Photo: J. Boethling

Rethinking rural and agricultural finance – The African case

The 'Green Revolution' has so far bypassed sub-Saharan Africa (SSA). However, in order to feed the world and reduce poverty, we need to seize the opportunities provided in SSA. To unlock African agricultural potential, two conditions need to be met: first, new approaches to agricultural risk management and second, closer co-operation between private and public entities.

A common characteristic of low-income countries is the predominance of less productive agricultural sectors. This is especially true of sub-Saharan Africa (SSA), where there is a lack of investment and knowledge. Growth in GDP resulting from agricultural activities could benefit the less wealthy two to four times more than that from non-agricultural activities. Consequently, the focus should be on assisting developing countries in minimising and mitigating agricultural risks (thereby attracting capital) and on strengthening self-finance in the long run.

Matthias Bickel
Planning Officer
Division 45 – Agriculture, Fisheries and Food
Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH
Matthias.Bickel@gtz.de

Prof. Martin Klein
Tobias Weirowski
Michael Schöppe
School of Economics and Business
Martin Luther University of Halle-Wittenberg

Financial actors in the agricultural sector

'Farmers need to increase global food production by some 70 percent in the coming decades to feed an additional 2.3 billion people by 2050.'
(FAO in September 2009)

The only way to accelerate agricultural development in SSA is to increase agricultural capital stocks and provide agricultural credits at affordable prices. Capital markets in developing countries can be described as oligopolistic sellers' markets: first, capital is scarce and thus interest rates are high. Second, there are only a few suppliers but a multitude of demanders. The capital market is often dominated on the demand side by domestic governments (*crowding out*) and on the supply side by 'alternative finance mechanisms'. The actors and sources of finance involved are presented in the Figure.

Financial agricultural agents as sources of finance

1. **The banking system** is the potential backbone of agricultural finance. In contrast, current banking systems are chronically undercapitalised, they lack information on agricultural sectors and transaction costs are often prohibitive. On a broader

◀ *Boosting investment in the agricultural sector will raise financial needs, for which agricultural credits must be available.*

level, the banking system also comprises non-bank financial institutions like insurance companies and commodities exchange.

2. **Governments:** Domestic governments play a major role since they can invariably set up a framework for a favourable investment climate and, thus, are the decision-makers behind the investment incentive system. In this context, governments are the entry point for large-scale investments by foreign actors in the agricultural sector.

3. **Private sector:** It is not uncommon for the private sector to finance up to 75 percent of the inflow into agricultural sectors. The private sector could seize the opportunity to increase investment into the agricultural sector of developing countries. However, for this to happen, financial agents should identify suitable opportunities.

4. **Alternative finance mechanism (AFM):** This complements the banking system, and is necessary to overcome financing gaps. It is not meant to establish parallel structures, but rather to kick-start viable projects. This is often the only possibility for many entrepreneurs to gain access to finance despite lacking a track record of financial flows and collateral.

Governments, the private sector and AFM can be regarded as both clients and funders of the banking sector. However, the functioning of the banking sector and the management and distribution of risks is fundamental for the capitalisation of the agricultural sector in SSA and thus for growth in productivity.

1. The Banking System

- **Multilateral Banks** (e.g. International Development Association – IDA, African Development Bank – AfDB), **Central & Commercial Banks**
- **Rural Banks** (e.g. Post Office Banks) & **Microfinance Institutions** (MFIs)
- **Non-Bank Financial Institutions** (NBFIs, e.g. insurance companies, currency exchanges, pawnbrokers)
- **Stock Exchanges** (e.g. Johannesburg Securities Exchange) and **Commodities Exchanges** (e.g. Botswana Multi Commodities Exchange)

2. Government

- **Domestic Government**
  - *Budget Financing*
  - *Fiscal & Monetary Policy*
  - *Regulatory Framework*
- **Foreign Government**
  - Official Development Assistance – *ODA (bi/multilateral)*
  - *Non-ODA sources of Finance (e.g. China)*

3. Private Sector

- **Foreign Direct Investors**
- **Portfolio Investors**
- **Remittances Senders**
- **Research and Development (R&D) Investors** *(e.g. agribusiness companies)*
- **Local Investors** *(e.g. savings & credit groups)*

4. Alternative Finance Mechanism

- **Development Finance Institutions (DFIs)** *(e.g. International Finance Corporation – IFC, Multilateral Investment Guarantee Agency – MIGA, Deutsche Investitions- und Entwicklungsgesellschaft – DEG)*
- **Non-Governmental Organisations** *(e.g. root capital, Kiva)*
- **Charitable Foundations** *(e.g. Gates, Skoll)*

The sources of agricultural finance

"In 2006, for example, most African countries spent 3–6 percent of their aid budgets on agriculture."
(IFPRI in April 2009)

Developing countries have long exhibited a high dependence on foreign financing due to low domestic savings rates and strong investment needs. Boosting investment and production in the agricultural sector will raise financing needs even further. A careful investigation of the impact of financial flows on the economy is thus advised.

