Monitoring, Impact Assessment and Learning for Research Into Use – Nigeria

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Executive Summary

Monitoring, Impact Assessment and Learning (MIL) is a key element of the new DFID Research Into Use programme. In Nigeria, some of the elements of the requirements of MIL have been considered during the Inception Phase of the programme through asking three key questions:

1) Learning to inform design; how does research get into use in Nigeria?
2) What is the existing data situation in Nigeria and what are the implications for RIU?
3) How are other, similar donor-funded initiatives responding to the data paucity and what can be learned from them?

This report provides partial answers to all three questions. Two learning case studies, on maize and aquaculture respectively, highlight the complexity and longevity of timeframe required for getting research into use. The case studies offer direct lessons for RIU; both in terms of the selection and refinement of areas of intervention for the programme, but also outlining areas of opportunity for deeper analysis and learning in the two sub-sectors.

The general data situation in Nigeria is poor; years of military rule eroded the culture of valuing statistics for decision-making. There are institutional structures at all levels within government for data gathering, but they have been under-utilised and under-funded for years. The result is a lack of reliable information on the status of Nigerian development. Under the Obasanjo administration, there has been recent interest in revitalising the national statistical system as part of wider governance reforms. Thus there are beacons of hope in a bleak data situation, and there is a need for RIU in Nigeria to take care to reinforce ongoing M&E reform initiatives, and to strengthen government capacity wherever possible.

Ongoing donor-funded programmes in the agriculture/rural development arena have much to offer the developing RIU regarding monitoring and evaluation in a difficult data environment. Large investments in baselines that are carried out too early in programme cycles can be wasteful. More limited and targeted baseline studies can be a much more effective tool for measuring change incurred by a programme. An individual programme can strengthen existing government structures if its activities are carefully executed.

List of Acronyms

ADP	Agricultural Development Project
APMIL	Agricultural Projects Monitoring and Evaluation Unit
BME	Budget Monitoring and Evaluation
DFID	Department for International Development
DPRS	Department of Planning, Research and Statistics
DRG	Debt Relief Gains
EMP	Environmental Monitoring Project
FAO	Food and Agriculture Organisation
FCA	Fadama Community Association
FMARD	Federal Ministry of Agriculture and Rural Development
FSR	Farming Systems Research
FUG	Fadama User Group
IITA	International Institute for Tropical Agriculture
IT	Information Technology
LDPs	Local Development Plans
LGA	Local Government Area
MARKETS	Maximising Agricultural Revenue and Key Enterprises in Targeted Sites
MIL	Monitoring, Impact Assessment and Learning
MIS	Management Information System
MTRM	Monthly Technical Review Meeting
NBS	National Bureau of Statistics
NEEDS	National Economic Empowerment and Development Strategy
NPC	National Planning Commission
NSPFS	National Special Programme on Food Security
OSSAP-MDGs	Office of the Senior Special Assistant to the President on the Millennium Development Goals
PrOpCom	Promoting Pro-poor Opportunities through Commodity and Service Markets
RIU	Research Into Use
SEEDS	State Economic Empowerment and Development Strategy
SLGP	State and Local Government Project
USAID	United States Agency for International Development

Introduction

Research Into Use is a programme with two inter-connected aims:

a) To maximise the poverty reducing impact of past natural resources research in sub-Saharan Africa and Asia, and in so doing
b) To increase understanding of how the promotion and widespread use of research outputs can contribute to poverty reduction and equitable economic growth

The programme is at the end of its inception phase (July 2006 – March 2007) and is in the process of selecting countries for programme implementation. Part of that process has entailed Country Assessment exercises in a selection of countries in Africa and Asia. The current report was compiled in parallel with the RIU design in Nigeria (for which a separate report is available). This report comprises the Monitoring, Impact Assessment and Learning (MIL) component of the inception phase in Nigeria.

The Consultancy Process

The MIL team comprised of two consultants: Philippa Haden and George Abalu[1]. Philippa Haden was involved in the RIU Scoping Visit to Nigeria in November 2006, during which initial contact was made with relevant government officials and donor representatives. The February visit was utilised by the MIL team for further and deeper discussion regarding monitoring and evaluation, data availability and the related challenges for a new programme that has a particular emphasis on learning and impact assessment. It was also decided, in consultation with the design team, that the MIL case studies would be selected to inform the ongoing design process as far as possible.

The Structure of the Report

The report is structured as follows:

i) Responding to the Country Assessment design, with particular reference to two case studies of how research gets into use in the Nigerian context (maize and aquaculture) – Section 1
ii) An overview of the national statistical system with particular reference to the institutional arrangements for natural resource data collection – Section 2
iii) Learning from three relevant donor-funded programmes currently operational in Nigeria – Section 3, and detail in Annex 1

Annex 2 provides a list of those interviewed by the MIL consultants during their time working together in Abuja (12th – 21st February 2007).

[1]Philippa Haden (phaden@f2s.com) is a Freelance Consultant based in the UK but with extensive Nigerian field experience and George Abalu (Abalu@agrosearch.com) is Managing Consultant of a private consultancy firm based in Abuja, Nigeria.

Section 1: The Design Process and MIL Case Studies

1.1.1 The RIU Design Team in Nigeria identified seven potential entry points, or opportunities, for the programme[1]. The criteria for selecting opportunities were threefold. First, that there was a visible "Innovation Platform", defined as a "network of partners working on a common theme, and using research knowledge in ways not used before to generate goods and services for the benefit of the poor". Second, that there needed to be clearly articulated demand or market for the product. Finally, that the opportunity had an explicit poverty dimension.

1.1.2 The design document divides the seven thematic opportunities into two sections. The first is a set of the three most obvious areas of intervention for the programme: aquaculture, rainwater harvesting and cassava processing. The second section outlines four potential opportunities namely improved maize varieties, soya and cowpea, small ruminant livestock and linking into the Fadama III programme.

1.1.3 The MIL consultants were tasked with consideration of the emerging design and its implications for monitoring and evaluation, and learning. While the detailed content of the programme was still developing, and therefore the design of an explicit M&E framework for RIU in Nigeria was premature, it seemed logical to focus on the broader learning element. Therefore the MIL consultants selected two learning case studies, which could both inform the design process itself, and more broadly provide insights into how research gets into use in the Nigerian context. Further, it was felt that there may be deeper learning potential from the case studies, and that a further MIL investment into impact assessment may be required. Commentary on all of these issues is provided in 1.4 below.

1.1.4 The examples of maize and aquaculture were chosen, the former as an example of a long process of adaptation leading to considerable increases in production, and the latter as an area of emerging interest, that may have some recent lessons to guide possible RIU intervention in the sub-sector.

