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Development initiatives for sub-Saharan agriculture and food production industries

Demographic trends and food crises are making reform of Africa's agriculture and agro-industry a matter of necessity. Solutions do exist – solutions which are to a large extent dependent on the private sector.

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Sub-Saharan Africa is about to undergo an unprecedented demographic explosion: in 40 years its population will triple and the ratio of urban to rural dwellers will be reversed. Today, and even more so in the future, the continent's stability – and this is a continent where 75% of the poorest people live in rural areas – depends on growth in the agricultural and agro-industrial sector. This sector, a key economic growth driver (15% of GDP) and the primary source of employment and revenues, must prepare to confront a colossal challenge: how will a population of two billion be fed in 2050 – with more than half of them living in urban areas? The answer to this question involves simultaneously overcoming several very familar agricultural challenges: improving yields, optimising the value of agricultural land and preserving biodiversity. More added value must also be created in the agri-food anda agro-industrial sectors. Investments in post-harvest operations, storage infrastructures, logistics, processing and distribution are essential. They will stimulate the creation of value and jobs, and increase producers' revenues.

Furthermore, the 2008 price spike, the increased and enduring volatility of basic agricultural products on the international markets, and the climate-related food crises currently impacting the Horn of Africa and the Sahel are making food security vital, firmly establishing agriculture and the agro-industries on the economic and political agendas of the continent and of the international community. The African Union and G20 commitments testify to this.

Translating these commitments into reality means finding answers for the following questions: What are the growth strategies for industry – both food and non-food? What are the opportunities for the sector's major players in Africa? How can the private investment and financing needed to realise them be attracted? What public policies are necessary to facilitate these investments?

To meet these challenges nearly USD 1,000 billion will need to be invested between now and 2050 – two-thirds of it downstream of production in the construction of markets, warehouses, cold chains and processing industries. These investments will need to be shouldered by the private sector – mainly family-run farms (on the production side) and SMEs (on the processing side). While highly developed export industries are able to secure appropriate financing, the availability of efficient, innovative finance for small farms and SMEs remains a challenge for the local banking sector to overcome. —

Proparco
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Modernising African agriculture: the need, opportunities, solutions

Modernising the agro-industrial sector in sub-Saharan Africa is a social, political and economic necessity requiring the introduction of effective agricultural policies, support for the formation of value-chain organisations and more robust coordination between unequal economic players.

Jean-Luc François and Stéphanie Lanfranchi

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Global food security depends upon the modernisation of sub-Saharan Africa agriculture. Africa's booming population and economic growth are set to drive demand for food and consumer goods in the continent. At the same time sub-Saharan Africa is one of the world's regions where new land can be cultivated and irrigated: its tropical position allows solar energy to be captured with optimum effectiveness. During the 21st century the continent will exert a growing influence on the demand and supply of agricultural and forestry products. Depending on the effectiveness of its agriculture and forestry policies, Africa will either aggravate tensions in the global markets by widening its deficit, or help to alleviate these tensions. Food price fluctuations, under-employment and population imbalances represent further causes of tension that agricultural and rural policies can mitigate.

The modernisation of sub-Saharan agricultural sectors is therefore a social, political and economic necessity. And Africa's leaders are clearly committed to moving in this direction. Over the last five years many countries have formulated strategies to develop reform and modernise their agricultural sectors. Private investors, both national and international, also have a genuine interest in African agriculture. A primary sector of diminishing relative importance (12% of GDP in sub-Saharan Africa today, as compared with 43% in 1962), with yields that remain low (Box 1), the agricultural and agro-industrial sector represents 65% of employment, 70% of internal trade, and 68% of manufacturing/processing. Its future importance is more easily understood: 1.5 billion African consumers in 2050, 1 billion of them living in urban areas, in addition to the 4.5 billion consumers in emerging markets. Growing urbanisation and purchasing power will drive growing urban food demand. Moreover, between 1990 and 2008 exports to China grew from USD 200 million to more than USD 2 billion while exports to India increased from USD 80 million to USD 1.3 billion. The markets for the African sectors will

"The modernisation of sub-Saharan agricultural sectors is a social, political and economic necessity."

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therefore be primarily domestic and then Asian rather than European or American. Yet the economy of Africa's rural areas is disadvantaged by isolation, energy poverty, inadequate education and healthcare provision, and ineffective land governance.

Modernising farms and services to agriculture

Whether the focus is on the land area cultivated, on the quantities produced and traded or on jobs, local farmers and processing SMEs are clearly the key players. Although their productivity offers room for improvement, their investment capacity is low. A scarcity of financing/investment is endangering the survival of some food-producing sectors in Africa. What is needed, therefore, is to increase the capitalisation of small family farms and processing facilities. The mobilisation of national and international capital can play a part here, *via* strengthened financial institutions. Traders in agricultural commodities have had to work directly with small producers, setting up technical or financial support programmes and certification schemes in order to improve yields and ensure a reliable supply of quality products. Today these programmes are financed *via* subsidies or directly by the traders, with a partial return in the sales premium enjoyed by certified products.

The rapid and large-scale adoption of new crops and techniques, the use of fertilisers or improved seeds, and the introduction of agricultural machinery to farms depend on many factors: farm gate prices, the availability of inputs, credit, and appropriate technical and economic advice. Different economic players are responsible for these various services: small services companies, upstream and downstream, producer groups, large corporations. Although the role played by these three categories of private players is specific to each individual value-chain, the vital importance of their cooperation is proven in all cases. This means that the State's primary role is to encourage the formation of value-chain specific organisations. Where they exist these institutions are powerful drivers of growth, regulating imbalances and amplifying government initiatives – Burkina Faso's cotton industry provides an example here.[1]

"What is needed is to increase the capitalisation of small family farms and processing facilities."

Deficiencies – in terms of availability, quality and price – in the services crucial to agricultural modernisation (seeds, fertilisers, plant protection and veterinary products, agricultural machinery) also place serious constraints on the sector. The same is true of professional training and technical/economic advice. Although contract agriculture is the standard solution for overcoming these deficiencies, it is not possible to do everything on a contract basis. Some states are taking charge of these services themselves in order to meet these challenges – though their performance is generally sub-standard. These services should really be delivered by private companies or producer organisations, which should be supported. International groups (fertilisers, pesticides, medications) can make a contribution here, in partnership with governments.

Limiting risks through long-term investments and contract agriculture

In Africa more than elsewhere the various different types of risk (natural, economic, political) combine and mutually aggravate each other. Individual countries, products and risks require specific responses, involving the development of skills (marketing), of private services (insurance, veterinary services), public services (crop protection and animal health), public and private investments ▸▸▸

[1] *Burkina Faso has around 250,000 agricultural businesses, mainly small-scale and family-run, which encompass more than 350,000 cotton producers. They are organised in associations which oversee the distribution of inputs, the provision and repayment of short- and medium-term loans, the harvest collection and the marketing of cottonseed. Grouped together in federations, these associations form unions of cotton producers.*

BOX 1: AFRICAN AGRICULTURAL YIELDS NEED IMPROVING

Although Africa possesses 12% of the world's arable land, its share of the global trade in agricultural products has fallen from 10% in 1960 to 2% today. Its agricultural trade balance, which was level until 1980, has deteriorated due to food imports (rice, oil, wheat). Yields have not improved here as they have in other regions of the world. The lion's share (80%) of production growth has been achieved by expanding the surface area cultivated; this expansion has been accompanied by a steady decrease in the area cultivated per agricultural worker (less than 0.5 hectares). Furthermore agriculture has had barely any knock-on impact on upstream industries (fertiliser, machinery) or downstream industries (processing): 63% of the value in the sector is produced at farm level (as compared with just 10% in industrial countries). Yet behind these aggregate figures the real picture is a very mixed one. For crops like rubber and palm oil, Africa ranks among the top performers. And Africa has also sidestepped the downsides of unbridled agricultural intensification. In consequence, by choosing the best options – now available thanks to technological progress – for soil fertility, crop protection and water efficiency, Africa can triple its production over the timespan when its population doubles, with fewer negative impacts on its environment.

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▶▶▶ (irrigation), trade agreements (price smoothing) and public interventions (safeguarding mechanisms). Here again the relationships between different value-chain players can make a major contribution. AFD's contribution to addressing these challenges involves supporting both private investments and public policies by facilitating negotiation and contracts between unequal economic players: small-scale farmers and SMEs, international groups and governments.

There are many reasons behind the financing difficulties facing agricultural sectors – relating to both short-term finance (seasonal credit) and long-term finance (water management, motorisation, livestock, planting, processing equipment). Farmers are under-capitalised, local banks have neither the expertise nor the long-term funding, the projects are risky and borrowers cannot provide sufficient security. Nonetheless action is possible on three levels. Long-term funding can be made available to businesses through investment funds and banks. Retail banks can be encouraged to develop a judicious involvement in the sector by building internal expertise, by sharing the risk *via* guarantees and by offering new products (leasing, ware house receipt and insurance). Finally the bankability of clients and their projects can be enhanced by deploying management consultancy services aimed at groups of farmers, farming businesses and SMEs (Box 2). At the same time contract agriculture has proved effective in sub-Saharan Africa, allowing agri-food businesses to secure a reliable supply in volume and quality terms without having to manage land- and labour-related issues. It connects hundreds of thousands of farmers to international markets, with access to technical services and the pre-financing of inputs. Delivery contracts between farmers and businesses provide security for local banks. Providing there is an appropriate balance in the apportionment of value and risks between these players – a matter worthy of public scrutiny – contract agriculture is definitely an option: as well as making further advances in export sectors (cocoa, coffee) it can also provide the key to unlocking rapid transformation across significant sections of subsistence agriculture in Africa.

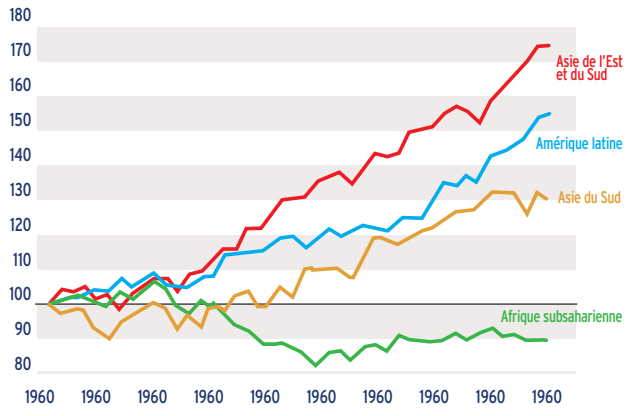
THE ROLE OF LARGE INDUSTRIAL PLANTATIONS, LABELS AND QUALITY STANDARDS

A new generation of large-scale farms is developing in the sparsely populated areas. Where substantial investments in water infrastructure are required, some governments see the need to call in private investors, conceding significant land areas to them on a long-term basis. Although there is little land free of any rights of use, long-term contracts can be concluded between the communities holding these rights, investors and governments. For obvious reasons of transparency these agreements need to be approved by all parties concerned and communicated in such a way that the details can be fully understood. Beyond the land itself they should include the companies' commitments in terms of investment, value creation, employment, social services and environmental protection. They should also include commitments on the part of governments (social services, infrastructures, security). It is entirely in the interest of private investors to base their projects on contract agriculture models, incorporating family-run farms.

"All Africa's agricultural sectors need to address quality issues more effectively from this point forwards."

Whatever the size of the players involved, all Africa's agricultural sectors need to address quality issues more effectively from this point forwards[2] – these factors are increasingly important for their competitiveness, whether in national or international markets. Product standardisation can play a part here; it is, after all, crucial for manufacturers – the efficiency

FIGURE 1: INDEX OF FOOD PRODUCTION PER CAPITA, 1961 - 2004



Source: FAOSTAT

[2] Standards for gari, for example, have been drawn up both in the Codex Alimentarius (a resource created by the FAO and the WHO) and also at national level in Benin and Ghana. The standards apply to semi-industrial units with a quality control system. As a result we are seeing the emergence of traceability mechanisms, standardisation in organisational procedures, promotion of geographic origin, packaging in sachets, etc. These practices can help producers sell their gari more effectively.

of their machinery depends upon it. It is also necessary for product pricing and to modernise transactions. Consumers in the north are driving an upgrade in health and safety standards. Finally, we are seeing an upsurge in labels certifying fairness (pay, child labour) and sustainability in agricultural sectors. In agriculture, the qualities of the finished product start in the field – making trade agreements and partnerships between governments and professionals vitally important.