1. **Domestic governments:** In 2002, the Comprehensive Africa Agriculture Development Program (CAADP) was established, aiming at reaching an agricultural growth rate of 6 percent by 2015. In Maputo (Mozambique) in 2003, domestic governments committed to allocate at least 10 percent of their budgets to agriculture within five years. Yet by 2008, only seven out of the 35 countries had reached this goal.

2. **Official Development Assistance (ODA):** After an upward trend during the early years of the new Millennium, there was a marked decline in bilateral ODA commitments in 2007. This reflected the fact that due to the global financial crisis on the horizon, donors were not in a position or unwilling to meet their prior commitments. The L'Aquila Food Security Initiative (AFSI) launched in July 2009 with total bilateral aid commitments of USD 20 billion over three years is expected to significantly boost ODA destined for the agricultural sector. Disbursements of multilateral ODA to SSA enabled

an offsetting of some of the decline in bilateral aid.

3. **Remittances:** Total remittances to developing countries recorded in 2007 amounted to USD 240 billion, which is twice as much as the corresponding amount of ODA flows. Together with migration, remittances can have a positive impact on poverty, and they can mitigate cyclical variations in income. Remittances are expected to decrease during the current economic downturn. The World Bank predicts that in the worst-case scenario, the inflow of remittances to developing countries will decrease by 6 percent to 7.3 percent in real terms.

4. **Private investment:** Foreign direct investment (FDI) yields a triple dividend in developing countries – it mitigates the domestic savings constraint, provides the main channel for technology transfer, and promotes exports by building capacity and improving competitiveness. In SSA, FDI is mainly driven by the availability of natural resources. Despite being the most important sector for overall production, exports and labour, agriculture attracts minimal FDI. The main reasons are weak infrastructure and the predominance of smallholder producers with low productivity. Consequently, 90 percent of FDI in agriculture is channelled to only a few organised producers.

Portfolio Investments have not played a significant role so far, although their potential should not be underestimated. Such investments are highly biased in their comprehensive distribution: South Africa, for instance, accounts for 88 percent of total portfolio inflows to SSA. Furthermore, the overall amount declined in 2008/09 due to the financial crisis.

Agricultural risks and their management

"The existence of millions of unorganized poor people living in rural areas, inadequate data, decaying or non-existent infrastructure, and lack of competent technical knowledge are among the major hurdles […] to increase insurance penetration."

(World Bank in September 2009)

In order to boost agricultural growth in SSA, agricultural credits must be available. However, lending to or investing in the agricultural sector is often simply not profitable enough. This is mainly due to the risks involved, and the lack of information, undercapitalisation, and the often prohibitively high transaction and opportunity costs involved – in contrast, six-month treasury bills in Ghana brought almost 29 percent interest in November 2009. Why should private banks lend to small-scale farmers or processors at a lower rate, when the risks are much higher?

Agriculture-related risks and mitigation tools

	Risk	Typification	Strategy	Suitability
Natural Risks	crop failure through: ■ *hail & storm* ■ *floods & drought* ■ *earthquakes & fires*	exogenous risk *(non-specific & covariant, i.e. high number of persons concerned)*	insurance, 'family insurance'	(+)
			savings	(++)
Operational Risks	underutilisation of production factors: ■ *land (e.g. soil contamination)* ■ *capital (e.g. depreciation)* ■ *labour (e.g. illness)*	endogenous risk *(specific risk, i.e. farm-related)*	life insurance	(+)
			build-up of farmer organisations, good agricultural practices, savings, 'family insurance'	(++)
Economic Risks	■ *price fluctuations* ■ *fall in demand* ■ *interest rates* ■ *exchange rates*	exogenous risk *(non-specific & covariant)*	insurance, purchasing guarantees/contract farming, 'family insurance', currency hedging, fixed interest rates contracts	(+)
			savings, diversification	(++)
Social Risks	■ *strike* ■ *theft* ■ *riots* ■ *warfare*	exogenous risk *(non-specific & covariant)*	insurance	(-)
			'family insurance'	(+)
			savings	(++)
Political Risks	■ *land reform* ■ *embargoes* ■ *subsidy/tax systems* ■ *protectionism*	exogenous risk *(non-specific & covariant)*	insurance, diversification	(-)
			advisory services (macro)	(+)

