

THE ROLE OF AGRICULTURE IN PRO-POOR GROWTH IN SUB-SAHARAN AFRICA¹

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Over the past 35 years, the international consensus on the importance of agriculture in economic development has varied from very high (until the early 1980s) to very low (1990s) to the current middling. Asia was fortunate enough to launch its agricultural and economic revolution at a time when interest in agriculture was still high. Africa was less fortunate and is now trapped in food crises, poverty and economic stagnation. However, even though agriculture is back on the agenda for Africa, the level of commitment amongst key donors and governments is mixed and the emerging strategy is very different from that of the past. Debate continues on both aspects.

I will first review the debate about the role of agriculture in Africa and then describe and evaluate the rural development priorities that seem to have emerged for the new Millennium.

What Role for Agriculture in Africa?

There are five major issues of contention in the current debate. These are described below and summarized in Table 1.

1. Scale

Proponents for agriculture argue that we need to recognize the scale of the growth problem in Africa. Africa's total GDP is currently about \$350 billion per year. This is not large by Western standards (e.g. it is little more than what the OECD countries spend on agricultural support policies for their farmers), but it is enough to provide 700 million Africans with an average annual income of \$500 each. To make a serious dent in Africa's poverty it is necessary to think about doubling or trebling this income while also achieving a better distribution. Even a doubling would require another \$350 billion per year. To achieve this will require growth in a large sector like agriculture, which accounts for about 30 percent of gross domestic product (GDP) for Africa as a whole, and even larger shares in more than two-thirds of African countries.

But if agriculture is to provide the kinds of income increase needed, then it will have to derive from broad sector-wide growth, not just fast growth in small niches like high value agricultural exports. Those are useful additions but they are still measured in tens of millions of dollars, not the tens of billions required.

¹ Paper prepared for a workshop on Policy, Poverty and Agricultural Development in Sub-Saharan Africa, March 8-9, 2006, Ministry of Foreign Affairs, Stockholm, Sweden.

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Table 1: Summary of the Debate about the Role of Agriculture in Africa Today

Type of Argument	Case for Agriculture	Case against Agriculture
1. Scale	Has sufficient scale to make the needed impact on aggregate growth rates. But scale requires growth in food staples.	Too much of a bad thing given low prices and poor past performance
2. Catch up potential	Considerable catch up potential given current low levels of factor productivity. Africa badly needs to invest to regain competitiveness, just as other countries already have.	Too late and too expensive for most cash strapped countries
3. Growth linkages	Agriculture has powerful growth linkage effects in early stages of development, including providing a growing demand for nascent industries.	Not so important in today's liberalized economies, and anyway, employment intensive manufacturing and services create comparable linkages
4. Alternatives to agriculture	Better than the alternatives (manufacturing and services) given their smaller base, poor past performance, and highly competitive world markets (e.g. China and India).	Optimistic views about potential for a) manufacturing exports in coastal countries and b) better use of export revenues in oil and mineral rich countries.
5. Poverty impact	Agricultural growth can be powerfully pro-poor especially if the strategy builds on small farms and food staples (SFFS)	No future for small farms and food staples production given low prices, small farm sizes, and more integrated and competitive markets

Agricultural skeptics argue that having a big “bad thing” is not good, and one should focus on trying to move away from it as quickly as possible. They see agriculture as a sunset industry for Africa given world food surpluses and the low productivity and poor past performance of the sector. This begs the question of what the alternative “big thing” could be, a point taken up under issue 4 below.

2. Catch up Potential

Gross neglect of agricultural investment in Africa compared to the rest of the world has led to a situation in which cereal yields and per capita food production are now much lower in Africa, and the gap is widening (Figure 1). Agricultural proponents see plenty of opportunities for raising yields through technological change. Some of the needed technologies are already available on the shelf and it is merely a problem of dissemination. But additional research is also needed to develop farming practices that are more appropriate to the economic conditions of post-reform Africa in which many

farmers can no longer afford to buy fertilizers and soils are widely degraded. Skeptics argue that revitalizing the sector will not be easy: Africa still has much lower densities of rural infrastructure than India had even in the 1950s (Spencer 1994). Africa also has weak institutions for rural development; there is limited irrigation potential and most agriculture must be conducted on depleted soils and under difficult climatic conditions; and world agricultural prices are at historic lows.

3. Growth Linkages

Agricultural proponents argue that technology driven agricultural growth has powerful growth linkage effects for national economic growth (Johnston and Mellor, 1961; Mellor, 1976). These linkages are especially powerful during the early stages of development when agriculture is still the dominant sector. The key linkages arise because agriculture:

- generates more food and raw materials at lower prices, lowering wages and making industry more competitive;
- frees up foreign exchange for the importation of strategic industrial and capital goods;
- provides growing amounts of capital and labor for industrial development; and
- by increasing farm and rural incomes, provides a growing domestic market for nascent national industries.

