

Policy into Use: Accelerating Agricultural Growth through CAADP

Agriculture is the mainstay of most African economies. Millions of smallholders depend on farming for their livelihoods, it underpins food security and poverty alleviation efforts, and supports wider economic development. But agricultural growth has generally been disappointing, and there is understandable concern over the state of hunger on the continent¹. Agriculture faces new global challenges of high food and energy prices, climate change and international market failures. Agricultural development strategies, as well as increasing productivity and pro-poor growth, must encompass commercialisation and sustainable, market-led growth.

The Comprehensive Africa Agriculture Development Programme (CAADP) provides a vision and framework for governments to accelerate agriculture-led growth and sustainable development, and eradicate poverty and food insecurity. To achieve this, governments have pledged to increase agricultural spending, alongside policy and institutional changes to increase competitiveness at home and abroad; investment in technology and productivity; and improvement in marketing and transport.

CAADP is not just about mobilising resources for the agriculture sector. It aims to change the way business is done in the sector. This means critically examining and transforming institutional arrangements and policies across the sector².

This brief draws on latest research by Future Agricultures Consortium to inform debate on policy choice, design and implementation to achieve CAADP goals. It asks:

- What does the 6 percent agricultural growth target mean for agricultural output in Africa?
- Can the smallholder model of agricultural development deliver this growth?
- What policies and strategies should be followed – and how should they be formulated?
- What role should ministries of agriculture play in agricultural development?

Accelerating agricultural growth in Africa through CAADP: potential outcomes

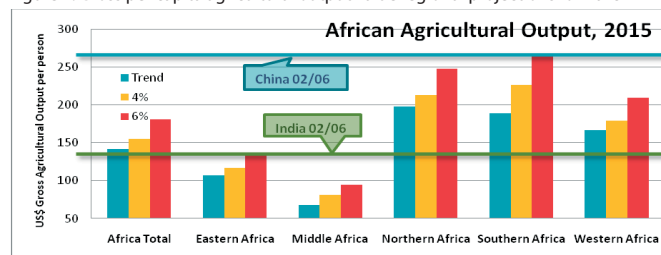
A central goal of CAADP is accelerating agricultural production in Africa, with the target set at 6 percent average growth per year. An assessment of what 6 percent growth (achieved by only one country over the period) would mean for African agricultural output is shown in Figure 1³. Outcomes which would be achieved with 4 percent growth (perhaps a more realistic target - achieved by 11 countries) and following the current growth trend (2.8 percent) are also shown. Higher growth leads, not surprisingly, to creation of more output.

For Africa as a whole, there is an almost 30% increase over trend by 2015 if 6% agricultural growth is achieved.

By region, the gains over trend are particularly strong for Middle and Southern Africa.

Comparing Africa to output per capita seen recently elsewhere, the continent would reach Indian levels by 2015 at all three growth rates (and Chinese levels by 2025 at 6 percent growth).

Figure 1: Gross per capita agricultural output value regional projections for 2015



Constructed using data from FAOSTAT and UNPD

Can the smallholder model deliver poverty reduction and food security in Africa?⁴

Africa's 33 million small farms dominate farm area in most countries and produce up to 90 percent of agricultural output. To meet the needs of a rapidly growing population, agricultural production needs to increase swiftly. Can Africa's smallholders imitate the Asian model and deliver a 'green revolution' for the continent?

The relative merits of small and large farms have been much debated. Small farms – 2ha or less – often produce more per hectare than larger farms. Operating at household level and using mainly family labour, they have some cost advantages over larger farms and use their knowledge of local conditions to farm appropriately. Large farms (or organised groups of small farms), on the other hand, are more likely to benefit from economies of scale in obtaining inputs, credit and market information.

Data on different sized farms in Africa is patchy, but given the dominance of small farms in many countries, national data is probably a reasonable measure of small farm performance. Looking back over the past fifty years, the record shows variable agricultural performance, with slow growth in the 1970s followed by an acceleration around the early 1980s (Figure 2). Even more striking is the difference in performance of Northern and Western Africa compared to other regions.

