Capac1ty Building in Agricultural Extension: the World Bank Experience in Nigeria

ABSTRACT

Capacity building for effective agricultural extension may be required at the levels of individual, non-governmental group, and institutional and policy actors. World Bank support to Nigeria for capacity building in agricultural extension dates back to the mid-1970s with the establishment of nine enclave Agricultural Development Projects (ADPs). These were followed by the statewide ADPs (1981-83), the multi-state ADPs (1986-89), and the National Agricultural Technology Support Project approved in 1992. The total investment in the ADPs, so far is about US$2 billion. Analyses of the earlier World Bank interventions for capacity building show results that vary from highly satisfactory to unsatisfactory, depending largely on the performance of the Bank, the government and the rural clients. In the process, the Bank has learned a number of lessons which will guide its future interventions in agricultural extension in Nigeria. First, the client needs to be in the driver’s seat, empowered to decide its priorities and be able to hold extension agents accountable. Second, the Bank’s limited resources will need to be focused on achieving strategic outcomes that are in line with the client’s development priorities and for which the Bank has a comparative advantage. Third, the selectivity principle will be applied to support the development strategies of reforming state and local governments. These lessons are being applied in the Second National Fadama Development Project (Fadama II) and the proposed Fadama III Project. The paradigm shift adopted under these projects requires: (a) demand-responsive advisory services; (b) empowerment of user groups to participate in the planning and implementation of advisory services; and (c) encouragement of pluralistic service delivery. Although the experience on Fadama II is still very limited, there are clear indications of increasing participation and ownership by the user groups which will likely increase the sustainability of the investments in capacity building.

1.0 INTRODUCTION

Thank you for inviting the World Bank to this important conference of the Agricultural Extension Society of Nigeria (AESON), and to speak on the subject of capacity building in agricultural extension. The availability, dissemination and utilization of appropriate technology backed by adequate supporting institutions are critical factors for productivity growth in the agricultural sector. An effective extension service would facilitate the development of technology, support its adaptation and adoption by the farmers, foster linkages with relevant service providers and institutions, and provide feedback for further improvement of the system.

With over 65% of Nigerians living in poverty, most of them in the rural space, achieving the Millenium Development Goal (MDG) of reducing poverty and malnutrition by half by 2015 is undoubtedly a major challenge for Nigeria. Although the performance in GDP growth rate has improved in recent years, Nigeria’s historical trend growth rate is only 3.4%, just slightly higher than the population growth rate. At this rate, it will take over 20 years to double per capita incomes. Agricultural growth has also been slow and value added per capita has grown by less than 1% per annum in the last 20 years. Rapid and sustainable growth is necessary to ensure the reduction of poverty and malnutrition in Nigeria, and the agricultural extension services have a key role to play to make this happen.

In pursuit of its mission of fighting poverty with passion and professionalism for lasting results, the World Bank is finalizing a Country Partnership Strategy (CPS) for Nigeria, jointly agreed between the World Bank Group and the UK Department for International Development (DFID) and developed in close cooperation with the Government and other development partners. The CPS is the World Bank’s business plan for supporting Nigeria’s development agenda during FY06-09, and is anchored on three expected outcomes which are closely aligned to the pillars of the National Economic Empowerment and Development Strategy (NEEDS), Nigeria’s strategy for growth and poverty reduction. The three outcomes of the CPS are:
(i) improved service delivery for human development; (ii) improved environment and services for non-oil growth; and (iii) enhanced accountability and transparency for better governance.

The World Bank’s support to agricultural development during the CPS period will be through the non-oil growth outcome pillar. The Bank is supporting the NEEDS plan to grow the agricultural sector by 6% annually through the Fadama II Project that is being implemented in 12 states of the federation, a proposed Fadama III Project, and an ongoing Analytical and Advisory Activity (AAA) on Agricultural Sector Growth Review. The objective of the review is to identify potential sources of rapid and sustainable growth in Nigeria’s agricultural sector and to highlight the interventions that will be needed to unlock these sources of growth.