The current context presents Africa with a historic opportunity for strong growth for more productive and competitive agricultural businesses. Yet there is no guarantee that these developments will conform to the principles of sustainable agriculture as they unfold. From here a very wide range of scenarios is conceivable. For Africa the time has come for coordinated, strategic decisions between political players (governments, civil society and value-chain organisations) which will facilitate partnerships in investment projects between various economic players (farmers, manufacturers and banks). Development finance institutions like AFD Group will support them with the full range of financial resources and expertise at their disposal. ●

BOX 2: THE ROLE OF EUROPEAN FINANCIAL DEVELOPMENT INSTITUTIONS

The intervention of European Financial Development Institutions (EFIS), including Proparco, is based on a main objective: supporting private investment at all stages within agro-industrial sectors – from seed production through to marketing. Beyond financial intermediation – which allows them to have an direct impact on growers and SMEs – EDFIs are finding it difficult to reach all the players in the sector. Nonetheless there are a number of pragmatic intervention strategies that might be prioritised. The aim is to preserve productive capability while optimising resources (water, soil), to develop agricultural production for trading, and to improve farms' productivity and profitability in a sustainable way. The support of the major historic players in the agro-industrial sectors is essential to underpin this strategy – in the form of direct shareholdings or direct financing to local subsidiaries. In addition to supporting the productive sector, EDFIs' intervention needs to encompass the whole of the Food Supply Chain. The creation and improvement of logistics infrastructures are very important drivers here, particularly with respect to warehousing, refrigerated facilities and irrigation systems. Another possibility is the direct financing of commodities traders or specialist operators investing in logistics assets and grower certification programmes. Finally it is important to promote diversification projects: production of biofuels, development of biomass-based cogeneration. Agricultural production exclusively based on expansion of the land area cultivated contributes to the degradation of biodiversity and sets a ceiling on yields. Diversification helps to alleviate inflationary pressure on the prices of agricultural commodities by providing a reliable source of supplementary income for producers.

Strengths and weaknesses of Africa's agrifood industries

Africa's agrifood sectors are booming. Besides producing food for local consumption, the food industry is supplying the towns with processed products. However, a lack of facilities and equipment, poor quality control, and difficulties in accessing credit, advice and specialist training are still hampering the development of this sector, despite its potential to create large numbers of jobs.

Nicolas Bricas

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During the Maputo Summit in Mozambique in 2003, the countries of sub-Saharan Africa made agriculture a political priority. In doing so, they were anticipating the conclusions of the World Bank's annual report on agriculture published at the end of 2007, which recognised that after decades of neglect, the agricultural sector has a key role to play in combating poverty and climate change and in improving food security (World Bank, 2007). The world food price crises of 2008 and 2011 confirmed the importance of this political decision, reminding people of the vulnerability of being over-reliant on international markets for food requirements. The food sector in sub-Saharan Africa therefore finds itself once again at the centre of development issues. Just as African states did not wait for the World Bank report or escalating prices to take heed of the situation, neither did Africa's food industries wait for political injunctions or international cooperation assistance before taking action. Food production in sub-Saharan Africa, with the exception of countries at war or in political crisis, has improved considerably and African food industries have developed since the 1980s, particularly in West Africa.

NICOLAS BRICAS

Nicolas Bricas is a socio-economist. He has spent years monitoring the commercial strategies of small agrifood businesses producing local products for urban markets in sub-Saharan Africa, and has helped promote local cereals in the Sahel. He conducts research into dietary changes in developing countries and their consequences for agricultural and food policies.

From food crop to cash crop

The concept of "food crops" dates back to colonial times when people differentiated between "cash crops" for export (groundnuts, cotton, coffee, cocoa, etc.), which provided a cash income for farmers, particularly necessary for paying taxes, and food crops for feeding the largely rural population (subsistence farming). According to statistics supplied by the United Nations, the urban population in sub-Saharan Africa was only 35 million in 1960, or 15.5% of the total population (UNO, 2011). This situation has changed dramatically over the past 50 years, as the urban population has increased at an unprecedented rate in the world's history (Dureau, 2004). Today, according to United Nations figures, there are around 313 million people living in towns and cities in sub-Saharan Africa, representing 37.6% of the total population. And the towns, far from being supplied exclusively by international markets, as some believe, represent a growing outlet for local production.

"The food sector in sub-Saharan Africa finds itself once again at the centre of development issues."

At first, only surplus produce was sold in the towns. Today, food is starting to be produced with the sole aim of supplying the urban markets: maize, cassava, yam, chicken, eggs, fish, dairy produce, vegetables, fruits and herbs and spices. Certain products once grown for export, such as palm oil, are now being sold on the regional market instead. Of course, the continent does import a considerable proportion of its food (Table 1), but the situation varies widely from one region to another and from one country to another, depending on local agricultural potential and political incentives for local production. Looking at the continent as a whole, Africa is less dependent on imports for cereals (30% of supplies are imported) than for vegetable oils and sugar, where over half is imported.

TABLE 1: IMPORTS AS A PERCENTAGE OF TOTAL SUPPLIES AVERAGE 2005-2007

	Africa	East Africa	Central Africa	North Africa	Southern Africa	West Africa
Cereals	30%	17%	35%	48%	25%	20%
Wheat	62%	59%	98%	56%	42%	100%
White rice	40%	28%	68%	11%	100%	47%
Roots and tubers	0%	0%	0%	5%	9%	0%
Meat	10%	2%	28%	9%	14%	7%
Dairy products (excluding butter)	17%	4%	30%	17%	11%	39%
Pulses	11%	6%	9%	47%	46%	1%
Vegetable oils	55%	76%	34%	84%	76%	26%
Vegetables	4%	2%	9%	2%	8%	6%
Sugar	55%	31%	71%	56%	17%	93%
Fruit	2%	1%	1%	4%	8%	1%

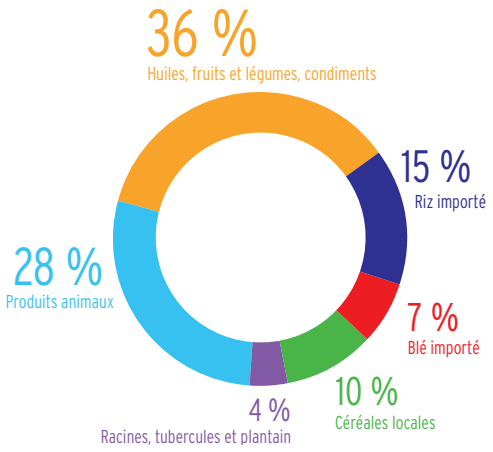
Sources: FAOSTAT, FAO

Some towns are in fact supplied mainly with rice imported from Asia, and with wheat from Europe or America. This dependency, which is often highlighted in evaluation reports and in the media, should be seen in terms of economic value, and not just the quantities involved. As shown by research into household expenditure conducted in 2008 in the eight capital cities of WAEMU,[1] imported cereals account for 22% of the urban market (and only 12.2% of the calories consumed on the African continent, including North Africa and rural populations). Primary products with a high starch content – cereals, roots, tubers and plantains – actually account for only just over a third of the market (36%). Just under a third (28%) is made up of animal products: meat, fish, eggs and dairy products, and just over a third (36%) consists of all the other products: oils, vegetables, fruits, sugar and condiments (Figure 1). It is true that imported wheat and rice are not the only products bought in from outside the continent. Some milk powder, vegetable oils and sugar are also imported from elsewhere, or have been until recently. Food prices remained low and stable for nearly 30 years, which favoured imports. The price rises seen since 2007 have made people aware of the risks of relying too heavily on imports. In addition, higher prices on international markets makes local industries more competitive again, although tariff barriers continue to be lowered.[2] One of the reasons why some local food industries, like those for rice, oils and dairy produce, have failed to make their mark, is because international prices are too low to justify making the investments necessary to improve product quality or labour productivity.

"The towns represent a growing outlet for local production."

The urban market provides a large outlet for local produce (Box) – not only for primary products, but also, increasingly, for processed products: flours, meals, granules, fermented pastes, oils, chopped meat, dried and smoked products, drinks, etc. At the same time, ▸▸▸

FIGURE 1: URBAN MARKET COMPOSITION OF THE 8 WAEMU CAPITALS



Source: WAEMU / Surveys of household expenditure in WAEMU capitals, conducted as part of the calculation of the harmonised consumer price index, 2008.

[1] *The West African Economic and Monetary Union (WAEMU/French acronym UEMOA) is an organisation working to achieve economic integration of its member states (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) by strengthening economic competitiveness through open, competitive markets and the rationalization and harmonization of the legal environment.*

[2] *See article by Arlène Alpha and Cécile Broutin, p. 24 in the current issue of Private Sector & Developement.*

▶▶▶ production is not confined to the suburbs (often limited to the production of fresh vegetables, eggs and poultry), but sometimes takes place a long way away, with products being transported *via* trade networks that can extend across several countries – like onions from Cameroon which are sold as far away as Abidjan in Côte d'Ivoire.

A BOOMING AGRIFOOD SECTOR

Food production is being commercialised thanks to the development of a key intermediary sector between the agricultural producers and the markets: collectors, wholesalers, transporters, processors and packaging suppliers, distributors and caterers. This agrifood sector, which largely consists of small traders and is often combined with agricultural activities in rural areas or considered part of domestic cooking in urban areas, represents thousands of jobs – particularly for women – and a considerable income.

The evolution of these microbusinesses into small and medium-sized organisations does not necessarily take the shortcuts that the promoters of modernity would wish. Traditional food products are a part of cultural identity, so consumers are wary of moves towards artificial and mechanical processing methods. They look for producers they can trust, often through personal relationships. Attempts to industrialise some of these products too quickly, including millet couscous, *gari* (granular cassava flour), *attiéké* (cassava couscous) and *dolo* (red sorghum beer), have failed on several occasions. Nevertheless, this sector is booming: the most arduous processing activities are being mechanised, products are increasingly being packaged in sealed bags, which means they can be sold in self-service shops, and entrepreneurs are coming up with ideas for new products or distributing products from neighbouring countries.

"This agrifood sector represents thousands of jobs and a considerable income."

Although it does not receive much recognition in the statistics, surveys in some countries reveal that this sector is today one of the most effective in terms of job creation for young people with few or no qualifications (Bricas and Broutin, 2006). In rural and urban areas, these activities make a major contribution to food security: they make it possible to reduce post-harvest losses and to increase the quantities available for consumption. They generate income for large numbers of people and provide low-cost food for a population with limited financial means. They are also present in more profitable markets.

OBSTACLES TO DEVELOPMENT IN THE AGRIFOOD SECTOR

Despite their dynamism, food production and commercial food sectors face numerous obstacles. Although it is true that agricultural research has often provided technical solutions to bottlenecks (improvements to maize, cassava and palm oil varieties, mechanisation of the hulling process for millet and fonio, etc.), vast areas are still in need of improvement: from production to storage, from processing productivity to product hygiene standards. Threshers, cleaning machines, shellers, secondary processing equipment (rollers, sifters, etc.), dryers for humid regions, oil presses – all these items of equipment designed for small-scale processing are not yet produced locally in sufficient quantities to meet the demand, although Chinese and Indian manufacturers are showing an interest in the African market. There are not enough regional networks for servicing the machinery and supplying replacement parts, and some areas still do not have access to electricity or drinking water.

There are numerous solutions for improving rural transportation from field to market, for improving storage, for packaging products and reducing losses, but there are not enough credit facilities or advisory services for small-scale food processors. For example, although safe, effective insecticides for controlling grain-boring insects are available, they are only distributed in certain countries. In areas where nothing has been done to train users or distribute these products, post-harvest losses sometimes account for half of total production. The mechanisation and transportation concepts are based on cheap petroleum and relatively stable energy prices. The risk now is that energy prices are increasing and becoming increasingly unstable. In addition, research capabilities relating to these production operations, to prepare them for a more unstable future, both in terms of climate and economic changes, are woefully inadequate. Agrifood research has been neglected in comparison with agricultural research and still suffers from a lack of resources to meet all the sector's needs.

In the agricultural sector, professional organisations like the Network of Farmers' and Agricultural Producers' Organisations of West Africa (ROPPA) began to emerge about 20 years ago. Today these organisations are capable of defending their interests and negotiating policies and development projects. These kinds of structures are a much more recent phenomenon in the agrifood sector. The women who process food prod-

ucts are still poorly represented, do not carry any political weight and have trouble making their demands heard. For instance, many young women are looking for professional training courses for food-related occupations instead of the dressmaking or embroidery courses which have been available for years, but these kinds of courses are almost non-existent. Credit for SMEs in this sector is practically non-existent as well. Whereas microbusinesses can borrow money from microcredit organisations, and large-scale businesses can take out loans from banks, SMEs with between five and ten employees face an institutional void when it comes to finding start-up capital.

Future prospects for the agrifood sector

In ten years the urban population will represent half of the total population of sub-Saharan Africa. Already, a middle class is emerging in the big cities, which would indicate that a market for products with greater added value is developing. The urban food market is attracting vultures. Supermarket chains are already setting up in East and Southern Africa and foreign operators are considering investing in processing businesses. SPAR[3] owned more than 900 self-service shops in Southern Africa in 2010, and Leader Price[4] is investing in Francophone Africa, particularly in Senegal.