1.1.5 The case studies below are structured as follows. First, the story is summarised. Then, the key drivers of the success are analysed, followed by consideration of the challenges encountered. Finally, the key learning points are distilled, with a distinction made between sector-specific learning and more generic learning.

[1] In addition, opportunities for engaging in Federal and State levels were also identified

1.2 The Maize Case Study

Summary of the Success

1.2.1 Improved maize technology and its widespread dissemination is clearly one of Nigeria's agricultural success stories. Documented studies show phenomenal increase in maize production in the different agro-ecological zones but especially in the Sub-humid zone of Nigeria[2]. It has been reported that nearly all maize presently grown in Nigeria derives from a steady stream of improved maize technologies on offer to farmers starting from the mid 1980s[3]. Between 1984 and 2006 the land area under maize increased from 653,000 to 5 million hectares while production increased from 1 to 7 million metric tons.

1.2.2 Today Nigeria has maize production, input, and marketing systems that have transformed maize into a major food and cash crop and ensured that maize has assumed an increasingly important role in increasing food production, enhancing food security and promoting rural economic growth[4]. A wide range of people appear to be benefiting from the widespread adoption of the maize technology on offer: the farmers who grow the crop, major distributors, middlemen and women, petty vendors selling green maize on the road side or selling dried maize in the markets as well as industrialists[5].

The Key Drivers of the Success

1.2.3 Available studies show that the success of maize in Nigeria was stimulated by investments in technology and infrastructure. For example, studies by IITA[6] show how infrastructure such as good road systems and extension services provided the precondition for the phenomenal increase in

[2] The agro-ecological zone is determined by the amount of rainfall and its distribution, which, in turn, determines the length of the growing season and the appropriate maturity class for maize.

[3] A recent World Bank review of strategic options for revamping agricultural research and extension services in Nigeria reveals that about 36 improved varieties have been developed and released based on soil type adaptation and agro-ecological zoning.

[4] The Projects Coordinating Unit (PCU) of the Federal Ministry of Agriculture and Water Resources believes that, despite the successes achieved so far with the generation and diffusion of maize technology in Nigeria, maize production can be increased from its present levels to over 15 million metric tones by 2008.

[5] Green maize on the cob (boiled or roasted has become a common sight in most street corners, along roadsides in villages and towns and along highways between towns and cities. In the Sub-humid zone green maize is available as early as March where farmers take advantage of residual moisture in fadama areas. As a result of increased production dried maize is also now available in local markets for much longer periods. Maize is being increasingly substituted for sorghum and millet in some local diets and industries are using it for brewing and for oil extraction.

[6] See for examples: Joyotee Smith, Anthony D. Barau, Abraham Goldman, and James H. Mareck, "The Role of Technology in Agricultural Intensification: The Evolution of Maize Production in the Northern Guinea Savanna of Nigeria", *Economic Development and Cultural Change*, Vol. 42, No. 3 (Apr., 1994), pp. 537-554; and A. Ikpi, "Nigeria's Agricultural Sector Assessment: Issues of Technology Development and Transfer", Report Prepared for USAID/AFR/SD, Washington, DC, USA., 2002

maize production especially in the sub-humid zones but the crucial driving force was a maize technology break-through that enabled farmers to achieve significant increases in incomes by expanding maize production for which the zone[7] had an ecological comparative advantage[8]. Behind these driving forces was the strategic emphasis on the part of research and delivery systems on developing and disseminating improved packages of maize for the high potential sub-humid agro-ecological zones of the country reflected by the large number and wide range of improved maize materials on offer to farmers and the dramatic rate at which the farmers changed their farming systems to incorporate significant maize components[9]. Recognition by the farmers of the potential yield increase accruable from adoption, financial costs (prices) and access to extension and other farmer support services[10] were also critical factors that accelerated the demand for improved maize technological packages in the zone[11].

The Challenges/Difficulties Encountered

1.2.4 The first major attempt to take "ready to go" improved maize technologies off the shelves of international and national agricultural research centres to farmers was in the early 1980s when the Agricultural Development Project (ADP) concept was introduced into the country[12]. Maize featured prominently in the improved technology packages that were made available to project farmers[13]. However, it soon became obvious that project farmers were not adopting the available packages aggressively enough. Studies were conducted which revealed that, in addition to farmers not understanding the basic principles underlying the recommended improved maize packages, they lacked the correct knowledge of the majority of the improved practices involved[14]. Other studies showed that the "trickle down diffusion of innovation

[7] The Sub-humid agro ecological zone with an average rainfall above 750mm has the greatest potential for maize.

[8] Streams of improved maize varieties, both hybrids and High Yielding Varieties (HYVs) are available for the sub-humid zone of the country. Suitable and appropriate varieties and technological packages do not appear to be available yet for the other zones of the country.

[9] Maize has replaced sorghum as the most important cereal crop in the cropping systems of the Sub-humid zone.

[10] The Training and Visit (T&V) extension approach introduced by the Agricultural Development Projects (ADP) was relatively more successful in reducing some of the adoption-restricting biases of traditional extension methods against remote areas and small-scale and uneducated farmers.

[11] While almost all farmers in the sub-humid zone use improved maize seeds on offer, a significant proportion of these farmers apply no or very little fertilizers to their maize crop, hence their improved maize varieties have still not realize their full yield potential.

[12] The approach focused on simple improved technology packages for maize production among other crops.

[13] The improved maize technology in the first generation ADPs was expressed in sole crop terms as a complete package. The package approach served as the basis for the organization of demonstration and extension activities, which were based on a sequence of prescriptions covering the entire cropping season. The recommendations were updated at least yearly to incorporate official releases of new research information coming from the research institutes.

[14] For example, one study conducted by the Institute of Agricultural Research in Zaria, showed that less than 1% of the project farmers had correct knowledge about the type and rate of fertilizer application. Fifty four percent of the farmers had correct knowledge of the

model" used to introduce the improved maize technology packages to farmers failed to adequately adapt the packages to their economic and social circumstances[15]. As a result, it became obvious that the expected uptake of the improved maize packages were not as expected.

1.2.5 It was at this time that Farming Systems Research (FSR) was emerging as a popular new approach in the work of researchers and extension workers in the national and international agricultural research community in Nigeria. The popularity of this approach was enhanced by FSR's capacity for ensuring that research was asking the most important questions because of its bottom-up distinguishing characteristics which integrated the participating farmers into the research process, acquired knowledge about their existing farming systems before proposing technological solutions, and recommended and adapted the new technologies to the local circumstances, aspirations and felt needs of the farmers.