In the rest of this paper, section II will review the issue of capacity building for agricultural extension. Section III analyzes the Bank’s experience in building capacity for agricultural extension in Nigeria, with emphasis on what worked well and what worked less well in order to draw lessons for future capacity building interventions in agricultural extension. The last section will draw conclusions and make recommendations.

2.0 CAPACITY BUILDING IN AGRICULTURAL EXTENSION - WHAT, FOR WHOM AND FOR WHAT BENEFIT

Capacity is the ability of people, organizations and society as a whole to manage their affairs to achieve set goals. The existence of capacity is indicated by the functional presence of a combination of most of the following factors: viable institutions and related organizations, commitment and vision of leadership, financial and material resources, and skilled human resources. For agricultural extension, capacity building is, therefore, the process whereby relevant stakeholders and organizations unleash, strengthen, create, adapt and maintain capacity over time, usually with the objective of assuring sustainable agricultural growth and improving the lives of the stakeholders. It requires the acquisition of individual skills and institutional capacities as well as the development of opportunities to put these skills and networks to productive use in the transformation of the agricultural sector.

Capacity building for agricultural extension may be required at the following levels:

(a) Individual actors in agriculture – farmers and other primary producers, input distributors, processors and marketing agents, end users of primary or partly processed agricultural produce. The focus here is to enhance the ability of the individuals to diagnose constraints, resources and opportunities, to widen the solution options, and to adapt and adopt;

(b) Non-governmental group actors in agriculture – producer/input/marketing organizations, cooperatives, savings and credit organizations, community-based organizations, gender and youth groups, network of associations, etc. For this level of actors, capacity building will aim at enhancing the ability of people to work together on a common cause, with emphasis on ownership and advocacy, participation in policy debates, and negotiation with other stakeholders; and

(c) Institutional and policy actors – involved in policy formulation and implementation, public sector extension delivery, public sector input, value-added activities and marketing, regulation, education, research, monitoring and evaluation etc. Capacity building for this level would emphasize participatory development of extension policies and strategies, efficiency in the allocation and monitoring of public investment in extension, the relevance, efficiency and effectiveness of service delivery with equitable and transparent rules and norms, networking and collaboration, as well as functional engagement with and promotion of non-public sector stakeholders.

The major benefit of capacity building in agricultural extension is improved performance brought about by increasing the individual’s or organization’s potential in terms of resources (skills, infrastructure, finance, technology) and management (program and processes management, strategic leadership, networking and linkages). Capacity building helps reduce wasteful resource allocation, increases enterprise outcomes for stakeholders, improves farmers access to extension services, accelerates policy reforms and improves the
success of policy reforms. An example is the Bangladesh Food Policy Project implemented by the International Food Policy Research Institute (IFPRI), 1989-1994. One of the components was to strengthen the capacity for food policy analysis. The analysis done under this component estimated the inefficiency and costs of the food-targeted programs, leading the government to abolish the food rationing system and introduce a new food for education program. This new program increased school attendance of poor children. The increased technical and analytical capacities created, strategically tied to information sharing, increased the acceptance and adoption of research results (Babu 2000).

3.0 WORLD BANK EXPERIENCE IN CAPACITY BUILDING FOR AGRICULTURAL EXTENSION IN NIGERIA

World Bank support to the Government of Nigeria for capacity building in agricultural extension dates back to the mid-1970s with the establishment of nine enclave Agricultural Development Projects (ADPs) between 1975 and 1980 (Funtua, Gussau, Gombe, Lafia, Ayangba, Bida, Ilorin, Oyo North and Ekiti-Akoko). These were followed by the first generation of statewide ADPs (Bauchi, Karo, Sokoto and Kaduna) between 1981 and 1983, the multi-state ADPs (MSADP I, II and III) approved in 1986, 1988 and 1989 respectively, and the National Agricultural Technology Support Project (NATSP) approved in 1992. The last of the ADP projects, the NATSP closed in 1999. The total investment in the ADPs, the major institutional arrangement for Bank assistance to agricultural development, so far is about US$2 billion.