Skeptics argue that while these linkages proved very powerful during the Green Revolution in Asia, they may be much weaker today in Africa's small and more open economies. For example, food prices should be determined more by border prices than domestic agricultural production when imports can enter freely, and industry can sell directly into foreign markets without having to wait for growth in domestic demand.

Counter arguments are based on the observation that while Africans living in coastal cities can access cheap food imports, most Africans live in areas where transport costs add significantly to the cost and availability of imported foods. In this context, increases in local food production can still be enormously helpful to the poor. Also, it is very difficult to launch whole new industries in today's highly competitive global markets, especially in countries that have only a small and inefficient industrial base (more on this later).

4. Alternatives to Agriculture

Skeptics who argue against agriculture must offer viable alternative engines of growth for African countries. Apart from the few African countries endowed with significant mineral or oil resources, they look to accelerated growth in industry and services.

Industry averages 25% or less of GDP in most African countries (e.g. 11% in Ethiopia) and is a much smaller sector than agriculture. Because it is smaller then to get the same scale of impact as agriculture, the industrial sector would have to grow faster. In reality, the industrial sector has grown much more slowly than agriculture (1.2% per annum since 1980 compared to 2.5% for agriculture – World Bank Indicators). Moreover, less than half of the so called industrial sector is actually manufacturing (including food processing), while the rest comprises oil and minerals, construction and urban utilities.

As with the recent growth in high value agricultural exports, recent successes with some manufacturing and food processing industries are not nearly enough to make a significant difference to aggregate income, employment and poverty in the next decade or two. Nor is it clear how Africa is supposed to launch a major industrial revolution based on its current small and largely inefficient industrial base, particularly at a time when countries like China and India are proving highly competitive in world markets for labor intensive manufactured products. Exceptions do of course arise (e.g. RSA and Kenya), but most African countries have yet to successfully break into manufacturing export markets.

In Asia, industry initially grew with domestic demand and was partially protected from import competition. Once it was established and had achieved the scale and efficiency needed to successfully compete, only then were its markets fully liberalized. But growth in domestic demand was driven initially by rapid agricultural growth. This has not yet happened in most of Africa. Without agricultural growth, fledgling industries will have to compete in world markets from their very inception, a daunting task that few countries (mostly island states) have ever achieved.

Services are the other big sector (about 45% of GDP; 47% in Ethiopia) and are growing at about same rate as agriculture (2.5% per year since 1980). Because it is a big and growing sector some now see this as an alternative lead growth sector to agriculture.

The problem with the service sector is that it largely depends on the domestic market for its demand and, unlike Asia, the service sector in Africa is rarely driven by rising per capita incomes. With stagnant per capita incomes in many countries, many service sector jobs are low productivity activities that simply supplement rather than replace existing incomes (what Michael Lipton might call 'jobs of distress'). The better jobs are often driven by government employment (including the military) that contributes little to economic growth, and by services directly linked to foreign aid (e.g. servicing the consumption needs of the expatriate community and their project activities). Unless one envisages very rapid growth in service sector exports (e.g. IT or tourism) then the prospects for the service sector ultimately depend on an alternative engine of growth to increase the average purchasing power of domestic consumers. This brings us back to the need for agricultural or industrial growth.

In reality, neither agriculture nor industry can do the job on its own and most countries will have to walk on both legs. This in turn will generate knock on benefits through the service sector. Even countries well endowed with oil and minerals cannot generate much employment growth unless they also invest in agricultural and manufacturing development. Since a lot of industry is agriculture based, a balanced growth strategy that builds on agriculture-manufacturing linkages makes a lot of sense. Country economic modeling work at IFPRI supports this conclusion (Diao et al., 2006). However, one of the constraints to this strategy is the restrictive import constraints imposed on processed agricultural products by most OECD countries.

5. Poverty Impact

Proponents of agriculture stress the sector's potential to slash poverty rates, as demonstrated during the Green Revolution in Asia. But agricultural growth in Africa is

not necessarily pro-poor. Growth driven by high value exports often is not. Not only is the amount of additional agricultural income from this sub-sector too small to make much of a difference for most of the poor, but the main beneficiaries are commercial farms located in areas with good market access (e.g. near cities and even airports).

