increasing Production along the Value Chain
<ul style="list-style-type: none"> <li>• Project (ID: P130788) approved for a loan in the amount of \$200 million in June 2013, with an expected closing date of December 2017</li> <li>• <b>Approach:</b> Focusing on agricultural development in key value chain products (cassava, rice, sorghum, and horticulture) with export potential</li> <li>• <b>Scope:</b> Six chosen states (Anambra, Enugu, Kano, Kogi, Lagos, and Niger)</li> <li>• <b>Results:</b> Ongoing—too early to assess</li> <li>• <b>Political context:</b> First democratic transition from the ruling party to the opposition</li> </ul>

Finally, Fadama III (2008–17) branched out to cover all 36 of Nigeria's states, as well as the Federal Capital Territory (FCT). Additional financing (2013–17) for Fadama III was recently approved to extend the program once again, this time as another pilot of new approaches.

The first key observation from table 1 is the project's longevity. For more than two decades, the Fadama project series has channeled consistent support and involvement to Nigerian communities and worked persistently to learn and adapt. These were key ingredients in ensuring sustainability and growth.

The second observation is the continuity in the project's main objectives. In all three phases, the principal aim has been to raise farmers' incomes, with the secondary goals of helping to alleviate food insecurity and poverty.

Third is the project's continued success in achieving its objectives. Evaluations and reviews have shown that, in most cases, the projects exceeded their goals in improving the income-generating capacity of beneficiaries (World Bank 2000, 2010, 2014). Under Fadama I, for example, financial return per hectare increased by 65 percent for vegetables and by almost 500 percent for rice

paddies, with 90 percent of farmers acknowledging increases in income during the project period. These accomplishments are particularly noteworthy when placed in the context of the operational challenges posed by Nigeria's substantial size, large population, and diverse interests. Fadama's successes have been preserved even after its expansion into a national program in response to growing demand from excluded communities.

Finally, it is important to note the number of innovations introduced by the project. Adaptations of the project's design occurred primarily in response to the issues and demands that emerged during the implementation of previous phases. Most significant was the introduction of a new development model that relied on the direct involvement and participation of local stakeholders in defining project activities, which allowed the flexibility needed to tailor solutions to specific local conditions. The new approach supported rural communities in strengthening local associations and promoting their engagement in planning and decision making as a means of more directly satisfying each community's particular needs.

### **Delivering Sustainable Change in Nigeria's Agricultural Sector**

Underlying the approach of all three Fadama projects has been the well-established critical importance of local agriculture in broadening economic opportunity for the majority of the population. Yet the challenges of promoting rural development and poverty reduction extend beyond simply expanding Nigeria's agricultural potential. It became increasingly evident over the years, particularly as the Fadama project series evolved, that local agricultural development required institutional

arrangements to strengthen citizens' engagement in community affairs by promoting inclusion and increasing the participation of all affected stakeholders in local planning and economic decision making. Experience with different approaches to rural development had revealed the importance of empowering communities to have a greater voice in defining their economic future—to own their development.

The process of addressing an evolving development challenge needed to be adaptive, capable of learning from past experience, and able to adjust to new conditions. The nature of interventions evolved with changing circumstances—social, political, economic, and international—and responded to emerging demands. As discussed in more detail shortly, it was the process of experimenting with different ways to address the development challenge that exposed the importance of adaptability and innovation. The key lessons from Fadama are about the evolution in delivery mechanisms to address rural poverty and foster agricultural and rural development.

**The process-mapping exercise described in the next section attempts to show how the Fadama projects have evolved and to identify the factors responsible for their continued success in adapting to changing circumstances.** The chronological review describes the critical junctures at which major changes were triggered, as well as the lessons that shaped reforms. It explains how subsequent designs built on accumulated experience and how lessons—even those that emerged from unexpected outcomes or shortcomings in implementation—were continually internalized and codified in studies and evaluations that helped strengthen the program's design over time.

# Tracing the Design and Implementation Process

The Fadama project series evolved from a pilot intervention under Fadama I, to adaptation in Fadama II and III, to scaling up in Fadama III (table 2). This sequence of learning, adaptation, and expansion allowed Fadama to be scaled up gradually from a successful pilot into a national program. This section traces the process of project design, implementation, lessons learned, and adaptation.

## FADAMA I DESIGN: BUILDING A PILOT FROM PREVIOUS EXPERIENCES, MARGINAL CHANGES, AND CONTINUAL EXPERIMENTATION

The Fadama project's emphasis on learning and adaptation began with the initial design of Fadama I (1992–99), which

built on the foundations of knowledge and experience gained from the previous ADPs. A senior adviser at the Ministry of Agriculture explained that a study conducted in the early 1990s was critical to shaping the design of the Fadama project: “The study found that during the dry season, farmers were idle. That same study showed that most of the country could farm around the year. That was how the idea of Fadama started germinating.”<sup>8</sup> As one participant in the design of Fadama I noted, “Fadama was a natural continuity of what was working with the ADPs.”<sup>9</sup> At its core, the design and organizational structure of Fadama I echoed those of the ADPs in *fadama* areas. A senior adviser at the Ministry of Agriculture observed, “Fadama I was initially an expansion of the pilot enclave projects developed under the ADPs in three states. It

**TABLE 2: Learning and Adaptation over 20 Years of Fadama Project Implementation**

Past Experiences: Agriculture Development Projects	Piloting: Fadama I Started in 7 States (1992–99)	Adaptation: Fadama II Started in 18 States (2003–09)	Scaling: Fadama III Cover All States (2008–ongoing)	Piloting: Fadama III AF Covers 6 States (2013–ongoing)
<ul style="list-style-type: none"> <li>• <b>Observation:</b> Exceptional outcomes in <i>fadama</i> areas</li> <li>• <b>Learning:</b> Recommendations for greater investments in small-scale irrigation</li> <li>• <b>Adaptation:</b> Start Fadama in six core states with the greatest potential for productivity growth</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Observation:</b> Conflicts between <i>fadama</i> area users intensified</li> <li>• <b>Learning:</b> Adopt a contextually tailored community-driven development (CDD) approach through local development plans (LDPs)</li> <li>• <b>Adaptation:</b> Expand Fadama; create and strengthen the Fadama Community Associations (FCAs)</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Observation:</b> Demands from communities</li> <li>• <b>Learning:</b> Need a more inclusive model to respond to conflicts in some <i>fadama</i> communities</li> <li>• <b>Adaptation:</b> Adopt a CDD approach using LDPs</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Learning:</b> Need for a more sustainable model that builds on the social and financial capital in communities</li> <li>• <b>Adaptation:</b> Institute the Fadama Users' Equity Fund (FUEF) account to create saving banks for Fadama User Groups (FUGs) and FCAs</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Learning:</b> Focus on crops with export potential in line with government's Agricultural Transformation Agenda</li> <li>• <b>Adaptation:</b> Focus on six states and select crops with comparative advantage in production in the selected states</li> </ul>

8 Interview with a senior adviser at the Ministry of Agriculture, January 2015.

9 Interview with the project's task team leader (TTL), April 2015.

was gradually scaled to statewide projects before going nationwide.”<sup>10</sup> To replicate and improve on the results of the ADPs, Fadama I focused on *fadama* regions in seven core states (Bauchi, Gombe, Jigawa, Kano, Kebbi, Sokoto, and Zamfara) where *fadama* investments had shown considerable promise.

It was crucial for the success of Fadama I to start with small-scale pilots, test the approach, monitor and learn before expanding the program. The concept of piloting first was not widely applied in Nigeria at the time of the project’s launch. Most projects were designed to deliver broadly across the country and to address national needs. Yet the federation struggled to balance the needs of its diverse population, characterized by conflicting interests and religious and ethnic views. The pilot concept faced difficult political pressures at first because it focused on only a few states and localities. A former national project coordinator pointed to three factors that made the pilot approach possible under Fadama I: (1) *design*—Fadama I was intended to meet the irrigation needs of Nigeria’s drier northern states; (2) *geographic scope*—the challenges addressed by the project were limited to the northern part of the country and would not have attracted much interest in the rainfall-rich south; and (3) an *inbuilt flexibility*—it provided for the possibility of expanding the Fadama project beyond the traditional *fadama* areas of northern Nigeria, helping to create awareness of the potential for intensified crop production during the dry season in every part of the country. During the last two years of Fadama I, the project was extended to other states under a centrally coordinated facility at the federal level, allowing each state to benefit from funding of between \$0.2 million and \$1 million.<sup>11</sup>

The design of Fadama I focused on what worked under the ADPs. The main capital investment activities of the Fadama project series have been the construction of tube wells, installation of pumps, construction of new small-scale infrastructure, simplification of drilling technology, and upgrading of irrigation technology. The ADPs had revealed that these interventions were the most effective in reducing the dependency of agricultural production on the intermittent and erratic rainfall patterns in the *fadama* regional areas.

