PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: PIDA713

<table>
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<tr>
<th>Project Name</th>
<th>Agricultural Productivity Program for Southern Africa (APPSA) (P094183)</th>
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<td>Region</td>
<td>AFRICA</td>
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<tr>
<td>Country</td>
<td>Africa</td>
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<td>Sector(s)</td>
<td>Agricultural extension and research (75%), General agriculture, fishing and forestry sector (25%)</td>
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<td>Lending Instrument</td>
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<td>Project ID</td>
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<td>Borrower(s)</td>
<td>Ministry of Finance, CCARDESA, Ministry of Planning and Development, Ministry of Finance and National Planning (MoFNP)</td>
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<td>Implementing Agency</td>
<td>Zambia Agricultural Research Institute (ZARI) of the Ministry of Agriculture and Livestock (MOAL), Chitedze Research Station of the Ministry of Agriculture and Food Security (MoAFS), Instituto de Investigação Agrária de Moçambique (IIAM) of the Ministry of Agriculture (MINAG)</td>
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<td>Environmental Category</td>
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<td>Date PID Prepared/Updated</td>
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<td>08-Feb-2013</td>
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I. Project Context

Country Context

The countries of southern Africa are home to about 258 million people and generate total Gross Domestic Product (GDP) of around US$471 billion. Agriculture varies in importance from country to country, but across the entire region it is the primary source of subsistence, employment, and income for most of the population. Particularly in the lower income countries, agriculture is the largest contributor to GDP, and the performance of the agricultural sector has a strong influence on growth, employment, food security, and poverty. Agricultural growth contributes to overall growth not only because agriculture makes up a significant share of GDP, but also because growth in the agricultural sector has a strong multiplier effect on non-agricultural sectors through production and consumption linkages.

Agricultural productivity has increased in recent years throughout sub-Saharan Africa (SSA) and
within southern Africa in particular, but most of the growth has come from bringing previously uncultivated land into production, rather than from raising yields on land that is already being cultivated through adoption of improved technology. Comparisons of total factor productivity growth have shown that during the past decade, technical change accounted for a large share of agricultural productivity growth in Asia and Latin America, but only a small share in Africa. Southern Africa has experienced more technology-driven productivity growth than other regions in Africa, but the gains have occurred mainly in middle income countries. Analysis has identified a number of yield gaps (the difference between actual and potential yields) that could be narrowed with additional investments in technology adaptation and dissemination.

Even though the performance of agriculture in southern Africa has improved recently, the sub-region as a whole suffers from periodic food deficits and recurring food price crises, as well as some of the worst nutrition indicators in the world. Southern Africa is vulnerable to climate shocks, which have the potential adversely to impact food security. Shifts in climate patterns are likely to increase the vulnerability of many countries to greater variability and more pronounced extremes of temperature and rainfall. This suggests that adaptation measures—particularly the adoption of climate-smart agricultural practices—will be needed to maintain productivity and ensure resilience in the face of more frequent and more severe shocks.

II. Sectoral and Institutional Context

Improvements in agricultural productivity come from investments in agricultural R&D. Hundreds of published studies have confirmed that the returns to investments in agricultural R&D are consistently very high. For a number of reasons, however, investment in agricultural R&D, both in the private sector and in the public sector, is frequently well below optimal levels. Private firms tend to underinvest in R&D because of the difficulty of appropriating the benefits of research. Governments tend to underinvest in R&D because some of the benefits spill over to other countries.

Regional integration has proven to be an effective strategy that can allow groups of countries facing common research challenges to increase the efficiency of their investments in agricultural R&D. Adoption of a regional approach to research based on the concentration of resources within a reduced number of large, specialized research institutes serving an expansive shared technology space can deliver a number of benefits. First, it can reduce duplication by allowing a single regional research institute to undertake work that otherwise would be done in parallel within multiple national research institutes. Second, it can help capture economies of scale by concentrating resources within a single institute, where they can achieve a critical mass. Third, it can increase the payoffs to research by facilitating dissemination of improved technologies across national borders, thereby vastly increasing the number of beneficiaries. Fourth, it can mitigate the isolation that frequently occurs in small, fragmented research institutes by creating effective mechanisms for facilitating knowledge exchange and technology transfer.