1.2.6 To take advantage of the strengths of this new FSR strategy, considerable resources were devoted by the ADPs to adapting the maize technical packages on offer to local smallholder conditions. However, in areas where the research capacity was lacking, the adoption of the new technologies was found to be low. To address this problem, regional and national framing systems research networks were created[16]. This was complemented by the holding of Monthly Technical Review Meetings (MTRMs) involving researchers, extension workers, and sometimes farmers to identify bottlenecks in the adoption process and jointly come out with solutions for these problems. The research efforts were complemented by aggressive extension and input supply and marketing policies to provide incentive for the adoption of the technological package. In particular a National Seed Service was established, fertilizer was highly subsidized, and cheap credit (with inputs provided in kind) was made available. A substantial amount of donor assistance was involved and was critical.

Key Learning Points

1.2.7 There are a number of key learning points for the MIL component of RIUP. Some of these are more specific to the maize adoption process that took place in the sub-humid zone of Nigeria while others are more generic and could apply to other technology development and dissemination processes in Nigeria.

required weeding, 36% had correct knowledge of planting dates, and 28% knew within-row spacing recommendations.

[15] The basic tenet of the diffusion model is that the dissemination of information is the basic process leading to technology adoption and diffusion, a process that is characterized by acceptance by farmers over time of some specific idea or practice by individuals or groups. Even though the new idea is initially adopted by a very small but highly innovative group of farmers, the idea eventually spreads throughout the community until most members of the community adopt it.

[16] These networks, which were largely supported by donor funds, have since been disbanded following the withdrawal of donor support. The Projects Coordinating Unit (PCU) is in the process of resuscitating these networks that are now called Research Extension Farmer Input Linkage System (REFILS).

1.2.8 Maize Technology-Specific Learning Points

- Maize farmers were selective in their willingness and/or ability to adopt the different components of the maize technology package on offer. The learning point here is that, to be relevant to poor uneducated farmers, new maize technology being developed or undergoing adaptation, has to satisfy their income needs and the component parts of these technologies have to be available in units that the farmers can afford to buy. Furthermore, because these farmers are not educated and do not have adequate capital, the managerial skills needed for their application have to be simple and the capital outlay required relatively small.

- There appears to an unquestioned acceptance, not based on evidence, that the widespread use of the improved maize technology has been beneficial to all farmers including poor smallholder farmers. There is increasing concern about the sustainability of the maize yield gains that have been achieved and their impact on increasing food security and reducing poverty. There is, therefore, the question mark as to whether widespread adoption of the improved maize technology has resulted in a general increase in food production, resulting in broad based increases in rural incomes. In other words, to what extent has the widespread adoption of the maize technology on offer contributed towards reversing the downward trend in food insecurity and poverty, at least, in the sub-humid zone of the country, which is a high potential zone for maize?

1.2.9 Generic Learning Points

- There are no short cuts. Initially, Nigeria took bold steps through the ADPs to increase maize production but most of the ADPs have now failed because their activities were largely donor-driven and their present incarnations lack high-level financial support[17]. Without financial and political support, the required research-extension-input supply-farmer innovation platform/network cannot function.

- The improved maize technology on offer in Nigeria involved a complete package of component parts including improved varieties, fertilizer application and improved cultural practices. Value chain analysis is,

[17] The Agricultural Development Projects (ADPs) are the front line implementers of technology delivery projects aimed at achieving food security and poverty reduction. Their responsibilities include: multiplication of improved crop/seed materials; transfer of improved farming technologies, use of improved land use practices; infrastructure development; marketing and hiring of services to local farmers; and delivering of extension services to farmers. Since the cessation of World Bank counterpart funding arrangements in 1995, financial support for technology delivery by the ADP's has progressively declined to the extent that most, if not all the State's ADP, now find it difficult to pay the salaries of their staff not to talk of making adequate provision for the needed operating transaction costs involved in technology delivery.

therefore, an effective way of fostering the important linkages between and among the key components of technological packages involving the productive processes from the provision of inputs to production, transportation, transformation, processing, marketing, trading, and retailing and to final consumption. The Nigerian maize experience teaches us that, commodity production, services and markets must be developed together. Emphasis on production without attention to how well downstream marketing services, including post-harvest handling and storage, packing and grading, and market information, are operating cannot be sustained. On the other hand, even if the market for a commodity has been identified, it can only be successfully accessed through proper attention to the downstream nodes in the chain that deal with agricultural inputs such as improved seeds, fertilizer availability and farming practices as well as with services that directly support efficient production such as transportation, finance and technical knowledge.

- There is need for a "fit for purpose" Technology Innovation Platform (IP) to continuously address and provide updated answers to the following types of questions:

    - Does the recommended package continue to be compatible with the existing values and farming systems of the target farmers/zone?
    - How does the package compliment or conflict with changing farmer's goals of profit maximization?
    - What are the changing resource requirements of the farmers for continued adoption of the recommended packages and do farmers possess or have access to these resources?
    - What is the state of institutions support systems for the farmers? Are they efficient and non-discriminatory?
    - Does the information dissemination strategy being used by the extension system continue to be valid under the unfolding and changing policy conditions and circumstances?
    - What are the changing interests being served by the continued adoption of the improved packages and how do these interests conflict?

- Understanding and balancing the appropriate roles of public and private sectors at different stages of the development and diffusion of improved technologies is important. The Nigerian government played a critical role through the ADPs in supporting maize research and providing farmer support and marketing services such as fertilizer and setting up seed services, but these programmes incurred large and unsustainable government subsidies in the process. Gradually private investments are being made in seed and fertilizer distribution, marketing and maize milling. Nigeria and its development partners have also accepted a reduced role for government in these areas. There is, however, need for consensus on the appropriate role of Government in responding to the needs of marginal potential areas and

very small subsistence farmers with limited capital and purchasing power and who are faced with high transaction costs and small market size, all of which will inevitably limit investment by the private sector but where concerns of rural poverty alleviation demand government intervention.

- In a related way, research institutions and national and state agricultural development projects would do better if they operated efficient information management systems to help agricultural decision makers to take the right decisions. A complementary issue here has to do with the effective allocation of research resources both within and between research centres and between research and other support services. Better allocation mechanisms are needed.

1.3 The Aquaculture Case Study

Summary of the Success

1.3.1 Aquaculture[1] has been developing rapidly since its introduction into Nigeria in 1944[2]. This was followed by a series of demonstration fishponds and commercial fish farms beginning in 1950 to raise local fish species in Okigwe, Ibadan and Ikoyi, Lagos. After a nation-wide campaign of "GROW YOUR OWN FISH" introduced by the government in 1964, awareness of the potential of aquaculture in the country was increased. Government fish farms were established in Bagauda (Kano State), Funtua (Kaduna State), Etinan (Cross River State) and Benin (Edo State). Community-owned fish farms were also established in Onitsha, Ijebu Ode, Oyo and Sokoto for extensive culture of Tilapia species (Clarias spp, Chrysichthys spp) as well as more exotic species such as carp (Cyprinus carpio spp).