The project’s design also addressed some of the identified weaknesses of the ADPs. The most evident lesson was the need to encourage local beneficiaries, including the private sector and farmers’ organizations, to take a more active role in local projects. In response, Fadama I launched

a pioneering effort to increase beneficiary participation. It introduced, through the FUAs,<sup>12</sup> a mechanism to organize local farmers, strengthen their involvement in community decision making, and give them a more direct financial interest in public investments. The aim was to build their collective capacity to participate in activities related to the drilling, construction, and maintenance of *fadama* infrastructure, along with contributing to cost recovery and monitoring the available water resources. To enhance their use and sustainability, the organizational structure and participation mechanisms of the FUAs were built on existing associative forums, and a key role was given to the engineering departments that provided technical support to farmers.

Another weakness of the ADPs was their poor cost recovery performance, which jeopardized their sustainability. To address this issue, and because initial investments were heavily subsidized, Fadama I became the first World Bank–supported project in Nigeria to insist on full operational cost recovery for beneficiaries (World Bank 2000). Under the project, farmers were allowed to repay the full cost of equipment made available to them over a period of about five years. The awareness created among policy makers and farmers of the viability of full cost recovery under Fadama I proved useful for the design of future projects, and the experience gained by organizing communities became important to the sustainability of the projects.

The lack of reliable, detailed evaluative data from the ADPs prompted recognition of the need for better information systems to monitor and evaluate the effectiveness of interventions and management practices. The design of Fadama I incorporated a component on collecting the relevant information, providing advisory services to project participants, and carrying out studies on many aspects of the program. This information system became an incubator for the advancement of knowledge about agricultural development in the *fadama* regions and for the promotion, through clear information on results, of best practices among beneficiaries. This occurred, for example, in the wider application of improved irrigation technologies sponsored by the project.

## FADAMA I IMPLEMENTATION: AN EXPERIMENT IN PILOTING AND LEARNING

Targeted development pilots have the benefit of generating outcomes that are specific to local conditions, thereby building a knowledge base for learning.

10 Interview with a senior adviser at the Ministry of Agriculture, January 2015.

11 Interview with the project’s TTL, April 2015.

12 The farmers groups were referred to as FUAs (Fadama Users Associations) under Fadama I, and FUGs (Fadama User Groups) under Fadama II and III. An FCA (Fadama Community Association) is a consortium of several (usually 10–15) FUGs.



Implementation of Fadama I produced a wealth of understanding about the effectiveness of the project's design and spawned unexpected developments, many with identifiable shortcomings, that informed the next phase of the project.

Among the positive developments during implementation was farmers' widespread acceptance of the project's technology as most suitable for their small-scale operations. The result was their enthusiastic participation in the project. With proactive assistance from the project implementation unit, about 9,239 FUAs were formed—138 percent of the project's target of 6,693. These groups quickly recognized the power of association and mutual support, particularly in shaping decisions at the local level and increasing farmers' control of irrigation management. Their buy-in was demonstrated by farmers' contributions of nearly half of total local project financing costs (49 percent), compared with 22 percent from state governments, 9 percent from the federal government, and 20 percent from the World Bank (World Bank 2000, Annex Table 8b). The operational plans prepared by implementing agencies helped to expand acceptance of the model by improving FUAs' capacity to manage *fadama* development. This included direct procurement of their wells and pumps from suppliers and continual monitoring of local projects, including environmental effects. Greater involvement of the private sector, local government councils, and nongovernmental organizations (NGOs) in project implementation raised their stakes in the project and improved the chances of sustainability. Finally, the profitability of *fadama* farming became more widely known and created demand for expanding the program.

Other important factors adversely affected project implementation. Some factors were under the government's control, including delays in the release of counterpart funds; delays in project implementation due to management shortcomings in the responsible government agencies; negligence in upholding procurement standards; and scarcity of key inputs that were centrally controlled such as fuel for irrigation purposes. Some factors were outside the control of implementing agencies, including inadequate involvement of farmers, local authorities, and NGOs in project implementation; contract and service delivery delays on the part of some suppliers; and, more important, intercommunity conflicts between pastoralists and farmers. These conflicts arose because Fadama I helped extend the farming season by several months each year, thereby precluding herders from using traditional grazing lands.

Lessons learned during implementation of Fadama I influenced the design of Fadama II. First, it became clear that strong beneficiary involvement in the design and implementation of projects increased the sense of ownership, including responsibility for maintenance of infrastructure. Moreover, the experiment revealed that farmers wanted greater flexibility to select components and investments that suited conditions in their area. The centralized, top-down approach to rural development had undermined community ownership and participation, hindering sustainability (World Bank 2000). According to one task team leader (TTL), "In some communities, we built roads that did not end up being used . . . We did not consult the community on what they wanted the investment to go to."<sup>13</sup>

Second, community-based facilitators were trained for implementation support and close supervision. These facilitators were recruited from *fadama* communities, thus mitigating the risk of "supply-driven/demand-driven" development in many community-based programs whereby facilitators assume the preferences of community members, who in turn tell facilitators what they think facilitators want to hear (Mansuri and Rao 2013).

Third, procurement arrangements were revised. These changes gave farmers greater responsibility for procuring their own inputs and taking charge of their investments, freeing up the implementing agencies to focus more on providing technical assistance, training FUAs, and handling credit operations.

Finally, it was evident that greater attention needed to be paid to downstream marketing of local products. Crop losses were high under Fadama I because of the lack of marketing infrastructure and other value-added interventions such as storage facilities and processing. Improving these services was deemed a critical step in boosting agricultural income.

## **FADAMA II PREPARATION: ADAPTING TO CHANGING SOCIAL AND POLITICAL CONDITIONS, RESPONDING TO GROWING DEMANDS, AND INCORPORATING INTERNATIONAL BEST PRACTICES**

The lessons learned through implementation of Fadama I, together with developing global best practices, prompted a broader and more extended debate over the future direction of the Fadama project. This debate

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13 Interview with World Bank senior agriculture specialist, January 2015.

took place at a time of profound social and political change in Nigeria. The end of military rule ushered in a period of democratically elected government, which in turn fostered a greater desire for citizen participation in the nation's social, political, and economic affairs at all levels of society, including in rural areas. At the same time, development assistance was beginning to engage communities more fully in the decisions that affected their economic development. These two major trends fundamentally altered the project's delivery philosophy.

The demand to scale up the project was locally led and supported by many leaders at different levels of government, including at the federal level. Farmers and citizens in a wide variety of communities saw the benefits being derived from the Fadama project. As one TTL noted, "The high financial returns for participating farmers raised their desire to invest further in *fadama* development and also attracted other farmers to the project" (World Bank 2000, v). This strong demonstration effect built the Fadama project's reputation as a valuable development intervention. Communities in many states, supported by local and regional government leaders, wanted the Fadama project to expand to their areas. There was general support, even at the federal and state levels, to extend Fadama to a second phase and expand it into more states. There was no agreement, however, on how to capitalize on the lessons learned under Fadama I by adjusting to a community-driven development (CDD) model. Therefore, considerable time, debate, and persuasion were needed to reconcile the contrasting views on the future of Fadama. As a result, preparation of Fadama II stretched over almost two years before the project's eventual approval in late 2003.

