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Workshop Report # 5

Stakeholder Workshop: Developing Evidence for Agricultural and Rural Development Policies and Strategies in Nigeria

Nigeria Strategy Support Program (NSSP)

Workshop Report No. NSSP 005

May 20, 2008

IFPRI-Abuja

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THE NIGERIA STRATEGY SUPPORT PROGRAM (NSSP)

WORKSHOP REPORTS

ABOUT NSSP/APSF

The Agricultural Policy Support Facility (APSF) is an initiative to strengthen evidence-based policymaking in Nigeria in the areas of rural and agricultural development. Facilitated by the **Nigeria Strategy Support Program of the International Food Policy Research Institute** (IFPRI) in collaboration with the Federal Ministry of Agriculture and Water Resources and funded by the Canadian International Development Agency, APSF supports the implementation of Nigeria's national development plans by strengthening agricultural-sector policies and strategies through:

- Enhanced knowledge, information, data, and tools for the analysis, design, and implementation of pro-poor, gender-sensitive, and environmentally sustainable agricultural and rural development policies and strategies in Nigeria;
- Strengthened capacity for government agencies, research institutions, and other stakeholders to carry out and use applied research that directly informs agricultural and rural policies and strategies; and
- Improved communication linkages and consultations between policymakers, policy analysts, and policy beneficiaries on agricultural and rural development policy issues.

ABOUT THESE WORKSHOP REPORTS

The Nigeria Strategy Support Program (NSSP) Workshop Reports contain a summary of the workshop and the key discussion points raised by the participants. The reports have not been subject to a formal peer review. They are circulated in order to share discussion points and outputs of the respective workshop. The opinions stated are those of the participants and do not necessarily reflect those of their home institutions or supporting organizations.

**Stakeholder Workshop:
Developing Evidence for Agricultural
and Rural Development Policies and Strategies in Nigeria¹**

Abuja, Nigeria

May 20, 2008

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Table of Contents

EXECUTIVE SUMMARY	1
RESEARCH FINDINGS.....	1
STRENGTHENING THE ENVIRONMENT FOR EVIDENCE-BASED, PRO-POOR, GENDER-SENSITIVE, AND ENVIRONMENTALLY SUSTAINABLE AGRICULTURAL POLICYMAKING AND STRATEGY DESIGN	3
GROUP DISCUSSION ON PRELIMINARY FINDINGS AND UPCOMING RESEARCH.....	4
SPENDING AND INVESTMENT	4
GENDER.....	5
NEXT STEPS	5
INTRODUCTION	6
OPENING REMARKS	6
SUMMARY OF PRESENTATIONS AND DISCUSSIONS	7
OPTIONS FOR AGRICULTURAL SECTOR GROWTH THAT IS PRO-POOR, GENDER SENSITIVE, AND ENVIRONMENTALLY SUSTAINABLE.....	8
GROWTH OPTIONS FOR ACHIEVING DEVELOPMENT TARGETS	13
IMPROVING THE NIGERIAN POLICY LANDSCAPE.....	16
GENDER.....	16
GROUP DISCUSSIONS	17
GROUP I: ANALYZING AGRICULTURAL GROWTH OPTIONS FOR ACHIEVING DEVELOPMENT TARGETS	18
GROUP II: PRIORITIZING PUBLIC SPENDING AND INVESTMENT	19
GROUP III: ENHANCING COMPETITIVENESS OF COMMODITY VALUE CHAIN	20
GROUP IV: PROFITABILITY OF CROPS & LAND MANAGEMENT.....	21
GROUP V: DECENTRALIZATION AND PUBLIC SERVICE DELIVERY IN NIGERIA	22
GROUP VI: ENHANCING AGRICULTURAL & RURAL DEVELOPMENT POLICIES: A GENDER LENS.....	24
GROUP VII: RURAL ECONOMY KNOWLEDGE SUPPORT SYSTEM	24
NEXT STEPS.....	25
APPENDIX A: AGENDA	26
APPENDIX B: PARTICIPANTS LIST.....	28
APPENDIX C: PRESENTATIONS.....	35

Executive Summary

Bridging the research and policy divide remains a top priority on the Nigerian federal government's agenda. This renewed commitment paved the way for the Agricultural Support Facility Project (APSF), which seeks to, among other things, create an environment and produce evidence on specific policy issues facing the Nigerian agricultural sector that allows for a more inclusive design and implementation of evidence-based, pro-poor, gender sensitive, and environmentally sustainable agricultural and rural development policies and strategies in Nigeria.

The conviction that the policymaking process should benefit from stakeholders' active participation led APSF to organize a stakeholder workshop to serve as a forum for addressing issues emanating from the evidence being generated by the facility. The workshop objectives were to:

- Share progress on implementing APSF;
- Discuss current research findings; and
- Dialogue with stakeholders on upcoming activities (see Appendix A for Agenda).

The workshop brought together participants from the Federal Ministry of Agriculture and Water Resources (FMAWR), the National Planning Commission (NPC), the National Bureau of Statistics (NBS), the Federal Ministry of Finance (FMF), the Federal Ministry of Commerce and Industry (FMCI), the New Partnership for Africa's Development (NEPAD), the donor community, academia, farmers' organizations and the private sector. This executive summary provides an overview of the research findings, highlights key group discussion points, and provides next steps.

Research Findings

As APSF has just completed its first year of implementation, most of its research activities are in progress and not finalized, with the exception of the National Agricultural Public Expenditure Review (NAGPER). Therefore, preliminary results were shared with the participants for further input. This section provides a few key findings from each of the following research activities:

- National agriculture public expenditure review (NAGPER)
- Analyzing agricultural growth options for achieving development targets
- Trends, constraints and approaches for increasing productivity and profitability of crop production in Nigeria
- Enhancing commodity value chains in Nigeria
- Enhancing the effectiveness and gender responsiveness of public service provision for agriculture

Growth options for attaining development targets

APSF research on growth options for attaining development targets has so far focused on the level of agriculture public expenditures in Nigeria and the various policies and strategies that aim induce agricultural growth.

Public spending on agriculture in Nigeria is low, with less than two percent of the federal budget allocated to agriculture (2001-2005). While low spending in agriculture is an obvious flaw, more worrisome is the lopsidedness of such spending. Three out of 179 sub-items of federal government agricultural capital expenditure accounted for 81 percent of spending: fertilizer procurement and distribution (43%), the National Special Program on Food Security (22%), and the buyer of last resort grain purchase program (16%). The lack of functional budget lines within the agricultural budget structure and a poor data reporting system with FMAWR makes tracking expenditures difficult. There is a need to improve Nigeria's agriculture public expenditure tracking system and to clarify the roles of the three tiers of government in agricultural delivery services.

The use of targets to monitor the development agenda is intensifying in Nigeria, but there is a need to examine the internal consistency of these targets to ascertain their adequacy. With an array of policies for agriculture in Nigeria, the sector's development strategy is in its formative stage. For those policies and strategies that have been designed, performance indicators are limited and continue to constrain the tracking of progress and improvements.

Options for agricultural sector growth

The preliminary analyses that are looking at options for agricultural sector growth that is pro-poor, gender sensitive, and environmentally sustainable have provided some insights on how to enhance agriculture growth through enhancing commodity value chains, and increasing agricultural productivity, and the decentralization of agricultural services.