Food staples production is much more pro-poor because they are grown by farmers across Africa, including most small farms and the poor. Small farms account for 70-90% of farms in many African countries and for significant shares of food staples production. Increases in cereal yields, if based on inputs or technologies that can be widely used by farms of all sizes, can have an enormous impact on poverty³. Not only does it lead to greater on-farm productivity for many poor farmers, but it brings down food prices for everyone else. As argued above, this price effect may not be very large in urban areas in today's open economies (certainly if the cities are near ports) but for most Africans who live in areas where transport costs add significantly to the cost of imported foods, increases in local food production can still be enormously helpful.

Simulations with economy-wide models of countries like Ethiopia support this argument (Diao et al., 2006). For the same rate of agricultural growth, a much larger reduction in poverty by 2015 is achieved if that growth is driven by food staples rather than high value export crops (Figure 2). And because of its much smaller size, the high value sector has to grow at much faster (mostly infeasible) rates to provide comparable rates of agricultural sector growth.

The same models also show that industrial led growth has a smaller impact on poverty reduction than agricultural growth (Diao et al., 2006). But this is not a new finding⁴.

Emerging Rural Development Priorities for the New Millennium

The debate about the role of agriculture in Africa remains unresolved in many countries and donor agencies as well as within the academic community. As such, we now have two camps pulling in different directions. However, the pro-agriculture lobby seems to be making some progress, and the level of funding for agriculture has at least bottomed out and may actually be increasing again⁵. But even as the momentum for agriculture is increasing, there is another debate about the relevant strategy for agricultural development. A new donor paradigm seems to have emerged (seemingly as much a European as a new Washington Consensus) that embeds agricultural development within

³ There is a large econometric literature that uses cross-country or time series data to estimate growth-poverty elasticities by sector. These studies generally find high poverty reduction elasticities for agricultural productivity growth, especially in the early stages of development and relative to other sectors. For example, Thirtle et al. (2002) in a cross country study estimate that a one percent increase in crop productivity reduces the number of poor people by 0.72 % in Africa and by 0.48% in Asia. In India, Ravallion and Datt (1996) have estimated the elasticity of poverty reduction with respect to agricultural value added per ha at 0.4% in the short run, and 1.9% in the long run, the latter through the indirect effects of lower food prices and higher wages

⁴ For example, see Timmer (1997) and Ravallion and Datt (1999).

⁵ African leaders committed in the Maputo 2003 Declaration of the Heads of States of the African Union (the Maputo Declaration) to allocate up to 10% of their fiscal budgets to agriculture by 2008.

a broader approach to rural development, with enhanced links to the urban sector. This new paradigm focuses on market and private sector-led agricultural growth; rural income diversification out of agriculture, especially for small farmers and the rural poor; increased investments in human capital and safety nets to provide relief during crises like droughts and to help manage the transition towards more urban societies; and improved governance arrangements including a smaller role for the public sector and new public-private partnerships. I review this new paradigm below and compare it to the agricultural development priorities of the past. The arguments are summarized around six questions in table 2.

Table 2: Changing priorities for the rural sector

Theme	What's in	What's out
1. High value agriculture or food staples?	High value products (especially for export), commercial farming, agro-processing and integrated market chains – all privately led	Small farms and food staples production (SFFS)
2. Is there a future for small farms?	Farm consolidation and larger commercial farms	Small farms, especially for food staples
3. Exit strategies or more investment in small farms?	Farm exit strategies through growth in urbanization, migration and the manufacturing and services sectors.	Big public investments in rural infrastructure
4. Trade liberalization for whom?	Trade liberalization (including agriculture) for developing countries	Liberalization of OECD agricultural policies (including protection for high value and processed products)
5. Safety nets or more investment in pro-poor growth?	Targeted interventions for the rural poor, built around sustainable livelihood strategies, community-led development, and consumption subsidies (e.g., food aid).	Broad based and productivity enhancing investments in SFFS
6. Does good governance have to mean an emasculated public sector?	Good governance, especially more democratic decisions for public choice, and enhanced roles for the private sector, civil society and local governments	Production subsidies and direct public sector involvement in agricultural marketing and provision of agricultural credit and input supplies.

1. High value agriculture or food staples?

With historically low world prices for food staples and rapid expansion in international agricultural trade, the new paradigm sees the best opportunities for African farmers in high-value commodities such as fruits, flowers, vegetables, and livestock. In many successfully growing Asian and Latin American countries, domestic demand for these products is growing rapidly, providing ready market outlets for increased domestic production.⁶ In contrast, growth in domestic demand is much weaker in Africa, primarily because of low and stagnant per capita incomes. The best high-value market opportunities are seen in export markets to richer countries. Many African countries are being encouraged to aggressively expand into high-value, nontraditional exports, as well as to improve the quality of their traditional tree crop exports.