The government saw the Fadama project as an important tool, not only for economic support but also for social inclusion. Government leaders' direct and active participation in the preparation process for Fadama II sent a strong signal of political support to implementers and communities alike. As noted by one participant, "The Ministry of Agriculture at both the central and state levels played a pivotal role during preparation and implementation" (World Bank 2010, 20). The government endorsed scaling up the project to cover 11 core states and the FCT initially, and then a total of 18 states, including the FCT. The project was expected to reach about 3 million beneficiary households in *fadama* communities, including direct users of *fadama* resources and nonusers who benefited from improved infrastructure, other productive investments, and institution-building interventions in targeted *fadama* communities. The *fadama* population was heterogeneous, comprising not only farmers, but also fishers, pastoralists, and hunters/gatherers. Other indirect beneficiaries included public

and private sector service providers, including NGOs, and staff of public agencies at all levels of government. Preparation of Fadama II aimed to ensure that indirect beneficiaries were recognized as legitimate users of shared resources such as scarce land and water. Broader participation could help different resource user groups learn to respect each other's rights and to consider the impact of their individual decisions on others.

This being said, the government's original concept for Fadama II did not fully address some of the most basic lessons of the previous project. Despite its reformist mindset, the government initially intended to use the existing organizational structure of the ADPs, allowing them to continue to serve as the project's institutional home. This continuation of a top-down, supply-driven approach did not address the growing demands among communities for a greater say in local decision making. Equally important, it ran counter to the position of the development partners, including the World Bank, who felt that lessons from CDD programs in other countries could help the Fadama project overcome some of the challenges encountered in the first phase. International experience had demonstrated the positive impact of CDD projects in rural areas and their ability to manage conflicting local interests, and the international development community was becoming increasingly interested in CDD as a new paradigm for ensuring community-level participation in local service delivery.

Nigeria was testing the CDD approach in social activities such as school building under the World Bank-supported Community Based Poverty Reduction Project (CPRP), the first Nigerian government-funded CDD project. In addition, the government had created a new public agency to partner with communities in providing education, health, and water services at the local level. Many stakeholders, including the World Bank team, felt these developments could assist in improving the design of Fadama II.

Those involved in the preparation of Fadama II were deeply concerned about the local conflicts that had arisen in many Fadama I areas. As noted earlier, preexisting conflicts between pastoralists and farmers became more pronounced under Fadama I (World Bank 2010; Okeke 2014), leading to deadly confrontations and presenting serious security concerns. According to one official at the National Fadama Coordination Office (NFCO), the focus on crop farmers under Fadama I, to the exclusion of livestock and fishery farmers, exacerbated existing tensions: "Immediately after Fadama I, we realized that many more segments of rural stakeholders needed to be targeted; social inclusiveness became a necessity."<sup>14</sup> Furthermore, the growing relative prosperity of some

14 Interview with a project coordinator at the NFCO, January 2015.

members of *fadama* communities gave rise to tensions and feelings of exclusion, and many excluded communities resented Fadama. As a result, many participants in the preparation of Fadama II felt strongly that the design of the new project needed to address these issues by promoting inclusion. They argued that participation could ameliorate the conflicts through searches for better local solutions to existing challenges.

Incorporation of CDD principles into the project met with resistance, however. National government leaders were pessimistic about the applicability of such an approach in a country emerging from 30 years of military rule and still divided. Local government leaders doubted that villagers could manage complex project cycles. A senior NFCO adviser recognized that “the whole idea of CDD, which started with Fadama II in Nigeria, was absolutely [unheard of]. We were not used to this kind of approach.”

Preparation of Fadama II included broad consultations with a wide range of stakeholders. These consultations allowed participants to develop a better sense of the communities’ aspirations (World Bank 2010). They helped create awareness and build consensus, eventually garnering the endorsement of the communities for design changes that incorporated CDD approaches and introduced new methods of local planning and consensus building. Factors such as regular communication and involvement of traditional institutions helped to cement the buy-in of recipient communities.

Preparation of Fadama II also incorporated a process of learning from the experience of other countries. During this time, a team of 22 Fadama officials participated in study tours to Sri Lanka and India as part of a South-South Knowledge Exchange program (WBI 2011). The experience of Sri Lanka offered ideas on possible institutional arrangements, the role of women and youth, and infrastructure cluster models (WBI 2011). In assessing India’s program, the Fadama team gained a better understanding of how farmers collaborated and designed their own institutional mechanisms, how farmer groups achieved economies of scale, how stakeholders formed private-public partnerships, and how project implementers built ownership at all levels (WBI 2011). As such, this exchange program allowed the Fadama team to tailor the best elements of other successful CDD implementation mechanisms to the context in Nigeria. State officials began to map out how best to structure a locally tailored CDD approach that would employ local facilitators for close supervision and develop training materials that were appropriate for farmers’ levels of education.

Together, the philosophical shift to a bottom-up model, the extended consultations, and the focus on international knowledge exchange extended the time required to prepare the project. The lengthy preparation process eventually resulted in an agreement to change the project’s design and institutional arrangements. The acceptance of a CDD approach that would engage beneficiaries and stakeholders in planning and consensus building marked a major shift for World Bank–financed rural projects in Nigeria.

## **FADAMA II DESIGN: TAILORING THE COMMUNITY-DRIVEN DEVELOPMENT APPROACH TO RURAL CONDITIONS IN NIGERIA AND INTRODUCING INSTITUTIONAL CAPACITY BUILDING AT THE LOCAL LEVEL**

Once the CDD-based concept design was accepted, the challenge became to adapt the model to the Nigerian context. This was particularly important with regard to the institutional and governance arrangements that had to be created to implement a new, decentralized delivery model that transferred responsibility for day-to-day implementation to the local level, relying heavily on the collective actions of local communities. The new decision-making structure needed to consider Nigeria’s unique local associative and administrative structures, particularly the roles of local governments and farmers’ associations.

The main transformation was the creation of Fadama Community Associations at the local level. Each FCA was charged with preparing and agreeing on a local development plan (LDP) to guide the project’s investment decisions at the local level. The communities were empowered with the financial resources and the training and technical support needed to properly use public funds. Meanwhile, the federal, state, and local governments retained important roles in reviewing and approving the LDPs.

Integrating the use of LDPs as drivers of inclusive project management was one of the key innovations in the design of Fadama II. As a member of the National Fadama Coordination Office noted, “The introduction of the LDP concept was a homegrown Nigerian innovation in local planning.”<sup>15</sup> This design feature tailored the CDD approach to Nigerian conditions, while retaining basic community-centered principles. The LDPs reflected the FCAs’ joint agreements on how to finance and carry out

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15 Interview with a member of the NFCO, January 2015.

the identified subprojects. Introduction of the LDPs constituted a “culture change in the sense that the planning of community development activities followed an inclusive and participatory process, whereby all potential Fadama resource users—farmers, pastoralists, hunters, fisher folks, traders, agro-processors—participated in collective decision making on setting the priorities for their community and how the funds from the project could be utilized to meet their collectively-identified needs (in the form of subprojects)” (World Bank 2010, 3–4). The establishment of the LDPs as a participatory mechanism increased the likelihood of internalizing community needs, perspectives, and ownership.<sup>16</sup>

The institutional arrangements established under Fadama II helped to strengthen communities’ existing social capital by enhancing collaboration and cooperation among different groups to ensure inclusiveness and accountability while avoiding the potential for conflict. The structure was multilayered. Just as in Fadama I, community groups—now called Fadama User Groups—were the fundamental organizational unit. Formed on the basis of economic interests, they remained the closest representatives of the beneficiaries. Because of the tendency under Fadama I for FUGs to work independently, even if they were in the same community, Fadama II introduced formal arrangements to bring the FUGs together and improve communications. The FUGs were placed with other contiguous communities under the umbrella of broader Fadama Community Associations. The FCAs were, in essence, a federation of FUGs within a wider regional area. They served to share knowledge more systematically, to identify the most important subprojects for the community at large, and to devise a more coordinated approach to implementation activities, especially funding requests. FCA members oversaw the process of collective bargaining around the development of an LDP and were responsible for its final preparation and presentation.

Membership of the FUGs was broadened to include stakeholders other than farmers, thereby promoting greater participation. In addition, quotas were introduced to ensure the inclusion of segments of the community, such as women and youth, who had not traditionally been involved in community-level decision-making processes. Each FUG was composed of 20 members, including at least five farmers, five women, and five youth committee members.

