1. Key development issues and rationale for Bank involvement

Agriculture is a key sector of the Ugandan economy and features prominently amongst the top five priority areas for public sector investment in the country’s new five year strategic framework for economic development, the National Development Plan (NDP). It is also the centerpiece in the Prosperity for All (PFA) program, the vision driving the NDP based on the political manifesto of the NRM. Recent analytical work also highlights agricultural growth as a key determinant in the country’s efforts to reduce poverty in the immediate years ahead.¹ It is

¹ The sector contributes nearly 20 percent of GDP, accounts for 48 percent of exports and provides a large proportion of the raw materials for industry. Food processing alone accounts for 40 per cent of total manufacturing. The sector employs 73 percent of the population aged 10 years and older.
within this framework that the Development Strategy and Investment Plan (DSIP) for the agriculture sector is being designed under the auspices of the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). The DSIP envisages a comprehensive Sector Wide Approach (SWAP) to be aligned with the principles and aspirations of the Comprehensive Africa Agriculture Development Program (CAADP), which has been endorsed by African governments, including the Government of Uganda (GoU). The DSIP will focus on four main intervention and investment areas, namely: (i) enhancing agricultural production and productivity; (ii) improving access to and sustainability of markets; (iii) creating an enabling environment for the agricultural sector; and (iv) undertaking agricultural sector institutional reforms and development.

In the past, the Bank has supported agricultural research and advisory services through two parastatals, the National Agricultural Research Organization (NARO) and National Agricultural Advisory Services (NAADS), given their critical contribution to pro-poor agricultural growth in Uganda. The institutional development, including the reforms of the NARS, and agricultural research efforts of NARO have been supported by the Bank since its inception in 1992 through two successive projects (ARTP I and II, including Additional Financing for ARTP II for the past two years). The institutional development and advisory services through NAADS have been supported since its inception in 2001. Both agricultural research and NAADS were key pillars of the Plan for Modernization of Agriculture (PMA), the strategic framework for the sector since 2001. Both areas are also core functions and mandates of MAAIF under the proposed DSIP, and are projected to absorb more than 50 percent of total sector budget over the next five years.

Despite the critical role of these “supply side” interventions, it is increasingly recognized by GoU, other stakeholders and the DPs that other core public functions, also identified as core mandates of MAAIF under the proposed DSIP such as animal and plant disease control, regulatory services, water for agricultural production, sector statistics and monitoring and evaluation, etc. need to be also supported to ensure enduring agricultural growth, including the desired impact of research and advisory services.

The DSIP, however, is still being developed. Among the core functions, the agricultural technology and advisory services programs are the most advanced in terms of preparation for the next round of support. Important aspects relating to the rest of MAAIF such as an effective institutional structure for MAAIF, division of labor between national and local governments, and the role of the private vs. public sectors remain to be refined. To minimize implementation disruptions for NARO and NAADS and in the light of the different state of readiness of the full DSIP, the Government has requested the Bank and the other DPs to prepare their support to the DSIP agenda using a “two track approach” comprising: (i) a fast-track program to put in place the next phase of support for Agricultural Technology and Advisory Services (ATAS) for NARO and NAADS, with the related institutional support, and (ii) a second-track parallel program to cover the other critical priorities of the DSIP. This is the basis on which the ATAS project is being proposed.

2 The funding gap is already resulting in disruptions to the agricultural research programs as ARTP 2 support to NARO ended in June 30, 2009 and is looming for NAADS as the current phase of support is due to end on December 31, 2009.
The ATAS project will build on the completed Second Agricultural Research and Training Project (ARTP II) and the nearly completed National Agricultural Advisory Service Project (NAADS). Significant institutional development progress has been achieved under these projects, including (i) the establishment of a decentralized, demand driven and pluralistic advisory services through the NAADS Act in 2000; (ii) the building up of NARO since 1992 and then the reform of the National Agricultural Research System (NARS) through the NARS Act in 2005; (iii) innovative designs of both NARO and NAADS; and (iii) strengthened stakeholder-driven NARO and NAADS governing entities at the national and zonal levels. There is considerable evidence of impact at the farm level in terms of technology dissemination and adoption, household incomes and other outcome measures. Further, a key achievement of the previous projects has institution building and the establishment of basic capacities, along with enhanced service delivery. The next phase would consolidate the achievements of the previous projects by further strengthening the institutions, deepening their effectiveness and outreach, and move the agenda forward under a unified framework for substantive research and service delivery. NARO and NAADS are now well-positioned to exploit synergies and deliver increased results for the sector.