Initial analysis on commodity value chains using a policy analysis matrix (PAM) showed that there are obvious distortions in both rice and cassava markets. Low yield (200t/ha-300t/ha) and high production costs prohibit Nigeria from having a comparative advantage in exporting cassava chips. Furthermore, the quality difference between local and imported rice remains a big challenge for Nigeria. The research team is in the process of collecting additional data for a more robust analysis.

The initial research on increasing agricultural productivity and profitability identified poor agricultural pricing policies, low fertilizer use, inadequate and untimely release of government funds, low and unstable investment in research, poor access to credit,

insufficient funding and coordination of agricultural extension, limited market access, and problems with land tenure and degradation as major challenges. To reverse the trend and put Nigerian farmers on the path of sustainable productivity growth, public policies must address the constraints listed above, and elicit better private sector participation especially in funding research. Research also showed that productivity in cassava, yam, maize, rice and millet across Nigeria's three principal agro-ecological zones is driven by level of farmers' education, farming experience, wise use of labor, and access to extension services. In fadama areas, investment in irrigation, roads, education, and membership of cooperatives can increase return to their high-value crops.

Nigeria is one of the most decentralized countries in Africa yet access to agricultural services is low. Furthermore, horizontal imbalances in revenue sharing are increasing and may inhibit addressing some of the national development challenges that vary across states and local government areas.

Strengthening the Environment for Evidence-based, Pro-poor, Gender-Sensitive, and Environmentally Sustainable Agricultural Policymaking and Strategy Design

Understanding the policy landscape, the existing capacity, and how gender and environmental issues are integrated into policy research and policymaking is essential to identify ways to strengthen the environment for evidence-based policymaking and strategy design.

The policy landscape in Nigeria admittedly needs to be strengthened to be able to supply and demand for evidence in the policymaking process. The initial situation analysis drawn from a review of policies and consultation workshops showed that human capacity within the sectoral ministry for formulating policies for agricultural and rural development is inadequate. Furthermore, performance indicators of policies and programs are limited; hence it remains difficult to track progress and improvement. The current curriculum in selected agricultural universities revealed weak policy analysis tools skills and requires strengthening to cater for the future generation of policymakers and analysts.

Gender is seldom seen as a main focus in research conceptualization and in the designing and implementation of policies and programs in Nigeria. If development efforts are to address the needs and priorities of both men and women, which are different, due consideration must be given to gender dimension of poverty, nutrition, and food security in the country. Researchers, policy analysts, policy planners, and policymakers should be held accountable for policies and programs which address gender related issues

Group Discussion on Preliminary Findings and Upcoming Research

Time was allocated for in-depth group discussions by key research topic. Key points from each group discussion are highlighted below.

- Group 1: Analyzing agriculture growth option for achieving development targets
- Group 2: Prioritizing public spending and investment
- Group 3: Enhancing competitiveness of commodity value chains
- Group 4: Profitability of crops and land management
- Group 5: Decentralization and public service delivery in Nigeria
- Group 6: Enhancing agricultural and rural development policies through a gender lens
- Group 7: Rural economy knowledge support system

In analyzing the growth options for achieving development targets in Nigeria, stakeholders agreed that growth targets set in the different policy documents (NEEDS I and II, 7-point agenda) in Nigeria could not be judged feasible until a more detailed and thorough analysis is done to check adequacy and internal consistency of such growth targets, including subsectoral targets. The analysis should be sensitive to the diverse regional differences in the country.

Spending and Investment

The group discussing competitiveness of commodity value chains identified climate and rainfall, price information, finances, infrastructure and lack of access to input as key constraints. The stakeholders recommended that interventions to address the constraints be sequenced in this order: productivity, processing, and transport. While planning the intervention programs, government should focus on commodities with high-value addition potential that would not undermine food security objectives of the farm families.

Discussions around productivity growth and crop profitability highlighted that future sources of productivity growth conditioned on land management are: investment in small scale irrigation, advisory services on land management, resuscitation and expansion of agro forestry, soil testing and fertility management, high quality seed, adequate and timely access to input, improved research and extension linkage, appropriate mechanization of farm operations, and public-private demand driven research.

The importance of decentralizing input delivery was discussed. This decentralization is conditioned on the capacity of local government institutions to be strengthened to effectively deliver high quality public services. The group also expressed the need for mandatory participatory budgeting and planning at local levels as well as literacy program and political education, which could spur better participation in the policy decisionmaking process.

The relevance of knowledge and its use for strategic policy planning and analysis is not in doubt but developing an effective knowledge management system remained a major challenge in Nigeria's policy landscape. To address the gap between stakeholders that produce and those that use knowledge, REKSS should relate more with all the relevant stakeholders in the policy landscape. Doing this, the policy landscape should be sensitive to gender issues.

Gender

The outcomes of policy decision affect men and women differently but adequate attention has not been paid to it during research design and policy formulation. However, lack of adequate and reliable gender disaggregated data continues to constrain the tracking of gender dimensions of policy action. Arguably, gender issues need to be mainstreamed into the policy decision making process at all levels of government. Targeting of interventions on Functional education, value re-orientation, and participatory needs assessment will improve women access to crucial services.

Next Steps

The APSF research team will consider the recommendations and consensus coming from the participants in the revisions of their research and outputs. Thereafter, additional data will be collected and analyzed to capture critical issues that emerged from the workshop. Final reports will then be circulated to key stakeholders and posted on the Nigeria Strategy Support Program webpage hosted by IFPRI.

Introduction

Bridging the research and policy divide remains a top priority on the Nigerian federal government agenda. The renewed commitment for pursuing evidence-based policymaking paved the way for the Agricultural Support Facility Project (APSF), which seeks to, among other things, create an environment and produce evidence on specific policy issues facing the Nigerian agricultural sector that allows for a more inclusive design and implementation of evidence-based, pro-poor, gender sensitive, and environmentally sustainable agricultural and rural development policies and strategies in Nigeria.

The conviction that the policymaking process should benefit from stakeholders' active participation led APSF to organize a stakeholder workshop to serve as a forum for addressing issues emanating from the evidences being generated by APSF research teams. The workshop objectives were to:

- Share progress on implementing APSF;
- Discuss current research findings; and
- Dialogue with stakeholders on upcoming activities (see Appendix A for Agenda).

The workshop was held at the Valencia Hotel in Abuja on May 20, 2008 and brought together participants from the Federal Ministry of Agriculture and Water Resources (FMAWR), the National Planning Commission (NPC), the National Bureau of Statistics (NBS), the Federal Ministry of Finance (FMF), the Federal Ministry of Commerce and Industry (FMCI), the New Partnership for Africa's Development (NEPAD), the donor community, academia, farmers' organizations and the private sector (see Appendix B for participants list).

This workshop report provides an overview of the presentations, key reactions, and group discussions, and next steps.

Opening Remarks

The workshop commenced with an opening prayer by Prof. Anthony Ikpi of the University of Ibadan. Thereafter, welcome addresses were given by Mr. Oluwole Edun (representing the Permanent Secretary), Mr. Ako Amadi (Representing Head of Corporation, Canadian International Development Agency (CIDA)), and Dr. Shenggen Fan, Division Director, Development Strategy and Governance, International Food Policy Research Institute (IFPRI).