By enabling the participation of representative members of the community, the FUG structure enhanced

accountability. Each FUG member participated in one of its subcommittees as a means of strengthening involvement in decision making and avoiding elite capture—a concern highlighted in the literature on CDD (Rao and Ibáñez 2003). The politically savvy design of Fadama II created an informal system of mutually beneficial exchanges between Fadama participants and the local elite. According to the independent Project Performance Assessment Report for Fadama II, “a more elongated engagement and sensitization period was needed at the village level to mitigate risks of elite capture and undue influence by traditional authorities and village elites” (World Bank 2014, xiv). Initial training conducted under Fadama II may have prepared participants to engage with local elites while managing expectations. In some communities in Kutigi, Niger State, where it is customary for local elites to fund the FUGs’ counterpart contribution, communities have reduced their subprojects’ susceptibility to elite capture by sending strong signals about the consequences of breaching the informal contract. For example, a powerful wealthy contractor involved with some of the FUGs was taken to court for trying to divert funds intended for the project.<sup>17</sup> In many instances, FUGs had the ability to supervise providers’ compliance with service contracts. The Implementation Completion and Results Report for Fadama II concluded that “the LDP preparation process has integrated the principles of transparency and inclusion and significantly improved group cohesion” (World Bank 2010, 17).

Fadama II further strengthened direct support for community organization, building on pilots under Fadama I. With the shift to a more decentralized, participatory approach, communities needed significant financial and technical advisory assistance. In response, about 20 percent of the project’s financial resources was allocated to create a network of 480 facilitators (40 per state covered by the project), whose main responsibility was to provide direct capacity building assistance to both the FUGs and FCAs. The training provided by these facilitators proved to be an integral part of the success of the Fadama project. The facilitators helped the FUGs craft more robust LDPs and the FCAs identified their priorities through inclusive participatory planning (World Bank 2003). They engaged in social mobilization, group formation, sensitization, and training on inclusive decision making and participatory local development planning. They also helped create partnerships among community organizations, service providers, and local governments. The facilitators were so important to the project’s success that they were maintained despite initial plans to phase

<sup>16</sup> Interview with the project’s TTL, April 2015.

<sup>17</sup> Rao and Ibáñez (2003) refer to this type of control as “benevolent capture,” whereby “elite control can be an effective part of the cooperative infrastructure when power is used to facilitate collective action toward the public good” (Mansuri and Rao 2013, 75).

them out after the FUGs and FCAs received the first round of training.<sup>18</sup>

The design of Fadama II gave local governments an important role to play in reviewing community requests for project support. The Local Fadama Desk (LFD), which was placed in the local government council and reported to the Local Development Committee, was tasked with ensuring that there was no duplication of projects within that local government and recommending the projects to be approved at the local government level. The Local Fadama Desk Officers (LFDOs) coordinated with facilitators and advisory service providers, who were always in direct communication with the community groups. The desk officers thus served as key brokers among the FUGs, FCAs, and local government. The Niger State Project Coordinator defined the LFD as “the secretariat for Fadama in each local government.”<sup>19</sup> This arrangement granted Fadama a certain level of legitimacy because local governments saw the project as an integral part of its system and the communities recognized it as a legal entity.

The governance structure of Fadama II was designed to introduce incentives for participants at different levels, with the goal of enhancing stakeholder commitment to the project and thus improving its sustainability. At the community level, measures were taken to induce joint ownership of assets. Participants were required to contribute financially to purchase or build assets, and there was an associated ownership structure for the assets. Under Fadama II’s pilot asset acquisition component, it was possible for the FUGs and FCAs to own tangible assets. This component, which proved critical for the project’s beneficiaries, aimed to enhance the efficiency, effectiveness, and productive capacity of the FUGs and FCAs, thereby enhancing their ability to generate income. By showing visible improvements in the accumulation of assets, the project could build ownership and commitment.

Local governments also had a financial stake in Fadama projects. Drawing on lessons from the first phase, Fadama II required financial contributions from local governments, particularly in financing local infrastructure. The communities themselves covered 10 percent of the cost of infrastructure (such as rural roads, markets, and boreholes), whereas local governments contributed 90 percent. One traditional local authority found that this model not only improved ownership, but also created a platform for interactions between citizens and their local

government: “Greater involvement of local government was necessary to bring people closer to their government and the government closer to their people.”<sup>20</sup> (This was viewed as a missing element of Fadama I.) Because of this opportunity, local governments became more invested in supporting the FUGs and FCAs in their area, and more accountable to them as well. This closer collaboration eased administrative processes for the FUGs and FCAs, increased their access to bank financing (“a letter from local government that says ‘Fadama’ is rarely rejected by local banks”),<sup>21</sup> and helped the government to better tailor its interventions in the communities. According to the State Fadama Coordination Office (SFCO) project manager in Niger State, Fadama interventions in many instances brought attention to the particular challenges that communities faced: “Government noticed things because of Fadama.”<sup>22</sup>

The design of Fadama II allowed for adaptation that would better respond to needs on the ground by ensuring adequate counterpart capacity and better feedback and monitoring loops. For example, when early supervision missions found that the FUGs needed capacity strengthening to adequately prepare and implement their LDPs, the project’s design was adapted to include a new demand-responsive advisory service, a greater number of community-based facilitators (40 per state, up from the original 20), and the pilot asset acquisition component discussed earlier. At midterm, the project’s monitoring and evaluation system was overhauled to be more responsive and allow for quicker problem detection and adaptation. A management information system was adopted at each LFD.

## **FADAMA II IMPLEMENTATION: A LEARNING EXPERIENCE IN ADOPTING COMMUNITY-DRIVEN DEVELOPMENT AND CREATING SOCIAL AND ECONOMIC CAPITAL IN RURAL AREAS**

Fadama II generated a wide range of lessons on introducing CDD approaches in Nigeria (box 1). In a broad sense, the project showed that community-based approaches could flourish in diverse localities and strengthen their social capital. During the design phase, it was unclear whether communities possessed the social capital and capacity needed to empower farmers, but these elements were transformed during Fadama II. Participation in the FUGs (12,570) and FCAs (1,470) across the project’s 12 states exceeded expectations

18 Interview with the project’s TTL, January 2015.

19 Interview with the Niger State project coordinator, January 2015.

20 Interview with a traditional local authority in Kutigi, Niger State, January 2015.

21 Interview with an SFCO officer, Niger State, January 2015.

22 Interview with a project manager at the SFCO, Niger State, January 2015.

## BOX 1: Fadama's Use of CDD Principles

Fadama II and III applied CDD principles to transform how local rural communities secured sustainable income generation. The literature identifies as enabling conditions for CDD (annex B) the existence of strong political commitment at the top (ensuring that power shifts from top-down to bottom-up) and a well-designed decentralization process (across political, administrative, and fiscal dimensions). These conditions are supported by an empowered and active civil society, mechanisms for democratic accountability to citizens, free media, and relatively strong NGOs (Binswanger-Mkhize, de Regt, and Spector 2010; Mansuri and Rao 2013; Mukherji 2013). It could be argued that such conditions have been present, at different levels and with more or less intensity, throughout evolution of the Fadama series.

By 2001, the World Bank had identified some key principles for supporting effective and sustainable CDD initiatives (Dongier et al. 2002; Wong 2012). These included (1) building participatory mechanisms for community control and stakeholder 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) ensuring social and gender inclusion; (7) designing for scaling up; and (8) investing in an exit strategy (Dongier et al. 2002).

Fadama's interpretation of participatory interventions deserves further analysis, which could contribute to the extensive literature on CDD effectiveness. For example, the principle of investing in capacity building of community-based organizations, together with the findings of Mansuri and Rao (2004, 2013) that induced participatory interventions work best when supported by a responsive state, show Fadama to be a midway or hybrid solution, with strong institutions at the central level replicating the structure in a uniform manner throughout the states while community-level entities (FUGs and FCAs) provide an autonomous space for deciding—with a constrained level of flexibility—the initiatives in which to invest. This hybrid solution includes the introduction of sustainable solutions at the community level, such as the Fadama Users' Equity Fund (FUEF), while acknowledging the need for a permanent state role in co-financing this program because communities do not possess the financial capacity to fully self-sustain all aspects of the project. Local governments thus need to set aside and secure budget resources for recurrent spending activities such as infrastructure maintenance.