There is also great variation between countries (Figure 3). Although many African countries have a disappointing record, thirteen have doubled (or more than doubled) agricultural production in the past 20 years. These include countries where small farms produce the bulk of output - Burkina Faso, Ghana, Niger, Mali. On the other hand, countries that have (or had) significant large-farm sectors - such as Namibia, South Africa and Zimbabwe - are well down the growth ranking. Whilst other factors are clearly important, an agriculture sector dominated by small farms is no obstacle to growth, and quite rapid growth at that.

Many agricultural booms — in both food and cash crops — have been based on small-scale farming. Not all have been sustained, being sensitive to prevailing prices, as well as state support (including subsidies) and organisation. But significant, lasting change has been achieved where small farmers have successfully applied technical innovations: hybrid maize varieties in Zimbabwe, open-pollinated maize in West Africa, improved bananas in East Africa, horticulture by smallholders on contract in Kenya, and pest and disease resistant cassava⁵. On the other hand, large farms do not have a particularly good record, with some notable failures associated with reliance on technology unsuited to local conditions. Large farms also face

higher costs - including minimum wages, healthcare and taxation - which are rarely applied to small farms. Apart from high value enterprises - such as horticulture and intensive pigs and poultry - and for crops that require local processing in large scale plants - including sisal, sugar, tea, rubber and coffee - large farms are not common in Africa.

What policies and conditions make smallholder development possible?

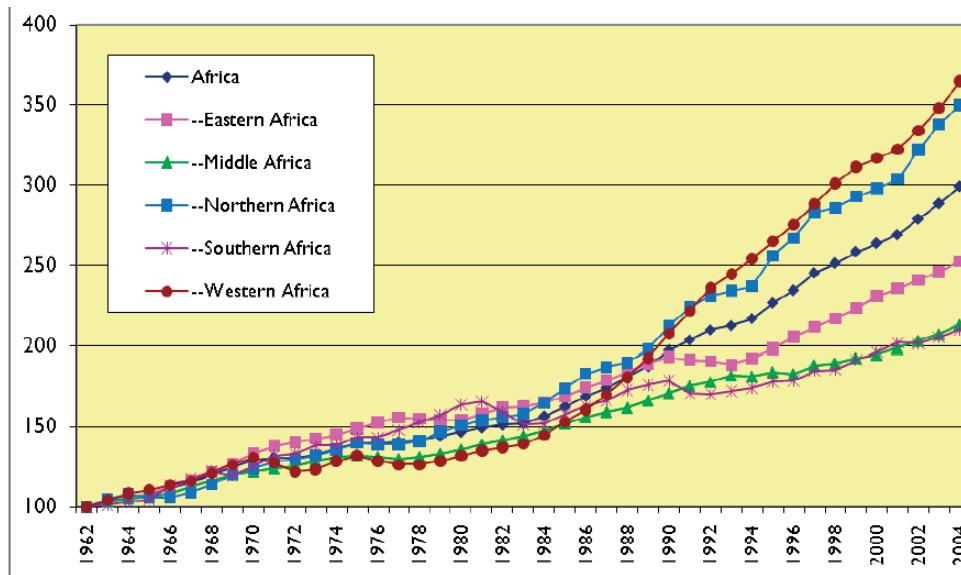
There is broad agreement that successful smallholder development requires supportive policies:

- 1. Creating a favourable investment climate** – where farmers can buy inputs, access finance and sell their produce without having to pay exorbitant taxes, compete with dumped imports, export to markets where prices are depressed by OECD policies, or be exploited by agencies with monopoly power.
- 2. Spending on public goods that support agriculture** – research and extension, rural roads, education, water, health-care and, in some cases, subsidised inputs, irrigation and power supplies.
- 3. Fostering economic institutions** – to allocate and protect property rights, facilitate trading, reduce risk and allow collective action. Combined with effective market demand:
- 4. The existence of demand at the farm gate** – domestic urban demand, with farmers linked to these markets by better roads, or from parastatals offering farmers in remote areas pan-territorial prices.

