

## AGRICULTURE AS THE POTENTIAL ENGINE FOR AFRICAN GROWTH AND THE ROLE OF NEPAD

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There are many arguments to believe that future broad-based economic growth in the majority of Sub-Saharan Africa (SSA) countries should and will be based on agriculture. Factors such as trends in demand and markets, production potential, comparative advantages, path dependencies and the strongly pro-poor nature of agricultural growth call for an important role for agriculture in African growth in the near and medium future. However, agriculture in Africa will not develop automatically. In the past, the sector has shown a deplorable performance in general – SSA has lagged behind all other continents in terms of food production dynamics. This is due to over-taxation of the agricultural sector and/or neglect by governments, donors, and subsequently, the private sector including farmers. After decades of exploitation and neglect, agriculture in SSA is in a bad shape.

To unfold the potential of African agriculture under unfavourable starting conditions, special efforts are necessary, such as improving agriculture-linked institutions and organisations, investing in agriculture-related public goods, and encouraging and supporting the private sector to invest in agriculture. Intelligent agricultural policies are a precondition for such efforts. The Comprehensive Africa Agriculture Development Programme (CAADP), one of seven pillars of the New Partnership for Africa's Development (NEPAD), is the most prominent attempt to help design such intelligent agricultural policies. It has many potentials which previous initiatives to boost agriculture in SSA did not have, though the challenges are still manifold.

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The article is structured as follows. First, the arguments for agriculture-based growth in SSA are briefly outlined. Then, some key challenges to achieve this type of growth are portrayed. Finally, the structure, potentials and challenges of CAADP to play an important role in boosting agriculture in SSA are presented.

### Arguments for agriculture-based growth in SSA

Agriculture is the basic pillar of the economies of SSA. Today, 30 percent of GDP, more than 40 percent of exports and around 70 to 80 percent of the workforce rely on agriculture (World Bank 2007). Even if structural transformation towards industry and services will ultimately result in a decline of agriculture's relative importance, this will not be possible without substantial growth of agriculture. The opportunities exist.

#### *Major agricultural demand and market trends*

Worldwide market trends for agricultural products are nowadays widely considered attractive; prices are projected to be 10 to 20 percent higher than in the past decade (OECD and FAO 2009). This is a fundamental paradigm change from a few years ago when it was generally assumed that the long-term negative price trends and terms of trade against agriculture which prevailed for the last century or more would continue. Several factors contribute to this new prospect:

- Continuous population growth in developing countries, urbanisation, increasing incomes and changing dietary patterns in favour of animal products steadily increases demand. It is assumed that by 2050 world food production has to increase by 70 percent until 2050 (FAO 2009b).
- Demand for biofuels seems to continue to rise, despite more sceptical assessments concerning their benefits for climate change and their effects on food security than a few years ago. However, scenarios of ambitious reduction of green house gas emission predict an indispensable role for bio-



fuels, particularly in the transport sector (OECD and IEA 2008). Even without political support for biofuels, a high oil price (which is likely – for instance, OECD and IEA (2008) is projecting a crude oil price of about 100 USD/barrel in constant terms even in low-carbon scenarios) will drive demand for biomass upward, not only for biofuels and bio-energy more generally but also as a material substitute for mineral oil.

SSA will strongly contribute to the projected increase in demand for agricultural products. Until 2050, its population is projected to more than double to almost two billion (FAO 2009a). African cities grow by five to six percent annually.

Resulting demand growth is favouring African producers who have a favourable selling position due to local preferences for and non-tradability of demanded food (e.g. local tubers and cereals) or due to high transport costs of bulky and perishable products (e.g. meat, vegetables and fresh milk products). Demand will gradually shift away from raw products towards more processed and convenient food, more standardisation, more packaging and more formal marketing channels, thereby encouraging agro-industry and agro-business. The dimension of the combined agricultural and agri-food sector in developing countries is huge – low income households and countries devote a dominant proportion of their income on food, and even in middle income countries the combined contribution of both sectors generally exceed 40 percent of GDP (Jaffee et al. 2003). Jaffee et al. (2003) also expect that the share of agribusiness services and manufacturing in GDP will rise to between 30 and 45 percent in the majority of African countries.