Using the example of agricultural borrowers, the risks involved could be divided into five risk groups, of which the first two – **natural** and **operational** risks – deserve closer attention. Classified as exogenous risks (i.e. the borrowers cannot prevent them from happening), **natural risks** include among others, the inferior allocation of water resources: either too little (*drought*) or too much water (*heavy rainfall or floods*) leading to credit crunches and defaults.

Operational risks are endogenous (i.e. the borrowers can influence them), and thus could be insured at a reasonable premium, although transaction costs

may remain high. In general, risk prevention and minimisation strategies are almost non-existent in rural SSA since credit and insurance suppliers only operate in cities. Furthermore, the infrastructure for private agricultural insurances can be regarded as insufficient in relation to specific knowledge, distribution of insurance policies, or claims settlements.

Providing insurances could help mitigate risks. For this to happen, an insurance market would have to be built almost from scratch in SSA. In order to supply, for example, small-scale farmers with reliable insurance products at affordable prices, the roles and objectives of the abovementioned financial agricultural agents should be clear and the insurance products should be kept very basic. Conveying an understanding of and trust in insurance products will be a major success factor.

Recommendations and Outlook

"Net investments of USD 83 billion a year must be made in agriculture in developing countries if there is to be enough food to feed 9.1 billion people in 2050."

(FAO in October 2009)

The further **building-up of banking systems** and their linkage to agricultural markets is key to sustainable development. The provision of refinancing capital might turn out to be a prerequisite for commercial banks to set up agricultural credit lines. In order to increase credit market access, certain necessary criteria have to be met:

1. the agricultural sector has to become more productive;
2. transaction costs should be lowered;
3. endogenous risks need to be mitigated; and
4. where possible, exogenous risks should be insured.

Accordingly, by adopting the very part of the credit risk that is necessary to make banks lend to agricultural actors, governments would value the intrinsic public good character of agriculture.

To **boost private-public co-operation**, a more integrated and coherent approach is certainly needed. As such, strategic alliances of a large scale, covering an entire value chain from production to consumer markets, could be an adequate means of doing so. As the major source of external financing for SSA, ODA should be used to improve the business environment.

ODA as a catalyst for private investments: Sub-Saharan African governments currently spend only about 3 to 6 percent of their aid budgets on agriculture (USD 2 billion). However the estimated additional investment required for agriculture amounts to USD 11 billion a year. If African governments were to consider spending 10 percent of their ODA budgets on agriculture (USD 3.6 billion), one US dollar of ODA would still have to attract about three US dollars of additional private investment. For this to happen economically viable businesses that generate competitive returns on investment and promote large-scale pro-poor growth must be assessed.

Credit and insurance suppliers are almost non-existent so far in rural sub-Saharan Africa.

Photo: Bilderbox.com

A list of references can be obtained from the authors.

Zusammenfassung

Um das Wachstum des Agrarsektors in den afrikanischen Ländern südlich der Sahara zu fördern, sind dringend weitere Agrarinvestitionen erforderlich. Die Aufstockung der Mittel der Öffentlichen Entwicklungszusammenarbeit (ODA) ist hier ein weiterer Schritt; jedoch sollte ODA ein Katalysator für private Investitionen sein und den Regierungen der Empfängerländer beim Aufbau des notwendigen institutionellen Rahmenwerks helfen, um private Investitionen zu erschließen und ein ausgewogenes Wachstum zu fördern. Wichtige Erfolgsfaktoren sind hier Fortschritte bei der Verbesserung des nationalen Bankenwesens und der Risikomanagementsysteme im Agrarsektor.

Resumen

A fin de impulsar el desarrollo agrícola en el África Subsahariana, se requieren urgentemente mayores inversiones en el sector agrícola. El aumento de los fondos de la AOD es un avance en este sentido. Sin embargo, la AOD debería funcionar como catalizador para mayores inversiones privadas y debería utilizarse para ayudar a los gobiernos beneficiarios a establecer un marco institucional que atraiga la inversión privada y promueva un crecimiento equilibrado. Los factores de éxito importantes incluyen un mayor progreso en la mejora de las estructuras bancarias nacionales y de los sistemas de gestión de riesgos agrícolas.