For foreign operators, the aim is to secure supplies of raw materials and to increase sales fast in a competitive environment occupied by thousands of microbusinesses. The risk is that these thousands of business activities will be sacrificed in the name of modernisation, as has happened in some countries. We must not forget that one of the continent's major challenges is employment. Africa's demographic transition is not yet complete. As a result of population growth, 20,000 to 30,000 young people enter the job market each year for every million inhabitants. For a country with a population of around 10 million it is therefore necessary to create between 200,000 and 300,000 jobs every year. The agricultural sector certainly has the ability to create large numbers of jobs (although it needs to find ways to continue to attract young people), but the agrifood sector has great potential when it comes to job creation. The development of this sector will involve the creation of large numbers of jobs and it can help meet the challenge faced by these countries, feeding their populations using resources that shape their identities: their products, their skills and their know-how. ●

"SMEs with between five and ten employees face an institutional void when it comes to finding start-up capital."

[3] SPAR is a supermarket chain, specialising in food and belonging to a Dutch company, SPAR International. It has shops in 33 countries.
[4] Leader Price is a French discount chain established in 1989 that now belongs to Casino, a supermarket group present in France and all over the world.

FOCUS

Cirad is a French research centre specialising in international agricultural and development issues. Around 20 Cirad researchers and colleagues from three other Montpellier institutions (Inra, Montpellier SupAgro and IAM) belong to a joint research unit (UMR Moisa) that specialises in the sustainable development of the agricultural and agrifood sector in Mediterranean and developing countries.

BOX: THE MAIZE INDUSTRY IN THE COUNTRIES OF THE SAHEL

Maize production in the Sahel is carried out by millions of small-scale producers. Associated with the cotton industry, it makes use of fertiliser inputs from cotton-growing: an instance of complementarity between export crops and food crops.

While a part of the maize harvest is consumed locally, the rest is sold to collectors, who buy grains on the rural markets. The collectors also act as bankers and can provide advance payment and seasonal loans. They generally work with wholesalers based in the towns, who treat the maize grains and store them in sacks. Relationships between these operators are based on trust – sometimes cultivated through lineage or village networks – which is indispensable for guaranteeing the quality of the products and for handling large sums of money.

Initially, the maize grains were sold in their untreated state to housewives and small traders who took them to millers with motorised mills in market areas and urban districts for grinding. Then small-scale commercial activities developed involving the sale of ready-to-eat or ready-to-cook products, as an extension on a larger scale of the most arduous domestic activities or those requiring particular technical competence. The products are processed at home and sold door-to-door, in the street or at fresh produce markets. Here too, it is interpersonal trust that reassures customers worried about the hygiene standards of products sold at markets which otherwise tend to be rather anonymous.

Thanks to the arrival of mechanised equipment, small businesses are now offering the same type of products in plastic packaging that keeps food dry, which means it keeps for longer. These businesses sell their products in grocery or self-service stores, where the customers are more affluent and prepared to pay for the quality guarantees associated with a brand name.

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Price volatility and agricultural development

The volatility of agricultural prices undermines food security in developing countries. It is a well-known issue which calls for proactive, consistent agricultural policies that address the various risks facing producers and consumers – policies that include an analysis of the risks, strengthen agricultural sectors, encourage the formation of producer groups, build up emergency contingency stocks, collect and analyse data, and provide access to various types of insurance and risk cover. Efforts such as these can and should be supported by international donors, as has been advocated by the G20.

Pierre Jacquet

Chief Economist, Agence française de développement

The recent rises in food prices (2008 and 2010) have had tragic consequences for millions of people. As a result, food security has become a major mobilising issue, albeit not a new one: the proportion of undernourished people in developing countries stopped falling in the mid-1990s. Today, approximately one billion people are suffering from malnutrition (Vindel and Jacquet, 2011).

Price volatility is not a new problem either: agricultural commodity prices have been more variable than the prices of manufactured products since the beginning of the 18th century. The degree of volatility has not increased noticeably since then (Jacks, O'Rourke and Williamson, 2009). Price volatility, a characteristic of agricultural markets, poses a risk to producers – by depriving them of the foreknowledge they need of their future income in order to decide whether or not to increase production – and to consumers. It also weakens public finances.

Industrial countries have often implemented proactive agricultural policies as an answer to price instability. Public policies have helped to stabilise prices or farmers' income, giving them the foreknowledge they need to plan ahead. And, since the second half of the 19th century, agricultural markets have developed financial instruments to provide cover for price risks. Following the serious crises of recent years, the French presidency of the G20 has made the volatility of agricultural prices and food security one of the group's priorities.

PIERRE JACQUET

Pierre Jacquet is Chief Economist at Agence française de développement (AFD) and a member of the Cercle des Économistes. He is a lecturer and head of the Department of Economics and Finance at École des Ponts ParisTech. He was formerly deputy director of the French Institute of International Relations (IFRI) and from 1997 to 2006 was a member of the Conseil d'Analyse Économique, an independent advisory panel set up by the French prime minister. His publications focus on the international economy, economic policy, development and the governance of globalisation.

What we know about price volatility

The volatility of agricultural prices is naturally high. Supply and demand of agricultural products are not "elastic" in the short term: they do not alter much in response to price fluctuations. This means that any change in the quantities produced or demanded will lead to a significant variation in the price. In other words, only a big price increase will bring demand down in line with lower production, for instance. In addition, the supply-side response is always delayed: when prices rise, farmers plan to increase production, but the increased supply will not arrive on the market until after the next harvest.

In the past 25 years, food prices have risen at an unprecedented rate in real terms compared with the prices of manufactured goods (Figure 1). Price volatility, incidentally positively correlated with price levels (Sarris, 2009), has risen, particularly since 2006. In addition to the fundamental causes – demographic and economic growth, dietary changes, climate disasters, higher energy prices, competition from biofuel crops and very low food stocks – speculation on agricultural markets has possibly fuelled price volatility by spreading a sense of panic. Nevertheless, speculation is not likely to be the sole cause of the increase in volatility: the two types of causal factors interact. Speculation is a signal that draws attention to fun-

"Food security is once again a major issue."

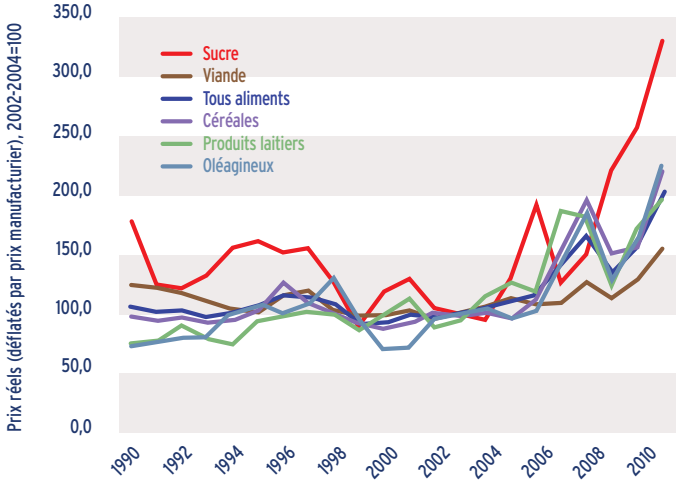
damental issues that have been ignored for too long.
In fact, the long-term view does not give credence to the idea that there has been a historical trend towards increased volatility. Smoothed over ten years, it rather appears to show a slightly downward curve, despite the very noticeable rise since 2006.
Yet, a number of elements seem to indicate that this phase of rising volatility and prices could continue (see FAO forecasts), sustained on the demand side by demographic pressure and economic growth in developing countries, and on the supply side by environmental pressures, climate change and energy costs. The capacity of the supply side to meet demand in a particular place at a particular time remains very uncertain, even though the long-term studies available do not show any problems meeting aggregate global food demand.

What can be done?

The volatility of agricultural prices is not the only problem facing producers and consumers in developing countries. There are plenty of other difficulties: insufficient transport, communication and storage infrastructure; access to finance; lack of training; crop vulnerability to disease; access to water, etc. We therefore need to develop an integrated approach that covers the entire value chain and focuses on agricultural development and food security.
This is why the G20 2011, under its French presidency, insisted on providing support for drawing up coherent agricultural policies that clearly pursue the aim of improving food security, and on the need to include in these policies a risk analysis and management component that addresses all the risks involved, including price volatility. NEPAD validated this approach, submitting an official request to the G20 in September 2011 to help its member countries supplement the efforts being made to draw up agricultural policies within the framework of the CAADP programme, by including provisions for risk analysis and management.[1]
It is time to revive the idea of proactive agricultural policies. Agricultural development will not happen spontaneously without them. The example of industrial countries demonstrates the importance of proactive policies. In the past, such policies have combined a number of different market intervention mechanisms: buffer stocks, fiscal and commercial measures, and transfer or compensation mechanisms designed to assist individuals or countries in times of crisis. The European Union put in place market regulation instruments as part of the Lomé Convention (Stabex and Sysmin[2]) and the IMF set up facilities for emergency finance. In developing countries, policies should enable producers to calculate revenues in advance, providing enough incentive to boost production, and should include social security safety nets to protect consumers and give the most vulnerable sections of society the means to feed themselves.
The build-up of stocks should be encouraged along the entire value chain by means, for example, of public purchasing, whilst ensuring that the use of these stocks does not interfere with decisions in the private sector by sending out signals that create uncertainty. It is important, however, not to repeat the mistakes made by agricultural policies in industrial countries and international mechanisms. Stabilisation processes have in fact suffered from a number of shortcomings: confusion between reducing price variability and arbitrary price fixing, which causes distortions in production and consumption that are untenable in the long run; and ignorance of market trends at prohibitive costs. Price shocks can last years (Cashin and McDermott, 2001),[3] which quickly makes any price-fixing mechanism very costly. In addi- ▸▸▸

"This phase of rising volatility and prices could continue."

FIGURE 1: REAL PRICES OF FOOD COMMODITIES (1970-2011)



Source: FAO,2009

[1] A number of examples demonstrate the value of a risk-based approach. For example, the price-smoothing fund for cotton prices in Burkina Faso that was set up with the assistance of AFD, and the mechanism set up in Argentina in 2010 to assist cotton producers.
[2] The compensatory finance scheme for stabilising export earnings from agricultural products (STABEX) compensated losses affecting a large number of agricultural products, particularly those resulting from price fluctuations on global markets. Loans from the SYSMIN fund were designed to reduce a country's dependence on the exploitation of its mineral resources.
[3] Prices are in fact correlated between one year and the next, particularly as a result of storage dynamics. Building up stocks supports the current price and smoothes price shocks over several years.

Development initiatives for sub-Saharan agriculture and food production industries

▶▶▶ tion, the conditions that are often stipulated by compensation mechanisms, for example STABEX (Collier *et al*, 1998), delay their implementation significantly. As a result, instead of acting as a counter-cyclical buffer, the mechanism ends up having a pro-cyclical effect. Building up and managing buffer stocks is also particularly costly, both in terms of storage infrastructure and conserving the quality of the stored products. Finally, poor governance has led recipient states to seize funds intended both for transfers to farmers and for restocking the mechanism.

Agricultural policies can also make use of market mechanisms. Index-linked insurance in particular allows a lump-sum approach, rather than one based on a precise damage assessment that is open to dispute. But the insurance culture is insufficiently developed. In addition, insurance premiums are often too high for farmers and need to be subsidised. The commodity markets also offer various instruments for hedging against risks, both for consumers (protection against high prices) and for producers (protection against low prices). But these instruments are hardly adequate for developing countries. For instance, there can be a noticeable difference between international prices and domestic prices[4] because of trade restrictions, taxes, subsidies or price controls, a lack of infrastructure, the high cost of domestic transactions or exchange rate fluctuations. The volatility of international prices is not the only source of price shocks for developing countries. The preliminary report by multilateral institutions produced for the G20 (FAO *et al*, 2011) suggests that efforts to improve food security should be based on a sufficiently extensive database on the situation in the different countries. Finally, risk management instruments need to be practically custom-made.

These costly instruments require training and expertise and their benefits do not become visible until agricultural sectors are sufficiently well organised and function correctly. In some cases, up to 50% of production can be lost because of inefficiencies throughout the entire value chain. Risk management needs to be integrated into an approach focused on developing agricultural sectors, from field to commodity utilisation. The stakeholders involved also need to be taught to fulfil their obligations. It is generally difficult to get producers to adhere to a domestic price ceiling when international prices are higher, or to convince consumers to agree to a minimum price in the opposite case. It is one of the obstacles preventing the development of contract farming, which can give producers – and consumers – the necessary advance price information for one or more crop years.