At the same time, the economic support for agriculture in industrial countries seems to have seen its upper limits. Under pressure in international trade negotiations and with fading national political backing, support will increasingly be converted to less production enhancing and trade distorting forms and probably even decrease in absolute terms. This will reduce artificial overproduction and raise world market prices. Complete suppression of agricultural support is calculated to increase world market prices for important agricultural products by up to 20 percent (Anderson et al. 2005). Thus, agricultural market liberalisation would constitute an additional incentive for farmers in developing countries, though

many African farmers would also suffer from preference erosion.

#### *Africa's advantages for agriculture*

Although the past track record of agriculture in SSA is not very encouraging (see above), many SSA countries have revealed comparative advantages for agricultural production, and many more have potential advantages (OECD 2008; FAO 2009). Most of the countries which do not dispose of mineral resources have relied, and still heavily rely, on agriculture for exports where some products have maintained considerable market shares – most important are cocoa, coffee and cotton, followed by sugar, tobacco, tea, peanuts, natural rubber and bananas (Ng and Yeats 2003). These successes are all the more important as they are mostly achieved against declining world market prices. Many of those countries that do have mineral resources such as the Democratic Republic of Congo, Angola, Sudan, Nigeria or Zambia have huge untapped agricultural potentials. SSA as a whole, together with South America, have the largest land reserves, and many of these reserves do not fall into (protected) forest areas (OECD and FAO 2009). In the Guinea Savannah regions alone, only 10 percent of 600 million hectares of cultivable land are presently exploited (FAO 2009b).

The potential for increasing yields is also very high. For instance, the gap between average maize yields and yields achieved under good management conditions on demonstration plots amounts to 250 to 500 percent in several African countries (World Bank 2007). With improved low external input technologies, high yield increases can be achieved, too, though at the expense of higher labour input. In addition, SSA has a large untapped irrigation potential, at least in some regions, although information on this are not very reliable.

In contrast, for non-agricultural products SSA seems to have lost competitiveness. The share of manufactures in GDP declined from 11 percent to 7.5 percent between 1970 and 2006 (World Bank 2008). Except for a few countries (like South Africa and Mauritius), manufactures do hardly figure as exports. Asian countries, notably China, have taken the lead in manufacture exports since the 1960s, and at present it is unlikely that SSA will gain back market shares – Asia has substantially lower labour and capital costs (see World Economic Forum et al. 2009),

while labour productivity is higher, infrastructure is better and the industrial learning curve is steep.

Another indicator of the high comparative advantage of SSA agriculture are world trade models which, despite all contradictions in assumptions and modelling details, consistently predict a considerable increase in agricultural production in SSA under free trade scenarios (Anderson et al. 2005). On the other hand, light and heavy industries are forecasted to shrink.

#### *Pro-poor nature of agricultural growth*

A last set of arguments in favour of agriculture as the growth basis in SSA is the pro-poor nature of agricultural growth compared to growth in other sectors (World Bank 2007). This is due to several factors: about two thirds of the poor in SSA live in rural areas, and despite rapid urbanisation the majority of the poor will remain in rural areas for decades to come (Ravaillon et al. 2007). Most forms of agriculture, particularly in SSA, are very intensive in labour relative to capital, much more than most industrial sectors. Agricultural growth is mainly realised by smallholder farmers and commercial producers with a high intensity of unskilled labour. In addition to these direct income and employment effects of agricultural growth on poverty, indirect effects on the local economy expressed in terms of the so-called multiplier effects, are particularly high in SSA (up to more than 4 in remote regions according to literature reviewed by Wiggins 2009), due to the resulting demand increase for overwhelmingly local products and services produced by other rural (poor) people. Finally, the downward pressure on prices of local (partially non-tradable) food items is a strong mechanism for poverty reduction in both rural and urban areas (World Bank 2007).