Another new element in the next phase will be increased attention to sustainable land management (SLM) to help prevent and reduce the impact of land degradation processes on ecosystem services in agricultural landscapes. This effort is envisaged to strengthen farmers’ capacity to adapt to climate change. This support will build on the Bank’s SLM PER, the Uganda Strategic Framework for SLM, and the current DSIP through generation and dissemination of proven SLM technologies such as integrated nutrient management, agroforestry, reduced tillage, and water harvesting, among others. Global Environment Facility (GEF) grants will be used for these activities, and will be fully blended with IDA and other financial resources to promote SLM. GEF support would also finance the GoU’s on-going effort as part of CAADP pillar 1 to improve institutional capacity to carry out multi-sector investment programming and monitoring on land use, land management, and land use change. This effort is led by MAAIF and involves NARO and five line ministries.

The ATAS project will be supported by other DPs in addition to IDA. IFAD will continue with the current arrangements it has with the World Bank for NAADS for management of their funds. The EC, DANIDA, and the African Development Bank (AfDB) are the other DPs who will participate in the program through parallel financing to a “basket fund” and have actively been participating in the project identification and preparation.

2. Proposed objective(s)

The project development objective (PDO) is to increase agricultural productivity and the household incomes of participating smallholder farmers. Project activities will contribute to this

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3 Finalization now being led by MAAIF, in line with TerrAfrica and CAADP dialogues.
4 The GEF support is under the Bank-led umbrella the Strategic Investment Program for SLM in Sub-Saharan Africa. The GEF Secretariat already approved a Project Identification Form in 2007 that would have attached the funding to a planned NRM SWAP at the time. Since then, there has been agreement between AFTEN and AFTAR that the support will be transferred to the ATAS operation.
objective by transforming and improving the performance of the agricultural technology development and advisory service systems in Uganda.

The proposed key performance indicators are (i) farmer adoption rates of improved agricultural technologies, including SLM technologies; (ii) percentage increase of the agricultural income of households participating in the project; and (iii) proportion of participating male and female smallholder farmers who are satisfied with agricultural research and extension services.

3. Preliminary description

The project will be implemented over a five year period (2010-2015). This is to enable upscaling and consolidation of research and advisory services activities supported in the previous phases, and to continue to have impact on productivity growth at the farm level. Financing will be provided through joint DP Basket Funding arrangements, under which IFAD will be co-financing the project with the funds being managed by IDA. EC, AfDB, and DANIDA have committed to provide funds to the basket.

The proposed IDA allocation is US$100 million with IFAD cofinancing of about US$30 million. Government co-financing is estimated at US$50 million. In addition, the GEF grant will be blended with IDA in the amount of US$7.2 million to promote SLM and to respond to climate change. It is proposed that the project be financed by a Specific Investment Loan (SIL).

The ATAS project will build on the institutional and implementation structures adopted by NARO and NAADS under the previous phases. These institutional arrangements will be further strengthened and improved. NARO and NAADS have been supported separately and discretely in the past and there have been some significant but ad hoc linkages between the two programs; this has been identified as a weakness which has affected the field-level impact of both programs. This has been a perennial problem in many agricultural technology programs around the world. Therefore, to enhance the agricultural technology continuum and in order to allow widespread adaptation, dissemination and adoption of productivity-enhancing technologies, ATAS will introduce appropriate incentives for both NARO and NAADS by operating under a single project with a single objective, results frameworks and performance indicators. While project implementation will be led by the NARO and NAADS Secretariats, they will work closely with MAAIF for alignment with DSIP to realize successful achievement of project outcomes. Monitoring and evaluation frameworks will be jointly developed and carried out by both institutions. The project will also provide for rigorous impact evaluations with the establishment of a baseline and assessments of mid-term and final impacts.

Proposed ATAS Components: Two components were proposed, as agreed with the Government during September 28-October 8, 2009 mission.

Component 1: Supporting the National Agricultural Research System. This component will focus on supporting agricultural research in Uganda through three sets of activities. It will have three sub-components, namely: (i) technology development and adaptation; (ii) outreach and technology dissemination; and (iii) institutional strengthening of the research system:
• **Technology Development and Adaptation.** The project will support (i) on-going core national strategic and agro-ecological zone specific adaptive research which addresses problems of dominant production and resource management systems; (ii) newly initiated research to respond to serious emerging problems; and (iii) other important research priorities through National and Zonal competitive grant schemes. Increased attention will be given to developing adequate measures for agriculture to cope with climate change. The project will support the adaptation of technologies (e.g. drought resistant varieties and enhanced soil/water management) and finance studies on mitigation of the effects of climate change.