The high value sector is particularly attractive to some donor agencies because it fits with their market led philosophy in which the private sector provides the leadership and much of the required investment, and the public sector is asked mostly to keep out of the way. While not wishing to diminish some of the real opportunities that exist in high value markets, it does seem that some donors are demonstrating the kinds of “irrational exuberance” that once prevailed for tree crop exports in the 1970s. A quick look at the price data for tree crops over recent decades should provide ample warning of the dangers that may lie ahead.

Alternative market opportunities for African agriculture are also more nuanced (Diao and Hazell 2004) than portrayed by the advocates of high value exports. While opportunities exist for improving traditional exports through better-quality and niche markets and while nontraditional exports are growing quite fast, albeit from a small base, the greatest market potential for most African farmers still lies in domestic and regional markets for food staples (cereals, roots and tubers, and traditional livestock products). For Africa as a whole, the consumption of these foods accounts for about 70 percent of agricultural output (Table 3) and is projected to double by 2020 (Rosegrant et al., 2005). This will add another \$50 billion per year to demand in 1996-2000 prices, a growth of approximately 4% growth per year. Moreover, with increasing commercialization and urbanization, much of this additional demand will translate into market transactions and not just additional on-farm consumption. There are no other markets that offer this kind of growth potential, and unlike many higher value products, food staples also have relatively low credence attributes making them much easier products for small farmers to sell in today’s markets. If African farmers could capture a decent share of this growing market, there would be plenty of scope for them to increase their food staples production by 3-4% per year. The trick is not to grow faster than 4% unless one can sell to neighboring countries, and there is scope for that if some of the intra-regional trading barriers were removed (Diao et al., 2004).

⁶ In India, for example, high-value products now account for just over half of the total value of agricultural output, and they are growing at about 5 to 6 percent per year (author’s own calculations). Interestingly, only about 2 percent of nontraditional high-value products are exported, and growth is being driven almost entirely by the domestic market.

Table 3. Size of Africa’s agricultural trade and markets

Market	Value (\$ billion)
Traditional exports to non-SubSaharan Africa	8.6
Nontraditional exports to non-SubSaharan Africa	6.0
Other exports to non-SubSaharan Africa	1.9
Intra-SubSaharan Africa trade	1.9
Domestic markets for food staples	50.0

Note: All figures are averages for 1996–2000, except the data for domestic which are 1997 figures.

Source: Diao and Hazell (2004)

Simulations with economy-wide models at IFPRI also show that food staples offer more realistic pathways for achieving growth and poverty reduction within the time frame of the MDGs (Hazell and Diao, 2005). For example, Figure 1 shows that the fastest way for Ethiopia (a poor and food deficit country) to reduce poverty by 2015 is through productivity growth for food staples. This strategy is not only more feasible for achieving a sustained 5% agricultural growth rate, but also outperforms a strategy built around increasing production of high value products (called non-trationals in Figure 1). The results show that not only is a 5 to 6 percent agricultural growth rate driven by food staples feasible in terms of market absorption in both countries, but it has a superior poverty-reducing impact. That is because productivity enhancements for staple crops (e.g., through technological change) benefit farms throughout both countries, reaching many of the smallest farms and the poorest areas. Staple crops also form the dominant share of household food expenditure, so productivity increases that lead to lower prices have powerful benefits for the urban poor, too. By contrast, growth in nontraditional high-value export crops only reaches farmers in the better-connected areas and has little impact on the food costs of the poor.

2. Is there a future for small farms?

Most small farms are not seen as viable in the new paradigm and hence are not prioritized for future agricultural investment. There are at least three reasons behind this position. First, agricultural marketing chains are changing dramatically in ways that make it harder for small farms to compete. Small farmers are increasingly being asked to compete in markets that are much more demanding in terms of quality and food safety, more concentrated and integrated, and much more open to international competition. Supermarkets, for example, are playing an increasingly dominant role in controlling access to retail markets (Reardon et al. 2003), and direct links to exporters are often essential for accessing high-value export markets. As small farms struggle to diversify

into higher-value products, they must increasingly meet the requirements of such demanding markets, both at home and overseas. These changes offer new opportunities to small farmers who can successfully access and compete in the transformed markets, but are a direct threat to the many others.

Second, at the same time that markets have become more unforgiving, structural adjustment and privatization programs have left many small farmers without adequate access to key inputs and services, including farm credit. State agencies no longer provide many direct marketing and service functions to small farms, leaving a vacuum that the private sector has yet to fill in many countries (Kherallah et al. 2002). The removal of subsidies has also made some key inputs, such as fertilizer, prohibitively expensive for many small farmers, and the removal of price stabilization programs has exposed many farmers to greater downside price risks. These problems are especially difficult for small farms living in more remote regions with poor infrastructure and market access.