In 2011 for the first time, the G20 made food security one of the priorities for international action and launched a number of lines of action ranging from emergency stocks to setting up a coordinated rapid-response forum for crisis situations, and including the promotion of agricultural investment and productivity. In terms of managing price volatility, the G20 invited donors to set up a joint information-sharing, risk analysis and management mechanism, for which Agence française de développement has taken the initiative, in order to meet the request for assistance from developing countries, particularly those in NEPAD, and, if necessary, to instigate new debates on the key issues identified. The G20 has also supported the setting up of a public-private platform for food security. The agricultural sector is in fact the most important private sector in developing countries. One of the roles of agricultural policies is therefore to act as a catalyst to mobilise private economic players in support of the food security objective, and to reinvent an effective, egalitarian public-private partnership. The G20 is also appealing to donors to take stock of their responsibilities in terms of developing flexible financing instruments that take greater account of the risks – following the example of the highly concessional counter-cyclical loan[5] set up by Agence française de développement. It has set the international community on a promising path, which future G20 summits will need to take forward. ●

"Agricultural development will not happen spontaneously; it is time to revive the idea of proactive agricultural policies."

[4] This difference between local and international risks is called "basis risk". The higher it is, the less effective international risk coverage instruments will be.
[5] The highly concessional counter-cyclical loan is designed to enable beneficiary countries to adapt their debt repayments in the event of exogenous shocks on their economy involving a significant reduction in their export income.

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Village plantations central to sustainable agribusiness

Development of village plantations is a major contributor to the expansion of sub-Saharan Africa's agribusiness sector. SIFCA has instigated a strategy to assist outgrowers and in particular to support the small-scale farming of rubber trees and oil palms. By helping oil palm and rubber outgrowers to develop their farms and by supplying tools and services to support their operations, SIFCA is both optimising its own growth and strengthening local communities.

Bertrand Vignes

CEO of the SIFCA Group

The SIFCA Group sees the expansion of village plantations – and of the populations living around them – as central to its own growth. In 2009, SIFCA once again scaled up its sustainable development policy, enhancing its strategy for collaborating with village communities with the aim of boosting the economic, social and environmental conditions for agricultural development in Côte d'Ivoire.

Côte d'Ivoire – a model for success

Since focusing its activities on oilseed crops, natural rubber and cane sugar in 1999, SIFCA's strategy has centred particularly on village plantations. The focus has been on increasing the amount of land cultivated and on improving yields while at the same time protecting social structures and the environment.

When the SIFCA Group first started operating in Côte d'Ivoire, the agribusinesses that now comprise the Group (SAPH, PALMCI and Sucrivoire) enjoyed state concessions; in particular, they encouraged the creation of village plantations around their own industrial-scale plantations. Since then, changes in the country's land ownership regime have meant an end to new concessions from the state, while new land ownership legislation is proving very slow to implement, limiting agribusinesses' access to land. Moreover, rural populations have grown, and these communities now need to identify sources of revenue from agriculture. SIFCA's response has been to scale up its operations by developing village plantations around its own. SIFCA's production in Côte d'Ivoire is, therefore, now based on a balance between industrial-scale plantations and smaller village plantations.

The Group's primary emphasis is on supporting the 30,000 or so outgrowers who grow oil palms and rubber trees, since they supply more than 60% of the raw materials processed by SIFCA subsidiaries in these sectors. The overwhelming majority are very small outgrowers. For example, of the 22,000 oil palm outgrowers who supply PALMCI, some 15,600 – seven out of ten – have plantations smaller than five hectares, while almost one in five (4,200) farm between five and ten hectares. 8,500 outgrowers supply the SIFCA rubber subsidiary SAPH (Société africaine de plantations d'hévéas), of whom 7,500 or 88% farm less than five hectares. Most of these small outgrowers are members of local communities: around half actually live on their plantation, and that proportion is increasing. However, many local non-agricultural workers now also see larger rubber tree and oil palm plantations as an investment opportunity, and such plantations are operated by agreement with local communities.

"Rural populations have grown, and these communities now need to identify sources of revenue from agriculture."

The volumes produced have given rise to a whole range of products and services, such as the supply of selected nursery-grown seedlings (in 2011, SAPH supplied 3,000,000 seedlings, the equivalent of 5,000 hectares of plantation), the ▸▸▸

BERTRAND VIGNES

Bertrand Vignes trained at France's École nationale supérieure agronomique in Rennes (an elite university institution providing training in agronomy). Between 1981 and 2008, he held a number of posts in the Michelin Group, joining the SIFCA Group in 2009 as its Deputy CEO and heading its palm oil subsidiary PALMCI until 2010. In 2009, he was appointed CEO of the Group's rubber subsidiary SIPH (Société internationale de plantations d'hévéas) and since March 2011, he has been the SIFCA Group's CEO.

▶▶▶ award of 'quality bonuses' to outgrowers producing clean rubber, training in good practice for outgrowers, and so on. To manage training, SAPH has set up support systems involving over 300 staff, including mentors, inspectors and maintenance workers. This support is provided in conjunction with and on the advice of FIRCA, an intersectoral body funding agricultural research and consultancy.[1] In the oil palm sector, FIRCA supports agricultural cooperatives, while PALMCI also has more than 130 staff who are involved in assisting these cooperatives. Supporting outgrowers is, therefore, one of the Group's major priorities as it seeks to provide technical assistance and training in good cultivation practice, including harvesting techniques and nursery management.

However, the measures taken go further still. SAPH has also set up 21 collection centres, ensuring that outgrowers are more likely to have access to a nearby centre. These centres, which weigh and store the rubber collected from privately owned plantations, enable the Group to work more closely with village plantations and to make better use of what they produce. Meanwhile, the development of village plantations indirectly boosts the establishment or improvement of infrastructure, such as roads and tracks, schools and health centres. For example, in the areas where SIFCA's local subsidiaries operate, there are now more than 80 schools, 45 dispensaries and maternity hospitals, 31 community health centres and nursing stations that are available to the local community as well as to outgrowers and their families. SAPH and PALMCI have also embarked on building more than 200 houses using compressed earth bricks.[2]

"The professionalisation of agriculture has played a key role in the development of village plantations in Côte d'Ivoire."

The professionalisation of agriculture has had a key role in the development of village plantations in Côte d'Ivoire, and the associations representing the rubber tree and oil palm sectors (APROMAC[3] and AIPH[4]) play a major part in ensuring that these activities are sustainable. These two bodies bring together all the players involved in the sector, from individual planters to research and development scientists, and oversee the efficient organisation of the sector. One of their major priorities is to fix the monthly minimum price in line with market conditions, which is based on an agreement between sector players without intervention by the state. Once agreed, the price is communicated on the first of each month to all the planters *via* a text messaging system instigated by SAPH. Agreement and consensus between the parties involved is vital to the success of these sectors.

The Group's sugar subsidiary, Sucrivoire, also operates a village plantation programme. This mode of operation, which is the dominant model in countries such as Thailand, is as yet relatively under-developed in Côte d'Ivoire, however, and the Group is looking for ways of increasing the amount of land available for planting.

Innovative schemes for village growers

Any responsible agribusiness sets great store by strengthening its relationship with village growers and by improving their quality of life, so specific schemes can be very helpful on occasion. A sickness insurance scheme for outgrowers, launched by SAPH in 2009, is the most concrete example of this. The scheme now has more than 1,180 members. PALMCI has recently launched 4PH (Plan de Prévoyance des Planteurs de Palmier à Huile), a similar scheme for palm oil growers, to make it easier for planters and their families to gain access to medical care. A payment is deducted from each outgrower's salary every month, in return for which 80% of the cost of all medical consultations is met for themselves and four family members. 70% of the cost of medicines is also covered.

PALMCI, the SIFCA Group subsidiary that specialises in running oil palm plantations and producing crude palm oil, is currently devising an innovative funding programme – the first of its kind in Côte d'Ivoire – to help village growers to develop and expand their plantations. It has three main components: fertilisation of existing plantations; replanting and enlarging areas that are currently being farmed; and establishing new plantations on land that is currently lying fallow. A support and development fund has been set up to channel donor funds to the planters in the forms of loans that will finance their plantations.

Finally, SAPH has recently launched a savings scheme for outgrowers in conjunction

[1] *FIRCA serves production sectors and public sector bodies responsible for funding applied research, agricultural consultancy, vocational training and capacity building programmes for agricultural and forestry organisations.*

[2] *Compressed earth bricks are made from sifted earth that has been damp slightly and then compressed using a press. While still damp, the bricks are then stored for drying under plastic sheeting for between one and three weeks.*

[3] *APROMAC (Association des professionnels du caoutchouc naturel de Côte d'Ivoire) was set up in 1975.*

[4] *AIPH (Association Interprofessionnelle du Palmier à Huile de Côte d'Ivoire) was set up in 2002.*

with Microcred. Outgrowers need to be able to take advantage of periods when rubber prices are high if they are to be able to save effectively. The new scheme enables them to choose what deduction is made from the proceeds from their harvest (a percentage or a fixed sum) and also to decide for themselves the payment period (one year, three years or five years). Since the scheme was launched in early November 2011, it has proved a substantial success, with 30 contracts signed for the Aboisso sector and 15 for the Bonoua sector.

A SUB-REGIONAL STRATEGY

SIFCA also operates in Ghana, Nigeria and Liberia and is keen to reproduce in those countries the model for success it has established in Côte d'Ivoire – maximising the country's agricultural potential at the same time as supporting village communities. In Nigeria, where the Group has been based since 2006 through its subsidiary Rubber Estate Nigeria Ltd (RENL), a project to develop village plantations financed jointly by the Group's rubber holding company SIPH and the Michelin Group has facilitated pilot plantations designed to encourage local planters to take the initiative for themselves. In Liberia, meanwhile, the Group signed a concession agreement in early 2011, providing for 11,000 hectares of village plantations to be created, helping to develop rubber tree and oil palm culture. These projects are likely to prove attractive to donors, since such activity is highly effective as a vector for development in particularly under-developed regions.

"This project has given huge new momentum to Ghana's agriculture."

In 1995, the Ghanaian state, working in association with Ghana Rubber Estate Ltd (GREL), launched a large-scale project to develop plantations in the west of the country based on a tripartite agreement between a financial operator, a technical operator, and ROAA, the Rubber Outgrowers and Agents Association. This agreement means that the interests of the planters are properly reflected, and the project's main aim is a sustainable reduction in rural poverty. Following the success of the three initial stages of the programme, stage four was set in motion in 2010 with the aim of enabling 2,750 new outgrowers to create a total of 10,500 hectares of rubber tree plantations. The financial operator makes loans available to village planters to cover the full cost of the plantation before the trees reach maturity. The technical operator, meanwhile, provides technical help and support, for example by organising training or by supplying saplings and other inputs at cost price. The village grower, finally, undertakes to make his land available to grow rubber trees, to follow the recommendations made by the technical operator, and to supply the scheme with rubber until he has repaid his loan. This project has given huge new momentum to Ghana's agriculture: by 2010, more than 5,600 outgrowers were farming an estimated 21,100 hectares, including 4,500 hectares given over to production.

The output from industrial plantations is still higher than that from village plantations, but the balance is gradually shifting: within ten years, Ghana's natural rubber production is forecast to exceed 60,000 tonnes, four times the 15,000 tonnes recorded in 2011, and 70% of this total is expected to derive from village plantations, as against just 30% in 2011.