#### **Key challenges**

Although, as the previous section argued, “African agriculture is a sleeping giant” (OECD 2008, 7), there are numerous obstacles to release this potential. The historic track record of African agriculture is quite bad. Production may have grown in physical terms, but less than in most other world regions, and basically due to area expansion. Yields are stagnating and per capita production has declined over decades (FAO 2009a). The models predicting comparative advantages are based on favourable as-

sumptions about supply elasticities which are mostly adopted from other countries and are difficult to achieve for African farmers. Most traditional export crops have developed less dynamically than in other world regions, and few new export crops have emerged on a larger scale (Ng and Yeats 2003). Modern agricultural technologies are lacking in most areas: mechanisation is declining, green revolution technologies have not spread except for a few spots and crops, and fertiliser use is about 10 kg/ha compared with 145 in Asia (World Bank 2007). Development of low-input technologies, probably well adapted to ecological conditions in former times (though this was not enough to prevent hunger), could not keep pace with the growing population density and ever reducing man/land ratio except in a few areas where special circumstances converged. Around 75 percent of the agricultural area suffers from severe soil mining and fertility degradation (FAO 2009a). SSA has converted from a food net-exporting to a net-importing continent, and particularly the growing urban population is strongly relying on imports for food security and for higher end consumption.

This weak past performance is partially explained by more or less immutable structural factors. These include the prevalence of poor soils, ecological disadvantages and disease pressures, including difficult conditions for animal husbandry and resulting problems of integrating agriculture and livestock. A particular problem is large variations and variability of growing conditions in many parts of the continent, in particular the absence of irrigation and water management. This is a major reason for the absence of a green revolution in SSA, since Africa requires a large number of crops to be improved and higher profitability of technology to be adapted compared to more stable conditions. High exposure to the risks of climate change completes the natural problems of African agriculture.

However, adverse natural conditions are not the only largest problem of agriculture in SSA. Examples for this assessment are the above-mentioned yield gaps which show that substantial yield increases are feasible under on-farm conditions, some success stories of modern technology spread for individual crops such as cotton in West Africa, maize in Southern and East Africa or tea and coffee in Kenya (Wiggins 2009), and some regions of high and sustainable productivity such as those analysed in Burger and Zaal (2009).

Other, more important reasons for the weak development of agriculture in SSA are policy made. These include a macroeconomic environment such as price, trade and exchange rate policies which disfavour agriculture (a common phenomenon in SSA until the 1990s), and the neglect of rural infrastructure and public goods such as roads, communication, certain types of irrigation or agricultural research (common since the 1990s). In addition, policies in SSA have neglected and/or remained unsuccessful to correct for market failures since agricultural markets and institutions are usually not working efficiently. Transport, information, contract and other transaction costs in rural areas are very high. Also the private agribusiness needs appropriate support since it is mostly informal (with a few but important exceptions mostly in South Africa, see OECD 2008) and suffers from insufficient access to credit, information, technology and support services.

A particular challenge for SSA agriculture is due to the fact that most agricultural producers are smallholder farmers. What has been said about private agribusiness is true for this group of actors: they lack capital, modern know-how, access to finance, information and services. Smallholder households pursue different, partially conflicting production and consumption objectives at the same time, with a high emphasis on reducing elementary survival risks. Without cooperation – which is difficult to organise within the farming community – smallholders cannot achieve economies of scale in procurement and commercialisation nor negotiate favourable conditions with input and output traders (Collier and Decron 2009). Consequently, they encounter difficulties in boosting aggregate production and securing quality, standards and regulations for both exports and advanced local markets such as supermarket value chains (see World Bank 2007; Wiggins 2009). Smallholders constitute the largest group of the poor in SSA, and many more are extremely vulnerable to poverty.