Third, given that about 80% of Africa's farms are smaller than 2 hectares and are diminishing in size over time (Nakayets, 2005), there is concern that most farmers cannot get rich growing food staples.

Within this context, smallholders are seen as not having a viable future in farming and hence should not be prioritized in future agricultural development strategies. Farm consolidation is also increasingly recommended, although few advocates seem to have coherent exit strategies for the large numbers of small farms who must seemingly be displaced.

Yet small farms offer important economic and social advantages in low-income countries:

- They are more efficient producers in labor-surplus economies (because family workers are less costly and more motivated than hired workers and small farms are more likely to use labor rather than capital-intensive technologies).
- They help contain poverty by providing an affordable home platform from which poor households can experiment with ways to improve their livelihoods.
- They help prevent premature urban migration and the explosive growth of large cities.
- They also ensure a degree of food security in rural areas where high transport and marketing costs can drive up food prices, while at the national level their higher land productivity has the potential to help poor countries attain greater self-sufficiency in staples such as cereals, tubers, and even livestock.

Many such advantages slowly disappear as countries develop and labor becomes scarcer relative to land and capital, leading to a natural transition toward larger farms and an exodus of small farm workers to towns and nonfarm jobs. But that transition does not normally begin until countries have grown out of low-income status, and it typically takes several generations to unfold. A common misdiagnosis stems from overlooking this broader economic context for determining the economics of farm size (Hazell, 2004).

For most low-income countries, the problem is not that small farms are inherently unviable in today's marketplace, but that they face an increasingly tilted playing field that, if left unchecked, could lead to their premature demise. Key requirements for ensuring their survival will be improving infrastructure and education, ensuring that small farms get the technologies and key inputs they need, and promoting producer marketing organizations that can link small farmers to the new market chains. Small farmers cannot do all these things on their own, and the public, private, and nongovernmental organization sectors all have important roles to play.

3. Exit strategies or more investment in small farms?

Africa has experienced rapid urbanization in recent years, a trend that seems likely to continue if not increase. This is accepted as desirable in the new paradigm, leading to greater emphasis on helping rural families diversify their livelihoods away from agriculture rather than on creating new agricultural opportunities. Supporting this approach, Maxwell et al. (2001) and Ellis and Harris (2004) argue that agriculture has already become a relatively small productive sector in many rural regions and most rural households already have diverse and geographically dispersed portfolios of income sources. They question whether agriculture can any longer serve as a relevant engine of rural growth and suggest instead that poverty reduction can better be achieved by taking a more holistic household livelihoods approach. Ellis and Harris (2004) go further and suggest that public investment should be geared towards improving the ease with which migrants can access viable livelihoods in urban areas where growth is assumed to be taking place.

Rural income diversification has been a reality in Africa for decades. In fact, the first large-scale rural household survey in Africa conducted in 1974-75 in Kenya found that smallholders derived at least half of their incomes from sources other than from the farming of their own lands (Kenya, 1977). A similar situation is also reported by Reardon *et al.* (1994) from a series of studies in eight West African countries, and a review of 35 African case studies by Barrett and Reardon (2000) revealed that rural households derived a median of 43 percent of their incomes from the non-farm economy. Even in many Asian countries, farmers were highly diversified before the Green Revolution (see evidence from India in Ravallion and Datt, 1996). If most African farmers have been unable to find pathways out of poverty despite income diversification strategies over many decades, then it is unclear why such a strategy should work better today, particularly in countries where the nonagricultural sectors are not thriving either.

Diversification into non-farm activities is not an unequivocally positive phenomenon. On the one hand, diversification may reflect a successful structural transformation in which rural workers are gradually absorbed into more lucrative non-farm jobs, such as teaching, milling, or welding. Entry into these formal jobs often requires some capital, qualifications, and/or possibly social contacts (Start, 2001). On the other hand, in Africa, diversification into the non-farm economy is often driven by growing land scarcity, declining wages, and poor agricultural growth (Haggblade *et al.*, 2002; Start, 2001). Migration driven by a stagnant agricultural and rural environment or due to growth in low productivity urban sector activity, such as public service employment, is often a dead end,

which Lipton characterizes as “the migration of despair.” In this case, migration “depresses wage rates, denudes rural areas of innovators, and hence, while it may briefly relieve extreme need, seldom cuts chronic poverty.” (Lipton, 2004 p.7)

History shows that countries invariably diversify as they develop, and that involves a decline of agriculture relative to the rest of the economy and the movement of workers out of agriculture and into other occupations. But diversification is demand driven and follows rising per capita incomes; it is not a primary engine of growth in its own right as the new paradigm suggests. The reality is that African countries need a major engine of growth to drive diversification, and as seen above, agricultural growth is the only engine available of sufficient scale for most African countries.