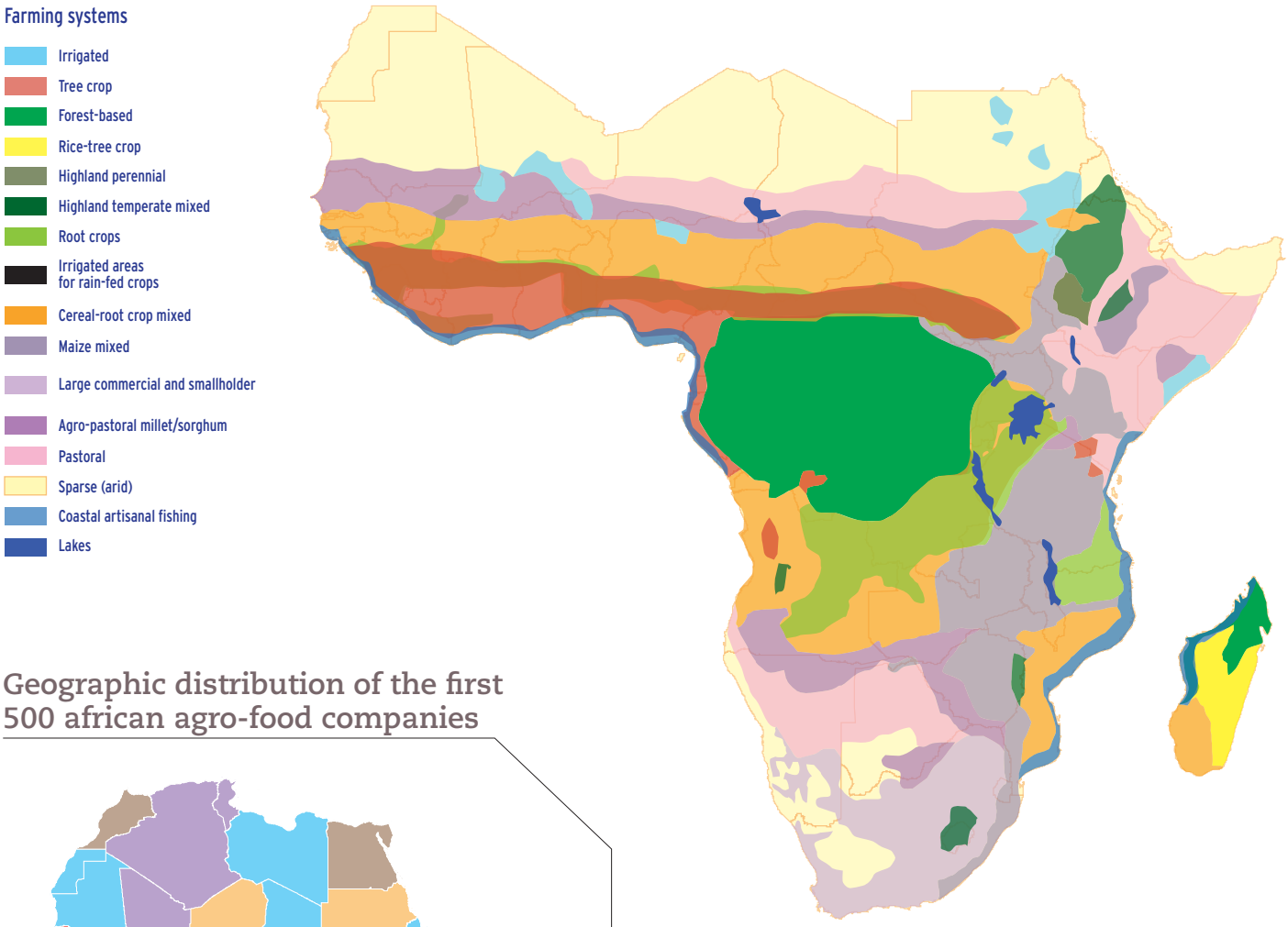
The aim of these programmes is to ensure balanced development between agribusiness and village and private sector planters, because such a balance is essential if this type of farming is to be sustainable. Finding the right way of doing this is, therefore, a major challenge for the SIFCA Group but also a tremendous lever for economic development in the countries of West Africa. As Côte d'Ivoire's former president and the father of independence Félix Houphouët-Boigny once commented, *"Our country's wealth is based on its agriculture"*. ●

FOCUS

The SIFCA Group was set up in 1964 and is a major agribusiness player in Africa. The group is involved in running plantations and in processing and marketing palm oil, natural rubber and cane sugar. SIFCA employs more than 25,000 people and has nine subsidiaries in five countries.

Developing the agri-food and agro-industry sectors in sub-Saharan Africa has become a global challenge in order to combat food crises and meet the growing needs of a fast-increasing population. Massive reinvestment in the agricultural sector is therefore imperative – for governments, producers and private investors.

The agribusiness sector in Africa



Notes: Projection = geographical (lat/long)
Source: J. Dixon and A. Gulliver with D. Gibbon, Farming Systems and Poverty : improving Farmers' Livehoods in a Changing World, 2001.

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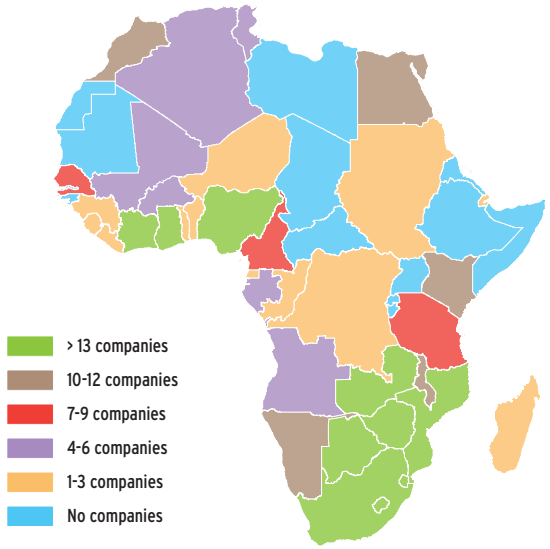
Geographic distribution of the first 500 african agro-food companies



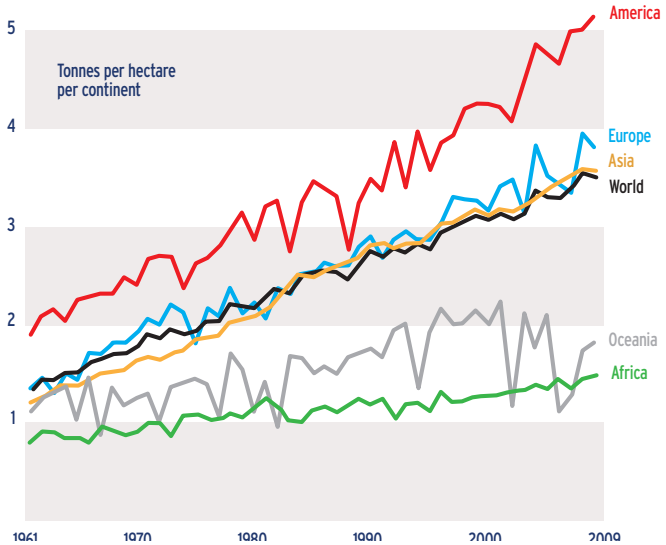
Note: Figures include headquarters and target market
Source: OECD Development Centre (2008); based on "Les 500 premières entreprises africaines" (Jeune Afrique, 2007) and companies' annual reports.

Use of technology designed to improve agricultural productivity, 2001 – 2003

REGION	Irrigated land (percentage of cultivated land)	Fertiliser consumption (kg/ha of agricultural area)	Tractors per 100 km2 of agricultural area
East Asia & Pacific	N.A.	N.A.	89
Eastern Europe & central Asia	11.2	34.7	185
Latin America & the Caribbean	11.4	89.6	123
Middle East & North Africa	32.7	83.3	142
South Asia	38.9	106.7	129
Sub-Saharan Africa	3.6	12.5	13
Europe (monetary union)	17	205.9	1 002

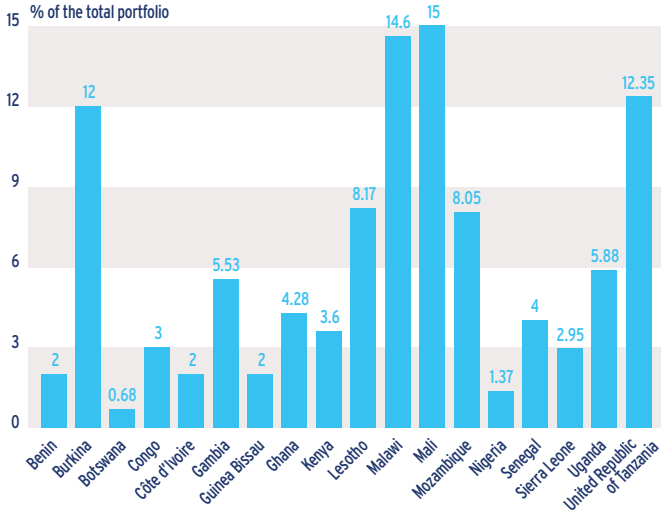
Source: World Bank data cited in UNECA & African Union, 2009

Global yields 1961-2009



Source: FAO, 2009

Share of commercial bank lending to the agricultural sector, 2008



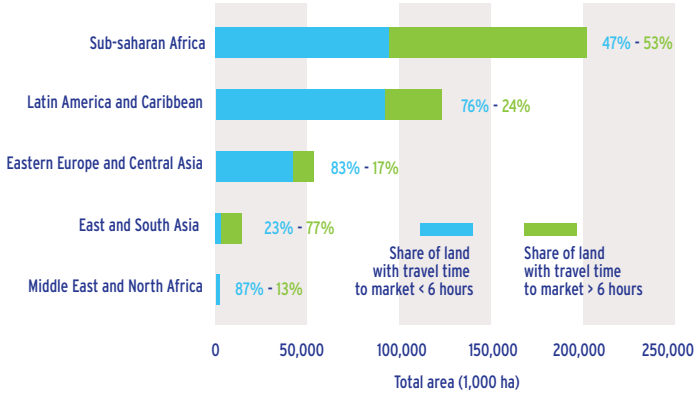
Sources: Nomathemba Mhlanga, Les investissements du secteur privé dans l'agrobusiness en Afrique Subsaharienne, FAO, 2010
CIA - world-factbook, Central bank of Congo, Central bank of Nigeria, Central bank of Kenya, Central bank of South Africa; BCEAO, 2008

Growth rates in public agricultural research expenditures, 1976-2000

	1981-1991	1991-2000
Sub-Saharan Africa	1.02	-0.15
Asia-Pacific	4.67	3.35
Latin America & the Caribbean	1.86	0.32
West Asia & North Africa	4.12	2.93
High income	2.43	0.52

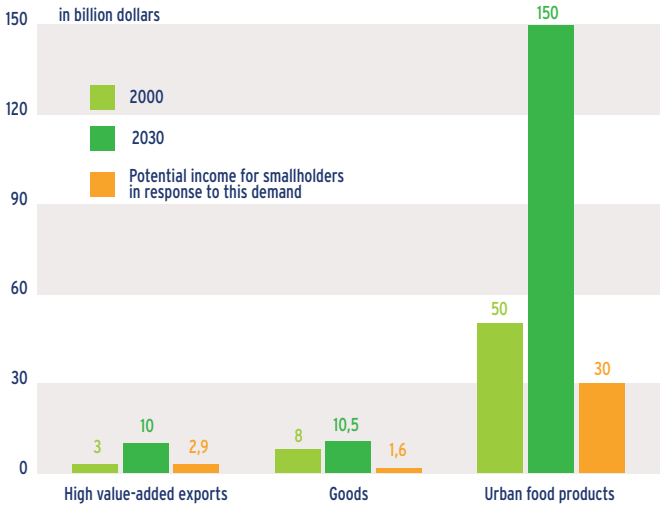
Source: Beintema and Elliott, 2009

Potential Availability of Uncultivated Land in Different Regions



Note: Data identify uncultivated land with high agro-ecological potential in areas with population density of less than 25 persons /km²
Source: Fisher and Shah, 2010

Expected increase in intra-African demand 2000-2030



Source: NEPAD secretariat, 2005

Challenges for agricultural financing

With state funding coming to an end, Ghana's Agricultural Development Bank is reorganising to meet the agricultural sector's needs more effectively – stepping up its strategy of specialisation, creating new products, strengthening its branch network. Growth is happening and agricultural loans are advancing at a remarkable pace. For the bank, however, finding additional financing is crucial in order to expand its activities.

Dr Henry Alhassan Shirazu and Thomas de Gubernatis

Policy Implementation Co-ordinator, ADB
Senior Project officer, AFD

The main object of the Agricultural Development Bank (ADB) was to provide medium- and long-term financial intermediation and related services to the agricultural and agro-allied sectors in order to make agriculture attractive through modernising its operations; create employment, especially rural employment; provide raw materials for local industries; provide foreign exchange; and improve the living standards of those in the sector.

Initially, funding was largely provided by government and multilateral development banks, mainly the World Bank, the European Development Fund, and donor agencies such as USAID. This was on-lent to farmers to finance agricultural projects in the areas of poultry, rubber, oil palm production and processing, and fishing. Funds were used for land preparation, importation of plant and equipment, and working capital. Investments resulted in the commercialisation of agricultural products and by-products, and in transforming several small-scale enterprises into medium-scale enterprises, providing the foundation for Ghana's industrial and socio-economic growth.

With the eventual abolition of government funding, the bank had to expand its branch network, mobilise additional deposits, and source funds from multilateral development banks, mainly the African Development Fund (AfDF), the African Development Bank (AfDB), and the World Bank.

Foreign exchange losses (due to financial sector reforms), loan defaults, removals of subsidies on agricultural inputs, and production-related losses led to the rapid deterioration of the bank's overall credit portfolio. This resulted in its re-capitalisation in 1990.

This, coupled with the lifting of restrictions on banks to lend at least a quarter of their lending portfolio to the agricultural sector increased pressure on the ADB (with its mandate to finance agriculture) for short-, medium- and long-term agricultural investments.

Current Trend

The ADB began to restructure its business model in 2009 due to its systemic operational uncompetitiveness within the dynamic national and international financial environments. Its restructuring was informed by a three-year corporate strategic plan, aimed at ensuring that the ADB's operations were consistent with modern universal banking practices, in order to meet the requirements of increasingly enlightened investors, customers and shareholders.