The Bank also supported: (a) the Agricultural Technical Assistance Project (ATAP) to strengthen the capacity of the Federal Department of Rural Development (APMEU and FACU) to plan, coordinate and monitor agricultural production programs; (b) the establishment of the Agricultural and Rural Management Training Institute (ARMITI) in 1979 with further funding for it being provided under the Multi-State ADP II; (c) under the National Agricultural Research Project (NARP), research on agricultural extension and strengthening of research-extension-farmer-input linkages (REFILS); and (d) other projects in livestock and forestry, which also provided for building extension capacity among the producers as well as the extension agents.

Emphasis in this paper will be on the capacity building efforts through the ADPs which targeted individual and group producers, women groups, extension agents, and public sector departments and agencies responsible for policy formulation, coordination of extension programs, and monitoring and evaluation of same. The support from ARMITI was also broadly targeted at the ADPs and other public sector clients, but was later extended to cooperatives, community-based organizations and research institutions.

The enclave ADPs

The enclave ADPs were established in the mid-1970s on the assumption of weak and ineffective local capacity for provision of extension services to small farmers. The ADPs were managed mainly by expatriate personnel who were provided appropriate financial resources and other facilities to do their work. Although the expatriates were supposed to relinquish their positions to Nigerians in the fourth year of the project, this hardly happened as conditions of service for local managers were rarely attractive enough to keep capable managers, and the expatriates tried all they could to protect their jobs and relevance. There was little training of local staff and their knowledge was not exploited to enhance agricultural extension service delivery. At the farmer level, a training and demonstration extension approach was used, which concentrated on a small number of cooperators using high-input technology on large demonstration plots and involving pre-selected sole crops. The extension activities during this period led to increased yields and incomes of the participating farmers, but the capacity gains, if any, were not sustainable.

Two key lessons for capacity building were identified from an analysis of the results of the first five enclave ADPs. Firstly, the farmers were highly selective and discriminatory in adopting the new products offered by the ADPs. They had an innate capacity to adopt recommendations that suited their personal circumstances. It was clear that to be effective, the extension services needed to consult the farmers and should respond to the farmers’ needs. Of course, the extension services did not have the capacity for such a
response. Second was the need to avoid investment in extension staff if there are no valid technical messages. This was a reflection of the poor capacity at both the research and extension ends.

**Statewide ADPs**

Implementation of the first statewide ADPs (Baueti, Kano, Sokoto) started in the early 1980s, each ADP having a component for Farm and Crop Development which covered research, extension and input supply. The features of the agricultural extension services in the enclave ADPs were basically replicated in the first set of statewide ADPs, which were also headed by expatriate project managers. However, because of the larger coverage of these projects, there was a stronger emphasis on training of local extension staff seconded from the ministry of agriculture and local staff were appointed as zonal managers. A major challenge to building the capacity of the extension staff was the very low academic qualifications possessed by most of the staff. The staff were equipped with vehicles and extension kits bought from loan proceeds. The extension method used was similar to that for the enclave ADPs, top-down in nature, focusing on high-input sole cropping technologies, with minimal participation by the farmers and no direct contact with women. Adoption rates by farmers were generally poor and the ADP management paid more attention to rural infrastructure and inputs distribution which required less robust agricultural extension capacity. Later evaluations rightly raised questions about the sustainability of frequent visits by a large number of extension agents and the quality of the interactions with the farmers.

An interesting chance outcome of the extension services under the statewide ADPs was the successful Fadama development program. In relation to capacity building for agricultural extension, this development generated two main lessons. First, the technology menu should be sufficiently comprehensive to address the major constraints of the farmers. The uptake of the tubewell/pump package technology was low initially, as farmers were not sufficiently advised on the economics of its use, and they tended to irrigate low value grain crops, including supplementary irrigation for rice in the wet season. As farmers began to appreciate the potential for dry season production of vegetables, technology uptake increased remarkably. There was a clear switch to market-oriented production, an increase in the use of cash inputs, and a widening of the range of products. The expanded range of products enhanced the farmers’ ability to spread risks and increase consumer choice. Second, the suitability of technology is a major determinant of successful agricultural extension outcomes. The highly divisible irrigation technology was within the capacity of the individual farmers to adopt as compared with the earlier introduced group-owned diesel pumps.