4. Trade liberalization for whom?

The new paradigm asks that African countries continue along their path of policy reforms, including further opening of their agricultural markets to international trade. At the same time, progress towards the reciprocal liberalization of the OECD’s own agricultural markets has been stymied by the opposition of a few of its members.

Protection of domestic agricultural markets in OECD countries together with export subsidies, sometimes in the form of ill-designed food aid, have reduced prices for many African farmers and rendered their products uncompetitive. Liberalization of agricultural markets in OECD countries, including for processed agricultural products, would create new market opportunities for many developing countries, including African countries. If matched by domestic reforms and investments in their own rural sector, this could translate into significant long term agricultural growth among the latter countries.

Various studies suggest that if the OECD countries as a whole were to liberalize their agricultural markets, world prices for major agricultural commodities would increase. This could induce new investment and technological change that would lead to even larger long term benefits, though measurement of these additional gains is rarely attempted. But the gains would not necessarily benefit all of the poorest countries. Some would lose concessionary access to US or European export markets (e.g. sugar and banana producers in Africa and the Caribbean) and consumers would lose from higher food prices. Past agricultural neglect also means that few African countries are well positioned to quickly expand their production to seize new market opportunities, and they may lose out to other countries such as Brazil, Argentina and Eastern Europe that are much better positioned to compete. But this is not an argument for delaying further OECD agricultural policy reforms but rather for the urgent need to accelerate investment in African agriculture to improve its competitive position in world markets. Clearly, however, export subsidies such as for cotton and for sugar in high income countries undermine the development opportunities of large numbers of small farmers in Africa.

Africa also needs better access to OECD markets for labor intensive manufactured goods, primary agricultural goods (e.g. sugar and cotton), and processed agricultural products.

5. Safety nets or more investment in pro-poor growth?

The growth priorities of the new paradigm imply considerable human and social adjustment as many small farmers are encouraged to exit agriculture, and urban growth and more rapid rural-urban migration are promoted. The new paradigm therefore also calls for substantial new investment in human capital and rural safety net programs to assist in the transition. Already these investments are growing rapidly, and are buttressed by the increasing demands for relief in crisis years, needs that are related to under-investment in increasing the productivity of food staples on small farms. There is a renewed emphasis on “productive” safety nets, built around strengthening livelihoods and community-led development, but income transfers in the form of food, education and health subsidies are also on the increase. There have been real advances in recent years in targeting and delivering assistance more effectively, often by involving local communities in the design and implementation of targeted programs, which leads to programs that are primarily demand-driven and hence reflect local needs and constraints.

But safety net programs in poor countries cannot realistically be seen as a substitute for policy support for small farm agricultural development. While this is conceivably a viable strategy in countries with important sources of mineral or manufacturing income (e.g. Mexico or Indonesia) that can pay for extensive safety net programs, most African countries cannot afford large welfare programs. In fact they lead to further neglect of agricultural development. For example, donor funds are now so heavily tied to relief and safety programs in some of Africa’s poorest countries (e.g. Ethiopia) that few resources are left to help these countries grow out of their poverty. This is an unsustainable situation and one that can only worsen as rural populations grow and donors eventually seek to stabilize or cut back on their emergency assistance. Unfortunately, finding a more realistic balance between longer term poverty reducing growth and short term social and environmental goals is complicated by the current fixation on the MDGs, such as halving poverty by 2015. As the year 2015 approaches, interventions that quickly cut poverty will take increasing priority over growth, even if they cannot be sustained in the longer term (Bruce Gardner calls this the “mischief” of the MDGs!).

6. Does good governance have to mean an emasculated public sector?

The new paradigm calls for improved governance, especially a shift to more democratic systems for public choice at national, regional and local levels, and enhanced roles for the private sector, civil society and local governments. It is now fashionable to think that the private sector and producer organizations can perform most market chain functions in agriculture and that the government’s role should be limited to creating an enabling environment, such as setting and regulating grades and standards, ensuring food safety, and registering and enforcing contracts. This contrasts sharply with the key role that the public sector played in food staple market chains during the early years of the Green Revolution in Asia.

There the public sector went far beyond a facilitating role and provided most key services itself, including research and development, extension, improved seeds, fertilizer, credit, storage, and marketing. Moreover, governments intervened to stabilize prices for producers and consumers alike, and provided subsidies for many key inputs to encourage

their uptake. Recent work at IFPRI on India shows these interventions played a key role in launching the Green Revolution (Dorward et al. 2004, ch. 3). They also helped ensure that small farmers were able to participate, and that contributed greatly to the levels of poverty reduction achieved. The IFPRI calculations show that most of these policies and interventions had favorable benefit-cost ratios in the early years, but the ratios worsened over time once the interventions had served their primary purposes. Unfortunately, once institutionalized, removing the interventions has proved very difficult, and as input use increased the costs to the governments soared. Today, for example, India spends about \$10 billion per year on subsidies that are basically unproductive.

