Towards the Vision:
Priorities to achieve on progress along CAADP pillars and PEDSA vision

Pillar 1: Land and water management
Pillar 2: Rural infrastructure, marketing, and market access
Pillar 3: Food and nutrition security
Pillar 4: Research and Extension
Throughout Africa, policymakers have joined with researchers to identify the key four investment areas needed to move African agriculture forward. The Comprehensive African Agricultural Development Program (CAADP) has four pillars:

**Pillar 1:** Land and water management

**Pillar 2:** Rural infrastructure and marketing (trade, market access)

**Pillar 3:** Increasing food supply and reducing hunger

**Pillar 4:** Agricultural research, technology dissemination, and technology adoption

In Mozambique, the Strategic Plan for the Development of the Agricultural Sector (known as PEDSA) and the Mozambican CAADP Compact establish a vision for a “prosperous agrarian sector: competitive, equitable and sustainable”. The National Agricultural Sector Investment Plan (PNISA) was designed to reach that vision with five strategic objectives:

1. Increased agricultural production, productivity, and competitiveness
2. Improved infrastructures and services for markets and marketing
3. Sustainable use of land, water, forest and wildlife resources
4. Conducive legal framework and policies in place for agricultural sector growth
5. Strengthened agricultural institutions

(See Plano Nacional de Investimento do Sector Agrário (PNISA) 2013-2017)

Both CAADP and PEDSA with PNISA strive to enhance the contributions of agriculture in income growth and food security for millions of smallholder farmers and households living in poverty, while creating a dynamic private sector capable of moving technology and markets forward.

In 2013, researchers revisited the CAADP pillars to understand the progress and identify the needs into the future for Mozambican agriculture. A set of Flash publications were disseminated by the Ministry of Agriculture and Food Security with its collaborators and are the basis of this document.

**CAADP Pillar I: Land and water management**

Both land and water are used inefficiently and far below their potential in Mozambique, with only 15% of the potentially arable land used in agriculture and only 14% of irrigable land equipped with infrastructure as of 2009 (Flash 62). Access to agricultural services is low and decreasing, as well as the use of modern agricultural inputs (IFPRI Policy note #5). The role of the public sector in agriculture has not been very proactive, contributing to reduced investments both by the public and the private sectors. The Government will need to create the physical and policy environment to stimulate agricultural growth to benefit about four million smallholder farming households in rural Mozambique.

Research has highlighted the following priority investment areas:

- animal and motorized traction, to increase land and labor productivity
- land ownership systems, especially under irrigation schemes, that promote investments in infrastructure
- input market development with both private and public sector actions
- public sector research and extension investments in small-scale irrigation and conservation agriculture
- significant increases in agricultural sector investments based on diagnosis of poverty and potential role of agriculture to reduce poverty.

More research is required on the role of forestry and other natural resources, looking at impact of burning, large land holding, and new projects.

See Flash 62 Sustainable land and water management in Mozambique and IFPRI Policy Note #5.
CAADP Pillar II: Rural infrastructure and trade-related capacities for market access

Mozambican smallholder farmers have made some gains in productivity, but the improvements are limited and yield gaps continue to be large. Public and private sectors will need to make investments in the following areas to improve smallholder market participation and market performance: 1) rural road infrastructure; 2) development/dissemination of improved inputs; 3) improved spatial coverage and targeting of SIMA price data and market information; 4) enhanced local storage capacity; and 5) expansion of the electricity grid for irrigation, processing, storage, etc.

In Flash 63, researchers identified several key policies:

- improve competition and introduce incentive based monitoring systems for out-grower schemes;
- facilitate smallholder inclusion in sugar cane development;
- phase out the VAT applied to imported maize grain and/or solve problems related to VAT in agriculture and agricultural imports;
- adoption of a rules-based, predictable and transparent approach to state operations in markets if the state chooses to use its grain reserve for price stabilization, so that the private sector understands the specific market conditions that will trigger government interventions.

Researchers have identified the following priority interventions:

- enhanced agricultural productivity, especially for products of high nutritional value and for crops that are resilient in the face of climate change
- greater market efficiency and lower post-harvest losses
- availability of more nutritious food in markets at accessible prices (fortification, reduced prices for nutrient dense foods)
- increased diversity of products in the diet, whether from home consumption or markets
- increase in income opportunities for vulnerable households
- integration of nutrition into agricultural extension as well as into general education

Multisectoral action at all levels is needed to ensure that economic growth results in food security and nutrition, which is the challenge of CAADP Pillar III. See Flash 64 Food Availability and Quality of Diet in Mozambique: Linking Agriculture to Nutrition.

CAADP Pillar III: Increasing food supply and reducing hunger

In spite of agricultural sector growth in Mozambique in the past ten years, agriculture’s full potential to reduce poverty and prevent food and nutrition insecurity remains untapped. As of 2011, 43% of children under 5 years of age had signs of chronic malnutrition (MOH, IDS 2011). Analysts and policy makers have pointed to the need to ensure that all the components of the food system contribute to reduction in malnutrition as well as increased income growth.

In Flash 63 Agricultural Marketing and Development in Mozambique: Research Findings and Policy Implications.

Pillar IV: Agricultural Research, Technology Dissemination and Adoption

Investment in research, innovation and extension is an immediate imperative to providing technological solutions to Mozambican agriculture. Mozambique has high potential to increase agricultural growth and poverty reduction by narrowing or reducing the gap between potential and actual yields and improving the efficiency of land use and human resources.

Poor performance has been seen in extension agents reaching farmers (less than 7% of farm families reached in 2011). The yield gap between potential yield and actual farm level yields for main crops...
remains very high (maize yields less than 1/8 of potential; cowpea yields less than ¼ potential). This will require investments especially in national agricultural research and extension services. Human, financial, and material resources must be continuously provided by the public sector for the research and extension system to respond to the challenges of an increasingly volatile environment.

Huge productivity gains can be achieved in a short time if there is consistency and coherence in the allocation of resources. Investments should be based on comparative and competitive advantage of the country. On the policy side, the Mozambican government can reverse the declining trend in investments, such that researchers and extension agents have effective working conditions and incentives, based on innovative ways of funding through new institutional arrangements.

See Flash 65 Investment in Research and Extension: An Imperative to Increase Agricultural Productivity.

PNISA 2013 – 2017
The Agricultural Sector Investment Plan was developed to target resources (human, physical and financial) to key agro-ecological zones, on high potential crops that contribute to poverty reduction as well as income growth.

Challenges ahead
Given the four CAADP Pillars and the five strategic objectives of PEDSA indicated earlier, the allocation of resources (human, financial, and physical) will need reorientation. With the PNISA in hand, financing the investments will be a major challenge moving forward. Some aspects require private sector investments and that entails public and private sector working together to remove constraints and ensure an optimal environment for such investments. Encouraging private sector investments with strong linkages to rural smallholders and poverty reduction requires a conducive policy environment and incentives. The Mozambican government has a key role in working with bilateral and multilateral donors, public and private, to help meet the identified needs, leveraging available resources.

For food security and nutrition, SETSAN guidance and the Multisectoral Plan for the Reduction of Chronic Malnutrition have identified specific investments with crop diversification and dietary diversification linked to reduced malnutrition. Without combined private and public investments, the agricultural sector will continue to have little impact on child malnutrition and poverty.

References:
Flashes can be found at http://www.fsg.afre.msu.edu/Mozambique. IFRPI policy notes are at www.IFPRI.org.

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