1.3.2 Aquaculture production has been increasing steadily since the 1960s but has gained momentum during the last five years as a result of interest of new entrants into aquaculture activities. The Federal Department of Fisheries estimates that aquaculture fish production increased from 25,750 metric tons in 2000 to 43,950 metric tons in 2004[3]. The success of aquaculture in the country can be attributed to three sources: subsistence-level[4] fish farming (with ponds as small as 3m x 10m), "backyard"[5] fish farming, and commercial fish farming[6]. Progress in subsistence level fish farming has been slow but Nigeria's National Special Programme on Food Security (NSPFS)[7] concludes that during the last five years fish production from this source has expanded rapidly. Backyard fish farming has also expanded rapidly since the late 1980s

[1] Aquaculture also known as fish farming is the culture of choice fish species in enclosures such as ponds, tanks and raceways.

[2] The construction of the Panyam Fish farm for tilapia production in 1944 marked the inception of fish culture in Nigeria.

[3] FAO estimates the fish farming potential of Nigeria to be over 65,000 metric tons per annum.

[4] A typical subsistence-level fish farmer owns between one to three ponds with an average size of 210m^2, ranging from 50 to 1000 m^2. The level of management is low and family labour is the norm.

[5] "Backyard" or family-scale aquaculture, as the name signifies, is carried out in the backyard of homes in urban and peri-urban areas mostly by government workers, retired civil servants, and by informal sector entrepreneurs.

[6] Commercial fish farms are characterized by high levels of management, capital investment, and quality control and are served by markets that are well structured.

[7] The NSPFS aims to attain food security in its broadest sense throughout the country and alleviate poverty especially in the rural areas by, among other things: assisting small-scale farmers to achieve their potential for increasing output and productivity, leading to sustainable increases in incomes; strengthening the effectiveness of research and extension services by bringing technology and new farming practices developed by research institutes to these farmers and ensuring greater relevance of research in solving the practical problems that they face; and training and educating farmers in the effective utilization of available land, water and other resources and facilities to produce food and create employment on a sustainable basis. Aquaculture development, whose key strategy is to concentrate initial efforts on pilot sites so as to guarantee maximum impact and facilitate replicability, is a major component of the programme.

as many people in urban and peri-urban areas seek additional means of livelihoods[8]. Production from commercial fish farms is also estimated to have increased significantly since 2000[9].

The Key Drivers of the Success

1.3.3 It is believed that the success of aquaculture in the country has been prompted by the introduction of new technological, structural and managerial techniques into the day-to-day operation of the different types of fish farms in the country[10]. Over the years, Federal and State governments as well as many private commercial farms have become deeply involved in the modernization of fish farming. As a result, the use of earthen ponds as opposed to the previous methods used by subsistence fish farmers has caught on, resulting in higher fish yields per unit time and space. Many fish farmers have adopted the concrete (homestead) tank system that they hitherto considered impracticable to the extent that this method of fish farming has now become one of the most popular culture environments in the country. Other key drivers of the success of small-scale fish farming include the replacement of fingerlings collected from the wild by a market-oriented collection and transportation of fish fingerlings from production hatcheries[11] to farm sites, improvements in the quality and supply of fish feeds, and the introduction of improved extension services.

1.3.4 A key driving force behind the emergence of commercial fish farming systems[12] that operate at varying levels of intensification was the introduction of new technologies involving the raising of fish in tanks of varying sizes ranging from 1-50 m^3 and using intensive technologies, with stocking densities ranging from 10-100kg/m^3. The introduction and use of technologies[13] involving raceways, pens, cages and recirculation systems[14]

[8] The Federal Department of Fisheries estimates that backyard fish production has been increasing at an average annual rate of about eight percent since the mid 2000.

[9] Although exact production statistics are not available it has been estimated by the National Bureau of Statistics that the number of commercial fish farms in Nigeria has increased from about 1,900 in 2000 to over 2,600 in 2004.

[10] See the Report of the Presidential Initiative on Fisheries and Aquaculture presented at the 35th Regular Meeting of the National Council on Agriculture and Rural Development (NCARD) held in Abeokuta, Ogun State, May 22 2006.

[11] Private sector entrepreneurs manage most of these hatcheries. Fishpond owners are, however, expected to collect their required stocks from the hatcheries. Although there is very little or no quality control, the introduction of hatchery products has resulted in reduced incidences of disease and helped eliminate the transfer of waterborne aquatic pests and dragons that feed on fish in ponds especially where frys and fingerlings were offsprings of proven and genetically selected brood stocks.

[12] These commercial fish farms are owned by individuals, business consortia, and national or foreign companies or joint venture companies. They have all benefited from huge investments in new production technologies originating from Western Europe and the USA. The majority of these commercial fish farms are located in peri-urban areas close to markets.

[13] These improved technologies were the results of research emanating from the Universities and most especially from the two Federal Research Institutes in Nigeria (NIOMR in Victoria Island, Lagos and NIFFR, in Kainji, New Bussa, Niger State). However some of the State Fisheries Departments also contributed to the development of a few of these technologies. For example, the Ondo State Fisheries Department perfected the production of the Common

have also contributed to their success. Another key driving force here was the emergence of commercial fish hatcheries ranging from open or closed systems, aeration, controlled egg incubation, and intensive catfish larval and juvenile rearing. Catfish hatchery technologies such as induced spawning and larval rearing, which are now well developed in the country, also contributed to the success.

1.3.5 Complimenting the availability and adoption of profitable fish technologies was the emergence of an enabling environment created by the implementation of structural reforms in the country. These reforms forced more and more Nigerians to search for alternative sources of livelihoods. As public enterprises and private firms downsized during the implementation of the reform measures, many of the retrenched workers who could not find alternative employment in the formal sector and who could not afford to be unemployed saw fish farming as offering good employment and income-earning opportunities. Furthermore, many families (both civil servants and private sector workers) also turned to fish farming as a way of supplementing their formal earnings in response to inflation and cutbacks in public services[15].

The Challenges/Difficulties Encountered

1.3.6 A number of challenges/difficulties were encountered and attempts made to address them. Some of these attempts were more successful than others, although almost all of them are still present in varying degrees.

1.3.7 Partially Addressed Challenges

- Lack of awareness by policy-makers and decision-makers about the potential of aquaculture in contributing towards food security and poverty reduction and difficulties in spreading the 'good news' of the income-earning and employment-generating potentials of aquaculture to prospective fish farmers.
- Inadequate knowledge and understanding of the fish technologies on offer especially with regards the culture, propagation and economic management of fish farms caused by inadequately trained aquaculture extension workers[16].
- Non-availability of appropriate and adequate fingerlings to stock prepared ponds[17].

Carp (*Cyprinus carpio)* while the Agodi Fish Station carried out extensive research on the production of the African Mud catfish.