And also:

- 5. Conservation of natural resources** – sustainable land, water and other natural resource management so production can be sustained.

Figure 2: Growth of agricultural production, Africa and its regions, 1961/63 to 2003/05

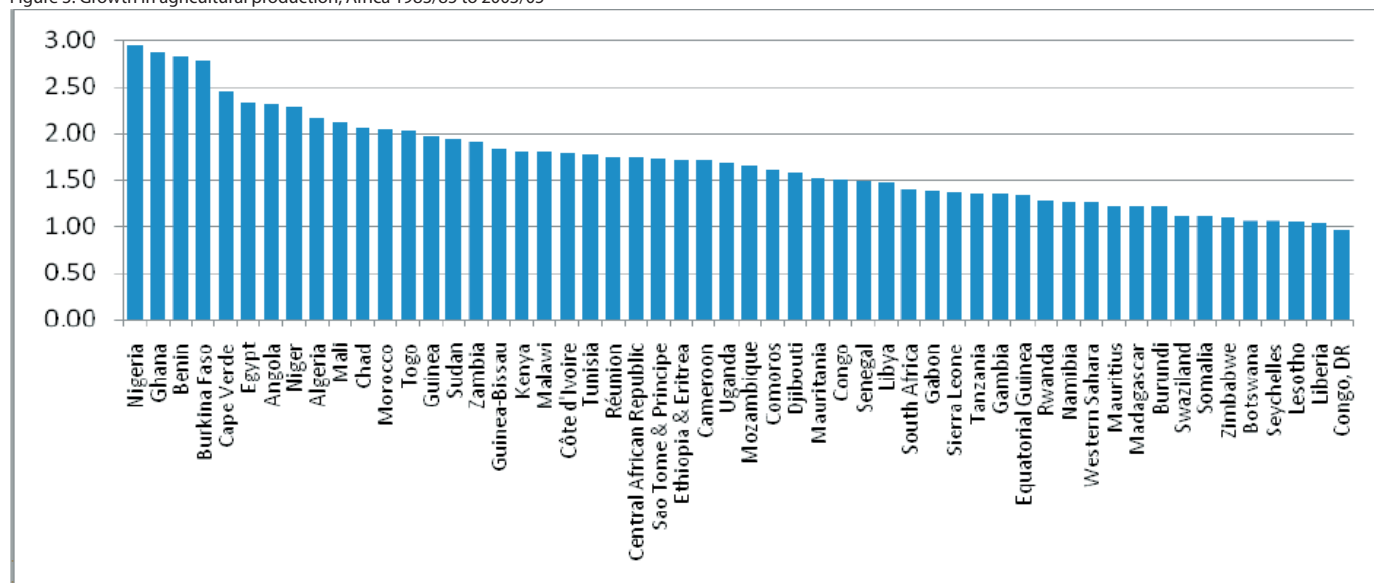


Source: FAOSTAT, gross PIN, taking three-year moving averages and basing the index to 1961/63.

Meeting these conditions with limited resources means governments have to make difficult strategic decisions on the combination and sequencing of policy and investments (see below). Outcomes have sometimes been worsened by misguided policy and poor governance. But there have been successes at various times and in various countries. The agenda should be achievable.

Of course Africa today is not the same as Asia at the start of the green revolution. Agricultural supply chains involve ever-more demanding conditions; technical innovations may be difficult to generate for African conditions; environmental degradation and climate change undermine development; HIV/AIDS is taking a heavy toll; and the kind of support to farming given by Asian governments 30 years ago is unthinkable today. But not all change is negative: agricultural science is better equipped today to produce innovations; increasing commodity prices present Africa with export opportunities; and biofuels could constitute a major new market for farmers.