Mr. Edun welcomed the participants on behalf of Prof. O.A Afolabi, Permanent Secretary, FMAWR. In his remarks, he opined that the workshop is timely and expressed appreciation to the attendees. He reaffirmed his conviction that the forum will be able to proffer solution to some of the recalcitrant challenges facing agriculture in the country. Commenting further, he asserted that without food security there cannot be

national security, and reminded the audience of the need for the output of the workshop to be presented in a context-related form to the authorities.

Mr. Ako Amadi, who represented Ms. Julia Bracken, Head of Corporation CIDA, conveyed her apologies, welcomed the participants, and reiterated the central place agriculture takes in Nigeria's economy, and her quest for poverty reduction, food security, and economic growth. According to him, the sector provides 45 percent of the gross domestic product (GDP), and 60 percent of employment in the country. More than 70 percent of the poor reside in rural areas; 90 percent of whom find livelihood in agriculture. According to Mr. Amadi, food security is the first of President Yar'Adua's 7-Point Agenda, but he noted that historical data on changes in agricultural production and land use, a starting point in the fight against food insecurity, are seldom assembled and documented sequentially. Worst still, the existing secondary data are not spatially organized to facilitate detailed case studies that could guide policy action.

Data remains a huge challenge in Nigeria's policy landscape, but the cost of improper enumeration and analysis that results in an economy operating outside statistical margin of error is better imagined. Every country must therefore have a repository of consistently collected data and evidence from research for effective policy action against food insecurity. The current international rise in prices of food, which affects Nigeria, could have been predicted, had adequate data and its analysis been a regular function supporting policymaking in Nigeria.

Dr. Shenggen Fan, IFPRI Division Director, gave an overview of the Agricultural Policy Support Facility (APSF) with tripartite organizational collaboration (FMAWR, CIDA, and IFPRI), and the expectations from the workshop. He reminded the audience that IFPRI was established in the 1970s after the first food crisis, a moment just like today, where food prices are rising and supply decreasing, to provide policy options for cutting poverty and ending hunger. According to him, APSF was officially launched in September 2007. He informed the participants that preliminary results will be presented at today's meeting, and urged them to be forthcoming in their feedback.

Summary of Presentations and Discussions

Agriculture is one of the areas of focus of the strategic vision for growth and development in Nigeria. Identifying priority areas of policy actions and investments that will spur the type of growth and development envisaged in the sector requires plausible evidence from policy-oriented research.

The following presentations provided preliminary evidence and results from knowledge reviews and research results that APSF has undertaken in its first year of operation. The presentations are divided into three broad groups. The first group provides insights into the options the government can explore for agricultural growth that is pro-poor, gender sensitive, and environmentally sustainable. The second set of presentations highlights current public spending patterns, an initial step to determining the right priority mix of

investments as well as the impacts of the different agricultural growth options on poverty and rural and urban households. The third set of presentations touches on ways to improve the entire policy landscape and the cross-cutting issue of gender.

Options for Agricultural Sector Growth that is Pro-poor, Gender Sensitive, and Environmentally Sustainable

Achieving agricultural growth is at the centre of the poverty reduction objective of the government, as the welfare of the poor is intricately tied to the performance of the agricultural sector. Sustainable agricultural growth, therefore, would depend on improved productivity, profitability, and competitiveness of agricultural activities and efficient service delivery systems. The following six presentations provided highlights of the research work on understanding the options for agricultural growth in Nigeria.

Constraints to Agricultural Productivity in Nigeria by Dayo Phillip, Professor of Agricultural Economics and Farm Management, University of Agriculture, Abeokuta

Trends and Drivers of Agricultural Productivity in Nigeria by Dr. O.A. Oni, Lecturer, Department of Agricultural Economics University of Ibadan

Returns to Land Management Practices and their Implications for Increasing Agricultural Productivity in Nigeria by Dr. Ephraim Nkonya, Research Fellow, IFPRI

Profitability of Key Crops in Fadama Regions of Nigeria by Dr John Pender, Senior Research Fellow, IFPRI

Enhancing the Competitiveness of Commodity Value Chains by Ms. Saweda Liverpool, doctoral student at the University of Illinois, Champagne

Delivery of Agricultural and Rural Services by Dr. Kamiljon Akramov, Post-Doctoral Fellow, IFPRI and Dr. Christiana Okojie, Professor, Department of Economics and Statistics, University of Benin

Increasing Agricultural Productivity

The first four presentations examined the constraints and determinants of agricultural productivity in Nigeria, and assessed the profitability of crops and the returns to land management practices in the fadama areas of Nigeria.

Prof. Phillip reviewed the **constraints to agricultural productivity** by underscoring the macroeconomic policy distortions (overvalued exchange rate and dictated domestic prices) witnessed during the first two decades after independence that resulted in limited downstream activities. According to him, the policy distortions paved way for the adoption of the Structural Adjustment Programme (SAP) in 1986. The presentation also touched on the impact of the presidential initiatives on the output of cassava, rice, and groundnut between 2001 and 2006. Based on a review of more than 40 studies on agricultural productivity in Nigeria, Dr. Phillip classified the constraints into three categories: (1) sector-wide, (2) commodity specific, and (3) livestock related. Examples

of sector-wide constraints given include: poor agricultural pricing policies, low fertilizer use, inadequate and untimely release of funds by all government tiers, low and unstable investment in research, limited access to credit, poor funding and coordination of agricultural extension, poor market access, and land tenure/land degradation problems. For the commodities reviewed, fertilizer shortages, lack of protection of the outgrowers, and multiplication problems of the crops are the major constraints identified. Others include high cost of inputs and farm machinery. Seasonality of feed, water, good quality pasture, poor veterinary services, costly medicines, biological limitations, and inconsistent livestock trade policies are major constraints affecting livestock production.

Some of his recommendations to address these constraints include the need for:

- agricultural policies to endure and outlive the government that formulated them;
- the various government tiers to act in consonance with the economic reforms agenda which entails promotion of greater or absolute private sector roles in agricultural production, processing and marketing of farm commodities as well as provision of farm inputs;
- adequate and timely release of approved budgets;
- input subsidy programs to be market responsive;
- adequate pricing, so that farm income will be high enough to enable purchase of farm inputs;
- improving access of women to farmland, extension services and farm inputs
- loan terms to be more flexible;
- improved public and private investments in agricultural research and development;
- the Land Use Act of 1978 to be reviewed; and
- Greater government investments in transportation infrastructure, especially rural-urban roads and markets.

The quality and quantity of fertilizer used and sufficient moisture in the soil were among the issues discussed amongst the audience. It was brought to the group's attention that consistent improvement in planting materials, such as experienced during the Green Revolution, could contribute to increase agricultural productivity in Nigeria and that the seed sector in Nigeria needs to be carefully reviewed.

Another concern expressed was the need for an enabling environment for the private sector to operate. It was argued that the private sector has the capacity to turn the agricultural sector around citing the Nucleus Estate Initiative promoted by OLAM Mill Nigeria Limited, which has technical backstopping from USAID MARKETS. There is also a need to strengthen the linkage between research and policy.

In responding, the presenter agreed to the suggestions but submitted that given the present environment, the private sector could do more, especially in the area of funding research. Prof Phillip mentioned that in the United States, private entrepreneurs in

swine production supported research in animal science, and those involved in crop production and processing supported research in agronomy.