**MSADP I, II and III**

The design of the multi-state ADPs benefited from the lessons of the first two enclave ADPs and the 1985 World Bank Agricultural Sector Memorandum. For instance, compared with Ayangba ADP which provided a total investment of US$1,100 per farm family, MSADP I only provided US$103. The Sector Memorandum noted that: (a) the existing institutional framework encouraged duplication and inefficient services to farmers, (b) the cumbersome distribution procedures discouraged an increasing uptake of fertilizers by smallholder farmers, (c) there was a limited range of new technology available for extension, (d) there was a low uptake of improved planting material, and (e) there was little impact from the national agricultural research centers.

The MSADP I strategy was to develop a smaller but more effective extension service. MSADP II was appraised just after MSADP I became effective, and with little scope to learn from the MSADP I experience, MSADP II had the ambitious aim of strengthening agricultural services through the unification of the services and providing institutional development support to the ADPs and ministries. MSADP III had components similar to those of the first two projects, but there was the addition of a fisheries component, and crop extension was broadened to include tree crops. The addition of fisheries and tree crops brought about greater project complexity and raised additional challenges for the capacity of the extension services. The period of the MSADPs also witnessed the introduction of the Training and Visit (T&V) extension approach to Nigeria by the World Bank and a considerable emphasis on Women-in-Agriculture (WIA). During implementation, extension was unified in the three MSADPs.

The evaluation of the MSADPs showed that the technology packages all had three elements – use of improved planting material, improved husbandry techniques, and use of chemical inputs, primarily inorganic
fertilizers and pesticides. Analysis of crop areas and yields showed that expansion of area was the dominant
effect in most crops, and the greatest yield changes occurred for crops (groundnut, millet) for which no major
technical packages are available, and cassava. This raised questions about the robustness of the available
technical packages and the ability of the extension services to assist the farmers to adapt the packages. The
extension service, while successful at delivering available technology, was yet to develop the capacity to
respond to farmers’ needs and develop technical packages that solve the problems some farmers faced. A
lesson that came out clearly is that without an analysis of the profitability of technical packages, the
extension service was unable to assist the farmers to tackle an environment where costs and prices were
changing. The MSADPs never developed this orientation. For MSADP II and III which provided for rural
infrastructure and private sector input supply, the ADPs did not have the staff with special community and
private sector development skills. Also, the cost-effectiveness and sustainability of the unified extension
service is yet to be proven. While a unified extension service engendered a common approach to the food
crops, tree crops, livestock and fisheries sub-sectors of agriculture, there was no solid evidence to confirm
changes in staffing levels or ratio of field to supervisory staff.

**NATSP**

The objective of the NATSP was to strengthen, in the states of Bauchi, Kano, Jigawa, Sokoto and Kebbi (and
in a smaller way in selected other states, through the Technology Support Facility), the adaptation and
dissemination of location-specific, environmentally sound, agricultural technology to increase farm
productivity and production on a sustainable basis. The Agricultural Extension component which accounted
for 44% of the total cost of the project of US$60 million, was to ensure the unification of the extension
service to provide cost-effective services to all categories of farmers, including women in agriculture. There
was also provision for manpower development and training to build the capacity of the ADP staff, especially,
the extension staff.

The extension component achieved its objective of unifying the extension service in all the ADPs. The
T&V extension approach used was credited with regular and intensive training of extension agents and visits
to contact farmers, but it was considered to be top-down in the development of technical recommendations
and did not respond to farmers’ socioeconomic conditions and investment attitudes. The approach was also
considered to be costly in terms of its high demand for staff mobility and field allowances which were not
readily available. There was considerable success in building the capacity of women for improved crop and
livestock production, post-harvest practices, family nutrition, and access to credit. Two lessons learned for
agricultural extension capacity building include: (a) the need for the harmonization of public and donor
agency institutional arrangements for agricultural extension to ensure complementarity and reduce
duplication; and (b) the need to empower beneficiaries, communities, the private sector and local
governments for greater participation in the planning and implementation of future extension programs, and
to make the extension services more decentralized and demand-driven.