Figure 3: Growth in agricultural production, Africa 1983/85 to 2003/05



Source: FAOSTAT data, Gross agricultural PIN, three-year moving averages. Ethiopia and Eritrea combined to allow record to extend before 1991.

Who will benefit from smallholder development?

Smallholder development is likely to directly benefit only the top quartile of small farmers: those with access to slightly more land and resources and to markets. Does this mean that agricultural development based on small farms will not reduce poverty and hunger? No: there is every reason to expect multipliers in the rural economy to translate uneven smallholder growth into broad-based gains, through demand for labour and non-farm goods - if growth is complemented by policies which encourage the rural non-farm economy, build links to cities and provide social protection.

Will smallholder development deliver food security? It will help: greater food availability will push down food prices, while increasing incomes for the poor will enable them to purchase more food. But for better nutrition, the continent needs to do as much to improve access to clean water, sanitation and primary health, as to grow more food⁶.

What investments are needed to promote pro-poor agricultural growth, and how should they be sequenced?⁷

The need for investment in agricultural development in Africa is now generally accepted by governments and donors. How should investment programmes be formulated to efficiently and effectively promote agricultural growth to benefit poor people and improve food security? Investment sequencing is critical. Getting this right requires understanding the major processes and stages of agricultural growth, development and poverty reduction.

1. Livelihoods strategies

To achieve agricultural growth, poverty reduction and food security, changes need to happen in people's livelihoods and in the local and national environment. These need to be positive and mutually reinforcing. Livelihoods can be seen as contributing to three broad types of strategy:

- **'Hanging in'** – where poor people are engaged in activities to try to maintain their livelihoods levels, often in the face of socio-economic adversity.
- **'Stepping up'** – where people invest in assets to expand their current activities, increasing production and income.
- **'Stepping out'** – where people have accumulated sufficient assets to branch out into new activities with higher returns.

Agriculture is a vehicle for poor people to 'hang in' and, given agricultural growth, 'step up'; but in the long-run most 'step out' to employment in non-farm activities. The growth of the non-farm sector, however, depends on 'stepping up' growth and structural change in the wider economy -including agriculture.

2. Poverty traps

Change and growth in livelihoods and the economy are driven by changes in technology and institutions, which increase productivity and allow people to accumulate capital and invest more. However, these processes can unfortunately be stalled by a set of *micro*, *meso* and *macro*-poverty traps.

Micro traps are a vicious circle of limited resources, low productivity, low incomes and low resource accumulation - exacerbated by health, climate and economic shocks. It should be possible for private firms to invest in credit systems, inputs, services and insurance to raise productivity and reduce people's vulnerability. However, supply chain or *meso*-poverty traps can prevent this happening. Low economic activity levels, poor infrastructure and weak institutions, worsened by climatic and price uncertainties, mean high costs and risks, which input and credit suppliers pass on to farmers. This tends to have negative effects on production, limiting opportunities for large scale produce buying, keeping farm-gate prices low and depressing farmers' demand for inputs and credit.

Can firms or governments provide the coordination and investments to overcome these supply chain failures? For smallholder production of staple foods, there are few incentives for firms to invest in produce buying, input supply and financial services. Often it falls to governments to do this. But provision of these services and investments requires strong administrative and financial capacity – often lacking in the countries that need them most (the *macro* trap). Short term political horizons, uncertain success, changing donor fashions and aid flow cushions mean politicians, bureaucrats and donors avoid the long term commitments needed for capacity development and sustained investment and action.

3. What are the lessons for sequencing investments in agricultural development?

Constraints are different between crop types and over time. Increasing productivity of staple crops in poor areas means addressing micro, meso and macro poverty traps simultaneously. This involves sustained, well sequenced investments - both needed from the start, but with the emphasis shifting from the first to the second as more people 'step out':

- First step: develop basic productive technologies for staple crops for farmers to both 'hang in' and 'step up', and establish administrative and political capacity and commitment to providing the services necessary for this. This requires integrating social protection, to support those 'hanging in', with agricultural development policies to promote (rather than stifle) market development.
- Once markets and low food prices are established: invest in market coordination and stimulation to encourage development of private markets and 'stepping out' – to higher value crops and to non-farm activities.