The Fadama project series has tailored CDD principles on creating a decentralized participatory structure by establishing the FUGs and FCAs to improve social cohesion and develop social capital within communities. Mansuri and Rao (2013) confirm the need for serious and sustained engagement in building local capacity as a condition for creating social capital. Fadama's FUGs and FCAs have managed at different community levels (within a village and in a cluster of villages, respectively) to improve the stock of social capital and foster more effective communication with local government.

(World Bank 2010, 38–39). The Project Performance Assessment Report for Fadama II found the model to be more effective in rural areas than in periurban areas, in part because of the tighter social cohesion in rural communities, which tend to be smaller and sustain greater interaction among community members. “This finding coincides with the empowerment literature that generally finds that social cohesion is an integral ingredient to successful social capital formation and associated welfare gains” (World Bank 2014, 11).

Social cohesion within communities grew under Fadama II. Empowering communities to take charge of their own development agenda required strong institutional arrangements for participation and ongoing support for local groups. Program evaluations and field

observations have shown that social capital expanded under Fadama II on two levels: (1) within the community; and (2) in the interface between communities and their local government through the Local Fadama Development Committee (LFDC). Toward the end of Fadama II, more than 1,300 LDPs had been approved and 1,246 were being implemented (World Bank 2010, 12, 39). Because of differences in capacities at the local level, performances varied across regions, with LDP implementation rates ranging from a low of 67 percent in Kebbi to a high of 98 percent in Bauchi. Reflecting the high degree of social cohesion, conflicts among Fadama users declined by more than 75 percent from the baseline during the project. In the end, then, Fadama II's method of social organization, conflict avoidance, and conflict resolution exceeded expectations.

The participatory process of LDP preparation and implementation introduced in Fadama II helped expand social capital, strengthen local governance, and build community decision-making capacity. Through this process, Fadama II transformed the paradigm from a culture of dependence, whereby farmers played a passive role in their own development, to one of active involvement—from identification to implementation of subprojects. According to program evaluations, the LDPs expanded social capital at four levels: (1) institutionalizing through the LFDC community participation in local government decisions on the use of public resources; (2) strengthening communities' capacities to select, prioritize, and implement investment decisions; (3) creating partnerships among community organizations, service providers, and local governments; and (4) fostering citizenship through increased awareness of the social responsibilities of citizens, their representatives, and public authorities in community matters and field implementing agencies. The chairman of one FUG in Adamawa claims that Fadama granted him an identity: "Before Fadama, nobody knew me. Now everyone calls me Fadama."<sup>23</sup> Community participation in the development process built a new culture of governance, including principles of transparency, accountability, and democratic decision making.

The support provided by project facilitators was critical in helping rural communities become more inclusive. The presence and assistance of the facilitators were instrumental in building communities' organizational capacities and helping them become more sensitive to the needs of all stakeholders. For example, the facilitators coached communities in designing development plans that gave priority to the less privileged in society, including poor people and youth. The implementation structure ensured constant communication among the facilitators, the implementation team, and the communities. The facilitators received regular, targeted technical assistance and logistical support from the World Bank. A senior adviser at the NFCO found the close project supervision and prolonged community discussions to be critical to communities' acceptance of the CDD concept. In this way, the project developed a critical mass of highly trained personnel who could be redeployed by the relevant government agencies.

The financial arrangements under Fadama II helped generate stakeholder interest and commitment. The project had a significant impact on productive asset

acquisition across a large segment of beneficiaries, including women. Participation in the project increased the value of individual productive assets by 49 percent and that of group-owned productive assets by 590 percent (World Bank 2010, 17). The greater impact on jointly owned productive assets reflects the project's policy of supporting group acquisition of productive assets—the dramatic increase was due in large part to cash transfers from the 70 percent matching fund for the FUGs. The national Fadama project coordinator noted that this was a critical step in gaining communities' trust: "Users can easily identify with direct ownership of tangible assets, the impact of which was direct and increased their income."<sup>24</sup>

It was the overall economic gains made by beneficiaries and their satisfaction with the delivery model that contributed most to the growing acceptance of the Fadama project. Fadama II proved that the new participatory model could also sustainably increase the incomes of Fadama users. Survey data indicated that beneficiary incomes rose by 63 percent, surpassing the project's original goal of increasing the average real income of 50 percent of targeted beneficiaries by at least 20 percent. The successes achieved during Fadama II convinced many more community members to join, with the understanding that Fadama was their project and it was up to them to take charge of it: "Even with the poverty level, farmers were able to squeeze and raise some financial resources to enable them to pay for the beneficiary contribution and access a lot of the facilities that were available under the Fadama II project."<sup>25</sup>

Implementation success sparked the interest of several development partners in supporting Fadama II. The African Development Bank was already implementing a project similar to Fadama II in six states, bringing the total number of states benefitting from the project to 18.<sup>26</sup> In 2006 the Global Environment Fund financed the Critical Ecosystem Component of Fadama II to enhance in six states the productivity of *fadama* areas and the livelihood systems they supported through sustainable land use and water management. The government of Japan supported Fadama II with a Population and Human Resources Development grant of \$1 million and later provided an additional \$828,000 for preparation of Fadama III (World Bank and Government of Japan 2005). These partners were motivated by the strong project management unit backed by a high level of political support at the federal and state levels, by the quality

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23 Interview with a Fadama participant, Adamawa, May 2015.

24 Interview with the project's TTL, April 2015.

25 Interview with an NFCO adviser, January 2015.

26 The six states financed by the African Development Bank were five noncore Fadama I states—Borno, Katsina, Kogi, Kwara, and Plateau—and one core Fadama I state, Jigawa (African Development Fund 2003).

of the project team, and by the results achieved under Fadama I.<sup>27</sup>

Implementation of Fadama II showed that a delivery model based on stakeholder empowerment could address the challenges of poor rural communities. The project's success in achieving the same types of objectives set out under the previous pilot, but under a new model, pointed to the effectiveness of the CDD approach in this case. Steady progress allowed communities to recognize the merits of the approach and to participate more actively. The model's success became widely known, leading to widespread demand for further expansion based on the project's attractive new forms of community ownership, social inclusion, and collective decision making. Once again, the demonstration effects of a pilot that had been scaled up generated interest among excluded communities.

A few shortcomings in the implementation of Fadama II provided lessons for the design of the third phase. To be effective, support to communities had to be sustained and continual. Efforts to empower communities to take charge of their own development were more successful in areas that enjoyed constant support, whereas results were less satisfactory in areas where program activities ceased with the end of financing. Evaluations found that the capacity to participate in local development planning in a socially inclusive and accountable manner deteriorated rather quickly in Fadama II villages that received support from only one project cycle (World Bank 2014). Although the project was successful in supporting 95 percent of all FCAs in implementing their LDPs, a random sample a few years later showed that the majority of those plans had not been updated, even though they could have gained access to additional financing. With few exceptions, interviews with local government officials revealed that the participatory and negotiated decision making promoted by Fadama declined with the reduction of advisory support. Villagers expressed disappointment about the lack of continued access to facilitated negotiation for the provision of local goods and services. The conflict training and mediation module piloted by the project was appreciated by stakeholders, but was ultimately found to be unsustainable in the absence of the project architecture and support system. Similarly, the maintenance of public infrastructure faced challenges without technical assistance.

The role of the facilitators offset, but could not fully prevent, the potential for local elite capture of the project. The facilitators were expected to encourage inclusive and participatory decision making amid complex social relations in new environments, all while cobbling together a village's first LDP. With many responsibilities,

they were often unable to avoid undue influence by the local traditional authorities or village elites. In many cases, Fadama benefits appeared to have been enjoyed more by group leaders and active members than by inactive members, or more by elite group members than by nonelite members. Fadama members with preexisting strong interpersonal networks seemed to have more voice in the choice of assets and greater control over their use. The project's midterm review observed that, in some cases, there was collusion between advisory service providers and FUG/FCA officials, compromising the independent recruitment of providers and potentially signifying a degree of elite capture in the project and risks over time to fostering sustainable enterprises. There were also cases in which local leaders joined FUGs for the financial incentives. Membership allowed them to receive loans from the group in order to engage in independent social and economic enterprises (such as weddings or other businesses) and to cater to emergencies. In addition, local leaders benefitted from revenues generated by FUGs and by the social capital developed through the project.

