



Agriculture is in the news

Tuesday, 12 February 2008

By Derek Byerlee

Record food and grain prices, the rush to develop biofuels, social tensions caused by the widening gap between rural and urban populations in Asia - agriculture is in the news.

Some farmers in developing countries will benefit from higher prices, but such brief windfalls will not be enough to make a dent in rural poverty, since most poor people in the countryside purchase more food than they sell. A large and permanent decline in rural poverty will require a new "agriculture-for-development agenda". Australian know-how can contribute to such an agenda in important ways.

Agriculture's role in our globalising, urbanising world should not be underestimated. Indeed to meet the Millennium Development Goals of halving hunger and poverty, it is essential that governments and donors give higher priority to agriculture. Agricultural productivity growth can provide high payoffs for the worst off - GDP growth originating in the farm sector can be up to four times more effective in reducing extreme poverty than GDP growth originating outside the sector.

But widening the benefits of today's "new agriculture" requires a serious course correction by governments, donors, and their development agencies such as the World Bank, since agriculture in the developing world has suffered serious under-investment from the mid-1980s. Indeed, only 4 per cent of public expenditure in agriculture-based countries is allocated to the sector, even though 75 per cent of the poor live in rural areas and rely on farming for their livelihoods. Likewise, agriculture is receiving only about 4 per cent of overseas development assistance for developing countries.

With rapidly-expanding agricultural markets, opportunities abound to use agriculture more effectively for development. But farmers in the developing world need better deals for the commodities they export, easier access to markets, rural financial services to support investments, and new technologies to raise their productivity. This must happen not just in the irrigated rice paddies of East Asia, but also in the fields of the men and women farmers of less-developed countries as diverse as Cambodia, Ethiopia and Papua-New Guinea.

Where investments in agricultural research and development (R&D) have been made in the developing world, they have turned agriculture into a dynamic sector, with rapid technological innovation accelerating growth and reducing poverty.

Published estimates of rates of return on R&D and extension investments in the developing world average 40-50 per cent a year. However, the technological challenges facing agriculture in the 21st century are probably even more daunting than those of recent decades. Land and water are becoming increasingly scarce on a per-farm worker basis, so the main source of growth to satisfy increased demand for food and agricultural products will be through gains in productivity based on investments in science. Climate change adds even more urgency to these investments to develop drought-, heat-, salt- and flood-tolerant varieties and more resilient farming systems.

Recent advances in the biological sciences and information sciences offer great promise to raise productivity in a sustainable manner, increase the resilience of production systems important to the poor, and increase the nutritional value of food staples.

But despite the need and the promise, agricultural science remains grossly under-funded in developing countries. Growth in public spending has slowed sharply in the past decade and remains a fraction of the public investment seen in industrialised countries.

Some countries, notably India and China, have sharply increased spending. Most urgent is to reverse the stagnant funding of agricultural R&D in agriculture-based countries, especially in Sub-Saharan Africa. This must be driven by national leadership and funding, but will also require substantially increased and sustained support from donor organisations.

One such key organisation, the Consultative Group for International Agricultural Research (CGIAR), has been a leader in agricultural research that benefits the poor, and new, complementary options to develop and spread new agricultural technologies are emerging.

Australia is especially well positioned in the international community to provide global leadership to support agriculture for development, and especially leadership in applying agricultural science to the benefit of the poor.

Australians (and New Zealanders) are among the few citizens of the rich world that can hold their heads high in global trade discussions - unlike other rich countries, they have farm policies that do not distort global prices. For OECD countries as a whole, farm subsidies and protection cost developing countries an average of five times what OECD countries provide in official development assistance.

Moreover, in the absence of farm subsidies, Australia, both through the public sector and farmers themselves, has one of the highest intensities of investment in agricultural R&D in the world, with a strong human and institutional base that provides a rich resource for supporting science in the developing world.

The [Australian Centre for International Agricultural Research](#) is an innovative example of support to agricultural science for development. Finally, Australian scientists have long experience in dealing with the challenges of both dryland and tropical agriculture - knowledge that is directly relevant to conditions in many developing countries.

But to provide leadership, Australia must invest more than the 5 per cent of its official development assistance that currently goes to agriculture, and continue to scale up and sustain its support for and partnerships with national and international agricultural research centers around the world. With world leaders once again paying attention to agriculture, the time to act is now.

Co-written by Derek Byerlee, Co-Director; Kym Anderson, Philip Pardey, Julian Alston, Jock Anderson, and Will Martin (Team members), World Bank's [World Development Report 2008: Agriculture for Development](#). All authors of this opinion piece are Australian.

DereDerek Byerlee, originally from a South Australian sheep/wheat farm, is the Co-Director of the World Bank's flagship report, [The World Development Report](#). He has dedicated his career to agriculture in developing countries, as a teacher, researcher, administrator and policy advisor.

An opinion provided by OnlineOpinion.com.au - Australia's e-journal of social and political debate. [Click here to read & post comments on this article.](#)

[About Us](#) | [Contact Us](#) | [Disclaimer](#) | [Privacy](#) | [Got a story?](#) | [Advertise on this site](#)

© ScienceAlert | ABN 47 669 144 935