**The paradigm shift under Fadama II**

Taking into cognisance the lessons of the earlier agricultural extension projects in Nigeria as well as the
experience of the new generation of extension projects elsewhere, the Advisory Services component of the
Fadama II Project has been designed with the following considerations:

(a) demand-responsive advisory services, responding to identified priority constraints in production,
processing, marketing, community mobilization, natural resources management (NRM), etc;

(b) empowerment of the advisory service user groups to participate in planning, implementation, choice
of service providers and payment for services, and with user contribution to costs to promote
ownership;

(c) encouragement of pluralistic service delivery (private and public service providers), tapping on the
respective subject matter competencies of different providers, encouraging the use of indigenous
knowledge systems, and reducing the ‘one size fits all’ syndrome;
(d) promoting the sharing of knowledge and lessons about good practices in implementation, including processes, methods, and subject matter issues; and
(e) decentralized decision making to the local government level, but providing for synergy of activities across wider areas;

The experience on Fadama II is still very limited, but fadama user groups have already produced the first set of proposals for implementing demand-responsive advisory services as a part of the local development plan (LDP) that will drive the socially-inclusive investments at the community level. One is highly optimistic that this paradigm shift will help resolve many of the shortcomings identified in Nigeria’s earlier efforts at capacity building for agricultural extension. The increasing participation and ownership by the user groups will likely increase the sustainability of the investments in capacity building.

4.0 CONCLUSION

Capacity building in agricultural extension aims at enhancing the capability of the key stakeholders in agricultural extension policy formulation, implementation, monitoring and evaluation as well as equipping the primary producers and other value-added actors with the knowledge, skills and attitude that enable them take effective charge of their development.

The World Bank over the last 30 years, has worked in collaboration with the government of Nigeria and other development partners to help create, adapt and maintain capacity for agricultural extension, with the objective of helping the farmers improve their incomes. The ADP system has been the major implementing agency for the Bank’s support, but the interventions hitherto have been largely supply-driven. Although the ADPs have positively impacted on Nigeria’s rural sector, with the closure of the World Bank loans in the mid 1990s, they have been experiencing unstable and inadequate funding and the sustainability of the system is questionable. The standardization of the ADP system has also made them a “one-size-fits-all” form of organization, and their structure does not fully reflect the diverse agro-ecological, institutional, political, economic and social make-up of the states. Recently, the T&V approach of extension has come under severe criticism for being expensive to operate and for excluding non-public sector stakeholders from participation in extension delivery systems (World Bank 2004).

Analyses of the World Bank’s interventions for capacity building show results that vary from highly satisfactory to unsatisfactory, depending largely on the performance of the Bank, the government and the rural clients. In the process, the Bank has learned a number of lessons which will guide its future interventions in agricultural extension in Nigeria. First, the client needs to be in the driver’s seat, empowered to decide its priorities, to fully participate in the development process, from planning to implementation and evaluation, and to be able to hold extension agents accountable. Second, the Bank’s limited resources will need to be focused on achieving strategic outcomes that are in line with the client’s development priorities and for which the Bank has a comparative advantage. Third, the selectivity principle will need to be applied at the sub-national government level to support the development strategies of reforming state and local governments. Fostering client ownership and sustainability of activities is at the core of the Bank’s strategy for assistance to Nigeria.

If Nigeria’s agricultural sector which is considered by Government to be the engine of economic growth under the NEEDS is to grow in a sustainable and equitable manner, then a fundamental change is required in the sector strategies. Capacity building will remain a key factor for such forward movement and it must be strategic and comprehensive enough to result in significant knowledge, skill and attitude changes among the key actors and institutions for sustainable economic growth.
REFERENCES