Focused on these post-Green Revolution problems, the new paradigm asks that Africa launch its own agricultural revolution without these kinds of public interventions. Africa is being asked to rely almost exclusively on the private sector and producer organizations. Is the international development community asking for the impossible? Is it drawing the right lessons from Asia?

Hardly any credible evidence exists to suggest that the private sector can take the lead in market chains for staple foods during the early stages of agricultural development. As farmers struggle with low productivity and high subsistence needs, low input use, low incomes, poor infrastructure, high risks, and the like, the amount of profit to be made in market chains for food staples remains low and unattractive for much private investment. There is also a growing body of studies showing that important institutional and market failures are to be expected at that level of development. It is a singular fact that no Asian country developed its food staple agriculture from a subsistence to a market orientation without heavy public intervention in the market chains.

This is not to advocate a return to costly and inefficient parastatals or to hefty and poorly targeted subsidies of Africa's past. Nor is it an argument against a strong role for the private sector where this can work, as in many high-value market chains. But what is really needed is a much better understanding of those aspects of public intervention that really worked in Asia and why (e.g., Dorward, Kydd, and Poulton 1998; Dorward et al. 2004). Then we can draw the right lessons for developing new institutional innovations to bring those essential ingredients to Africa.

Will the New Strategy Work?

In essence, the core content of past agricultural development strategies (productivity enhancement of food staples on large numbers of small farms) -- that traces its heritage to the green revolution -- has been gutted from the new paradigm. There is simply no priority today for the kinds of investments that promote broad based growth in the small farm, food staples (SFFS) sector.

Is this new strategy likely to work any better than previous ones? Does the economics add up? Are governments likely to support the key priorities? Will the private sector be allowed to play its role? Will corruption and poor governance permit successful implementation?

One of the distressing things about our current state of knowledge is that we really cannot answer many of these questions with any certainty. And there is not much of a sustained track record in any one African country to give much confidence that the new strategy will work. The easiest questions relate to the economic issues; will the strategy add up and deliver on its goals? Based on recent country economy-wide modeling work at IFPRI, I think one can lay down a few preconditions for success. The strategy is most likely to work in countries that have:

- Sufficient scale in high value commercial agriculture to make a difference to aggregate growth rates
- Sizeable and dynamic alternative engines of growth (oil, manufacturing, tourism, IT, etc.)
- A strong private sector
- Market access, especially to OECD countries and perhaps large South countries like China and India.
- Reasonable national governance and stability and political commitment.
- Not too large a traditional small farm – food staples sector that would require a hugely expensive set of targeted assistance programs during the transition
- Absence of a food constraint (world prices remain low and adequate foreign exchange can be earned to pay for imports).

On these grounds, the strategy would seem to be most relevant for many Asian and LAC countries today where agriculture is already a small share of national GDP. Perhaps even relevant for already diversified and/or mineral rich countries in Africa like South Africa, Botswana, Kenya and Nigeria. However, the high employment shares in agriculture in most of these countries still present a challenge if SFFS sector is neglected.

The relevance of the approach to most of Africa's poor and agriculture dependent countries seems moot. Even if commercial agriculture and manufacturers in these countries can rise to compete in world markets, we are still only likely to see pockets of growth emerging that together are on far too small a scale for the first decade or so to make much difference to national growth rates and non-farm employment. Such growth will benefit relatively few people, leaving most of the population behind in a classic dualistic pattern with either worsening poverty or burgeoning costs of targeted assistance to the rural poor. There is also the possibility of emerging food constraint. With projected demand growth of about 4% per year for Africa, then neglect of the SFFS sector will lead to growth in imports and many countries may not be able to afford the needed foreign exchange.

It seems obvious that the SFFS sector cannot be neglected in most African countries. It is the only sector that can ensure that growth is broad based and that quickly slash poverty. On the other hand, given market constraints and low prices, there is no longer much basis for thinking that a large scale SFFA approach could do the job on its own. The market will only grow at about 4% per year. What is needed is a more balanced strategy that integrates a suitably ambitious SFFS component into the new agenda, and with greater

emphasis on agro-processing as a lead manufacturing sector. Such a strategy could generate powerful synergies between sectors, including between food staples, high value products, exports and agro-industry, accelerating growth rates and poverty reduction. Given the rather profound market failures that characterize the SFFS sector in the early stages of development, this would require greater commitment than the new agenda currently allows to public investment in rural areas and a greater role for government in food staple markets and agricultural services. In many ways, CAADP⁷ represents the more balanced strategy that is needed, but the level of government and donor financial commitment for its SFFS component has yet to be seen.