The restructuring entailed re-aligning the bank's departments and business units to enhance customer satisfaction, comply

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THOMAS DE GUBERNATIS

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with industry best practices, and achieve profitability. A new management team was also recruited to actualise the strategic plan and create new strategic business units such as corporate, retail, development finance, transaction banking, and technology. Consequently, rolling out new products was consistent with universal banking functions and was responsive to the needs of agricultural investors.

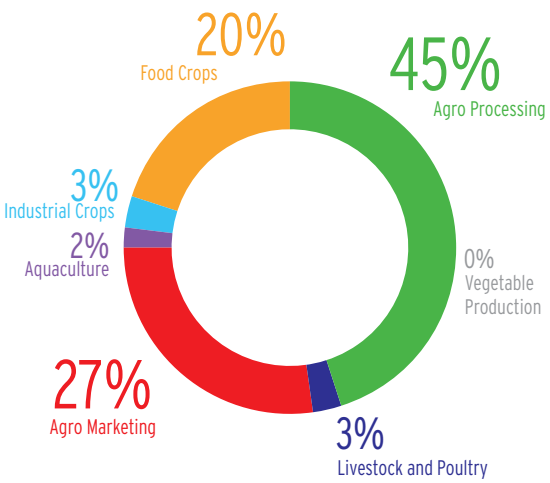
The ADB also expanded its branch network in an effort to bring banking services closer to investors, particularly those engaged in agriculture and agro-based industries. Since June 2010, 22 new branches have been opened (bringing the total network to 91 branches) in largely rural, agriculturally active communities, corridors and commercial centres with potential for agricultural production.

Since restructuring, the growth of the bank's balance sheet has been impressive, with total net credits growing from GHS 372.86 million (EUR 186 M) in 2009 to GHS 576.99 million (EUR 288 M) in 2010. Over the same period, lending to the agricultural sector climbed from GHS 105.3 million to GHS 174.2 million, representing an increase of 64.5%. This translated into an increase in agriculture's share of the total credit portfolio from 24.1% in 2009 to 28.9% in 2010, showing a purposeful channelling of credit to the bank's agricultural portfolio.

Such growth reinforces the ADB's position as the country's number one financier, holding over a third of total agriculture sector credits. The bank's success was recognised in 2010 with its nomination as Bank of the Year in Africa at the Africa Investor Agribusiness Awards in South Africa. The ADB was recognised for its strides in financial intermediation tailored to the agricultural sector, and its experience accumulated in this area. To further consolidate its position as the premier financial institution in agricultural lending, the ADB's total loan approvals for agricultural purposes made in the first half of 2011 increased by nearly 70% (financing of the cocoa campaign exclusive), compared with those made in the same period last year. This significant increase in approvals in agriculture-related loans is fulfilling one of the core objectives of the bank's three-year strategic plan – to increase the share of agriculture in its credit portfolio to 40% by the end of 2012.

Within the agricultural sector, the subsector that receives the greatest attention is the agro-processing subsector, which accounts for about 45% of sector approvals. This is followed by the agro-marketing subsector (Figure 1).

FIGURE 1: SUB-SECTOR APPROVALS IN 2010



Source: ADB

In partnership with the Ministry of Food and Agriculture (MOFA) and Development Partners such as IFAD and Agence française de développement (AFD), the bank has provided support for farmers under various schemes, such as the Inland Valley Rice Development Project[1], the Rubber Outgrower Programme (Box), etc. It has also provided substantial support for several government initiatives, such as the Youth in Agriculture Programme[2], among others.

Key Challenge

The most significant and critical challenge the ADB faces in its quest to finance and support agricultural investors at all scales is the lack of medium- to long-term financing. This has made it very difficult for the ADB to provide the necessary finance to purchase machinery and plants for agro-processing and to provide working capital for ventures with long gestation periods.

The lack of term financing has also made it difficult to consistently develop agricultural and agro-processing industries, thus affecting the sustainable growth of the economy of the country. ▶▶▶

[1] This project aims at increasing rice production and the incomes of producers, traders and processors. Its components are land management; credit for crop development; capacity building; adaptive research and surveys; and project management. It will also provide social service campaigns. The project will directly benefit about 10,000 households (60,000 people) through continuous employment and will create an additional 8,500 seasonal jobs. Financing of projects by the African Bank Development Credit Facility (AFDB) will create additional employment opportunities.

[2] This is a government agricultural sector initiative, the objective being to encourage the youth to take up farming as a lifetime vocation. Benefits will be derived from employing the youth in the sector. The programme includes training in agricultural practices, book keeping and banking, complemented by on-the-job training from the ADB's customers. Successful trainees will be eligible to receive financing from the ADB to start their own projects.

Development initiatives for sub-Saharan agriculture and food production industries

▸▸▸ Description of ADB's Strategy in Agricultural Sector

To support its agricultural sector strategy, the ADB has developed a sharpened focus on agriculture, by making available asset financing facilities to assist in developing each segment of the value chain. Products and lending facilities have been designed and adapted to provide credit to each sector and type of client. These are tailored to clients' needs, using the bank's understanding of the drivers and structures of the underlying businesses, and the business processes involved. Consequently, its product range is large and flexible: facilities can take the form of short-, medium- or long-term loans; overdrafts; and leasing, depending on the nature/type of financing required. Key sub-sectors where the ADB has a presence include industrial crops (raw materials for industry), food crops, export crops, agro-processing, agro-marketing, agribusiness products, agro inputs, and agro services.

Financing of certain farming operations could take the form of a five-year loan, at a special interest rate of 15% (while base rate was 16.75%), using a variety of potential securities, such as cash collateral, life policies, landed properties, plant and equipment, and personal guarantors, among others), which could be granted to individuals, farmer-based organisations, groups, and companies.

There are other specialised financial products, like institutionalised personal loans for some farmers, like rubber farmers (Box).

Vision and Potential Opportunities

The ADB's vision for the agricultural sector is to help it and its value-chain grow by providing medium- and long-term financing on a strategic and sustained basis. This is premised on the agriculture sector's huge potential, given global market prices for most agricultural products.

However, executing this vision and pursuing the available opportunities require the availability of term financing from various sources, which should be accessible to the ADB. Furthermore, with the establishment of microfinance institutions and the growth of Rural Banks in recent times, the monopoly that the bank used to enjoy in financing small-scale agriculture is gradually being eroded.

In spite of significant challenges, the ADB has made giant strides in the past two years. To consolidate these, the bank's strategy for 2011 involves

Though supporting out-growers is in its early stages, the ADB is hopeful because of the partnership it has developed with international development agencies such as AFD. •

FOCUS

ADB is a state-owned Ghanaian bank, created in 1965, whose primary mission is to provide loans and financial services to the agricultural sector. A major player in the Ghanaian banking scene, ADB has the third largest national branch network and ranks no.5 – of 27 credit institutions in all – in terms of assets and loans

BOX: SUPPORTING OUT-GROWERS: THE ADB-AFD PARTNERSHIP

With the common goal of supporting the development of the agricultural sector in contributing to poverty alleviation and economic growth, the ADB and AFD have since 1992 entered into a long-term partnership to finance small-scale farmers in spite of the challenges involved. This culminated in AFD providing a non-sovereign loan of EUR 14 million for phase IV of the Rubber Out-grower Plantation Programme in 2010 (since 1995: 5,450 rubber outgrowers have been assisted to plant 18,952 ha, 868 outgrower farms involving 3516 ha are under tapping and get a monthly income of EUR 1071.6 out out of a 4 hectares farm).

The ADB and AFD have promoted a contractual agricultural scheme that has so far demonstrated its efficiency based on a tripartite agreement. The scheme brings the ADB, as the financial operator, together with a technical operator and farmers.

The role of the technical operator is crucial as it guarantees, first, the technical quality of the investment (crops); second, maintenance of the investment, by providing inputs and technical assistance; third, a market; and fourth, repayment of the loans (paying farmers for the product after deduction of each instalment).

The long-term vision of AFD is impressive. Having supported the programme for about fifteen years through the government, when it withdrew from this role, AFD elected to continue providing financing to the ADB at its own risk, without any state guarantee.

The next step in the ADB-AFD partnership entailed a shift from a project to a sector approach. Having satisfied the banking sector with financing small-scale farmers on a long-term basis, AFD is now prepared to grant dedicated long-term facilities to the ADB.

The innovation brought to the scheme over the years has to be highlighted, particularly regarding the modalities of the loan repayments. Monthly instalments have now shifted to repayments indexed to the farmer's turnover, allowing the fast repayment of loans when international prices are good, while not putting farmers in a difficult financial situation when international prices drop. This has led to about a 100% repayment rate from project beneficiaries.

Africa at the heart of growth

The agricultural sector in sub-Saharan Africa is impeded by numerous constraints: production weaknesses, the difficulty of accessing finance, infrastructure conditions and the impact of the regulatory environment. Yet governments are introducing incentives and targeted support, investments are being made, trading methods are evolving. Responding to this context, LDC has developed a strategy with five core components.

Frédéric Marret

Chief Executive Officer of Louis Dreyfus Commodities, Middle East and Africa Region

The global food crisis shook governments in many African countries, and world food prices remain highly volatile. The fear of "food riots" has caused increasing government interventions, including food commodity export bans in countries with surpluses, panic buying and "land grabs", making the markets much more difficult to read.

Yields have remained stagnant, and a non-conducive business environment has dissuaded investors from converting virgin lands into productive ones. Consequently, Africa is heavily and increasingly dependent on food imports - over the last decade, the import share of total grains, sugar and vegetable oil supplies was respectively 20, 45 and 55% of consumption, compared with 8%, 18% and 9% in 1970 (USDA, 2010).

Sub-Saharan Africa's urban population is expected to reach 62% by 2050 (UN Habitat, 2010). Urban populations are particularly vulnerable to food price hikes. These populations are generally poor - between 30 to 55% of sub-Saharan Africa's 320 million urban dwellers live below the poverty line -, and unlike rural populations, they have limited or no possibility of growing their own food (UN, 2010). This has given rise to serious concern about Africa's capacity to feed its populations. However, there are also valid reasons to believe that the situation could be drastically improved this decade. The steady growth of populations and GDPs, improvements in regulatory frameworks, and governments' efforts to boost domestic production and attract foreign investors should improve access to affordable food.

FRÉDÉRIC MARRET

Frédéric Marret was appointed Chief Executive Officer (CEO) of Louis Dreyfus Commodities (LDC), Middle East and Africa Region in September 2011. He joined LDC three years ago and has acquired an in-depth knowledge of the region through his previous role as regional CFO. Prior to this, he accumulated more than 20 years' experience in the hard commodity sector in Europe and North Africa, as operational CEO and in corporate finance.

Major Constraints

Market inefficiencies stemming from flawed supply and distribution systems, poor infrastructure, and at times, inadequate regulations have historically made food commodities in Africa very expensive. The following are some of the constraints agribusiness operators in Africa face.

One is production. More than 15% of the world's arable land is found in Africa, but the continent generates only 5% of global agricultural output. The dearth of local agricultural services, including research and limited access to agricultural inputs impedes domestic production. This is compounded by an absence of efficient producers' organisations enabling cost-effective sourcing of inputs and access to private and sustainable sources of rural finance and technical and marketing services. African farmers use 13 kilograms of fertilizers per hectare per year, compared to 73 and 190 used by North African and East Asian farmers respectively (FAO, 2009). Hence, yields are substandard. Also, difficulties associated with owning and trading agricultural land has impeded farming-related investments.

A second constraint is finance. Access to local finance is an issue for small-scale and commercial farmers alike; this has prevented farming intensification and expansion to virgin arable land. Local working capital is hard to obtain, expensive for merchants and nearly inaccessible for farmers. Crop insurance is rarely available for producers, and the cost of credit insurance is prohibitive for traders. There is no scope for small-scale farmers to forward-sell crops and obtain finance through pledging contracts, whereas this has proven an important tool to boost productivity and combat rural poverty in more developed countries. With limited foreign exchange reserves, any increase in ▸▸▸

▶▶▶ import prices or decline in export earnings forces a decline in food imports, negatively impacting the urban population first.
A third constraint is infrastructure. Rural storage capacity is lacking, leading to major physical losses and very seasonal domestic supplies, as produce is released rapidly after the harvest at depressed prices. Roads are generally derelict, and rail systems in most African countries have not been maintained since the independence period. Many African ports have shallow drafts, preventing large vessels from berthing and resulting in higher ocean freight costs. Ports are also often congested, resulting in importers having to pay demurrage charges to ship owners. As an illustration, a large portion of imported goods for the 30 million people living in western Democratic Republic of the Congo (DRC) transit *via* Matadi, DRC's main access to the sea - this port has a draft of 7 meters, which cannot accommodate vessels of more than 20.000 MT.
The regulatory framework is a fourth constraint faced by agribusiness operators in Africa. Though some noticeable improvements have been made, overall, doing business in Africa remains difficult. Government interventions (e.g. bans on exports, parastatal monopolies, physical food reserves) and restricted access to transparent market information, combined with an inability to combat corruption, often represent high barriers to new entrants. The resultant price paid by the end consumer reflects the limited number of market players. In such distorted systems, global price hikes are always passed on to the consumer, while downward price trends are rarely transferred.