SADC has taken a proactive role in pursuing the agricultural productivity agenda. It has expressed strong ownership of a regional approach to agricultural research focusing on programs that are of strategic importance to the region and that have large potential for spillovers across country borders. In 2011, SADC member states established the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) as a sub-regional body to lead collaboration in agricultural R&D. CCARDESA, which became operational in 2012, has identified five major objectives: (i) to coordinate and promote collaboration among regional and national agricultural research and extension systems through regional and international cooperation; (ii) to facilitate the
exchange of information and technology among the SADC regional R&D institutions; (iii) to promote SADC region partnerships between public, private, civil society and international organizations in R&D; (iv) to improve agricultural technology generation, dissemination and adoption in the region through collective efforts, training and capacity building; and (v) to strengthen national R&D institutions by mobilizing human, financial and technological resources to implement and sustain demand-driven activities.

III. Project Development Objectives
To increase the availability of improved agricultural technologies in participating countries in the SADC Region.

IV. Project Description
Component Name
Technology Generation and Dissemination
Strengthening Regional Centers of Leadership
Coordination and Facilitation

V. Financing (in USD Million)
For Loans/Credits/Others Amount
BORROWER/RECIPIENT 3.90
International Development Association (IDA) 89.40
IDA Grant 0.60
LOCAL BENEFICIARIES 0.74
Bilateral Agencies (unidentified) 0.00
Financing Gap 0.00
Total 94.64

VI. Implementation
Links to national programs. At the national level, APPSA will be linked to national projects and programs, and managed if possible through existing coordination units or teams.

In Malawi, the Ministry of Agriculture and Food Security (MoAFS) will have overall responsibility for APPSA supervision and coordination. APPSA will be implemented through existing country institutions, with day-to-day implementation responsibility delegated to an APPSA Secretariat hosted at the Chitedze Research Station. The Project will be integrated into the ASWAp and its management structure, which includes a multi-stakeholder platform for steering ASWAp activities. The complement of staff at Chitedze Research Station will need to be strengthened, given current high vacancy rates and the additional demands of APPSA implementation. Additional staff hired to support implementation will be financed through the Government budget.

In Mozambique, the Ministry of Agriculture (MINAG) will have overall responsibility for APPSA supervision and coordination. Responsibility for direct oversight of APPSA implementation will lie with the Director General of IIAM. IIAM’s management structures will be supported by a Technical and Scientific Committee which will be responsible for assessing the scientific and technical merit of research supported under APPSA. The Technical and Scientific Committee will be comprised of...
the IIAM research program coordinators, as well as other national and international researchers and academicians invited according to the theme under evaluation. APPSA financing will support consultants to fill gaps where there is insufficient experience or capacity within IIAM—particularly in project management and coordination, financial management and procurement, and monitoring and evaluation.

In Zambia, the Ministry of Agriculture and Livestock (MAL) will have overall responsibility for APPSA supervision and coordination. APPSA will be implemented by ZARI under its current structure as part of the MAL. Additional management and administration personnel—primarily financial management and procurement specialists—are expected to be financed through Government budget. Implementation will be overseen by a Steering Committee comprised of key stakeholder institutions and including representatives from farmers’ organizations, research institutes, the seed certification authority, training institutions, extension services, the private seed industry, processors, and agribusiness.

Because APPSA is a regional program, implementation will be based on partnerships and collaboration among the participating countries. Countries will work together in a number of ways: (i) by undertaking joint technology generation and dissemination activities through collaborative R&D projects; (ii) by coordinating taking place at the national level to contribute to the achievement of common regional objectives; and (iii) by sharing knowledge and technological outputs from their national programs throughout the region. To the extent possible, APPSA implementation will rely on existing regional platforms, networks, and partnerships to share information and create opportunities for collaboration.

VII. Safeguard Policies (including public consultation)

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<th>Safeguard Policies Triggered by the Project</th>
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<td>Projects in Disputed Areas OP/BP 7.60</td>
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