Income support for farmers, a departure from the hitherto production support, was another point of discourse. The consensus was that a two pronged approach supporting both supply and marketing could be used.

The commodity boards practiced in Nigeria in the seventies were observed by the participants to have failed, thus, they were discontinued. Some participants however asked whether such strategy should be re-introduced.

Dr. Omobowale Ayoola Oni explored **Trends and Drivers of Agricultural Productivity in Nigeria** looking specifically at cassava, yam, maize, rice, and millet production in three principal agro-ecological zones (dry savannah, humid forest, and moist savannah) and the geopolitical zones (north central, northwest, northeast, southwest, southeast and south south). The study used the production data from the National Bureau of Statistics covering the period of 1995 to 2006. Findings from the study revealed that the north central zone of Nigeria ranks the highest in output and area planted for most of the crops reviewed. When looking across the agro-ecological zones, comparative advantage in land use varies for different crops. The humid forest zone was found to have comparative advantage in land use for the production of yam, maize and cassava. The moist savannah zone reported the highest yields of rice and the highest yield of millet was reported in the dry savannah zone. Productivity of male family labor for cassava and maize was highest in the southwestern zone, rice and yam in the north central and south western zones while that of millet was highest in the northeastern zone of the country. Similarly, productivity of female family labor for maize and cassava was highest in the north and south western zones, rice and yam in the north central, northwest and southwestern zones. In contrast however, productivity of female family labor for millet was observed to be highest in the northwestern zone.

Four drivers of agricultural productivity were found to cross all the agro-ecological zones: level of education, farming experience, wise use of labor, and access to extension services. Studies reviewed showed that male labor was more productive than female labor for most crops across most geopolitical zones. However, women were more productive than male farmers in the northern region. The presentation was concluded by raising some policy issues such as human capital development, labor saving technology, favorable input pricing, land reform, and gender mainstreaming.

A concern was raised on the assertion that women are more productive in millet production, particularly in the northern part of Nigeria. This debate revolved around a disagreement about women's involvement in farming in northern Nigeria. The participant mentioned that women do not do much farming in the north. Dr. Oni expressed that data on labor per type of crop was limited, and therefore constrained a robust analysis. He explained that the study assumed if all labor available on the side of women was put into

millet production, women will be more productive than men. To have better analytical results, a normal input-output analysis is needed.

Dr. Ephraim Nkonya provided a quick overview of the Fadama II evaluation and then explored the **returns to land management practices and their implications for increasing agricultural productivity in fadama areas of Nigeria**. The Fadama II evaluation showed that participation in the Fadama II project increased household income of beneficiaries by 60 percent and led to significantly higher probability in using irrigation, which is a significant determinant of crop yield. The non-Fadama II households in fadama areas earn more income from non-farm sources, confirming the focus of Fadama II which is on the poor farmers who depend on agriculture rather than non-farm activities.

He analyzed fertilizer use, manure, cover crops, and irrigation in regards to land management practices. Fertilizer use was seen to be profitable for farmers who plant horticultural crops (pepper, tomatoes, and leafy vegetables) and cassava and rice. Use of fertilizer on these crops was profitable with value cost ratio above 1 even when fertilizer prices increase by 50 percent. In contrast, fertilizer use was not profitable for maize production. The presenter recommended irrigation as a potential strategy to boost maize production in Nigeria because maize is grown in the dry and moist savannah. Cover crops were also seen to have a negative impact on productivity. This could be a short-term effect that did not take into account the long-term benefits of cover crops for production of the main crop. The study also did not take into account for the short-term and long-term benefits of the cover crops themselves. However, agro-forestry was recommended because of its ability to compensate for nutrient, light, and space competition.

A cross section of participants expressed concern on the study's finding that fertilizer is not profitable to maize producers. Dr. Nkonya explained that farmers in Nigeria do not buy improved seeds every year, but instead recycle old seeds, and planting different varieties together could help explain the poor yield farmers get in the end. Another explanation is that the study's sample is not representative of the country's maize farmers, as the sample included fadama area farmers, whose lands are fertile and may not require as much fertilizer.

Another comment centered on why irrigation will negatively affect vegetable production, as revealed by the study. According to the participants, irrigation is being promoted in Nigeria because of the conviction that it can afford the farmers the opportunity to farm all year round thereby improving their productivity. Vegetables are mainly produced in southern part of the country where the soil is moist thus making irrigation not important.

Dr. John Pender assessed the **profitability of key crops in the fadama regions** and factors affecting them by analyzing the yields, value of production per hectare, gross margin, and the determinants of gross margin. Initial findings from the study revealed that there are many profitable crops in the fadama regions and the crops vary across

agro ecological zones, but noted that the presidential initiatives crops are not the most profitable. The most profitable crop (pepper) does not vary by gender of household head whereas the ranking of yams and tomatoes do: a surprise to some participants given its low importance in the typical Nigerian diet.

The second most profitable crop for male headed households is the tomato, while for female headed households it is leafy vegetables. As expected, most crops (tomato, pepper, onion, cowpea, maize, and rice) with irrigation have higher yields and gross margins, except cassava and yam, which are drought tolerant crops.

The value of production per hectare varies across the agro-ecological zones but is generally highest for pepper, tomato, yam, leafy vegetable and onion. The pattern of gross margin among the sampled fadama farmers is similar to the distribution of value of production per hectare. Farm size, type of primary activity, and education significantly affect gross margins. Dr. Pender suggested a closer look at high-value horticultural crops such as pepper, tomatoes, and yam for future investment decisions. The study also showed that investments in irrigation, roads, education, and membership of cooperatives can increase returns to these high-value crops. He submitted that since smaller farms and crop-oriented households obtain higher returns from many crops, efforts targeted towards these households can boost productivity and reduce poverty.

Enhancing the Competitiveness of Commodity Value Chains

Ms. Saweda Liverpool presented a value chain analysis of rice, cassava and maize production in Nigeria using the Policy Analysis Matrix (PAM). These three crops were selected as they are major staple foods in Nigeria and there is an increase in current production. During the PAM analysis, she explored alternative policy scenarios for both cassava and rice. For cassava, she looked at the potential for local and export markets, improved yield, and labor saving technology while for rice, improved yield and quality of rice were scenarios analyzed.

The PAM analysis revealed distortions both in the rice (import duty and subsidy) and in the cassava system (export subsidy). At \$200t/ha-\$300/ha, Nigerian farmers do not have the comparative advantage in the production of cassava chips for export because low yields make production costs too high. For rice, the same situation applies. The quality differential of local rice relative to imported rice also came out very strong from the PAM analysis. Increased yield, higher world commodity prices, reduced transportation cost, access to inputs, and guaranteed output market could enable farmers' comparative advantage in the production of both rice and cassava. Beyond the international market, the local market for cassava and rice offers opportunity for improved returns. OLAM farmers are an example of farmers that have both private and social price for rice production, because they have:

- access to improved varieties of seeds,
- adequate amount of input,

a guaranteed output market, and
adequate training (extension service).

According to Ms. Liverpool, the factors listed above are prerequisites to having both private and social cost in any production system.

Delivery of Agricultural and Rural Services

Nigeria was regarded as one of the most decentralized countries in Africa by Dr. Akramov and Prof. Okojie in their presentation on **delivery of agricultural and rural services**. Access to agricultural services in Nigeria is low, with only about one half of farm households in Nigeria having access to agricultural inputs. Twenty-seven percent of farmers lived in communities that had at least one project related to agricultural services during 2001-2006. Gender, household welfare, geopolitical location of farmers, and education were found among important factors that determine access to agricultural inputs in Nigeria.