[14] There are about 30 re-circulating farms in South- Western Nigeria used to produce fingerlings and table size of the African catfish specie. Production is reported to be about 3 tones of fish per week, using extruded pellets as starter feed.

[15] The finance for this came mostly from informal sources.

[16] The NSPFS reports that the Unified Agricultural Extension System adopted in the ADP's did not adequately meet the knowledge requirements of fish farmers.

[17] The Federal Department of Fisheries reports that fish farmers often waited for long periods to receive fingerlings from the few operational government hatcheries.

1.3.8 These challenges were addressed with varying degrees of success through a variety of ways including:

- The establishment of pilot aquaculture schemes in several rural communities throughout the country by officials of the Department of Fisheries as well as Aquaculture Development Projects such as those of the NSPFS and the organization of well publicized visits to successful sites by senior Federal and State policy-makers, decision-makers and politicians, to show and convince them about the potential and feasibility of aquaculture.
- The printing of Aquaculture Manuals and the organization of Aquaculture Training Programmes and Workshops in almost all the States of the Federation and awareness raising through the production of radio jingles and mass media video presentations on fish farming activities in the States and Local Government Areas (LGAs).
- Intensified efforts to train existing extension agents by a number of agencies and institutions including the ADPs and University Extension Services, and international organizations such as FAO and DFID.
- Introduction of private hatcheries into the supply of fingerlings to stock prepared ponds.

1.3.9 Still to be Fully Resolved Challenges

- Development of appropriate feeds for cultured fish and appropriation of adequate feeding techniques where and when necessary[18].
- Improvements in the operation of fish seed (fish fingerlings and juveniles) hatchery arrangements (public or private sector driven) to meet the rapidly increasing demand for fingerlings in the country.
- Issues relating to the disposal of polluted water, especially in backyard fish farms where drinking water comes from ground water, which might be polluted by the outputs of fish farms.
- Continuing inadequacies in aquaculture extension capabilities within or linked to line ministries and agencies.
- Apprehension of farmers about high incidences of fish theft (poaching).

Key Learning Points

1.3.10 Although the development and use of aquaculture technology in Nigeria is on a recent time frame, the research-into-use process that is unfolding provides us with a number of key learning points that should inform the design of the specific aquaculture component of RIU in Nigeria. These learning points include the following:

[18] Progress made here has so far been based on ad-hoc research conducted at research institutes but mostly from imported feed formulations as well as from formulations by foreign experts, especially the Chinese.

- The development and promotion of aquaculture in Nigeria has been quite successful and fish farmers have responded and made the most of the available technologies. However, the uptake of the available aquaculture technologies by non-commercial fish farmers has not been as successful especially when it involved purchase of the different components of the technologies. This should be of concern given the fact that the potential of aquaculture to make significant contributions to household and community livelihoods is enormous[19]. It is clear from the case study that credit and extension support are critical to increasing the readiness by fish farmers to adopt and adapt available fish technologies. However, the relative importance, effect and impact of these two factors are yet to be assessed.

- Past and on-going aquaculture research activities have largely not been in response to fish farmers' problems, aspirations, and circumstances. Given the different categories of Nigerians being attracted into fish farming, there is need for a better understanding of the social and institutional contexts that attract Nigerians (both urban and rural dwellers) to engage in different types of aquaculture with a view to evolving better service-oriented and demand-driven research and extension agendas.

- The absence of a national aquaculture policy appears to be a major factor constraining a coherent development of the aquaculture sector in Nigeria. Monitoring, evaluation, and documentation of the impact of successful aquaculture technologies and innovations would help mould the political will that is required to formulate and implement appropriate national, state and LGA aquaculture policies and programmes.

- The pattern of adoption of aquaculture technologies in Nigeria teaches us that if aquaculture is to be successfully integrated into the farming systems of the rural areas, its interactions with the surrounding physical, socio-cultural, and institutional environment must be well understood. Furthermore, it would be necessary to acquire more accurate knowledge of the functioning of markets (both input and output), market margins, and real returns to investments in the different levels and types of fish farming.

[19] The literature on African aquaculture supports the contention that non-commercial aquaculture plays an important role in rural livelihoods and that fish farming families in general are better nourished than non-fish farming families. See for example: M. Ahmed and M. Lorica, (2002), Improving developing country food security through aquaculture: development-lessons from Asia. Food Policy (27): 125–141; and A. Andrew, O. Weyl, and M. Andrew (2003), Aquaculture Master plan Development in Malawi: Socio-economic Survey report. Enviro-fish Africa, Grahamstown, South Africa.

1.4 Implications of the Case Studies

1.4.1 The case studies reveal a series of lessons within the context of both sub-sectors, which can inform specific elements of RIU design if these sub-sectors are selected. More generally, they also highlight the sheer complexity and longevity of the processes that are entailed in getting research into use in Nigeria.

1.4.2 The maize study highlights the importance of consideration of the functionality of the entire chain from production to marketing, as well as the need for a dynamic innovation platform, and the importance of delineating roles for government and private sector. In terms of providing further learning, the maize case study could become the subject of a more detailed impact assessment, focusing on the differentiated impact of improved maize technology on a range of farmers, highlighting the extent of impact on the poorest.

1.4.2 The aquaculture study focuses on a much more recent timeframe, and an ongoing process of innovation and change. It highlights issues that should inform the design of the specific aquaculture component of RIU. In terms of the ongoing technology development, it is evident that there is some way to go regarding the technologies for feed and in the operation of fish seed.

1.4.3 It is clear that there is a lot of energy, dynamism and potential in aquaculture in Nigeria at the moment, but there are several interconnected key factors to be considered before designing an RIU intervention. First, the specific roles of credit and extension support in increasing the readiness of fish farmers to adopt and adapt available fish technologies should be delineated. Second, detailed understanding must be ascertained of the social and institutional contexts of the poorer fish farmers (as the critical RIU target group). Third, an understanding of the functioning of markets (both input and output), margins and real returns to investments is essential. Finally, it is not clear that there is an obvious innovation platform on which to focus potential RIU inputs.

Section 2: An Overview of the National Statistical System

2.1.1 The situation in relation to data in Nigeria is dire: government systems for data collection are in place in terms of institutional mechanisms (both at the Federal level and at the State level) but these systems have been functioning minimally for years. Data that is being collected is questionable in terms of quality and therefore utility.

2.1.2 There has been little incentive for data gathering, as government has functioned without using an evidence base for decision making and budgeting over a long period of time. Within Federal Ministries, including the newly merged Federal Ministry of Agriculture and Water Resources, the Department of Planning, Research and Statistics has been under-funded and under utilised and staff frustration is at a high level[1].