In partial summary, section one and two have shown that the agricultural sector in SSA has a lot of opportunities to boost African development through agricultural-led expansion. However, short and long-term perspectives of agricultural-led development in SSA could be conceived differently. Whereas there are good arguments that in the short term agriculture is the best source of growth and poverty alleviation, it is evident that in the

longer run the sector cannot offer enough income and perspectives to keep most people in it. Industry and services have to take over the lead. Agro-business is an important transition sector, but it will not develop automatically and requires support from governments for markets, for farmers, for agribusiness and for rural supporting institutions and organisations. How fast transition can and should occur, how to manage it, which sub-sectors, regions and groups of people to support or to neglect is difficult to say, particularly in the absence of sound information. Agricultural policy making under such conditions poses difficult questions not only about technical, ecological, economic and social issues, but also political ones. There is no doubt that even under democratic regimes, good governance and with developmental orientation, to implement long-term agricultural strategies under permanent scrutiny of the electorate can be challenging for African governments. Therefore, a promising agricultural policy and long-term economic transition has to be based on transparency, best available information, continuous participation and ownership, in other words – it requires good agricultural policy processes.

#### **CAADP as the most promising initiative to re-launch African agriculture**

Currently, the most prominent and promising attempt to improve agricultural policy process is led by the New Partnership for Africa's Development (NEPAD). NEPAD is the economic programme of the African Union (AU), officially established in 2001 (NEPAD 2001). It early recognised both the importance of agriculture for development and poverty reduction on the continent and the weaknesses of member countries' agricultural policies. It developed a special initiative, the Comprehensive Africa Agriculture Development Programme (CAADP) to improve agricultural policies on the continent, based on the Maputo declaration during the second ordinary summit of the AU (NEPAD 2003). It is one of NEPAD's seven broad sector priorities.

CAADP has received considerable international attention: for instance the G8 (Cale and Shaw 2009) and the recent US initiative to support agriculture in SSA (Clinton 2009) make strong reference on CAADP. Some key aspects for any NEPAD initiative geared to improving policymaking are:

- broad participation in – and thus ownership of – the development of policies and strategies,
- better harmonisation of these policies and strategies and stronger efforts to embed them in regional and pan-African agendas,
- evidence-based policymaking, including peer learning and review, and
- building partnerships to enhance private and public investment.

These principles are in line with and grasped in advance the new aid effectiveness agenda of the international development community as enshrined in the Paris Declaration 2005 (see <http://www.aid-harmonization.org>). The underlying assumption of CAADP is that improved policymaking processes will lead to better policies and policy environments including various aspects of governance; state capacity to ensure effective planning, regulation, and service provision; and eventually more and better public and private investments.

African countries' ownership is expected to distinguish the NEPAD initiatives from other ones. One novel aspect of NEPAD initiatives is the increased importance they attach to regional and continental level organisations. This is an expression of the growing willingness and capacity of African countries to collaborate at supra-national levels, as well as of the realisation that national level processes can be usefully supported by regional and continental institutions. In fact, continuing globalisation and open market economy policies are increasingly exposing African agriculture and food markets to international competition. Individual African nations are often too small and weak to be able to act in isolation. The establishment of AU/NEPAD as well as regional organisations, most prominently the Regional Economic Communities (RECs), is the most important attempt of African nations to join forces in order to be able to shape their own policy space and to influence their fate in the world.

CAADP must be regarded more as a framework than as a programme. Among the key elements are:

- Values and principles reflecting general NEPAD principles (see above) that are expected to add value to country processes, including changing the quality of policy development and implementation, building of partnerships, dialogue, peer review and mutual accountability at all levels, and exploitation of regional complementarities.
- Four thematic pillars are recommended around which agricultural strategies should be built: sustainable land and water management, rural infrastructure and market access, food security, and agricultural research.

The two most tangible targets that the countries have committed themselves to (in the framework of the Maputo Declaration) are to allocate at least ten percent of their national budgets to agriculture and to achieve six percent agricultural growth. All members of the AU are signatories to the Maputo Declaration and thus expected to implement CAADP.

After a first unsuccessful approach under the guidance of the FAO, since 2005 a new approach was designed, which takes CAADP principles more seriously into account. Under the leadership of the RECs, country processes are suggested that follow certain steps: (a) taking stock of existing policies and strategies in the country and modelling whether they are adequate to achieve the CAADP objectives, (b) developing strategies to fill any gaps identified, and (c) facilitating dialogue among various stakeholders at a roundtable conference organised to discuss policies and investment opportunities, to develop partnerships, to harmonise development assistance and to establish a framework for review and accountability. The key output of a national CAADP process is a document called the Compact, which is signed during the roundtable by all groups of stakeholders (including the ministry of finance) and donors in agricultural policy and commits them to implement the Compact. Beyond supporting national processes, CAADP also involves regional activities.