According to the presenters, the state and local governments received substantial amount of revenue accounting for over 12 percent of the GDP in 2006, yet, horizontal imbalances in revenue sharing were increasing; this portends a danger of not being able to address some of the national development challenges that vary across states and local government areas. Further, intergovernmental transfers should be based on considerations of equity and efficiency. The federal government could support the subnational governments to produce differentiated public goods to the heterogeneous population, and ensure relatively equal distribution of basic public services across the regions in need.

It was suggested from the audience that the deregulation of agricultural and rural services could encourage private sector participation.

Growth Options for Achieving Development Targets

For the Nigerian government to achieve the goals of poverty reduction, adequate and strategic investment spending must be targeted at the agricultural sector. For such investments spending to be effective, a clear understanding of the current pattern of public spending on agriculture is imperative. To complement this, an understanding of the trade-offs of the different investment decisions and growth paths must also be undertaken. The following three presentations cover the research work APSF has undertaken to better understand the pattern of spending, and the proposed research that will uncover the trade-offs of different growth paths, and alternative methods of administering agricultural subsidies.

Nigeria Agriculture Public Expenditure Review by Tewodaj Mogues, Research Fellow, IFPRI

Planned Research on Agricultural Subsidies and the Health-Productivity Nexus
by Andrew Dillon, Post Doctoral Fellow, IFPRI
Economic Growth and Development Targets by Manson Nwafor, West Africa
ReSAKSS, International Institute of Tropical Agriculture

Dr. Tewodaj Mogues presented findings from the Nigeria Agriculture Public Expenditure Review (NAGPER) study. The study assessed the quantity and quality of spending in agriculture and evaluated its degree of alignment with government policy goals. She began by giving an overview of the study and the rationale for analyzing agricultural spending. Key findings from her presentation include:

- Nigeria public spending in agriculture is low;
- Agricultural growth in Nigeria is better than the average growth in Sub-Saharan Africa (SSA);
- Nigeria's budget is poorly executed;
- Three out of 179 sub-items of federal agricultural capital expenditure accounted for 81 percent of spending

Going further, the recommendations that will address the issues raised were:

- Carrying out applied research on the federal fertilizer procurement and distribution program, and reviews of the National Special Program on Food Security, and the buyer of last resort program for grain purchase, to assess how increased spending should be balanced against improved spending
- Improving budgetary structure and tracking system in the sectoral ministries and agencies
- Clarifying the roles of the three tiers of government on agricultural service delivery

One of the participants confirmed that the findings from NAGPER were similar to a study by Nigerian Institute of Social and Economic Research (NISER). Questions were raised on how low agricultural spending is in Nigeria, whether there are recommended areas for spending, given that Nigerian agriculture is subsistence, and if guarantee commodity prices for farmers are a better solution than subsidies. Several other comments focus on what expenditures were included in the study. Did the study considered donor contribution, which has remained a critical component of agricultural spending in Nigeria, and if so, were agricultural expenditures disaggregated between (a) actual government of Nigeria (GoN) contribution and (b) donor agency contribution.

Responding, Dr. Mogues explained that what was presented from the study was the magnitude of spending. When the level of public expenditure is compared with the Comprehensive African Agriculture Development Programme (CAADP) implementation and the Maputo Declaration of spending 10 percent, the 1.7 percent spent by the Nigerian federal government is considered low. She also tried to clarify between spending in agriculture and for agriculture, and that NAGPER actually considered spending in agriculture. Data on donor contribution on agriculture in Nigeria was neither

readily available in the Ministry nor with the donor organizations. More so, the way the available data were reported did not allow for disaggregating expenditure into actual government of Nigeria contribution and donor agency contribution. However, the study captured some part of the donor spending.

Concerns were raised on why funds from debt relief targeting the Millennium Development Goals -- and substantially supporting gender activities in agriculture and the rural sector -- were not included. Also, the table on the composition of federal capital expenditure does not reflect full expenditure in agricultural research. The study only reported national cereal research by the institute Badeggi, one out of 15 agricultural research institutes and 11 colleges of agriculture, since the Ministry was not able to furnish any data on the full spending on agricultural research.

There was a discussion on the disturbing paucity of data and how Nigeria can overcome its problems with data collection. On the paucity of data, all tiers of government must imbibe the culture of consistent data collection and invest in it. Lastly, apprehension on the selected states was raised because they are not representative of the states in Nigeria. The states selected covered the northern and the southern part of the country. Willingness to collaborate on this project was a factor considered in selecting the states.

It was recommended that IFPRI through APSF should emphasize to the GoN, the need to increase investment in agricultural research (both technology development and socioeconomic) and redirect agriculture expenditure in Nigeria.

Following the need to carefully take a closer look at federal capital expenditure that receives a large amount of the federal agricultural budget, Dr. Andrew Dillon presented **proposed research on fertilizers subsidies and the impact of malaria on farmers' productivity**. He raised some questions the proposed studies will answer, highlighted the research design to include a feasibility study and a tracking survey of previously surveyed household in Kaduna, and touched on evaluating the impact of malaria episodes on workers' productivity, labor supply, and welfare. The studies, when completed, will provide evidence on who actually accesses fertilizer subsidies, benefits of the alternative methods of administering subsidies, and the relationship between malaria and workers' productivity.

Dr. Nwafor's presentation on **agriculture, economic growth, and development targets** underscored the importance of modeling agriculture-led paths that will spur economic growth that is pro-poor, gender sensitive, and environmentally sustainable. He identified long term objectives of the government, key government targets (with respect to agriculture, poverty reduction, environment, and gender), possible area of conflict, data and local capacity for modeling, and major knowledge management issues (data collection and dissemination, and better communication among stakeholders). He also made a case for checking internal consistency and adequacy of government development targets to showcase trade-offs of different growth paths which hitherto are lacking in previous economy-wide models. According to him, there have been over thirty

Computer General Equilibrium (CGE) studies done on Nigeria so the local capacity is considerable; however, there has not been any model in the country that has quantified possible gender and environmental outcome of different growth paths. Other recommendations include the need to examine the consistency of subsectoral targets, collaboration with agricultural and agriculture households model experts, and a call for a research agenda on political economy of agricultural policy in Nigeria to improve policy consistency and continuity.

Improving the Nigerian Policy Landscape

The policy landscape in Nigeria admittedly needs to be strengthened to be able to supply and demand for evidence in the policymaking process. The starting point for such activity is to assess the entire landscape with a view to determining the strengths and weaknesses of the system. The presentation below is a preliminary result from an attempt to assess and improve the policy landscape in Nigeria.

Rural Economy Knowledge Support System by Valerie Rhoe, Program Coordinator, IFPRI; Kolawole Adebayo, University of Agriculture, Abeokuta; and Suresh Babu, Senior Research Fellow, IFPRI Rural Economy Knowledge Support System

Ms. Valerie Rhoe presented the current situation of agricultural policies and strategies, preliminary information from consultations about the policy landscape, and evaluated the human capacity within the FMAWR for planning and policy analysis, NISER, and two agricultural universities for policy research and curriculum development. The planned activities for REKSS were also explored.

