Agriculture and Growth Seminar: Notes

Original seminar delivered by Professor Frank Ellis and Professor Stefan Dercon

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Introduction

With the Evidence on Demand Topic Guide to Agriculture and Growth due for publication soon, its author Professor Frank Ellis together with DFID's Chief Economist Stefan Dercon, recently delivered a seminar on whether small-farm agriculture should be regarded as the engine of pro-poor growth in the developing world.

Frank Ellis is an Emeritus Professor at the University of East Anglia and has spent 40 years researching, writing and teaching on rural development, agricultural policies, livelihoods and social protection.

Stefan Dercon is the Chief Economist of DFID and Professor of Development Economics at Oxford University. His research interests include risk and poverty, the foundations of growth in poor societies, agriculture and rural institutions, migration, political economy, social and geographic mobility, and measurement issues related to poverty and vulnerability.

Proposing the Potential of Small-farm Agriculture for Growth and Poverty Reduction

Professor Frank Ellis

Qualifying the argument he was about to put forward, Professor Ellis began by stressing that it relates to growth and poverty reduction at a national or regional level rather than "down on the farm" in a particular rural area. Furthermore, growth and poverty reduction are distinct processes. It is possible to have high growth with little poverty reduction, due to low labour intensity in the sectors providing growth. The argument to prioritise small-farm agriculture depends on overlap between growth and poverty reduction.

For agriculture to be the lead sector in national economic growth, its size within the economy must be large, and its growth rate superior to that of other economic sectors. Under these conditions, purchasing power within agriculture rises, stimulating growth in other sectors by providing a growing market for their output. For the pure growth argument, the farm size structure is not critical, what matters is the sector's rate of growth. For example, large farms producing increasing quantities of food for an urban population might play a pivotal role in stimulating overall growth.

However, for simultaneous rapid poverty reduction, a small farm size structure is critical. Small farms are notably labour-intensive, generating employment and income for poor people. This means that a given rate of growth achieved through productivity increases in small farm agriculture leads to greater poverty reduction than the same rate of growth in large commercial farms or other sectors of the economy. The relationship between poverty reduction and economic growth is known as the growth elasticity of poverty reduction, and achieving small-farm agricultural growth is unique in the size of this elasticity. Indeed, evidence shows that small farm growth offers three to four times more poverty reduction for a given percentage growth than equivalent growth in other sectors.

Empirical studies have shown that the poverty reduction impact of agricultural growth is largest under conditions of relatively equal farm sizes, as pertained in Asia during the Green Revolution in the 1960s and 1970s. In Latin America, which also experienced strong yield gains and corresponding agricultural growth, the poverty reduction impact was smaller. In Africa, the average yield increase for major food crops (especially maize) since the 1970s has been relatively slow, so the poverty reduction impact of raising yields remains more a potential outcome than one actually realised.

Avenues for achieving small-farm growth include expanding the land under production (though this is limited by availability of cultivable land); raising yields through narrowing yield gaps; substituting lower for higher value crops; correcting market failures and enabling market access; encouraging new technologies and adoption pathways to keep yields rising over time; and taking account of climate change to make sure growth is sustainable.

(NB the line of argument taken by Professor Ellis in this seminar does not necessarily reflect his own views.)

Revisiting Agriculture and Growth

Professor Stefan Dercon

Professor Dercon's introduction summed up his overarching problem with the pro small-farm argument, namely that the narrative it relies upon is overly simplistic and draws upon fossilised and often unsubstantiated evidence. The appeal to the historical truth on the role of small-farm agriculture in growth is flawed - it ignores multiple speeds and other economic processes that feed this growth; and it is based on a primarily Asian story that makes little sense for the rest of the developing world, particularly Africa given its heterogeneity.

Dercon also takes issue with the argument's appeal to the efficiency of poverty reduction via economic growth. Even if growth from agriculture is three to four times more effective at reducing poverty than growth from other sectors (the statistic relates to China, so Dercon questions its application to the rest of the developing world) it doesn't say anything about how much it costs to get this growth, particularly in comparison to the cost of getting a similar growth from other sectors. No one is asking how expensive it is to get growth from agriculture and thus there is no evidence to suggest this approach is cost effective always and everywhere.

Proponents of prioritising small-farm agriculture also argue that because demand is outstripping supply, we must boost supply in order to create growth. Dercon, however, believes this is a fundamental misunderstanding of unavoidably complex markets. Similarly, he dismisses the notion that production is the only constraint on a farm's potential - an idea which leads to the naïve belief that all the answers lie in technology and agricultural research. And finally, Dercon takes issue with the regard of small-farm agriculture as a homogenous sector – stressing that there is heterogeneity in agricultural growth potential even within communities. He suggests that it is extremely naïve to ignore comparative advantage and other economic forces.

Dercon insists that donors and policy makers need to be more nuanced and strategic in their thinking, working towards new evidence, a better narrative, and better identification of interventions for agriculture and alternative paths to poverty reduction. He suggests we should be identifying processes to reduce numbers of very poor peasants, possibly by 100s of millions over the next 30 years, and questions what the next generation of people growing up in rural areas is going to do. We should be embracing rather than eroding human mobility, he asserts – rural families who manage to place members in urban jobs see their yields increase as earnings are sent home and invested. Dercon is not denying that agriculture is essential; he recognises it as a sector whose neglect is harmful for sustaining growth. However, it is just another sector and shouldn't dominate interventions in rural development.