2.1.3 At a State level, under the Agricultural Development Project structure (see Section 1.2.4 above), data systems functioned relatively well in the heyday of the ADPs (though the entire system became a kind of parallel structure to the existing government institutional framework). Monitoring and Evaluation was co-ordinated at a Federal level by the Agricultural Projects Monitoring and Evaluation Unit (APMIL). However the ADPs as a whole are now regarded as patchy and limited in their performance, and in need of reform[2].

2.1.4 In the latter part of President Obasanjo's second term, interest has been expressed in M&E at a national level as part of the wider reform process, and there is gathering momentum to strengthen the whole national statistical system. The reformed National Bureau of Statistics (NBS) has a huge task ahead of it in terms of breathing life into the Departments of Planning, Research and Statistics in all line Ministries, and specifically the Data Banks within those departments. Although NBS is being led by an energetic reformer, it will take some years before his vision can be realised.

2.1.5 Donor interest in measuring developmental progress since Nigeria's return to civilian rule in 1999 has led to considerable investment in a series of poverty-related surveys, mostly managed by NBS, but also a couple by the National Population Commission. These, alongside the results of the 2006 census, provide the most reliable data for measuring the poverty situation in Nigeria and need to be institutionalised with the Federal Government budget.

2.1.6 Nigeria's equivalent of the Poverty Reduction Strategy Paper, the National Economic Empowerment Development Strategy (NEEDS), was produced in 2004 by the National Planning Commission (NPC). It included an elaborate structure for M&E that was never actualised; there has been no monitoring of NEEDS. At the present time, there is a plan to benchmark

[1] Baseline Diagnostic Study of the Current MDGs Monitoring and Evaluation System, Nigeria. Haden, Abalu & Rogers, January 2007, for OSSAP-MDGs, Federal Government of Nigeria

[2] A recent internal World Bank review by the Operations Evaluation Department found that only 2 of 6 ADPs were operating "satisfactorily"; Agricultural Development Projects in Nigeria, www.worldbank.org/oed

NEEDS (i.e. look at the performance of individual line Ministries in relation to NEEDS goals and targets), and there is also a parallel process of developing NEEDS 2. However, these exercises are not being conducted in a phased manner that will allow the benchmarking to inform the new strategy. Further, there is so little time remaining before elections in April 2007 that it is doubtful whether a meaningful benchmarking exercise can be carried out.

2.1.7 At the State level, a SEEDS document is the key development strategy, and the first SEEDS were produced in 2004, co-ordinated by NPC. In 2005, the first SEEDS benchmarking was carried out, with considerable support from DFID's State and Local Government Programme (SLGP). The four areas of benchmarking were policy, fiscal management, service delivery and communications and transparency. This exercise provided the basis for State performance management, potentially providing information that could influence State allocations from the Federal Government and the donors. SEEDS benchmarking has certainly influenced the latter. Detailed SEEDS M&E frameworks have been limited to date, though there is interest in improving M&E at this level in some States which are engaged in an ongoing process of reforming both planning and budgeting and attempting to link the two in a more effective linked cycle (for example Kano State).

2.1.8 The Office of the Senior Special Assistant to the President on MDGs (OSSAP-MDGs) acts as the secretariat to the Presidential Committee on the MDGs, which has had real traction in the governance arena because of its oversight function of the Paris Club debt relief gains (DRG) awarded to Nigeria in 2005. Part of OSSAP-MDGs role has been to assist the ten line Ministries benefiting from DRG funding to set up adequate tagging and monitoring systems to track the spend. OSSAP-MDGs has aimed to institutionalise good practice in relation to M&E more broadly than simply in relation to DRG. The Office has started a process to design a new national system for M&E, with World Bank support. OSSAP-MDGs is likely to dissolve immediately after the elections, but it plans to institutionalise much of what it is doing in relation to M&E within the Budget Monitoring and Evaluation Unit of the Budget Office, in the Ministry of Finance. It is envisaged that the national M&E system will be coordinated by BME, though the role of NPC will be critical in order to ensure proper institutionalised linkages between planning and budgeting.

Ministries of Agriculture, Water Resources and the Environment

2.2.1 At present, individual line Ministries are carrying out rudimentary monitoring of a tiny proportion of ongoing capital projects. This monitoring takes the form of field visits, which entail spot-checks on projects and which focus at the activity level without taking cognisance of how activities are linked to a broader results chain. Expenditure tracking is not taking place in any systematic way, though there have been some donor funded activities in this area. No evaluation is taking place, other than that which is a requirement of donor-funded projects; and often those that do occur do not link with the existing Ministerial structure for M&E.

2.2.2 The problem is not one of structure; each Ministry has a Department of Planning, Research and Statistics (DPRS) as well as M&E Units or Branches within operational departments. The problem is a lack of culture of evidence-based decision-making.

Structural Changes in Relevant Ministries for RIU

2.2.3 In January 2007, it was declared that the Federal Ministry of Agriculture and Rural Development (FMARD) would be remerged with the Federal Ministry of Water Resources. Similarly, the Federal Ministry of the Environment is to be merged with the Ministry of Housing and Urban Development. The details of how these changes will affect the structures, including the respective DPRS are not yet clear.

Agriculture Census

2.2.4 A national agricultural sample census is planned jointly between the Federal Ministry of Agriculture and NBS. This would be the first census of its kind since 1993/4, and it is designed to address the weakness in agricultural statistics production. An Inter-Ministerial Committee has been inaugurated, and five sub-committees are planned. Several donors have pledged support to the exercise, which would be a year in execution. The budget for the census is Naira 1.2 billion. The census will not take place until after elections, but the planning is well under way.

Water and Environment Data

2.2.5 Data on groundwater levels, forestry and land use on a national scale are patchy and out of date. There is a World Bank funded initiative to carry out a baseline on water supply and sanitation in several states, but this has an urban focus. Forestry and land use statistics are deplorable.

Implications of the Data Situation

2.3.1 Given the limitations of the data situation in relation to natural resources in Nigeria three points are key for RIU;

- That the design of its own internal M&E system will work from the assumption of starting from a zero base, and that it must be assumed that RIU will need to gather its own baseline data;
- That any initiative that the programme takes in relation to data gathering on any level should be done in conjunction with the relevant government structure(s) for M&E as far as possible in order to inform and feed into the ongoing reform processes;
- That any capacity building that RIU carries out should take due note of the relevant government officials who could benefit from the process

Section 3: Learning from Ongoing Programmes

3.1.1 Given that the Nigerian data situation is so poor, and that other programmes are operating in this environment and actively dealing with the lack of reliable information, a brief analysis of three of them was undertaken to inform RIU.