• **Outreach and Technology Dissemination.** The ultimate objective of generating any technology is impact through widespread adoption. Up to now research-extension linkages and interactions in Uganda have been successful but not systematic. The project will support the formalization of NARO-NAADS collaboration to: (i) ensure more effective dissemination and adoption of existing “on the shelf” technologies; (ii) facilitate more effective and efficient technology adaptation; and (iii) facilitate continuous feedback of farmers, advisory service providers and other stakeholders to NARO institutions on the performance of new technologies and newly emerging needs. Through training, research institutions will also help strengthen the capacity of extension service providers in both the public and private sector in technology adaptation and promotion.

• **Institutional Strengthening of the Research System.** The effectiveness and interaction of the key elements of the NARS will be reinforced through: (i) National Agricultural Research Institutes (NARIs) being capacitated and facilitated with some becoming Regional Centers of Excellence; (ii) Zonal Agricultural Research and Development Institutes (ZARDIs) capacity strengthening, including for governance by their local stakeholders; (iii) public and private research providers operating in synergy; and (iv) the NARO Council of Stakeholders efficiently and effectively coordinating the NARS. As part of capacity building, physical infrastructure improvements are needed at several of NARIs and ZARDIs, including new civil works in the three newly established ZARDIs. In most other cases, there this will entail rehabilitation and upgrading of existing facilities and in some cases new civil works are proposed for expansion or addition of essential facilities. In all cases, civil works will be on land already owned by NARO, thus requiring no land acquisition (and hence no involuntary resettlement).

**Component 2: Strengthening the Agricultural Advisory Services.** This component will support the delivery of quality agricultural advisory services. It will have four sub-components: (i) advisory and information services to farmers; (ii) agribusiness and market linkages; (iii) quality assurance – regulations and technical auditing of service providers; and (iv) program management and monitoring. This component will build on core principles of the current NAADS program and it will make substantial efforts to deepen NAADS by increasing its

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6 This sub-component will strengthen the work of NARO under the East Africa Agricultural Productivity Project (EAAPP) to establish the Regional Center of Excellence in cassava research and participate in the regional research on dairy, wheat and rice together with Kenya, Ethiopia and Tanzania.

7 These core principles are (i) deepening decentralization, (ii) participation and ownership of stakeholders, (iii) farmer empowerment, (iv) pluralism in service delivery, (v) promotion of public-private partnerships, (vi) promotion
outreach to more farmers as well as assisting farmers to move up the value chain. NAADS has been very successful in reaching to the grassroots, and given its visibility at the local level has therefore has been subject to political interference. In this phase, the farmer-group based approach and farmer empowerment will remain central to the service delivery model, and will be strengthened as key elements of the program design. The concept of farmer progression, from subsistence to model to nucleus farmers with linkages up the value chain will be fully developed to support progressive commercialization of agriculture. Agreements reached with the country’s leadership on the basic approaches guiding the NAADS program will be at the core of the ATAS design and final project agreements.

- **Advisory and information services to farmers.** The project would support initiatives by men and women farmers, working together in groups to contract agricultural advisory services. Matching grants would be channeled through subcounty governments to farmers’ fora to finance such contracts. Services contracted under this mechanism would include group mobilization for farmers, participatory planning, farm advisory services, and information and communications. The process of subcounty enterprise selection would be well linked with the research system. Advisory services provide the “push” to allow farmers to benefit from better linkages to market.

- **Agribusiness and market linkages.** The project would support linkages between agribusiness, farmers, advisers and researchers to create viable, sustainable market linkages. Building on successful partnerships model developed by NAADS, the program would use the market to “pull” farmers out of subsistence agriculture.

- **Quality assurance – regulations and technical auditing of service providers.** The NAADS Board and Secretariat, in conjunction with MAAIF, would continue to set standards and provide a regulatory framework for service providers by setting and enforcing standards for qualification and performance, and developing model contracts.

- **Program management and monitoring.** Established institutional entities at all levels of Government would be supported to coordinate and administer the program. At national level, this will include maintenance of the NAADS Board and Secretariat. At district and subcounty levels, district and subcounty NAADS coordinators will be supported to facilitate the bottom-up planning process of the program and liaise with other stakeholders to provide consultation and dialogue. These positions will be mainstreamed into the government structure, and will support the facilitation, co-ordination, financial management and reporting, and oversight of service contracts. In addition, the management information system will be strengthened, as well as the data gathering procedures for baseline establishment and impact evaluation.

4. **Safeguard policies that might apply**

Two safeguard policies are proposed to be triggered, environmental assessment and pest management policies. An Environmental and Social Management Framework (ESMF) would be
prepared jointly by NARO and NAADS for the proposed project, including an Integrated Pest Management Framework (IPMF) which would guide the handling of fertilizers and pesticides in project-supported activities.

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5. Tentative financing

Source: ($m.)
BORROWER/RECIPIENT 50.0
International Development Association (IDA) 100.0
Global Environment Facility (GEF) 7.2
Total 127.2

6. Contact point

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