



Enhancing private sector engagement in agricultural research and development in eastern Africa*

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Key fact

Engagement with private sector firms in eastern Africa revealed that 65% of them did not allocate any budgets for research. Over 50% of the firms indicated that they responded to calls for collaborative research whenever they were advertised. Of the firms interviewed, 97% indicated that they knew research institutions that could address some of their business challenges.

Short summary

The three priority suggestions by private firms on how to improve uptake and commercialization of improved technologies were: involvement of end users in the research process; establishment of frameworks for regular interactions between researchers and industry players; and awareness creation and training for end users.

Private sector players are willing to be engaged in research through collaborative research, dialogue platforms, joint programmes and formation of partnerships. 75% of private sector firms in eastern Africa indicated that they would be interested to co-fund public sector research that was tailored to addressing their prioritized needs.

Formal engagement through, e.g., memoranda of understanding, will assure the private sector that they will be fully incorporated in research processes.

❖ After a decade of stagnation in the 1990s, public agricultural R&D spending in sub-Saharan Africa SSA increased by more than one-third in real terms, from \$1.2 billion in 2000 to \$1.7 billion in 2011, measured in constant 2005 PPP dollars (Nienke and Stads, 2014). Half of these investments were made in Nigeria (\$394 million), South Africa (\$237 million), and Kenya (\$188 million). Ethiopia, Ghana, Kenya, and Tanzania also recorded relatively high increases in total spending, each accounting for between 5 and 9 % of the total growth.

Despite recent increases, overall investment levels in most countries are still well below those required to sustain countries' needs. Agricultural R&D funding in many countries is highly dependent on donors and development banks.

The private sector is currently the least developed source of sustainable financing for agricultural R&D in SSA, and its funding potential remains largely untapped in most countries.

Cultivating private funding will involve provision of a more enabling national policy environment in terms of tax incentives, protection of intellectual property rights, and regulatory reforms.

Background

The private sector accounts for less than 10% of total agricultural research and development (R&D) spending, with the rest being taken up by public sector and development partners. The private sector share of total R&D expenditure for low and middle-income nations in 2000 ranged between 8-10 %, which is very low compared to USA and France at 51.5 and 74.7%, respectively (Keogh and Potard, 2011). Developing countries with relatively high private sector investments in R&D, such as India and South Africa tend to be ahead technologically in agriculture.

In recent years, involvement of the private sector in agricultural R&D activities has been growing significantly (Beintema and Stads, 2014). The private sector is increasingly getting involved in setting priorities for agricultural R&D, and implementation of projects alongside

researchers and farmers. Further, private companies are more visible in the release of new varieties, provision of extension services as well as farm inputs, veterinary care, food storage, processing, storage and packaging that are enabling many products to meet strict quality and hygiene standards.

These positive developments can be attributed partly to the liberalization of agricultural input industries, large-scale production, processing industries and trade, and liberalization of agricultural input and output markets. Some national governments have privatized agricultural input parastatals, allowing the entry of private firms, which not only enter the industries with their own products, but also invest in R&D to develop new products. For example, the maize seed industry in Zambia, Kenya and Tanzania is now characterized by competitive sectors with significant and growing private R&D.

Most private firms are discouraged from engaging in R&D by perceptions that:

- Research benefits in the agricultural field take long to be realised.

- It is difficult to contain the spillover of the benefits of research and hence recoup investments. Benefits are usually available to both the companies investing in research, and their business competitors.
- Technologies will spillover from the public sector or from abroad, eliminating the need to invest local resources in their generation.
- Hurdles in policies and regulations hamper large-scale private R&D and innovation. Commonly cited bottlenecks include the stringent regulations involved in registering and releasing new products; lack of enforcement of laws to eliminate unfair foreign competition that disadvantages local companies; widespread piracy of private innovations, owing to poorly developed intellectual property rights regimes, and the inadequacy of tax incentives to reward companies that invest in innovation.

Conclusion and Way Forward

Both ASARECA and private sector players will immediately organize exhibition fairs to show case ASARECA's validated technologies, innovations and management practices (TIMPs). On commercialization of promising TIMPs, the private sector will lead in incubation processes while ASARECA will provide the description of the TIMPs, where they apply and evidence of their associated benefits and costs. ASARECA will ensure that private sector players participate in setting of the regional research agenda.

Private sector players will lead in the establishment of platforms between themselves and researchers with clear modalities for engagement. Those platforms will coordinate rapid responses to emerging concerns, e.g., maize lethal necrosis disease. Private sector players will lead the development of a media strategy for improving communication of research outputs. They will also propose entry points for enhanced involvement of private-sector players in agricultural R&D. They will also spearhead advocacy in policy reforms for continued improvement of a favourable agricultural policy environment.

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