The financial incentives, particularly the large subsidies provided for rural infrastructure investments, contributed to low levels of maintenance in many projects. An impact assessment conducted by the International Food Policy Research Institute (IFPRI) found that the high subsidy offered to communities for rural infrastructure (10 percent community, 90 percent project) may have encouraged the construction of public goods that could not be maintained over the medium to long run for lack of funds (IFPRI 2010). The experience of Fadama II thus showed that high matching grants relative to counterpart contributions discouraged proper planning and affected the sustainability of the subprojects.

## **FADAMA III DESIGN: THE CHALLENGES OF REPLICATING A SUCCESSFUL FORMULA NATIONWIDE**

The success in applying the decentralized development model under Fadama II generated further demand among communities, political leaders, and development partners for its expansion—this time to the national level. The project's proven track record had broadened its recognition, and Fadama had become something of a brand that conveyed the benefits of greater community organization and participation in local development. The calls for expansion culminated in the approval of Fadama III in 2008 and its eventual rollout nationally, covering all 36 states and the FCT. The project continued to finance investments in productive community infrastructure to increase agricultural productivity and

27 Interview with the TTL, April 2015.



diversify sources of livelihood, with the same focus on building the capacity of community organizations to strengthen social capital. The project's overall objectives were recast, however, to focus more on rural poverty and on promoting socially inclusive and the environmentally sustainable management of natural resources, reflecting the importance placed on these issues by development practitioners.

The expansion was a challenge for both application and implementation of the model. The magnitude of the model's expansion was significant. It anticipated the creation of about 111,000 FUGs, each comprising 20 households. The project was thus expected to benefit about 2.2 million households (16 million members) directly and perhaps another 2 million indirectly. These were large numbers across a vast area, including communities with widely varying capacities for organization, participation, and implementation. The number of participating local governments was to reach 560, with the establishment of 7,400 FCAs.

Previous experience had revealed the considerable diversity in organizational capacity among communities and the general institutional weaknesses in some states. To deal with this challenge, Fadama III adopted a common approach to project implementation as a means of bringing all states (including those with capacity gaps) "up to speed with implementation."<sup>28</sup> A detailed project implementation manual was developed, and a shortened version was translated into local languages. Similarly, the institutional structure was replicated uniformly across states. The participatory approach was to be carried out under the same set of arrangements at the local level, with the organization of FUGs according to economic interest groups and the creation of umbrella FCAs. The LDPs remained the core mechanism for community participation, and local government participation was structured in the same way, based on the establishment of LFDs and the role of LFDCs serving as clearinghouses for LDPs.

Although consistent across the country, this implementation framework has been adapted in response to lessons learned at local and state levels. In Adamawa, FUGs are allowed to make in-kind contributions to the FUEF—by, for example, purchasing assets such as livestock—rather than through bank deposits. This adaptation was made in response to the scarcity of bank branches at the local government level and to address the Islamic prohibition of usury (and, accordingly, the receipt of bank interest). Some LFDs have also added fiduciary requirements to prevent fraud and corruption at the community level. After the case of a fraudulent FUG chairman, for example, the FUG began to require

that traditional leaders jointly vouch for newly elected ones. Moreover, some local government chairmen are clearing all FUG payments to ascertain their regularity, with the consent of the communities.

Within the uniform institutional structure, the design of Fadama III grants participating communities considerable flexibility to develop their own plans and choose their own local subprojects. Communities remain empowered to make decisions at the local level, and FUGs are still responsible for identifying, preparing, executing, supervising, operating, and maintaining their subprojects. Fadama III has enhanced flexibility by expanding the types of products and investments that are eligible for financing under the project, thereby giving communities more choices in addressing local needs.

Through the Fadama Users' Equity Fund, Fadama III has introduced an important innovation in the project's financial arrangements: a revolving asset maintenance fund. The objective of this fund is to strengthen the commitment to maintaining local subprojects. The fund is financed and owned by the FUGs, and it is funded primarily from annual FUG contributions. This second-generation fund is to be invested by FUGs at the community level, according to priorities and mechanisms they define as the sole owners of the fund. The revolving nature of the fund ensures the continued circulation of financial capital in the community or investment in physical capital, depending on the decisions made by the FUGs. The fund constitutes the basis for developing a sustainable savings and loan scheme. It has strengthened financial literacy among FUG members, assisted by the facilitators, who help to manage the fund and identify opportunities to improve the sustainability of subprojects.

### **FADAMA III IMPLEMENTATION: CONTINUED PROGRESS DESPITE STRETCHED CAPACITY**

Although implementation of Fadama III is still under way, the results achieved thus far provide a basis for preliminary observations about its sustainability. The project is on track to achieve its main target of a 40 percent increase in the average real incomes of 75 percent of Fadama user households. As of September 2014, the average income of Fadama beneficiaries had increased by 19 percent nationwide (48 percent for female beneficiaries and 36 percent among the poorest third of beneficiaries). Yields of major crops have increased substantially. To date, more than 4,700 LDPs covering about 60,000 subprojects have been prepared and approved. As a result of the capacity building given to beneficiaries, most of the LDPs are on track to be fully implemented. With

28 Interview with an officer at the NFCO, January 2015.

ongoing technical assistance, project implementation has been satisfactory along all parameters.

Implementation of Fadama III continues to generate useful lessons for future initiatives. These lessons relate mostly to the challenge of scaling up the program to the national level amid uneven performances among communities. Because the program has been mainstreamed across local governments but not scaled up financially, the nationwide rollout has significantly stretched the program's capacity and diluted available resources across a much larger number of beneficiaries. Although there was some effort to reinforce the capacity of beneficiaries who had received support under previous phases, Fadama III purposefully selected new villages that had not been treated under the second phase. This left many of the beneficiaries of Fadama II disappointed. Again, the implementation capacity of new communities has been built gradually, taking advantage of assistance from facilitators to reinforce a continual learning process that recognizes the importance of institutional capacity building. The uneven performance of communities under Fadama III resulted in part from differences in organizational capacity, but also from variations in agricultural conditions. This was not a significant factor in earlier phases, as most of the states participating in Fadama I and II were located in the humid and dry savannah zones. The homogeneity of agricultural conditions in earlier phases limited the project's ability to determine whether activities could be replicated elsewhere. Fadama III is compensating for the different agricultural outcomes by focusing more broadly on rural development activities and on poverty reduction. The project is also devoting greater attention and support to resource users across the *fadama* value chain, from production to marketing.

Fadama III is now a well-established project that has "come of age"<sup>29</sup> and gained wide acceptance as an effective intervention. In 2011 the minister of agriculture identified Fadama as the best-performing agricultural project in his ministry's portfolio, a clear outlier. The project has taken thousands of rural dwellers out of extreme poverty, building a strong national brand and transitioning previously disenfranchised farmers into

small-scale business owners. Recently, it was mobilized in an emergency situation to contribute to efforts to restore the livelihoods of a few thousand internally displaced people in the northeast who were victimized by the Boko Haram insurgency.<sup>30</sup>

Building on this solid foundation, the Ministry of Agriculture has supported extending the project's life through an additional financing operation for Fadama III. The next phase will focus on agricultural development in key value chain products with export potential, narrowly targeting eligible communities in six chosen states. In many ways, the additional financing will allow another pilot to test the model's adaptability to more modern agricultural development. The objective of the additional financing operation differs slightly from that of its predecessors, aiming to promote income generation by turning smallholder agriculture into profitable and competitive business-oriented ventures that supply local, regional, and international markets.<sup>31</sup> With the implementation arrangements remaining the same, the project is attempting to apply community engagement and participation to the process of tailoring local production to more demanding markets. One innovation in this context is the inclusion of more specialized assistance from agronomists and other experts who can help organize marketing and distribution at the production cluster level.