The situation analysis showed that many agricultural policies exist, and development targets are used to manage the economy, but the sector development strategy is still being prepared. The human capacity within the sectoral ministry, whose mandate is to formulate policies for agricultural and rural development, was found to be inadequate, and requires strengthening. The few planners within the ministry are being underutilized. Worse still is the fact that performance indicators of policies and programs are limited, hence, it remains difficult to track progress and improvement.

The current curriculum in agricultural universities revealed weak policy analysis tools skills and requires strengthening to cater for the future generation of policymakers and analysts. Gender mainstreaming and environmental issues are underplayed in the present curriculum; hence, there is a need for further review.

Gender

The issue of gender cuts across all the research and REKSS activities of APSF and requires close monitoring. Gender mainstreaming has been down played in the policymaking process even though policy actions affect men and women differently. The

presentation *Gender Dimensions in Agriculture, Poverty, Nutrition & Food Security in Nigeria* by Dr. I.O.Y. Ajani, Department of Agricultural Economics, University of Ibadan, highlights the gender related issues in the policy landscape in Nigeria

Dr. Ajani reviewed **gender dimensions in agriculture, poverty, nutrition, and food security in Nigeria**. She found that although gender inequality exists in access to and control of all livelihood assets that have direct bearing with agriculture, gender in the Nigerian literature and data space is accorded tokenism especially in the conceptualization and design of empirical research and data collection. Gender is seldom seen as a main focus in designing empirical research and is often treated as a dummy variable obscuring other important gender relations issues that could have been considered.

She also found that the agricultural sector has the highest poverty incidence rate (62.7) among all occupational groups, with females being more vulnerable to poverty than their male counterparts when the household poverty situation is considered. In contrast, female-headed households have lower poverty levels. The study also revealed that education is a key determinant of poverty.

In Nigeria, protein energy malnutrition (PEM) was found to account for 60 percent of deaths among children. Women with poor nutrition are also found to be caught in a vicious cycle of poverty and under nutrition. However, she submitted that nutrition interventions in Nigeria are biased towards women and children and not for men. Furthermore, findings showed that female headed households are more food insecure than male headed household. This food insecurity of female headed household arguably has implications on malnutrition and poverty.

Dr Ajani identified that data reporting in institutions is not done along gender lines, and much of the research undertaken only uses household headship for its gender analysis, which is not sufficient.

Group Discussions

The participants broke into seven groups to provide inputs into the evidence being generated and the planned APSF research on achieving different policy goals in the agricultural sector. Each group was given a set of guiding question to reflect upon. The seven groups were:

- Group I: Analyzing Agricultural Growth Options for Achieving Development Targets
- Group II: Prioritizing Public Spending and Investment
- Group III: Enhancing Competitiveness of Commodity Value Chain
- Group IV: Profitability of Crops & Land Management
- Group V: Decentralization & Public Service Delivery in Nigeria
- Group VI: Enhancing Agricultural & Rural Development Policies: A Gender Lens
- Group V: Decentralization & Public Service Delivery in Nigeria

Group I: Analyzing Agricultural Growth Options for Achieving Development Targets

The use of targets to manage the development agenda is intensifying in Nigeria. However, Nigeria's ability to articulate, set, and attain realistic and coherent development targets needs to be carefully reviewed. The agricultural growth options needed to achieve the set development targets were analyzed using the questions below:

- Are various growth and poverty reduction targets internally consistent?
- How much agricultural growth is required to reach MDG-1?
- What should be the priorities among subsectors, regions, and commodities for reaching required agricultural growth?
- How could macro or non-agricultural policies affect agricultural growth or use agriculture for development?
- What data are required and where to collect them?
- Is CGE the best method to be used?

The discussion centered around two main topics: growth targets and the influence of macro policies on agriculture.

It was raised in the discussion that the sectoral growth targets in NEEDS II were set to achieve Vision 2020. They were not necessarily adjudged to be feasible but were derived to answer the question of what was necessary to achieve 10 percent annual growth for the purpose of Vision 2020. The continued discussion highlighted that the composition of growth was just as important as the level of growth, as certain growth compositions could reduce poverty faster. It was agreed that the adequacy of subsectoral targets has not been analyzed and that any analysis needs to take into consideration the regional differences in the country.

There was a detailed discussion regarding the influence of macro policies on agriculture. Some of the key points were:

- Predictability and stability in macro variables is important for the agriculture sector to grow.
- The impact of an appreciating exchange rate on food security and agriculture in Nigeria needs empirical verification as lower rates lead to cheaper imported capital goods and inputs, but makes it more expensive to export agricultural output.
- Lower interest rates would increase access to credit and increases in output.
- The impact of inflation needs further empirical work.
- The range of trade policies adopted by Nigeria deserves further examination in a model.
- Agriculture subsidy removal (fertilizer, etc.) would affect agriculture output, but analysis is needed to ascertain the magnitude of the impacts.

Prominent among the issues discussed is the type of policy required to increase local rice production, given the continuing surge in its prices globally. Nigeria's intention to import rice came under serious debate among the participants. While a section of the participants agreed that the action cannot be offended, other applauded it as a good short term response from the government. In sum, a consensus was reached that it is an opportunity to stimulate government spending in the rice sector especially local processing which explains the quality differentials and consumer preference for imported rice.

The computer equilibrium model proposed for further analysis was well received by the group as a satisfactory tool, as it has been the major tool for macro planning and analysis in key planning and analytical sessions in government planning and research agencies. In addition to the current analysis undertaken through APSF, the group desired analysis in how best to reduce unemployment and poverty.

Group II: Prioritizing Public Spending and Investment

The Nigerian government, faced with limited policy instruments, needs to prioritize spending and investment on public goods that will have the greatest impact on the target audience and assist meeting policy objectives effectively. To guide the audience in discussing how the government can prioritize its spending, the following questions were posed:

What should be the investment priorities among:

- different types of investment such as agricultural research, irrigation, rural infrastructure, and education?
- different regions?
- different government levels (federal, state and local)?

What data are required and where to get them?

What is the best method to address these issues?

Tackling the questions raised, the group agreed that the:

The government has had large expenditure on large scale irrigation projects, and therefore, emphasis should now be on promoting small scale irrigation for smallholder farmers.

Investment in agricultural research is low; more spending must be targeted at technology development and socio-economic research, as they have the potential for boosting productivity, reducing poverty, and providing evidence for policymaking.

The budgeting process needs to be improved and the institutional linkages strengthened to facilitate effective public spending.

Government spending in the different regions should be along areas of comparative advantage.

Data on public spending for all tiers of government are needed for proper planning and program design and can be sourced from the National Bureau of Statistics (NBS), The Central Bank of Nigeria (CBN), and ministries of agriculture at federal, state, and local government levels. To collect the data a public expenditure tracking survey would be adequate.

Measuring the return to investment may not be possible unless there is deliberate investment in data collection. The National Assembly is undertaking some efforts, and the Federal Ministry of Finance has revived budget monitoring.

Group III: Enhancing Competitiveness of Commodity Value Chain

The quest to enhance the competitiveness of commodity value chain in Nigeria is growing. Achieving this goal requires an exploration of the constraints and opportunities along the value chain. In an attempt to understand these constraints and opportunity, the following questions were raised to stimulate the discussion.

