Poverty action needs a holistic policy mix

The World Bank’s Dr Will Martin discusses the role agricultural productivity can play in reducing poverty

Key points:
- The World Bank’s rural development program seeks agricultural productivity gains for the world’s poorest farmers.
- A coordinated multilateral approach to agricultural research, development and extension to farmers is considered essential.
- The World Bank aims for a flow of new techniques to farmers, along with infrastructure, land tenure and policy improvements.
The World Bank is a global leader in shaping thinking on development assistance and aid. Its aim is to help poor people help themselves and their environment by providing resources, knowledge and building capacity and forging partnerships in the public and private sectors.

Within the World Bank, the Development Research Group seeks answers to some of the most pressing questions in development. Dr Will Martin heads the Agriculture and Rural Development research program within this group. He recently spoke to Partners magazine about some of the challenges facing agriculture today.

**Partners: What is the mandate of the Agriculture and Rural Development research team?**

**Dr Martin:** We have a team of 10 research economists leading policy-oriented research on key issues in agriculture and rural development. Our work is organised into four broad themes:

- Agricultural productivity, factor markets and adjustment
- Rural infrastructure and governance
- Agriculture and the environment
- Price incentives, trade and food security.

Under our first theme, we place emphasis on securing the improvements in productivity that are central to lifting people from poverty—how, for instance, might a new ‘green revolution’ be secured in Africa?

We also focus on improvements in land tenure, which can achieve efficiency and equity. Another issue in developing countries is facilitating the movement of workers out of agriculture—by being drawn into other activities, rather than by being driven from the land by poverty and desperation.

Under our infrastructure and governance theme we examine the contribution to poverty reduction arising from rural infrastructure investments such as rural roads and electrification. We are also analysing some of the policy problems that arise in using common-pool resources such as groundwater.

Another challenge lies in learning what works when governments decentralise authority and responsibility to the local level through community-based development.

Under our third theme, agriculture and the environment, we are examining the potential opportunities for agriculture to contribute to mitigating carbon emissions, plus the need and scope for adaptation to climate change in India and Tanzania.

Our final theme of price incentives, trade and food security addresses the distortions to agricultural incentives that affect the performance of the farm sector and the economy more generally—measuring and explaining these developments, and assessing their importance for world prices and their volatility. It also includes research on the role of trade, productivity growth and stockholding in ensuring food security for all.

**How critical is policy in shaping the environment for agricultural innovation?**

Three-quarters of poor people live in rural areas and the majority depend on farming for their livelihoods. Improvements in agricultural productivity are critically important, not just for raising incomes in farming, but for lowering the cost of food to low-income consumers who spend up to three-quarters of their income on food. Policies on research, development and extension are critical to improving agricultural productivity in developing countries.

The challenge is to ensure a flow of new techniques that enable increases in productivity. This was achieved in Asia during the Green Revolution but has proved more difficult in Africa, for which we now have a new ‘Green Revolution for Africa’ project.

Once new technologies become available, a second set of challenges emerges. Farmers need to learn about the new approaches, they need finance to implement some of them, they need secure title to land so they can make any necessary investments, they need decent transport to obtain inputs and to get their products out, and they need prices that make it worthwhile.

Policies on land tenure are therefore an important factor. Some key findings include the need to keep the cost of land registration low, and to ensure that the rights of existing stakeholders are adequately protected.

**With regards to a ‘green revolution’ in Africa, how hopeful should we be in light of policy environments in Africa?**

There are good reasons for optimism if we have the right technologies and a focus on...
stressing African agriculture. At the same time, we need to be innovative and adaptive since many things we’ve tried in the past have not worked as originally hoped. The Green Revolution transformed agriculture in developing Asia but has had a much more muted effect in Africa. We don’t fully understand the difference in outcomes … although part of the explanation lies in differences in geography, climate, access to irrigation and in the suitability of varieties produced for the African and Asian environments.