The precise details of what policies and investments are needed, when, and how to formulate and implement them will vary between (and within) countries and over time. But agricultural support for those 'hanging in' will be rather different to that for farmers who are able to 'step up'. Technology for food staples for the very poor may need to be different to that for small farmers with more potential. Social protection policies are an important way to deal with chronic poverty, but need to be integrated with agricultural development policies. And rural development policies need to be linked with wider development strategies – developing markets for agricultural products and inputs, and supporting people to 'step out' into the non-farm economy, starting with education and skills.

What role for Ministries of Agriculture in development?⁸

Agricultural policy narratives

Ministries of agriculture have traditionally been a central player in agricultural policy-making and development programming. Now different narratives on agricultural policy are being pushed by different actors, each envisaging a different kind of ministry of agriculture:

1. **Statist model** - a strong sectoral ministry with capacity and policy influence to address the major constraints of agriculture.
2. **Neoliberal model** - sectoral ministries take on a minimal role, the focus being on oversight and regulation with the private sector taking an increasing role in a free market environment.
3. **Enabling model** – a coordination and intermediation role: getting markets to work effectively, while ensuring public efforts target poverty reduction.

Which of these models makes sense today? Important areas of intervention and spending fall outside the mandate of ministries of agriculture. Other public sector agencies and non-state actors are playing increasingly important roles. With the withdrawal of the state from agricultural production and marketing, the key areas of government

intervention today are: rural infrastructure development (transport, communications and irrigation), stabilising the economy, contract enforcement and negotiating trade conditions (tariffs, biosafety standards, etc.). Thus the role of ministries of agriculture appears to have shifted from transformation to regulation and facilitation.

What is the situation today?

In the face of these far-reaching changes, there are signs that some within top-down, hierarchical ministries are sticking to their case for state commitment to agriculture. At the same time, there are signs of concessions to the free market model, though these are often not consistently thought through and applied. The result: a poor compromise.

Reforms since the 1980s have sought to radically downsize, restructure and change state functions. Ministries are now facing declining financial resources from government and donors; decentralisation – which has tended to dissipate effort and competence; a new aid architecture – direct budget support, which reduces the role of sectoral ministries; loss of technical capacity to the non-government sector; and the HIV/AIDS epidemic.

Ministries of agriculture have neither the capacity to deliver on conventional roles – extension, research etc. – nor the flexibility and skills to be the new-style regulator, coordinator and facilitator. Many have become unable to function effectively and are ill-equipped to respond to new challenges.

Reimagining the model

An alternative vision is to maintain strong capacity within ministries of agriculture, but refocus attention on critical roles, including state-led reforms that help create conditions for kick-starting the agricultural economy. Key roles would be:

1. **Balancing development priorities** – alongside national food security, poverty reduction and increasing production, ministries should focus on improving productivity across entire supply chains, increasing exports or competing with imports.
2. **Public goods and services** – providing only those which would not otherwise be supplied by the private sector – agricultural research and bio-safety regulation, possibly extension and food safety.
3. **Coordination and facilitating supply chains** – promote investment in processing and marketing alongside the development of agricultural production technologies; ensure market information systems are available for farmers to improve decision-making; provide fora to help private interests – including small-scale producers – and government find ways of improving supply chains; and promote institutional innovation to support development of potential commercial opportunities (such as providing seed capital or financial guarantees where venture capital and insurance markets do not exist).
4. **Facilitating uptake of technologies** – screen innovations from regional and global sources and adapt 'best bets' to local situations; where technologies are unaffordable for poor farmers, selective short to medium term support in the form of subsidised inputs or credit can boost staple food productivity.
5. **Regulation** – where facilitation fails, regulation may be needed through licensing traders, setting prices.
6. **Supporting rural livelihoods** – understand livelihoods and how they are changing, including the labour market, with migration, especially youth from rural areas.