What are the most critical constraints along the chains from the farm level to consumer's tables or export markets?

How can we sequence the various interventions to improve the function of the chains?

What are the implications for public investment?

What are the implication for reforming regulations, laws, and legislations?

On which commodity should we focus?

What data are required?

What method is the best?

The group identified four groups of constraints: knowledge, financial, infrastructure and input

The knowledge constraints are:

Climate and rainfall pattern information: Farmers are faced with uncertainties about climate and weather-related disasters, such as drought, flood and so on.

These uncertainties constrained farmers from planting at the right time.

Price information: The lack of information about pricing also constrained the farmer in getting better prices for their produce.

Communication: The disconnect in communication linkages among the stakeholders along the chain leads to higher transaction cost and uninformed decisions to dispose wares at ridiculous prices.

Farmers have many competing needs (education, health, shelter, agriculture) with limited financial resources. This constrains farmers from investing in primary production. Furthermore, low investment in rural infrastructure has created large transport costs for the farmers. Lastly, major agricultural inputs such as seed and fertilizer are not readily available; even when available, their cost is prohibitively high.

The group ordered the constraints in their natural order: productivity, processing and transport, and interventions to improve the chain should be sequenced in the same order. The implication of the ordered constraints along the chain for public investment pertains to production support for farmers and a strong regulatory system. The group also called for the establishment of a regulatory commission for fertilizer and seed.

Answering the question on what commodities to focus on, the group suggested that the team focus on commodities with high-value addition potential that do not undermine the food security objective of the farm families. To facilitate the analysis of these commodities, data on production, processing, transport, and market price need to be collected.

Furthermore, the group recommended strengthening farmers associations, agricultural input dealers, and commodity associations to demand better policy through strong policy advocacy work. Accomplishing this would require the deliberate efforts of nongovernmental organizations (NGO) involved in policy advocacy and brokerage services. It was unanimously agreed that farmers should have a lobbyist at the National Assembly to further their agenda and have a voice, but the culture of lobbying needs to be built.

Group IV: Profitability of Crops & Land Management

The profitability of farm enterprise depends on productivity growth. However, productivity growth depends on how the land is managed for various farm enterprises. Sustainable land productivity growth requires probing into future sources of such growth. The team posed future sources of sustainable land productivity growth to encourage discussion such as:

- Land management and irrigation?
- High yielding seeds?
- Land tenure/investment incentives?
- Approach, performance, and access to research and extension services?
- Access to inputs (fertilizers, etc)?
- Appropriate mechanization?
- Agricultural credit?
- Rural infrastructure?
- Market development and education (including agricultural education)?

The group agreed on the following points:

Land management and irrigation: Investment in advisory services on land management, resuscitation and expansion of agro-forestry projects, land reclamation (liming, bioremediation and erosion control), and soil testing and fertility management can improve land productivity growth. Resuscitation of moribund irrigation projects through

public-private arrangement and promotion of small scale irrigation schemes are potential sources of land productivity growth.

High yielding seeds: Seed is critical for any profitable agricultural enterprise. Investment in seed research should therefore be improved and a strong regulatory framework should be put in place to certify and ensure good quality seed.

Land tenure/investment incentives: Communal land ownership limits access to credit and therefore limits long term investment decisions. To this effect, the Land Use Act must be reviewed to provide incentive for investment. Individual farm land should be certified for title deeds to serve as collateral for accessing credit from financial institutions.

Approach, performance, and access to research and extension services: There is a need to improve research and extension linkage and encourage the participation of farmers associations in research and extension service delivery. Building a formidable private sector-farmers association partnership to complement the government in providing access to information and extension services was seen as imperative. The Special Programme on Food Security and Fadama II have encouraged the formation of farmers' organizations, but their voices need to be strengthened.

Access to inputs: To ensure access to inputs, the government needs to build and strengthen the capacity of input dealers, provide subsidies, and give inventory credit to farmers to redeem inputs from agro dealers. The establishment of a strong regulatory framework to control the quality of inputs must be seen as a priority.

Mechanization: Mechanization can help improve land productivity growth but the degree of mechanization and the type of machinery need to be considered carefully. There is a need to balance between improving land productivity, preserving the soil, and meeting the financial constraints of farmers.

Rural infrastructure: Access roads to farmland and the provision of services like health and electricity should be undertaken to encourage investment in profitable crop production

Group V: Decentralization and Public Service Delivery in Nigeria

Agriculture greatly depends on the provision of public services. Improving agricultural development will therefore require better and more effective delivery of such services. The following questions will showcase the types of services that needed to be decentralized to improve the performance of the sector and access to farm families.

What type of services should be decentralized and to which level?

How do we ensure participation of local citizens?

Does local community or governments have enough capacity to provide decentralized services?

What data needs to be collected?

What analytical method should be used?

Nigeria is decentralized in principle, but to a limited extent in practice. The group suggested that the federal government provide guidelines, regulations, and an enabling environment to decentralize policymaking and input deliveries. The group argued that state and local governments should have more inputs into national policies to help promote a more inclusive and effective policymaking. Input deliveries should be the responsibility of lower level government, as they are in a better position to know what crops their farmers grow, and who they are. However, local government does not have the capacity to deliver services at the moment. So, the starting point in decentralizing services at the local level is to strengthen their capacity to be able to manage the services effectively. The provision of infrastructure in rural area to retain and attract high-level manpower; improved remuneration and working conditions; and the upward review of the qualifications for contesting elective positions will assist in building the capacity of the local government to deliver services.

There is inadequate data at all levels, and if available it is often not accessible. There is reluctance on the part of the private sector to share information or data for fear that it will be used for tax purposes. To address this challenge, a Freedom of Information bill is necessary to compel disclosure of information. Research and statistics units in sectoral ministries and local government should be equipped to generate data. It was recommended that NBS convene an annual meeting of statisticians at all levels for training and knowledge sharing.

Also discussed was the presence of the federal government at the implementation stage. The audience agreed that true federalism should be practiced; thus, states should be left alone to direct their affairs. The concurrent nature of agriculture, which allows for overlap of responsibility between federal and state government, came under serious scrutiny. Reference was made to schedule 2 Page 179 of the constitution, which according to the audience drew lines of demarcation. One very important issue that came out of the deliberation was that failure of states to carry out some of their constitutional roles often spurs the federal government to act instead. For example, state government inability to maintain buffet stock continues to compel the federal government to invest more in the Strategic Grain Reserve.

According to the group, a literacy program, political education on civic rights and obligations, entronement of rule of law at all levels, and mandatory participatory budgeting and planning at local levels will ensure better participation in the policy and decisionmaking process.

Group VI: Enhancing Agricultural & Rural Development Policies: A Gender Lens

The outcomes of policy decisions affect men and women differently but adequate attention has not been paid to it during research design and policy formulation. To better understand how gender is treated and to guide efforts at mainstreaming gender issues in the policymaking process, the following questions were raised to capture how best to address the gap.

- Are women treated differently when accessing services?
- What services should be targeted to women?
- How can local community and government improve their capacity in serving women farmers?
- How can we collect the required data for our work?
- What analytical methods should be use?
- What data needs to be collected?

The diverse nature of the country in terms of culture and religious beliefs make access by men and women to services context-specific. Men and women are also treated differently based on their educational and financial status.