3.1.2 Discussions were held with officials from three ongoing relevant programmes:

- Fadama II, funded by the Government of Nigeria and the World Bank,
- MARKETS programme (funded by USAID) and
- PrOpCom programme (funded by DFID)

3.1.3 Annex 1 provides detail on how all three programmes have operated their M&E systems, particularly the setting of baselines. Three key lessons emerged of utility to RIU:

a) That all three programmes have had to deal with the paucity of data and to set their own baselines
b) That two of the baseline exercises were carried out too early in the programme cycle and have produced information of limited utility to the measurement of change incurred by the programme. In both cases this related to the fact that the baselines were too broad and not focused on the programme beneficiaries. The third programme, PrOpCom, learnt from the experience of MARKETS, and has decided to invest in localised baseline studies for each intervention it funds
c) That there is expertise in Nigeria to carry out various M&E related activities, but in the main the capacity is individual rather than institutional. For example, there are highly qualified academics in all of the RIU-related sub-sectors within the universities, private sector organisations and in government. The issue of capacity in relation to the MIL element of RIU will therefore need careful consideration once it is clear what the MIL needs of the programme are. Broad statements about capacity at this point are not useful, and further could actually be misleading.

Annex 1

Overview of Existing Relevant Programme M&E Systems and Progress to Date

1. Fadama II

1.1 The ongoing Fadama II project was designed as a 6-year intervention, 2004-2010, with a total value of USD $125.37 million (World Bank and Government of Nigeria)[1]. This budget covers 12 states (Adamawa, Bauchi, Gombe, FCT, Imo, Kaduna, Kebbi, Lagos, Niger, Ogun, Oyo and Taraba), with an additional 6 states financed by a loan from the African Development Fund: Borno, Jigawa, Katsina, Kogi, Kwara and Plateau. Further the Global Environment Facility contributes to the development objective of the Project by focusing on the conservation of critical ecosystems within the fadama areas as well as enhances the conservation of biodiversity and environmental services of global significance.

1.2 Project Development Objective (PDO): To sustainably increase the incomes of fadama users – those who depend directly or indirectly on fadama resources (farmers, pastoralists, fishers, hunters, gatherers and service providers) through empowering communities to take charge of their own development agenda, and by reducing conflict between fadama users. Fadamas – the Hausa name for irrigable land – are flood plains and low-lying areas underlined by shallow aquifers and found along Nigeria's river systems. The Project has taken a demand-driven approach whereby all users of fadama resources have been encouraged to develop participatory and socially-inclusive Local Development Plans (LDPs). The LDPs provide the basis for support under the Project.

1.3 Key Performance Indicators:

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

1.4 Project Components:

a) Capacity Building
b) Rural infrastructure investment
c) Pilot productive asset acquisition support
d) Demand-responsive Advisory Services, and

[1] The Fadama II project period has been condensed into 3 years, and Fadama III is currently being prepared for 2008-14.

e) Project Management and M&E

Under e), there are three sub-components, two of which are relevant to M&E:

- Support to the Federal Ministry of Agriculture and Rural Development, including the establishment and operation of a rural development data bank, building on the past experience of the Department of Planning, Research and Statistics
- The establishment of an M&E system, which will measure performance at various project milestones, and which has 3 elements
    i. Management Information System (MIS)
    ii. Impact evaluations and beneficiary assessments
    iii. Monitoring of the Environmental Management Plan (EMP)

1.5 The project design outlined M&E components at the State and National levels, including a new or upgrade of the MIS to monitor and evaluate implementation of the project. The MIS was to produce periodic progress reports, develop baseline surveys, gather information on cropped area and yield, and conduct thematic and market surveys and generate data for impact evaluation as well as guide the Fadama Community Associations in developing monitoring and evaluation indicators and an M&E plan. Impact evaluation surveys were to be conducted by experienced investigators from independent Nigerian institutions to be competitively selected by the National Fadama Development Office. Results of both quantitative and qualitative evaluations were to be used to identify areas of improvement during implementation. Impact studies were to be designed to evaluate the impact of subprojects and feedback to implementation, including an impact assessment at Midterm Review and at the end of the project. Finally, the project aimed to finance the implementation and monitoring of the EMP, including monitoring of water and soil quality.

1.6 The institutional structure for M&E is based on Fadama Community Associations, and FUGs (Fadama User Groups) collecting data manually, which is sent to the local Fadama Office, where it would be collated and transmitted to State and National offices.

Implementation Issues

MIS Data Warehousing

1.7 The project brought together a group of IT specialists, software development experts and M&E professionals to design an M&E system for Fadama II. Together the team designed a data warehouse model for the programme, which included technical specifications and requirements, and the development of indicators, using the higher-level indicators developed as part of project appraisal and developing quantitative indicators for all aspects of the five components of the programme. The system was in place by January 2006. It has had some technical hitches regarding the merging of data at different levels, but it basically serves the needs of the programme.

The aspiration to link the information system with the Federal Ministry's DPRS has not been realised; not enough money was allocated to this aspect of the programme to enable it to happen.

The Development of a Baseline

1.8 A baseline study was carried out in the 12 States. The baseline covered 3 main areas to cover the project development outcomes:

1. Average income
2. Level of conflict
3. The number of local development plans

However, it has not fully met the needs of the programme:

a) It was carried out before the 10 Local Government Areas were selected for each State. Therefore there have been questions about how representative the information is
b) Further, there was no stratification of the beneficiary target group, which was selected randomly, resulting in data that was 90% related to crop farmers rather than the range of groups required.

1.9 As part of an ongoing "beneficiary assessment" study which is reviewing the progress of Fadama II, geographically targeted sampling is being done to cover the same three themes of the baseline, (and additionally household consumption), from 3 sample groups:

1. Fadama beneficiaries in fadama local govt areas
2. Non-beneficiaries in fadama local government areas
3. Farmers outside the area who have not benefited from the programme

This current study aims to gauge the impact of Fadama II and justify the proposed investment into Fadama III. IFPRI has been involved with design and implementation, as are experts from a range of Nigerian universities. The programme is investing N120 million (some USD $800,000) and several months into the exercise; a significantly larger investment than the original baseline, which cost the programme N4.2 million, and took 3 months to complete. The main difference between the two exercises is related to cost; the baseline was designed internally by programme staff and carried out through the Agricultural Development Project (ADP)[2] structure. The beneficiary assessment has been designed with external expertise, and is

[2] Since 1974 the World Bank has committed USD 1.2 billion for Agricultural Development Projects (ADPs) to increase farm production and welfare among smallholders in Nigeria. The projects provided agricultural investment and services, rural roads and village water supplies. The government's adoption of the ADP concept put the smallholder at the centre of the agricultural development strategy. Though they were developed to perform a temporary role, in providing investments and services in lieu of relatively ineffective line agencies, the ADPs have nonetheless assumed a permanent status. They are now recognised as the major agricultural development institutions in the states, but difficulties persist with their funding.

technically led by expert consultants, who are drawing on ADP personnel as enumerators.