This is a substantial and challenging role, requiring a professionalised staff with a relevant skill set⁹. Moving power back towards sectoral ministries – now financially, professionally and politically weakened – will not be easy. Stakeholders benefitting from the new aid modalities are strong and influential; while advocates for agricultural development are often poorly organised. But a ministry of agriculture capable and willing to synchronise different interests, provide direction, and ensure policy choices consistent with reducing poverty and inequality, is critical.

Key Policy Findings

- Reaching the 6 percent agricultural growth target would deliver increased production of almost 30 percent by 2015. At a more realistic 4 percent growth rate, Africa would achieve Indian levels of agricultural output per capita by this date.
- The smallholder model has produced good performance in food crops at various times and places across the continent. With supportive policies and continuing strong market demand, this can be repeated. Smallholder growth can deliver broad-based gains through lower food prices and increased demand for labour and non-farm goods.
- Achieving pro-poor growth requires developing basic productive technologies for staple food crops for farmers, and establishing capacity and commitment to do this. Social protection is important but must be integrated with agricultural development policies. Once markets and lower food prices are in place, coordination and stimulation is needed for the development of private markets for higher value crops and non-farm activities.
- Key roles for ministries of agriculture today are regulation and facilitation: balancing development priorities, coordination of supply chains, facilitating uptake of technologies, supporting rural livelihoods, providing public goods and services not otherwise supplied by the private sector, and regulation – where facilitation fails.

Endnotes

1. More than one third of Africa's population are estimated to be hungry. See: Wiggins S. and Leturque (2010), 'Helping Africa to feed itself: Promoting agriculture to reduce poverty and hunger'. Future Agricultures Occasional Paper 2, FAC/Friends of Europe/ODI.
2. CAADP (2010). Accelerating CAADP Country Implementation: A Guide for Implementors. NEPAD, Midrand.
3. Keats S. and Wiggins S. (2009) 'Accelerating agricultural growth in Africa through CAADP: Potential outcomes'. Volatile world food prices and their implications Series. Overseas Development Institute, London. Projections take each growth rate and make a simple forecast of production levels that would result, excluding changes in prices, input costs, climate change etc.
4. See: Wiggins, S. (2009) 'Can the smallholder model deliver poverty reduction and food security for a rapidly growing population in Africa?' FAC Working Paper 8, July 2009, IDS, Brighton.
5. Haggblade, S., Hazell, P., Kirsten, I. and Mkandawire R. (2003). 'African agriculture: Past performance, future imperatives', InWEnt/IFPRI/NEPAD/CTA Conference: Successes in African Agriculture, Pretoria, December 1-3, 2003.
6. Wiggins, S. and Keats, S. (2009), 'Current state of food security in Africa and the Africa-EU partnership on the Millennium Development Goals' Paper for Second Joint Experts Group Meeting, Sub Group on Priority Action: Accelerate the Food Security Targets of the MDGs, 24 March 2009, Pretoria, FAC, Brighton and ODI, London.
7. See: Dorward, A. n.d. 'Sequencing of investments for agricultural growth and poverty reduction and food security', Future Agricultures Discussion Paper, FAC, Brighton.
8. See: Scoones, I and Cabral, L (2006), 'What role for ministries of agriculture in the 21st century?' Future Agricultures Policy Brief 10, September 2006, FAC, Brighton. And Cabral, L. and Wiggins, S. (2007), 'Politics and the future of ministries of agriculture: Rethinking roles and transforming agendas', Future Agricultures Policy Brief 15, March 2007, FAC, Brighton.
9. The precise form of ministries of agriculture will differ from country to country according to specific geo-historical and political economic interests.

This CAADP Policy Brief was edited by Kate Wellard of the Future Agricultures Consortium. The series editor is David Hughes. Further information about this series of Research Updates at: www.future-agricultures.org / The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T +44 (0) 1273 915670 E info@future-agricultures.org / Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.

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