One question is whether farmers in Africa have not adopted new varieties—and technologies such as improved fertilisers—because of a reluctance to change, or because these technologies don’t work well enough under African conditions.

Some very nuanced results are emerging from our work in this area. In some cases, it appears that the problem is with adoption, but in others it is less clear whether the new varieties and techniques are actually profitable in the current environment—suggesting a need for more work to improve both varieties and the infrastructure and other features of the agricultural environment.

The overall policy environment for agriculture in Africa has improved enormously. The taxation of agriculture that was so prevalent a generation ago has now largely disappeared. There is now a commitment to support agricultural and rural development.

Can broad-scale economic growth be achieved across the developing world without a coordinated multilateral approach?

A coordinated multilateral approach is essential. Agricultural research is a classic ‘public good’, with three dimensions—global, regional and country. Findings from global or regional research may be applicable across broad agroclimatic zones. The Guinea Savannah zone, for example, covers 600 million hectares in 25 African countries. Within zones there is typically a great deal of commonality in challenges and needs, and it’s important to apply relevant learning as broadly as possible.

Country or region-specific adaption from global public good should be possible. Adapting this to specific country circumstances becomes an important contribution for national and sub-national research agencies.

In terms of national policy on price incentives, a complete sea change has occurred. A generation ago agriculture was often directly taxed, via export taxes and depressed domestic prices, and indirectly taxed, through measures such as overvalued exchange rates and through protection to competing sectors that pulled resources out of agriculture.

Our recent work suggests that the direct taxation of agriculture has almost disappeared, and the indirect taxation of agriculture through overvalued exchange rates and protection to the non-agricultural sector has fallen dramatically. Less reassuring are signs of a move towards agricultural protection in developing countries. Protection of staple foods creates potentially serious problems for poor consumers, who are particularly vulnerable to increases in food prices. The increasing interest in protecting import-competing agriculture—and hence indirectly taxing agricultural exports—also creates serious challenges for agricultural trade reform at the multilateral level, where many developing countries are seeking special safeguard measures that are proving controversial.

What is the role of policy in accelerating progress towards the Millennium Development Goals?
The first of the Millennium Development Goals is to eradicate extreme poverty and hunger, and policy for agriculture must play a major role in achieving this. One requirement is policies to improve agricultural productivity, because of its role in raising farm incomes and in lowering the cost of food to poor consumers. Another is policy to deal with price spikes, like the one in 2007–08, to which poor people are particularly vulnerable because they spend so much of their income on food.

As Amartya Sen, the Indian Nobel Prize winner in economics has pointed out, food security is not about achieving a balance between domestic production and demand, or even of ensuring that enough food is available. Food security means a policy that makes sure that poor and vulnerable people have access to the food they need.

Trade restrictions can play only a limited role in achieving these goals. Raising domestic prices of import-competing foods will increase self-sufficiency in these foods, but appears, in most cases, to raise poverty and food security by reducing the real incomes of poor consumers.

Varying protection to reduce fluctuations in domestic prices can help an individual country reduce price volatility but redistribute risk across countries, rather than diversifying it away. When many countries insulate their markets against changes in world prices, as in 2007–08, the end result is greater volatility in world prices.

When food prices rise, a critical element for policy is to ensure that food is available to the poorest and the most vulnerable. When the source of the food price increase is local—as it frequently is in poor, isolated countries—a key element of policy must be to improve infrastructure and to facilitate trade.

Where food stocks are held turns out to be a critical question and is the subject of current research.

Social safety nets also play an important role, and in the past many people in rural areas have been left out, with safety nets frequently covering only urban people. The avenues for lifting poor rural people from poverty are likely to come from well beyond the farm gate. Improving infrastructure and providing greater access to education and health care are essential.

A key indicator of successful rural development is a sharp reduction in the share of the workforce in agriculture, and we need to pay attention to the many impediments that reduce the ability of people to move from agricultural poverty.