When targeting services to women, it is necessary to understand the impact of this target on men and the best process that should be used to ensure women receive the targeted services. Gender -sensitive programs and campaigns targeted to men to change their value orientation could facilitate women access to targeted services.

Functional education such as agricultural extension education should be targeted to both men and women. However, there is a need to train and re-train extension agents to be able to discharge their duties efficiently. Value orientation of the community is crucial to improving the capacity of the local community and government in serving women farmers. Community needs assessment for project design should be participatory and developed along gender line. The community should promote the formation of women social and development group and mainstream them into the decisionmaking process.

There is a lack of gender disaggregated data for Nigeria. This type of data can be collected through intra-household surveys, ethnographic studies, and content analysis.

Group VII: Rural Economy Knowledge Support System

Right and adequate knowledge is essential for strategic planning. Developing an effective knowledge management system remains a major challenge in Nigeria. A startling disconnect exist among stakeholders that produce and use knowledge in the policy landscape. The following questions will help in evolving a sustainable knowledge support system.

- Who should be our clients?
- Who should be our partners?

What should be the contents of the knowledge system?
How do we make REKSS sustainable?
How do we strengthen communication linkages amongst stakeholders that are sustainable?
What should we achieve by the end of the project?

This group suggested that the clients should be farmers associations and government officials of sectoral ministries like Environment, Commerce and Industry, Agriculture, and Finance, and the partners could be agricultural research institutes and policy researchers from local universities. It was recommended that health and infrastructure should be considered in agriculture strategic planning. Regarding making REKSS sustainable, the group raised two suggestions:

The agricultural desk of the Central Bank of Nigeria could request funding from the National Planning Commission.

The government should be encouraged to allocate part of the funds contributed by private banks to be used to support REKSS.

The starting point at influencing the policymaking process is to professionalize policymaking. APSF can explore the following an entry points:

regular supply of information to the ministries;
advocacy;
data and literature available at libraries;
capacity building for future policy analyst in the area of gender analysis.

Next Steps

The APSF research team will consider the recommendations and consensus coming from the participants in the revisions of their research and outputs. Thereafter, additional data will be collected and analyzed to capture critical issues that emerged from the workshop. Final reports will then be circulated to key stakeholders and posted on the Nigeria Strategy Support Program webpage hosted by IFPRI.

Appendix A: Agenda

9: 00 AM **Prayer and Welcoming Remarks**

Master of Ceremony: Mr. Yemi Nelson, Assistant Director, Press and Public Relations, Federal Ministry of Agriculture and Water Resources (FMAWR)

Prof. O. A. Afolabi, Permanent Secretary, Federal Ministry of Agriculture and Water Resources

Mr. Ako Amadi, Natural Resource Management Advisor, Canadian International Development Agency – Project Support Unit

Dr. Shenggen Fan, Division Director and Interim Program Leader for APSF, IFPRI

9:30 **Agricultural Policy Support Facility in Nigeria: An Overview**

Dr. Shenggen Fan, Division Director, IFPRI

9: 50 **Nigeria Agriculture Public Expenditure Review**

Dr. Tewodaj Mogues, Research Fellow, IFPRI

10:50 Tea Break

Preliminary Evidence for Designing Agricultural and Rural Development Policies and Strategies

Chair: Engr. Oyewole Ogunmola, Director, Planning, Policy, Analysis, and Statistics, FMAWR

11: 05 **Trends, Constraints and Approaches to Increasing Productivity and Profitability of Crop Production in Nigeria**

Constraints to increasing agricultural productivity in Nigeria: a review, Prof. Dayo Phillip, Professor, University of Agriculture, Abeokuta

Trends and Drivers of Agricultural Productivity in Nigeria, Dr. Oni, Lecturer, University of Ibadan

Profitability of Key Crops in Fadama Regions of Nigeria, Dr. John Pender, Senior Research Fellow, IFPRI

Returns to Land Management Practices and their Implications for Increasing Agricultural Productivity in Nigeria, Dr. Ephraim Nkonya, Research Fellow, IFPRI

Preliminary Results on Knowledge, Capacity, Data, and Analysis

- 12:15 ***Economic Growth and Development Targets***
Dr. Manson Nwafor, Consultant, IITA
- 12:30 ***Enhancing the Competitiveness of Commodity Value Chains***
Ms. Saweda Liverpool, Doctoral Candidate, University of Illinois
- 12:45 ***Delivery of Agricultural and Rural Services***
Dr. Kamiljon Akramov, Post-doctoral Fellow, IFPRI

*Dr. Christiana Okojie, Professor, Department of Economics and Statistics,
University of Benin*
- 1:00 ***Gender Dimensions in Agriculture, Poverty, Nutrition & Food Security in
Nigeria***

Dr. Bunmi Ajani, Senior Lecturer, University of Ibadan
- 1:15 ***Rural Economy Knowledge Support System (REKSS)***

Ms. Valerie Rhoe, Program Coordinator, IFPRI
- 1:30 Lunch
- 2:30 ***Small Group Discussions: Program Components***

*Chair: Prof. Anthony Ikpi, Professor, Department of Economics and Statistics,
University of Ibadan*
- 3:45 Plenary on small group discussions
- 5:15 ***Closing Remarks***

*Prof. O. A. Afolabi, Permanent Secretary, Federal Ministry of Agriculture and
Water Resources*

*Mr. Ako Amadi, Natural Resource Management Advisor, Canadian International
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Dr. Shenggen Fan, Division Director and Interim Program Leader for APSF, IFPRI

Appendix B: Participants List

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Appendix C: Presentations

1. *Constraints to Agricultural Productivity in Nigeria* by Dayo Phillip, Professor of Agricultural Economics and Farm Management, University of Agriculture, Abeokuta
2. *Trends and Drivers of Agricultural Productivity in Nigeria* by Dr. O.A. Oni, Lecturer, Department of Agricultural Economics University of Ibadan
3. *Returns to Land Management Practices and their Implications for Increasing Agricultural Productivity in Nigeria* by Dr. Ephraim Nkonya, Research Fellow, International Food Policy Research Institute
4. *Profitability of Key Crops in Fadama Regions of Nigeria* by Dr John Pender, Senior Research Fellow, IFPRI
5. *Enhancing the Competitiveness of Commodity Value Chains* by Ms. Saweda Liverpool, doctoral student at the University of Illinois, Champagne
6. *Delivery of Agricultural and Rural Services* by Dr. Kamiljon Akramov, Post-doctoral Fellow, IFPRI and Dr. Christiana Okojie, Professor, Department of Economics and Statistics, University of Benin
7. *Nigeria Agriculture Public Expenditure Review* by Tewodaj Mogues, Research Fellow, IFPRI
8. *Planned Research on Agricultural Subsidies and the Health-Productivity Nexus* by Andrew Dillon , Post Doctoral Fellow, IFPRI
9. *Economic Growth and Development Targets* by Manson Nwafor, ReSAKKS, West Africa, International Institute of Tropical Agriculture
10. *Rural Economy Knowledge Support System* by Valerie Rhoe, Program Coordinator, IFPRI; Kolawole Adebayo, University of Agriculture, Abeokuta; and Suresh Babu, Senior Research Fellow, IFPRI
11. *Gender Dimensions in Agriculture, Poverty, Nutrition & Food Security in Nigeria* by Dr. I.O.Y. Ajani, Department of Agricultural Economics, University of Ibadan