The model continues to evolve and has now come full circle to a new process of experimentation, which highlights the importance of ensuring the sustainability of the institutional structure at the national level. With the focus narrowing again, both regionally and on certain product categories, the next phase will offer another opportunity to test the resilience and adaptability of the CDD approach in Nigeria's agricultural sector. The project's ability to improve the economic well-being of beneficiaries has been well established, but as this review has noted, a key element of its success has been the institutional structure of community engagement that was created in *fadama* areas. Without continued support for preserving and strengthening this institutional arrangement, it is not clear whether the successes of the Fadama project series can be sustained.

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29 Comments from the project TTL, June 2015.

30 Close to 2 million people are deemed internally displaced in Nigeria as a result of the insurgency.

31 Interview with an agricultural specialist at the World Bank, January 2015.

# Lessons Learned

Implementation of the Fadama project series has yielded lessons that can usefully inform the design and implementation of future operations, as well as other CDD programs in Nigeria. The benefit of the Fadama experience is that it has been iterative, allowing a process of learning from predecessor projects and adaptation to new challenges. Nigeria's sustained involvement with community-based agriculture development has left a clear track record from which to extract key observations and the lessons learned that follow.

**Maintain presence and continuity.** Implementation of the Fadama project spans 20 years. The project has grown considerably, building significant experience among local communities, political leaders, development practitioners, and the international development community. The project team's perseverance in providing financial and, more important, advisory assistance at various levels has been one of the most important ingredients of the project's development success.

**Embrace adaptive learning.** Design of the Fadama projects embraced a model of trial, error, and adaptation. Each phase of the project served as a test of new approaches under specific conditions, which could then be expanded once positive results were well established. From piloting targeted small-scale community investments in *fadama* areas to introducing fundamentally new mechanisms for community participation in agricultural development, the project has been a laboratory of experiments. Each phase of the project has addressed weaknesses identified under previous phases. The local conflicts sparked by the extension of the agricultural season under Fadama I, for example, prompted the introduction of greater community participation in local decision making. The observation that large matching grants under Fadama II tended to discourage maintenance of subprojects led to the introduction of new financial arrangements in Fadama III to promote greater attention to preserving community investments. This process of adaptive learning encouraged innovation at every stage, enhancing project results and sustainability. The demonstration effects of each phase of the project strengthened demand for wider application of the model. Projects that build on existing initiatives, start out as pilots, and expand carefully with attention to the local context can therefore be transformational.

**Tailor best practices to local conditions.** The Fadama project series offers a clear example of how country-

level projects can benefit from international experience, in this case with CDD projects. The broad acceptance of the model within Nigeria resulted in part from information on how similar projects had succeeded in other environments. Just as important, however, was the careful manner in which the design of CDD approaches under Fadama was tailored to the Nigerian context and built on local conditions, particularly with regard to the existing institutional arrangements. The LDPs, which became the main mechanism for decision making on local-level investments, were a homegrown approach to community development planning and, as a result, were successfully taken up under the umbrella of the Fadama project. The project's success in tailoring best practices to local conditions was evident in the strong demand for project expansion among excluded communities.

**Build consensus and attention to process.** The process of building consensus and promoting the acceptance of new approaches required considerable engagement with counterparts. To ensure the successful introduction of a CDD model for agricultural development in Nigeria, the project team had to move beyond national-level agreement to build a consensus among Nigerian counterparts and communities. The use of study tours to expose decision makers to emerging trends in CDD, as well as the project team's investment in a thorough consultation process, facilitated the move away from centrally led, top-down approaches toward locally led participatory approaches. A senior adviser at the NFCO found the project's collaborative consensus-building approach to be critical to communities' acceptance of the CDD concept:

The perseverance of the implementation team enabled the achievement and the success; when you are introducing a new concept or a new idea to anybody, it is very difficult for that person to comprehend immediately what you are talking about, particularly when you are asking for a change in attitude. The trust between the beneficiaries and the drivers of the process (the government on one side and the Bank on another) had to be established through a lot of advocacy channels: the use of traditional institutions, shakers and movers of the communities, and some pressure groups when necessary to sensitize and mobilize these farmers to come to terms [with] what CDD is all about, its processes, [and] the roles they, farmers, are expected to play in getting the job done.<sup>32</sup>

32 Interview with an NFCO adviser, January 2015.

Of particular importance in fostering community support were proactive efforts to involve traditional institutions; constant communication between the implementation team and the communities; and regular, targeted technical assistance and logistical support.

**Promote participation to strengthen social capital.**

An effective institutional structure at the local level was critical to organizing community participation and engagement. The core organizational element of Fadama lay in the formation of stakeholder groups according to their interests. This systematic approach was important in demonstrating the benefits of collective action and empowering farmers to participate in community decision making. This participatory process helped build social capital, local governance, and community decision-making capacity, thereby enhancing the sustainability of outcomes. Through its socially inclusive and participatory approach, Fadama is recognized as an effective instrument for bringing distinct local groups together to work toward common goals. This collaboration occurred primarily through the preparation and implementation of LDPs, but the presence of facilitators in each community was equally important in building the communities' organizational capacity.

**Foster inclusiveness.** By recognizing indirect beneficiaries (such as fishers, pastoralists, and hunters/gatherers) as legitimate users of shared resources, Fadama II developed a culture of inclusiveness and helped communities become more sensitive to the needs of all stakeholders. The project's consultative approach and rules of engagement helped the various user groups learn to consider the impacts of their actions on others and the environment, thereby addressing the initial flare-up of local conflicts and strengthening conflict resolution mechanisms over the longer term.

**Create organizational capacity through investments in staff.**

The Fadama project invested heavily in capacity building among project stakeholders in all participating states. First, Fadama attracted highly qualified staff from both the private and public sectors. Staff were selected on a competitive basis and paid according to their background and level of experience, fostering long-term commitment to the project and helping to preserve institutional memory. Second, Fadama deployed a large network of trained facilitators throughout the country to provide continual training and technical assistance to participating community groups. The facilitators also extended support to the relevant government agencies. This support structure helped narrow gaps in implementation capacity across states.

**Cultivate a culture of joint responsibility.** Fadama's institutional arrangements and capacity building helped create a culture of contribution, joint ownership, and commitment to subprojects—essential elements of sustainability. The required counterpart contributions (of cash, materials, or labor) have improved group cohesion and introduced a system of oversight to ensure the integrity of funds flow at the community level. In addition, technical assistance has strengthened the FCAs' operational capacities, supporting their active participation in project management, monitoring, and evaluation. The adoption of joint responsibility has been uneven in view of the time, effort, and cultural change involved. Still, this approach has gradually increased awareness of the importance of joint participation and contributions.

**Ensure sustainability through well-designed incentives.**

The project's financial incentives, together with the central role of beneficiary contributions and capital investments, have strengthened the continuity of community subprojects and isolated them from political funding cycles. According to a senior adviser at the Ministry of Agriculture, "The strategy embedded in Fadama II was to support the beneficiaries through matching grants, so government counterpart funds were not required for that."<sup>33</sup> Because of the financial stakes involved, local Fadama activities continued even when local government counterpart funds were delayed or absent. "Counterpart funds did not affect the project delivery at the field level. That is why Fadama has succeeded, despite the fact that most of the states are defaulting in counterpart funds."<sup>34</sup> Although lack of funding has impeded the functioning of Fadama desk offices, local governments can contribute in various ways, including complementing Fadama investments to ensure their sustainability.

**Create institutional change by scaling up through national-level standardization with local-level flexibility.**

Once rolled out at the national level, the project's organizational structure became more standardized to facilitate cross-country management. Yet Fadama's design has preserved the flexibility granted to communities in preparing and implementing their own development plans. This approach has had a lasting institutional effect. Many states have introduced a "Fadama-style" arrangement whereby local governments have adopted participatory planning and provided additional funding for LDPs beyond the resources provided by the project. Other state governments, such as Bauchi, have institutionalized Fadama through their budget process to ensure support for the program

33 Interview with a senior adviser at the Ministry of Agriculture, January 2015.

34 Interview with a senior adviser at the Ministry of Agriculture, January 2015.

after the project closes. Moreover, many state and local governments utilize the CDD mechanism as the basis for their local interventions, often through the same community members who have been empowered through Fadama groups. Niger State, for example, has developed a Ward Development Project that uses CDD approaches to identify communities' most pressing social service needs. Imo State's establishment of community government councils, modeled on the FCAs, can be construed as an institutionalization of Fadama. These councils are composed of community representatives (such as traditional rulers, women's leaders, and youth leaders) and government appointees (including a government liaison officer).

