



### ASTI/IFPRI-FARA Conference

# Agricultural R&D: Investing in Africa's Future. Analyzing Trends, Challenges, and Opportunities

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## Theme 1: Why do African Governments Underinvest in Agricultural R&D?

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It's great to be back in Ghana and to see the beginning of a new ASTI, **ASTI+**, where substantive analysis of the database on agricultural research and development (R&D) is being conducted.

These are truly great times for agricultural and rural development in Sub-Saharan Africa (SSA) and globally. The papers of this session illustrate that very good things are happening here in Africa, including lots of technical and institutional change, where both countries and agencies are talking not only about financing projects, but also about building capacity and finding sustainable ways of funding research. After so many years of neglect, agricultural development and agricultural research are back on the agenda, so we should focus on reaching consensus on the main substantive funding policy issues and seizing the moment.

I have two main general comments to make based on the six presentations we have heard. One is on *scale* and the other is about *priorities*.

### 1. SCALE OF RESEARCH ACTIVITIES

On the scale of research activities, we still have a long way to go, geographically and thematically, and also from a funding perspective. We cannot afford to say that we are involved in hundreds of projects that do not really have a substantial budget that will assure potential research success. To reach such scale, more subregional and regional activities should be done collectively, so countries with small-sized research systems can scale up their activities, working jointly with similar countries to complement and add value to national research efforts. If we do this in an organized and complementary way (national, regional, international), we would reap lots of value-added, and we may reach the needed scale to tackle research such as the management of tropical soils and food-security related research focusing on beans, maize, cassava, rice, and so on. An example of countries funding their own research at a regional level is the Latin American endowment fund (Fontagro) created a decade ago and now totaling an investment of US\$100 million. Regional competitive funding is provided with the rents generated by a pool of resources invested in the fund, mainly by the beneficiary countries themselves.

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SSA has a huge asset with so many research networks, regional forums, subregional initiatives, agreed frameworks, and the global development community supporting thousands of projects. There is no other region in the world where so much international development investment focuses on agriculture. To reach the needed impacts, more than eight countries (the "big eight" referred to by ASTI) should strengthen their research systems, and not only in the public sector, but also in the private sector and in civil society organizations. Byerlee's paper on producer funding is a great start in taking a real look at the possibility of increasing the use of levies to support commodity research.

The key needs from the public sector are not only funding for agricultural research, but also the ongoing prioritization of agriculture in order to establish the right incentives for agricultural development and for investments in infrastructure, land policies, irrigation, and many more key complementary investments. In turn, all of that would further justify the need to invest in agricultural research. Without such complementary rural investments, agricultural research alone will not be able to generate the desired levels of agricultural and rural development in SSA.

#### 2. RESEARCH PRIORITIES

On the priorities of what research activities to invest in, much has been written about the issues of underfunding of agricultural research and the need to focus research. Funding in the region is growing according to the presentations in the funding session of the conference; research funding in the region is growing. It is, therefore, a good time to take stock of the efficiency of the current investments in agricultural research. Are we sure that we are doing the best we can with the billions being invested in agricultural research in SSA? Are we duplicating efforts on some topics and leaving large research gaps? In addition, we should look at the relevance (effectiveness) of research in terms of which areas, themes, and challenges we should focus on. Can we clearly write research proposals stating concrete expected research outcomes? My point is that even if we agree that productivity and food security, natural resource management and the environment, and policy research are three key areas to work on, we need to go into much greater detail on the specific topics where global, regional, and national research efforts make sense, including better research on relevant funding mechanisms.

To finish these general comments I want to mention the need to strengthen South/South mechanisms of research collaboration. Not all countries can afford a strong research system, so we should mobilize resources as best we can to adapt technologies from other regions. Furthermore, not all countries will continue to need donor funding, so we in developing countries can do a lot to become more self-sufficient, including creating more incentives for the private sector to become more involved in funding or executing agricultural research.

On the specifics of each presentation I have the following comments to make. The Binswanger paper presents bright prospects for research in the region and has clarified the need to distinguish between global and regional competition, and the need to include the commercial farming sector in all development schemes. The Fuglie paper outstandingly quantifies total factor productivity and identifies research targeting issues, economies of scale, and the complementary role of the CGIAR centers. Stads' paper reconfirmed the overall increase in R&D spending (although concentrated in a few countries), documenting how funding shifts and its associated volatility. The only way out is to diversify funding sources via different funding mechanisms. Spielman's paper clearly discussed how donors could improve their overall support to research activities. A point to make here is that donors will always complement country and regional initiatives but should never

be a substitute for them; in fact, donors should strive to make very strategic investments, such as funding collective action via regional/subregional joint research ventures, funding networks, and so on. The paper by Nin-Pratt took an ex ante look at the prospects for funding toward 2050, mentioning that research efficiency would also be increasing over time. This is a point that deserves more research. The Byerlee paper hit a key topic that would make a difference: there are many underutilized opportunities to boost commercial funding of commodity research via levies. If such funds were matched by governments, we would establish a much more sustainable funding scheme.

On potential donor actions to strengthen research, in addition to funding, at least three actions are worth mentioning. The first is that it would be a great contribution to research if a group of donors could agree to coordinate monitoring and evaluation activities so that researchers could spend more time doing research instead of reporting to individual donors. Another potential action would be for donors to reach out to the health, environment, and energy sectors within their agencies or in the countries themselves in order to seek a more diversified portfolio of investments than those coming from the agriculture sector. A third potential action would be to advocate for jointly funded key initiatives with other agencies and potential donors, such as those from the philanthropic sector. If the private and philanthropic sectors within countries where agricultural research has traditionally been funded by the public sector were made more aware of the impacts of research and development that have had been achieved so far, perhaps they would be motivated to become more involved in funding global and regional agricultural research for development.