Up to mid-2009, only one Compact had been signed, Rwanda, which was an atypical case. In the last few weeks, eight other countries have concluded a first CAADP round and about 15 more are close to completion (see <http://www.nepad-caadp.net>). Many countries have already increased their budget contributions to agriculture since 2000, eight have achieved or surpassed the CAADP target of 10 percent, but the continental average is only about six percent, with the majority of countries below five percent. The continent's agricultural growth rate surpassed the CAADP six percent target, reaching 6.5 percent in 2007. This is, however, at least partially attributable to higher prices and not to productivity increases (OECD and FAO 2009)

and is, thus, most probably not due to CAADP or to agricultural policies, reforms and investments more generally.

It is premature to judge whether CAADP is really achieving its targets and improving agricultural policies and their impacts in SSA. However, it is possible to analyse the CAADP processes which are supposed to lead to better policies. A research project carried out by the German Development Institute together with the International Food Policy Research Institute (IFPRI) investigated the dynamics and qualities of CAADP by conducting in-depth case studies in countries where CAADP was assumed to be concluded very early – Kenya, Ghana and, to a lesser extent, Uganda (Zimmermann et al. 2009). By lack of concluded and implemented Compacts, the study had to focus on the quality of processes which would eventually lead to the compacts, using participation, ownership and use of scientific evidence as criteria to assess whether there is a value added compared to past agricultural policy processes.

The key conclusion of the study is that CAADP indeed has the potential to add considerable value to the way in which agricultural policies and strategies are developed and implemented, and to increase the emphasis placed on agriculture in development strategies. Its origin in the pan-African movement for stronger self-determination around African Union and NEPAD in principle gives it an authority which external initiatives cannot achieve. By and large, however, the potential has not yet been realized for various reasons:

- Its principles and values are not yet sufficiently reflected in the implementation of the CAADP agenda at the country level. The present CAADP process design offers few opportunities for stakeholders to participate and adds relatively little new evidence. It is technocrat-driven with low political leadership.
- If handled as a process separately from the autochthonous agricultural policy cycles (as has been the case in all case-study countries) which in turn are linked to poverty reduction strategies or other national strategic planning processes, CAADP does not have the force to trigger the changes it intends to do: it is barely known by many agricultural stakeholders and raises fears of duplication of efforts, distraction of focus and even negative effects on agricultur-

al policy by key stakeholders as well as many local donor representatives. Accordingly, national ownership is low, too, at least in the survey countries.

There are several reasons for this stated limitation of CAADP. Partially, it is due to lack of financial means and local capacities to implement the process. But also the process design itself is weak. There are communication gaps between CAADP actors at various levels (continental, regional, national) and between CAADP and the national stakeholder community. It is unclear what alignment between CAADP and autochthonous policy processes actually means and how it is to be achieved. Important questions about sector capabilities and absorption capacities are not posed. The integration of agriculture and other natural resource oriented policy fields is not achieved in the field (though is part of the design). Overall, the observed CAADP processes were of low intensity and created only very limited stakeholder interactions and interventions. In addition, several supporting elements at the supra-national level foreseen by CAADP have not been effective: pillar frameworks, pillar institutions, regional information services and peer elements do not yet exist, barely initialled or very weak.

However, due to its inherent potential CAADP is worth being continued. To ensure that CAADP proves successful, four particularly relevant needs should be kept in mind:

- improved communication and information on the nature and goals of and progress made on CAADP, and more clear-cut definitions of the roles of actors at the continental, regional and national level,
- improved dovetailing of CAADP with ongoing agricultural sector reform processes at national level,
- improved integration of agricultural sector into national reform processes, and
- more support by donors who have thus far taken a wait-and-see stance, on the one hand on account of the weaknesses pointed to above, and on the other for fear of jeopardizing African ownership.

To be successful, reforms of this magnitude call for a good measure of staying power. And in addition – there are no reasonable alternatives visible to CAADP.

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