**Improve local governance through decentralized implementation arrangements.** The implementation arrangements established under Fadama gave states unprecedented autonomy in decision making and implementation. As noted by a Fadama TTL, "The design of the project gave clear responsibilities to the federal and state agencies. Project preparation benefitted from a wide level of sensitization that was able to delineate the roles of different stakeholders under the project."<sup>35</sup> As the Fadama project series moved to adopt a more decentralized approach, the decision was made to place Fadama offices inside local governments and to work with them as much as possible. Local councils often used the better-equipped Fadama facilities for their administrative needs, creating stronger links between the project and local governments. The LFDC also served as a platform from which FUG members could voice their opinions on the use of public funds in local governments.

**Introduce flexibility as a means of reducing political interference.** Fadama's flexible delivery mechanisms have allowed solutions to be tailored to diverse local contexts, strengthening local-level decision making and reducing political interference. All stakeholders interviewed for this case study praised the Fadama leadership and management team's flexibility in resolving issues that arose during implementation. One Fadama state coordinator attributed the project's success in part to the lack of political interference, thereby giving project participants the freedom to operate unencumbered. However, there were some instances in which the state offloaded some of its own responsibilities onto Fadama. Over time, Fadama implementation arrangements seem to have become an interesting mix of local empowerment within a strongly centralized country. In a recent mapping exercise, stakeholders depicted a top-down system with strong decision-making power at the bottom, the local level.

**Demonstrate results to inform adaptation, build recognition, and strengthen demand.** The most important evidence developed by Fadama has been that community projects can address rural conditions in Nigeria. The project's effectiveness in generating improved economic conditions and achieving greater community participation has widened public acceptance of the underlying model and encouraged communities to participate more actively in their local development. The project has survived changes in government administration owing to wide recognition of its ability to deliver results across diverse communities. The lessons learned through the project's evolution and adaptation have become well ingrained and its results well established, making Fadama a powerful brand for poverty reduction and rural development through CDD.

**Recognize that heavy investments in supervision are required to support the implementation of such a project.** The success of Fadama interventions has depended on a long, participatory process of consensus building followed by close, consistent, and long-term supervision on the part of the project implementation team. Under Fadama I and II, this critical investment of time was backed up by the financial and human resources required for the World Bank to conduct supervision effectively. During the design of Fadama III, it was clear that expanded supervision would be required to support implementation across all 36 states and the FCT. The project's supervision plan was well costed (at \$250,000 for the World Bank and \$400,000 for the government) and consistently implemented. Specific roles and responsibilities for supervision were allocated at different levels of the project. According to the NFCO's national coordinator, "World Bank implementation assistance support to the states and to the project has been more regular; many of them do it three or four times a year and before it used to be once. There is no other project for which these site visits have been more regular."<sup>36</sup> Following the program's nationwide rollout under Fadama III, however, it seems that project resources have been stretched a bit too thin, leading to a planned refocusing under the follow-on additional financing operation.

**Keep promises early in the project and build trust, which are critical to obtaining buy-in from communities.** This approach was particularly important in the context of introducing new approaches, fostering community participation, and supporting cultural change. "Imagine what would have happened if communities went through the effort of making LDPs and then we tell them, there is

35 Interview with the project's TTL, April 2015.

36 Interviews with the NFCO national coordinator, January 2015.

no money, wait—that would have killed the project.”<sup>37</sup> In addition, continuity within the task team helped create a climate of trust and build on experience.

## THE WAY FORWARD

In many ways, Fadama has succeeded in “putting agriculture back on the map.”<sup>38</sup> In transitioning to a more market-oriented strategy, Fadama will find it important to keep in sight the mechanisms and lessons of the CDD approach. According to one observer, “It would be a pity to lose that social mechanism built under Fadama.”<sup>39</sup> New initiatives should continue to ask, “to what extent do interventions focus on the social and political as well?”<sup>40</sup>

Further work on Fadama will also need to address enduring sustainability challenges. First, there is a continuing need to enhance access to finance and markets to ensure the financial sustainability of community projects. The state program coordinator for Imo State envisages establishing a farmer’s market to allow Fadama community beneficiaries to sell their products directly to consumers. He also envisages creating a microfinance institution with

Fadama beneficiaries as shareholders to mitigate their inability to access bank credit. Second, some officials feel that Fadama suffers from a tension between the goal of enhancing economic returns and that of social inclusion. Third, Fadama’s local-level institutional arrangements are still rather fragile and will require continued active support. State and local governments will need to take over the Fadama management framework (including facilitators) after the World Bank project closes, but political sustainability remains uncertain because of the enduring perception among some state and local political elites that community development could threaten their authority.<sup>41</sup> In response, Fadama will have to embrace the challenge of garnering the necessary political support while fending off undue political elite capture.<sup>42</sup>

Fadama has become what some might describe as an “island of success” in a country portfolio that faces frequent implementation problems. Going forward, it is hoped that the project’s long process of evolution and continued analysis of the project’s specific features and results will help other project teams who are seeking innovative ways to deliver development results.

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37 Interviews with an officer at the NFCO, January 2015.

38 Interview with management at the World Bank Nigeria Country Office, January 2015.

39 Interview with a partner in the agricultural sector, April 2015.

40 Interview with a partner in the agricultural sector, April 2015.

41 Interview with a partner in the agricultural sector, April 2015.

42 Some facilitators advise FUGs that cannot afford to pay their contribution to ask local elected officials to pay it on their behalf. In so doing, they can gain active political support but risk the possibility that political officials will claim their share of expected returns to the detriment of the community.

# Annex A: Full Description of Fadama Project Life



Note: ADP = agricultural development project; CDD = community-driven development; FCA = Fadama Community Association; FCT = Federal Capital Territory; FUG = Fadama User Group; WB = World Bank.

# Annex B: CDD Lessons and Fadama Responses

Lesson From International Experience with Induced Community-Driven Development (CDD) Approaches	Fadama Response
<b>Risk to Be Mitigated</b>	
1. “Civil society failure,” parochialism of communities	Clustering communities; reaching out to vulnerable groups (such as women, youth, and the physically challenged)
2. Risk of elite capture	Institutionalizing participation of all community members within FUGs and FCAs; effective checks and balances (state coordination unit, facilitators); ability to garner political support while resisting undue interference (by helping officials enroll their constituency in accordance with project implementation manual)
3. “Supply-driven, demand-driven development”	Projects correspond to community capacity; community decisions informed by rapid rural diagnostic by facilitators; local development plans drafted by communities and only approved by Fadama Development Committee (participatory decision-making process)
4. Bypassing/duplicating/undermining formal institutions	Close involvement of local governments in funding, coaching communities, and vetting local development plans; counterpart funding from state government
5. Financial sustainability	Focus on productive activities; creation of local public goods/infrastructure taken over by local governments; promoting access to markets (creation of farmer’s markets) and finance (linking beneficiaries with local banks)
<b>Condition for Success</b>	
1. Responsive state	Long-standing engagement at federal and state levels; strong participation of local governments in Fadama implementation
2. Conflict management/inclusion	Participation of several stakeholders; inclusion of herders, fishers, and vulnerable groups among beneficiaries; micro-conflict management capacity within communities and in state coordination unit
3. Impact-/results-based monitoring and evaluation	Only inputs and activities systematically monitored, but surveys captured generated outcomes (such as social capital and return on investment)
4. Exit strategy	Promoting access to market and finance for beneficiaries; internalizing the Fadama institutional framework at state and local levels

Note: ADP = agricultural development project; CDD = community-driven development; FCA = Fadama Community Association; FCT = Federal Capital Territory; FUG = Fadama User Group; WB = World Bank.



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