The Paradigm is Shifting

In spite of these constraints, most global agribusiness players have set their sights on sub-Saharan Africa and the bounty of growth opportunities it offers. It represents 14% of the world population but only 5% of global consumption, and commodity consumption levels are gradually approaching those of developed economies. African governments are beginning to promote domestic agriculture, shifting from a "hardware" type of support to a "softer" type of assistance, including research developments and training, and they are calling on private sector operators to share their skills and co-invest. Large-scale investments in farming create demand for equipment and inputs, warrant investments in storage and processing units and are conducive to developing a pool of trained farm managers and technicians. Such developments benefit small-scale farmers and result in a more constant supply to urban areas. Investment in large infrastructure projects such as ports, storage, and domestic industries are being launched, often driven by the private sector. Intra-regional trade flows can be established by leveraging the strengths of each sub-region, which can boost export earnings. Organisations such as the SADC in Southern Africa and others elsewhere are strengthening free trade areas, which are stimulating intra-regional commodity flows and redefining the standards for efficient trading. Business methods are evolving: regional stock exchanges are being opened, banks are increasing their roles in commodity trades and projects, and people are buying commodities in more sophisticated ways (*via* premiums, trade finance, etc). The distribution system is also evolving rapidly, with the expansion of retailers' chains, which are offering more competitive prices, thanks to their procurement power. This illustrates the trend towards integration for Africa's agribusiness sector.

An Africa-specific strategy

Today, the Louis Drefus Commodities (LDC) network consists of 18 offices that import and export commodities throughout more than 50 countries in the region, making the group one of the top three importers and exporters. Its large and growing footprint in Africa and given it access to prime local business knowledge.
The group's strategy is driven by the Africa-specific constraints and opportunities it has identified. The following are the five core elements of this strategy.
First, buy either directly from the producer or as close to the producer as possible. LDC is investing in developing logistics assets to originate closer to the farmers. It is also investing in enhancing farming techniques and access to inputs to increase yields and production. LDC believes that such investments will gradually contribute to developing efficient and sustainable producers' organisations, the absence of which has so far prevented farmers' access to decent technical, financial and marketing services.

FOCUS

Louis Dreyfus Commodities (LDC) is one of the leading global commodity trading houses. The group's portfolio includes oilseeds, grains, rice, citrus, cotton, coffee, metals, milk, fertilizers, sugar and ethanol businesses. With 160 years in the commodities business, LDC maintains a dynamic culture with 34,000 employees at peak season, and offices in more than 55 countries. LDC has been actively involved in commodity markets throughout the African continent since it opened its office in South Africa in 1924. Three years ago, LDC decided to place Africa at the heart of its growth strategy, by creating a stand-alone Middle East and Africa (LDC MEA) regional headquarters in Dubai.

Second, build up a domestic, intra-regional and international multi-commodity trade program (imports, exports, logistics, and sales). In the majority of African countries, market size remains limited and trading one or two commodities is often not viable. In most of its MEA offices, LDC has implemented a multi-commodity approach to optimise overhead costs, reduce price volatility exposure, and maximise transport efficiency. Thanks to this strategy, logistics gains are passed to end-consumers and producers, and price volatility is easier to manage for the trader. LDC also sees an opportunity to leverage African countries' respective surplus capacities to fill the regional food gap, and has developed substantial intra-regional flows. Finally, LDC's global sourcing capacity enables it to propose multiple commodity trade flows that match clients' needs with best in class risk management and trade finance provision, as well as freight solutions. LDC accesses the Group's integrated flows, e.g. sourcing oilseeds from LDC's plants in Argentina, grains from US elevators, Black Sea silos, and ports in Latin America and Australia, rice from Pakistan, and sugar and citrus from our large asset network in Brazil, to all African ports. The Group's logistical expertise, coupled with its global network, has allowed LDC to become the N° 1 Rice importer in MEA, with 30% market share in Africa.

Third, develop distribution logistics. Local warehouses allow for convenient storage and ex-warehouse sales, and distribution centres are being created to store goods for domestic sales, primarily in main urban areas. LDC is planning to build new distribution centres based on experience in Egypt, Kenya, Uganda and South Africa, and the SSI experience. Further down the value chain, LDC is considering entering into branding and distribution to final consumers in collaboration with strategic local partners.

Fourth, invest in transformation assets. LDC's processing strategy in Africa is to develop the continent's industrial infrastructure in order to expand the business of the region, as well as the Group's business within the region. Fifth, cement long-term partnerships with local leaders. Because the African economy is so diverse, local partnerships are essential to LDC's understanding of the region and its business success. Such partnerships are occurring at both public and private levels, through engagement with governments and numerous local commercial entities. The Group's strong regional presence is expanded and strengthened *via* local partners, who provide a physical presence, local management experience and a network beyond the LDC base.

The food crisis of 2008 was a rude awakening. It made policy makers in sub-Saharan Africa conscious of the need for profound change in order to reduce price and supply volatility, increase domestic production and ease market inefficiencies.

Though some major constraints remain, the recent period has brought some noticeable improvements, including the implementation of large public/private transport infrastructure investment programs. A fast-growing middle class, regional banks with a pan-African coverage, efforts by governments to attract private sector investments and skills, and the rapid expansion of a formal retail system all constitute valid reasons for hope.

The main challenge of the next decade will be to encourage the transformation of sub-Saharan Africa from an import-dependent region into an industrial player that cultivates its unused arable lands to feed its rural and urban populations and become a regional and world granary.

LDC believes that there is a great role to play for innovative players who understand the growing need to fill the production/consumption gap and who can propose solutions to realise farming potential in the region through large-scale farming investments, which will in turn benefit small-scale farmers. For this to occur, it will be essential to reform the land tenure system to enable ownership by private individuals and companies and to make land tradable.

Increasing domestic and intra-regional trade flows are essential instruments for reducing Africa's exposure to food supply and price volatility and for boosting export earnings. However, these will require additional reforms to reduce government-induced market distortions, and continuous support to inter-regional economic entities.

Provided that the region's governments pursue a path of bold reforms to create a conducive business environment for private operators, LDC believes that its model – based on strong local partnerships coupled with the group's global experience in implementing agricultural technologies and optimising productivity – will contribute to helping sub-Saharan African countries execute a growth plan as impressive as that of Latin America in the 1980s. •

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Refining trade regulation to support and stabilise local agricultural production in Africa

Rice and sugar production in West Africa is inadequate. Imports meet a significant proportion of this region's consumption requirements, undermining its food sovereignty. Trade regulation, if it is modified, can assist the development of local production. In order to achieve this it needs to provide differentiated protection, utilising a wider range of instruments and adapting to the specific needs of individual sectors.

Arlène Alpha and Cécile Broutin

Director of GRET's Public Policy and International Regulations team
Director of GRET's Environment, Business and Family Farms team

For African countries, developing local agricultural production in order to be less reliant on imports is a necessity. Their food sovereignty is at stake – as recent agricultural price spikes have illustrated. Moreover, developing this sector would provide a large number of jobs across the industry's various sub-sectors. Rice and sugar are the key products exemplifying these challenges in West Africa. These socially and politically sensitive products face numerous challenges: production of sufficient quantity and quality, market availability, competitiveness, price, etc.

ARLÈNE ALPHA

Arlène Alpha, who has a doctorate in development and environment economics, joined GRET in 2003. She has been director of the Public Policy and International Regulations team since 2007. Her fields of expertise include agricultural policies and trade negotiations, regional integration processes and food security. She worked as a consultant with the NGO Solagral for around ten years.

CÉCILE BROUTIN

A trained agro-economist, Cécile Broutin has been the Director of GRET's Environment, Business and Family Farms team since September 2008. She was based at GRET's Senegal office for ten years, working in several West African countries during this period. Her fields of expertise are agricultural development, industrial development, and the processing, marketing and consumption of agricultural and agri-food products.

Trade regulation is one of the key elements within a wider policy of supporting these agricultural sectors. The direction it should take and the instruments to be used have yet to be determined. A very open trade environment, resulting in low levels of customs duties, brings the danger of exposing local industries to excessive import competition, impeding their growth. Conversely, inflexible import restrictions entail risks of a different kind when local industries are incapable of meeting the population's needs. Analysis of the specific cases of rice and sugar in West Africa argues for trade regulation that is more differentiated and flexible.

The challenges of local production

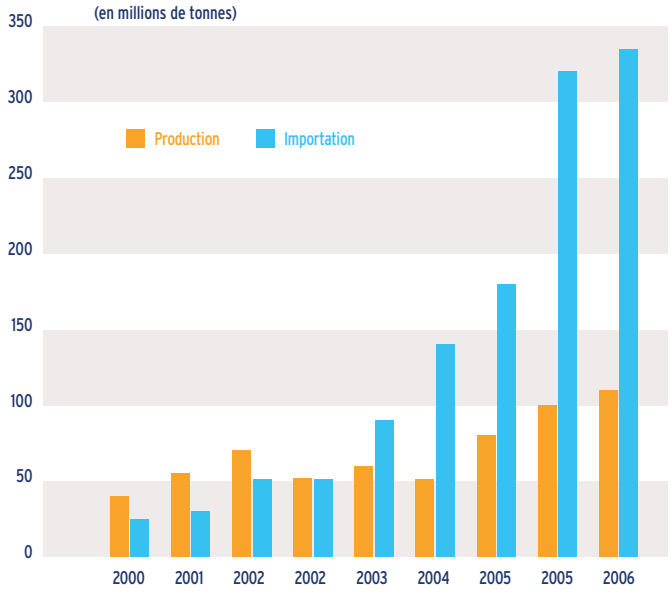
Rice is a basic foodstuff in West Africa, consumed in the coastal states in particular, where consumption levels (more than 60kg per person per year) are close to South Asian levels. Demand for rice is growing fast, too, driven by population growth and urbanisation.

The potential for growth in this sector is regarded as very substantial. Rice is cultivated almost everywhere in West Africa (Bricas *et al*, 2009) but most particularly in Nigeria (which accounts for 2.4 million of the 5.5 million hectares cultivated in the region), Guinea (nearly 1 million hectares), Sierra Leone and Mali (0.5 million hectares apiece). This potential is largely under-utilised and local production remains insufficient to meet consumption requirements (Figures 1 and 2). Production uses various cultivation systems and is characterised by highly variable yields, ranging from 1.02 tonnes per

"Trade regulation is one of the key elements within a wider policy of supporting these agricultural sectors."

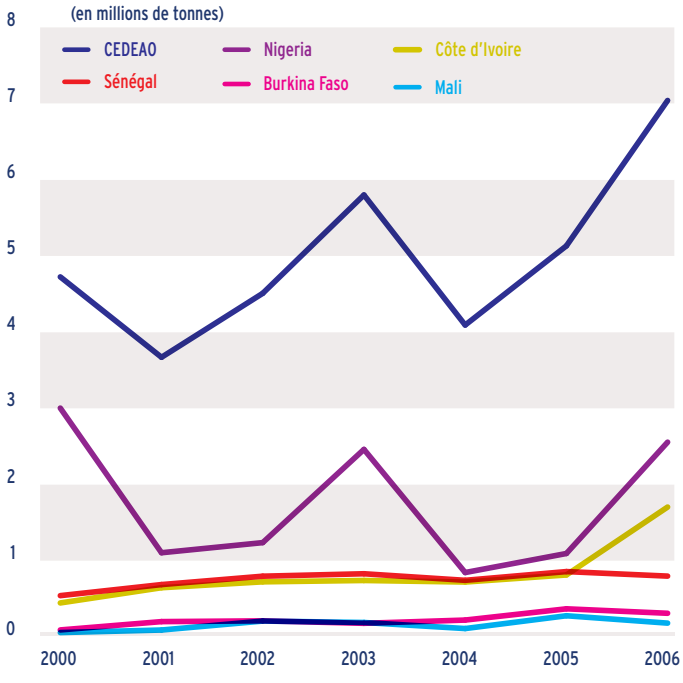
hectare (t/ha) for rainfed lowland rice to 4.19 t/ha for irrigated rice. Overall, however, the region's yields are low: West Africa's 1.9 t/ha compares with 2.6 t/ha for the African continent as a whole (FAO, 2009). Yields in Senegal and Mali can occasionally reach the levels achieved in Thailand (3 t/ha) but only over very limited areas. Growth in the rice sector is also impeded by quality problems (impurity levels) and high processing costs.