But what about the non-economy questions, governance and political processes? Are there also clear pre-conditions for success? Many today seem to think democracy is a pre-condition, but that seems far too demanding a requirement. In some quarters, there is even an effective triage against poorly governed countries (e.g. the Millennium Challenge Fund of the US). But good governance seems to evolve with economic progress and that suggests more emphasis should be put on small but targeted and strategic improvements in governance and enabling conditions rather than on wholesale governance reform. These issues badly need additional policy research.

Conclusions

Agriculture's role in the economic development of a country changes as the transformation proceeds. In the early stages, agricultural growth, particularly led by food staples and small farms, is a major engine of national economic growth and can play a very significant role in reducing poverty. As a country develops the agricultural sector begins to take a secondary role as an engine of growth, and the composition of its output and farm size structure changes. Labor migrates from agriculture, farms get larger, and higher-value foods become more important in the national diet and in production. Globalization and trade liberalization have weakened these traditional patterns of development to some extent, but there is little theory or evidence to suggest that today's low-income countries, especially in Africa, can bypass the need for an agricultural revolution to successfully launch their economic transformations.

Within this context, small farm development offers an efficient and pro-poor option for agricultural development during the early stages of the economic transformation. However, small farms are seriously challenged today in ways that make their future precarious. Marketing chains are changing and are becoming more integrated and more demanding of quality and food safety. This is creating new opportunities for higher-value production for farmers who can compete and link to such markets, but for many other small farms the risk is that they will simply be left behind.

Small farmers also face unfair competition from rich-country farmers in many of their export and domestic markets, and they no longer have adequate support in terms of basic services and farm inputs. And the spread of HIV/AIDS is further eroding the number of productive farm-family workers and leaving many children as orphans with limited

⁷ CAADP is NEPAD's Comprehensive African Agricultural Development Program.

knowledge about how to farm. Left to themselves, these forces will curtail opportunities for small farms, overly favor large farms, and lead to a premature and rapid exit of many small farms.

If most small farmers are to have a viable future, there is need for a concerted effort by governments, nongovernmental organizations, and the private sector to create a more equitable and enabling economic environment for their development. This must include assistance in forming effective marketing organizations, targeted agricultural research and extension, revamping financial systems to meet small farm credit needs, improved risk management policies, tenure security and efficient land markets, and where all else fails, targeted safety net programs. In addition, the public sector needs to invest in the provision of basic infrastructure, health, education, and other human capital to improve market access and to increase the range of nonfarm opportunities available to small farm households, including permanent migration to urban areas. These interventions are possible and could unleash significant benefits in the form of pro-poor agricultural growth. The associated public investments could also more than pay for themselves in terms of their economic and social return.

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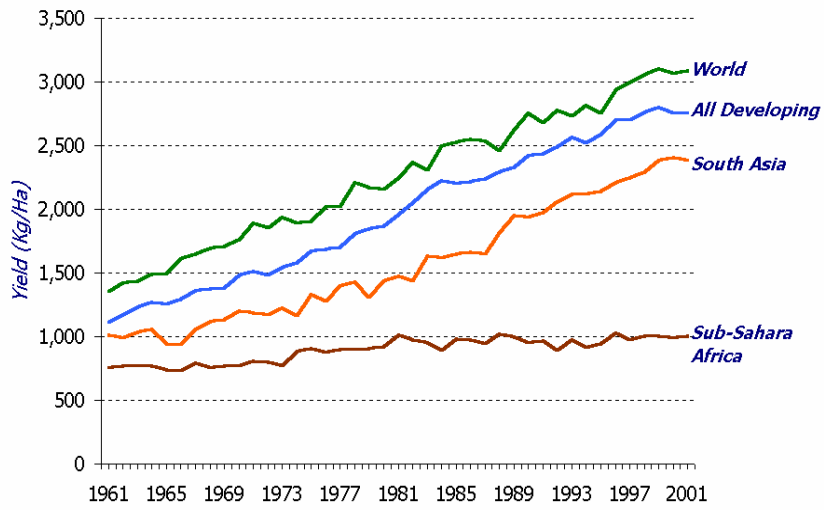
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Figure 1 Global Trends in Cereal Yields by Region (1961-2003)



Source : FAOSTAT data, 2002

Figure 2. The choice of sub-sector matters for poverty reduction – Ethiopia