M&E Lessons Learned:

1. Invest properly in the baseline
2. Carry out the baseline when it is clear exactly where the project will operate
3. Utilise the Agricultural Development Project (ADP) structure and personnel as much as possible, in a competitive environment, to avoid complacency but to revitalise the structure as much as possible
4. The elaborate institutional structure of multi-tiered responsibility for M&E is part of the empowerment process of the programme

References:

Project Appraisal Document for the Second National Fadama Development Project, November 2003, World Bank

Data Warehousing Development for Project Management, Monitoring and Evaluation, November 2004, Second National Fadama Development Project

2. MARKETS

2.1 MARKETS (Maximising Agricultural Revenue and Key Enterprises in Targeted Sites) is a five-year programme (2005-2010) funded by USAID with a budget of USD $24 million. The MARKETS approach is to expand economic opportunities in the agricultural sector by increasing agricultural productivity, enhancing value-added processing, and increasing commercialisation through private sector driven and market-oriented growth and development. The programme works along the commodity development chain – from primary producer to processor to end-user. It seeks to transform Nigerian agriculture in selected areas from low input/low output, subsistence farming to commercially competitive agriculture. The programme has selected five commodity areas: rice, sorghum, cowpea, dairy and aquaculture.

M&E for the Programme

2.2 MARKETS has a set of 26 performance indicators and related targets against which it reports quarterly to USAID. Of the 26, there are 7 key indicators and targets for the end of project:

a) Number of clients networked
b) Number of new jobs created
c) Amount of revenue (sales) generated (in $ million)
d) Quantity of fertiliser sold by the private sector
e) Financial credit leveraged for farmers and agro-processors (in $ million)
f) Increased productivity of selected commodities
g) Volume of bulk commodities processed into value-added products

The programme Performance Management Plan (PMP) describes its monitoring and evaluation design and parameters, which sets out the need for two types of baseline – a baseline for indicators and a general sector-wide baseline. While project staff collect baseline data at the individual enterprise level for MARKETS partners, the project similarly required sector-wide, geographically and commodity specific information on value-chain productivity, efficiency and competitiveness to provide a quantitative context for critically assessing MARKETS results and impacts on client groups and enterprises. This information is to be periodically updated to provide a realistic context over time for the current production/productivity and business environment in MARKETS target areas.

Setting the Baseline

2.3 The programme carried out a competitive bidding process to contract out the baseline data collection exercise. The Institute for Applied Economics in Enugu won the bid (out of a total of four prospective bidders). The baseline study cost USD $100,000, took 3 months and covered 16 states (Adamawa, Bauchi, Borno, Benue, Ebonyi, FCT, Jigawa, Kaduna, Kano, Katsina, Kwara, Lagos, Niger, Ogun, Oyo, Taraba and Zamfara). The study covered

agribusiness opportunities, and the following information in relation to rice, sorghum and cowpea:

- Area cultivated
- Output and productivity
- Post-harvest (value addition)
- Technology Adoption and Extension Service
- Agro-Inputs
- Credit
- Markets

2.4 The baseline study was based almost entirely on secondary data (with some focus group interviews), which was a disappointment to MARKETS management. Secondary data were collected from the Agricultural Development Programmes in the states, State Ministries of Agriculture, State government departments and agencies involved in aspects of agribusiness activity – input, credit and commodity.

2.5 The study found that the availability, adequacy and reliability of secondary data on agribusiness indicators appear asymmetric across States of the country, reflecting the different levels of efficiency and performance of the ADPs in the respective states. Despite the data limitations, ADP data are nationally accepted as official agricultural statistics in Nigeria.

M&E Lessons Learned:

1. The baseline study was a USAID requirement. The programme does not require this type of broad baseline, which is useful only in terms of setting parameters, and giving a general yardstick
2. The baseline report was well written, though needed significant revision in terms of validating the data. It was an expensive exercise for the collation of secondary data
3. M&E resources could be used more effectively in a more iterative way, focusing on the target groups much more closely. MARKETS develops its own site-specific baselines, which are much more useful to measure the change that the project is effecting; the M&E system needs to be anchored into the groups with whom the programme is actually working
4. Many of the Agricultural Development Projects (ADPs) don't have the data MARKETS requires; and even where the data is available it is necessary to check its validity and be explicit about the range it may cover, rather than taking figures verbatim.

References:

USAID Nigeria MARKETS Collection of Baseline Data, AIAE Enugu, July 2006

3. PrOpCom

3.1 PrOpCom (Promoting Pro-poor Opportunities through Commodity and Service Markets) is a six-year DFID intervention (2004-2010) with a budget of GBP £17.5 million. The PrOpCom purpose is to facilitate market-led reform through improvements in selected commodity markets. PrOpCom aims to use a "Making Markets Work for the Poor" approach to address the systemic reasons that prevent commodity and service markets from functioning effectively for the poor in Nigeria. It is a "sister" programme to MARKETS; the two actively seek to complement each other. Priority commodity areas for the programme are rice, soyabean, cashew, cassava, livestock feed and the service sector. The focus has been largely on rice to date.

M&E for the Programme

3.2 PrOpCom has invested significant time into thinking through its M&E requirements. Two logframes have been developed and revised; one overall programme logframe and one specifically for rice. The programme has established an M&E system using multiple approaches to gathering information, based on the fact that secondary data is rarely available in a form that allows direct comparisons for measuring progress against the logframe. It is envisaged that all contracts with project facilitators and service providers will contain clauses requiring that they provide feedback to the project on the activities in which they are involved (as the MARKETS programme does).

3.3 Further, PrOpCom has learned from the experience of the MARKETS programme in terms of setting baselines, and decided that it would need a separate baseline survey for every geographical area of activity. To have a common base so that there is a degree of comparability between the baselines in different locations a basic matrix framework of information needs related to the Objectively Verifiable Indicators (OVIs) has been developed. PrOpCom has developed a basic questionnaire that will serve as a standard for use in all its "catalytic activity" baseline surveys.

Baseline Development

3.4 PrOpCom has just carried out its first baseline for rice in Ogun state, through an NGO, the New Nigeria Foundation. The survey was designed to analyse the marketing chain rather than broader socio-economic impact, and designed to measure whether PrOpCom will have a catalytic effect, and if so, whether there will be a spread effect beyond the immediate area of activity.

M&E Lessons Learned:

1. There is no good primary data available and even secondary data is questionable;
2. Therefore any new intervention needs to consider its information needs very carefully, particularly the extent of baseline information required;
3. There are a limited number of service providers to respond to the needs of the programme in terms of carrying out baseline surveys.

References:

Programme Logframes and related information
Terms of Reference for the Ofada Baseline Survey
Draft Final Report for the Ofada Baseline Survey

Annex 2

Consultation List

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