FIGURE 1: ECOWAS RICE PRODUCTION AND IMPORTS



Source: ECOWAS, FAO, in Alpha et al, 2008

FIGURE 2: RICE IMPORTS OF THE REGION AND 5 COUNTRIES



Source: ECOWAS, FAO, in Alpha et al, 2008

As a result rice imports have increased substantially in West Africa: today the region imports 5.2 million tonnes of rice, compared with 1.7 million tonnes in the early 1990s; it meets only 60% of its own needs (Sahel and West Africa Club – SWAC/Club du Sahel et de l'Afrique de l'Ouest – CSAO, 2011). Moreover the imported rice, sourced mainly from Thailand and Vietnam, is increasingly rice of inferior quality: broken rice represents 40% of imports.

Consumption of sugar is steadily increasing in West Africa (12.5 million tonnes in 2005), even though it remains a relatively expensive product. Consumption mainly comprises table sugar, yet there is strong growth potential in terms of industrial demand (especially for beverages) and for biofuel. Half of consumption is imported and only 10% of these imports are derived from intra-African trade. Production of cane sugar has advanced little in the last 25 years, rising from 4 million tonnes to 4.7 million tonnes across ECOWAS from 1980 to the mid 2000s. Three countries account for the bulk of production: Côte d'Ivoire (40%), Senegal (32%) and – to a lesser extent – Burkina Faso at 15% (Faivre Dupaigre *et al*, 2006).

"Local production remains insufficient to meet consumption requirements."

INEFFECTIVE TRADE REGULATION

Changes to trade regulations in West Africa have resulted in a simplification and reduction of customs duties (Box 1). For the rice sector, the Common External Tariff (CET) implemented in the UEMOA zone[1] in 2000 is especially ineffective in protection terms, standing at 10%. When it was introduced the priority was to ensure that poor urban populations had access to rice; this was achieved at the expense of boosting local production. Effectively the CET contradicted the stated goals of developing local production and intra-regional trade.

Nonetheless putting strong protectionist measures in place does not guarantee the growth of local production. UEMOA's weak CET certainly played a part in the growth of rice imports in the region, but there is no evidence that a more protectionist tariff alone would have increased production. Other factors must be taken into ▶▶▶

[1] *UEMOA (Union économique et monétaire ouest-africaine – West African Economic and Monetary Union) was established to promote economic integration among its member states (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo), by improving economic competitiveness in the context of an open and competitive marketplace and a rationalised and harmonised legal environment.*

[2] *In Senegal, consumers prefer imported broken rice to whole local rice. Yet the crisis of 2008 showed that when the price differential was reversed they quickly reverted to local rice.*

▶▶▶ account: consumer preferences,[2] supply constraints, infrastructure, etc. The case of Nigeria, where import bans were enforced between 1985 and 1995 in order to stimulate local production, provides further evidence here: production did increase significantly (from 1.4 million tonnes in 1985 to 2.9 million tonnes in 1995), but there were no lasting effects in terms of controlling imports, which rose again as soon as the measures were lifted. The lack of adequate support for production meant that these measures were ineffective overall – especially in terms of problems relating to the quality of the local rice (Lançon and Benz, 2007).

More protectionist measures were put in place for sugar. Raw cane or beet sugar from external markets is taxed at 20% under UEMOA's CET. Reference prices have been set, based on market prices in the European Union and the United States and the global price. Moreover companies in this sector frequently enjoy a monopoly of production, operating within integrated sectors. In Senegal until recently only the Compagnie Sénégalaise du Sucre (CSS) could import sugar – and liberalisation was partly offset by an equalisation system, ensuring that no imported sugar costs less than CSS sugar. It should also be noted that in Côte d'Ivoire the government decided to suspend sugar imports from 2004 to 2006 to counter a sudden surge in imports (Food and Agriculture Organisation of the United Nations – FAO, 2007).

"Putting strong protectionist measures in place does not guarantee the growth of local production."

Recent global price spikes have brought with them a kind of "protection" for the rice and sugar sectors and a strong response in terms of local production has been evident. In the rice sector, most countries have proposed ambitious targets for increasing production and have launched programmes to boost the sector: Mali's Rice Initiative, Senegal's Grand Agricultural Offensive for Food Security (GOANA – Grande Offensive Agricole pour la Nourriture et l'Abondance), Benin's Emergency Support Programme for Food Security (PUASA – Programme d'Urgence d'Appui à la Sécurité Alimentaire), etc. The impacts on annual production growth are clearly apparent: average annual growth of the area cultivated has risen to 3.8% compared with 2.2% before 2008, while production growth has increased from 3.7% before 2008 to 5.4% today (SWAC/CSAO, 2011). In Senegal for example, a second rice crop (off-season rice) has been introduced – which had not previously been considered possible. In the sugar sector investments are pouring in and plantations are expanding, with the twin aim of making up the domestic market deficit and developing exports. Investments planned in Mali and Senegal, for example, have set sugar production targets far in excess of the current production deficits. However, the high volatility of global agricultural prices could rapidly undermine the "protection" high prices have afforded local production industries and therefore make it necessary to review trade regulations in West Africa.

The value of more differentiated trade regulation

Within the UEMOA area, trade regulation reflects the very liberal approach and highly simplified model of the CET: four tariff categories, tariffs based on value only, plus an import tax (the TCI, or Taxe Conjoncturelle à l'Importation) of 10% applying to particular products. At the same time, the free movement of goods and people within UEMOA (as within ECOWAS[3]) is barely materialising. As a result, trade between the countries of West Africa remains very limited, around 10 to 15% (although informal flows should be added to this).

Comparison with other regional integration areas shows that common trade regulations are often more sophisticated for sensitive agricultural products. In the Mercosur[4] region, the introduction of a CET led to a reduction in the highest tariffs, which today do not exceed 20% for agricultural products – but states within the region can apply higher or lower tariffs, overriding the CET. In Europe, the customs tariff is based on a wide range of instruments, permitting highly specific, differentiated protection according to the sensitivity of each tariff line (Box 2). It is striking, too, to note that intra-regional trade is much higher in these regions than it is in West Africa: accounting for 35% of trade in the Mercosur region and 70% in Europe.

The latest developments in West African trade regulation are tending towards differentiated protection. Instead of adopt-

[2] *In Senegal, consumers prefer imported broken rice to whole local rice. Yet the crisis of 2008 showed that when the price differential was reversed they quickly reverted to local rice.*

[3] *ECOWAS, the Economic Community of West African States (in French, CEDEAO – Communauté économique des États de l'Afrique de l'Ouest), an intergovernmental organisation created in 1975, is the main organisation responsible for coordinating initiatives undertaken by the countries of this region.*

[4] *Mercosur, established on 26 March 1991, is an economic community comprising various South American countries (permanent member states: Argentina, Brazil, Paraguay, Uruguay and Venezuela; associate member states: Bolivia, Chile, Peru, Colombia, Ecuador).*

ing UEMOA's CET, ECOWAS has introduced a fifth tariff band at 35%. However, the difficulty of finalising the CET, and also of implementing the free movement of goods and people, shows how difficult it is to harness regional integration in order to stimulate regional agricultural production and compete with imports. Rice and sugar exemplify these challenges perfectly.

"Regional integration in West Africa can help to support and stabilise local production industries."

In the case of rice, discussions on the CET have stalled, caught between the choice of supporting production given the region's potential (Ghana favours a 20% tariff), and the choice of accessibility for everyone. Sugar is a focal point for tensions, too. Two member states, Nigeria and Ghana, have proposed that refined sugar should be taxed at 20% and raw sugar at 10%. Yet the majority of member states consider that raw sugars are finished products and can be substituted for refined sugar. Applying different rates could simply encourage changes in designation, switching from one tariff category to another.

Despite the challenges the process involves, regional integration in West Africa can help to support and stabilise local production industries like rice and sugar as they strive to compete with imports. This will mean reviewing common trade regulation: there is no doubt that the trend towards simplification and openness has gone too far. Without proposing a complexity that would over-burden administrative capabilities and open the door to fraud, the key issue here is to broaden the range of instruments used so as to provide more sophisticated protection reflecting the specific needs of the sectors involved.

In the short term at least, the conformity of trade regulations with WTO rules is a secondary issue. At a time when negotiations have ground to a halt and exceptions to the general rules of liberalisation are increasingly common, the idea of allowing Africa to be an exception is entirely defensible. Without granting them full exemption from WTO regulations, the idea would be to at least allow these countries to review commitments undertaken at a time when they were not yet independent. The key challenge is to construct a regulatory system which – combined with measures to support production – can help to develop intra-African trade. •

BOX 1: THE DEVELOPMENT OF AGRICULTURAL TRADE REGULATIONS IN AFRICA

Although there is no trade regulation system covering the continent as a whole, a number of major trends common to all African countries have emerged during the past three decades. Between 1980 and 1990, structural adjustment programmes were introduced. Applied across the board, they represented a radical departure from the approaches and trade policy instruments implemented previously: reduction in the number and level of tariffs, dismantling of state import monopolies, etc. In the early 2000s, as trade negotiations at the WTO were beginning to get bogged down and the benefits of liberalisation had yet to materialise, more attention was focused on "sensitive" production sectors and specific protection measures. Recent years have seen an acceleration in the process of regional integration. West Africa has seen a trade liberalisation scheme within the ECOWAS area and a Common External Tariff in the UEMOA area. In East Africa, the East African Community Customs Union was established in 2009.

BOX 2: EUROPEAN TARIFF REGULATION

European Union customs tariff regulation is extremely complex for products regarded as highly sensitive. Although variable import levies were discontinued in the 1990s in order to align the customs regime with WTO rules, Europe has created a protection system based on specific duties plus *ad valorem* duties, combined duties (*ad valorem* plus specific), tariff quotas and import schedules. For some products (tomatoes for example), the protection is based on a highly complex system of entry prices: taxation (*ad valorem* and specific) varies according to the time of year and the entry price of the imported tomatoes, ensuring that tomatoes do not enter the European market at an excessively low price.

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Lessons learned from this issue

BY BENJAMIN NEUMANN *EDITOR IN CHIEF*

Agriculture has re-emerged as a priority for sub-Saharan Africa. African nations recognise the key importance of this sector for enhancing food security and supporting the growth of their economies. With its over-dependence on imports and international market prices, Africa needs to transform this sector from the ground up. This is a necessity that can no longer be overlooked, following the food price crisis of 2008. The huge growth potential of African agriculture is also attracting private operators: more than 60% of the globe's unexploited arable land is on the African continent, and the African market – buoyed up by urbanisation and the emergence of a "middle classe" – is set to represent nearly one and a half billion consumers by 2050. The improvements made to regulatory frameworks, the efforts that have been made to stimulate agricultural production, and the transformation of the distribution system are finally making this sector more attractive.

Despite this progress, however, agricultural production and yields in Africa are significantly below international standards. Isolation, gaps in energy supply, limited access to agricultural inputs, shortcomings in land administration, and market inefficiencies are hampering the sector's development. Moreover, the positive knock-on effect on upstream industries (fertilisers, machinery) and downstream sectors (processing) is limited. Nearly 65% of the sector's value is still produced at farm level, as compared with 10% in industrialised nations. Agribusinesses face high prices for basic foodstuffs, deficiencies in the supply system and regulations that are at times inadequate. Infrastructural weaknesses and difficult access to transparent market information, combined with a lack of capital, represent major entry barriers.

To make the most of its agricultural potential, and to make this sector more competitive and attractive, Africa needs to develop its transport, storage and communications infrastructure. It also needs to invest more in agricultural and agribusiness research – an area that is frequently neglected. In addition, Africa needs to focus on developing high-quality agricultural services. Better access to agricultural inputs, professional training and technical advice could bring about a marked improvement in the sector's productivity. Contract farming is another promising avenue for African agriculture: delivery contracts between farmers and businesses would make it easier to manage product quality and product flow. The financial services available to farmers and agribusinesses need to be improved and diversified. The growing use of leasing, warrantage and insurance products should make it possible to improve risk management and to protect the sector. Finally, significant progress in the area of regional integration and the regulation of commerce – together with production support measures – would support the development of intra-African trade.

Only an integrated approach – combining public initiatives and private investment – will turn the promising prospects of agriculture in Africa into reality. There is a need for concerted agricultural policies to gain the support of private economic stakeholders in the interests of food security; it is time to reinvent an effective, equitable public-private partnership. It is this vision that the G20, under its French presidency, promoted to the international community in 2011. It is a condition that must be met if Africa is to benefit from its agricultural potential in terms of growth, employment and sustainable development. And here, the role of the international financial institutions is fundamental. They can promote private investment at all stages of agribusiness industries and promote the development of sustainable agriculture. —

In our next issue

Utilising, developing and preserving forests: finding the balance

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