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**Competitive Strategy through Innovative Partnerships at the Regional Level: The Case of Tomatoes and Soybean Value Chains in Northern Togo.**

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**Abstract:** Agricultural intensification is widely seen as a condition sine-qua-non for overall economic growth and food security in sub-Saharan Africa (SSA). Though attention is shifting from technology development to more market-oriented approaches, the best examples of agricultural intensification seem to happen relatively independent of interventions from the development circuit. This paper argues that agricultural intensification and market development may be stimulated through grassroots and regional-level efforts when care is taken not to substitute for responsibilities that belong to farmers, traders, and other stakeholders themselves. An approach is required that carefully addresses the factors influencing the competitiveness of agricultural enterprises. A major role of ‘facilitating institutions’ may be to develop efficient relationships between farmers - and their complex multi-purpose farming systems – and traders and processors - engaged in commodity specific trade and processing market segments. Finally, competitiveness is not something to win for today – it crucially depends on innovation and continuous learning. The paper present cases from Northern Togo, where effective linkages have been established between farmers, traders, processors and rural bankers and NGOs. The paper concentrate on three cases: tomato production and marketing, soy bean processing, and the development of credit structures and interlocked contracts for input provisioning. The article is based on qualitative data – interviews with the major stakeholders, and accounts in progress reports from the NGOs and farmer organizations. In conclusion, it gives some observations on the major lessons learnt, and the contribution that social scientists can make to strengthen dialogue between theory and practice.

## 1. Introduction

Statistics are difficult to obtain in Togo, but no statistics are required to recognize that the population in Northern Togo depends heavily on farming to make a living. Farm households in the region typically store a large part of their food production, mainly sorghum, millet and maize for their own consumption. Dapaong and Kara, however, have become major cities and provide market outlets for cereal crops for a growing number of farmers. Other markets for agricultural produce exist, in particular, the Lomé market. Though the distance between Lomé and the northern region is quite long (about 700 km), there is considerable traffic and trade along the long paved road that connects Lomé with Dapaong and goes further on to Burkina Faso, Niger and even Mali. Besides cereals, many farmers in the region grow cotton. The ‘Société Togolaise de Coton’ (SOTOCO), a parastatal organization, is handling the provisioning of inputs (seeds, fertilizers, crop protection products) – on credit – transportation, ginning, sales of cotton lint, and the payment back to the farmers. Some marketing functions, however, in particular the ginning, processing, and sales of residual products (i.e., the cottonseed is used to produce oil and cotton ‘cake’) are gradually handed over to the private sector. Cotton production is an important source of revenue for the

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farmers in the region, despite the fact that many of them complain about the prices, quality standards and assessments, and delay in receiving payment. The region is hilly and has a relatively large area of lowlands, where farmers only recently have started to cultivate rice and vegetables (mainly tomatoes) on a significant scale.

In this paper we will describe some important changes in the northern region regarding farming systems, farmer organization, market integration of farmers, and commodity chain development. The interaction between farmers, traders, and facilitating institutions will receive particular emphasis. It will be argued that agricultural intensification and market development may be stimulated through grassroots and regional-level efforts when care is taken not to substitute for responsibilities that belong to farmers, traders, and other stakeholders themselves. The paper will describe how the factors influencing the competitiveness of agricultural enterprises in the northern region have been addressed, focusing on tomato and soybean production, by facilitating efficient relationships between farmers, traders, and in a few cases processors engaged in specific market segments through the development of appropriate financing systems and through capacity-building efforts grounded in social learning theories.

## **2. Materials and Methods**

The information presented in this paper is based on a case-study, which covers a period of about five years. Informal surveys in the region and in-depth discussions with producers, traders – also in Lomé – transporters and key staff from facilitating institutions have been held during this period. The role of the facilitating institutions will receive specific attention in this paper. In this paper we will concentrate on the activities of RAFIA (Recherche – Action et Formation aux Initiatives d'Autodéveloppement), a local NGO, which is largely responsible for the strengthening of farmer organizations in the region. RAFIA has supported the emergence and development of the Centrales d'Auto-promotion Paysannes' (CAPs), six (6) farmer-based organizations (FBOs) covering the northern region. The CAPs have played an important role in the diversification of agricultural production systems and the development of tomato production in the lowland areas. RAFIA and the CAPs have also developed a farmer-controlled savings and credit structure, called the 'Caisse Mutuelle d'Épargne et de Crédit' (CMEC). IFDC and RAFIA have worked together over the last few years – through the Integrated Soil Fertility Management project – to experiment alternative pathways for agricultural intensification and market development. Though IFDC's role is not central in this paper – the institution has played an important role, through training, backstopping, and participation in studies and experiments with alternative institutional arrangements – to improve access to inputs, and finance, and to establish commodity chain links – and production technologies. Collaboration between IFDC and RAFIA – and other institutions in West Africa – has produced the Competitive Agricultural Systems and Enterprises (CASE) approach that will be briefly outlined in the last section of this paper.

Data on yields, production costs, and market prices have been collected by enumerators of RAFIA, as a result of on-going monitoring and evaluation practices, and in collaboration with producer groups and agricultural services. Finally, collaborative activities between RAFIA, producer groups and IFDC, focusing on action – research, and participatory extension and institutional development, have produced a large number of documents (progress reports) and stories (narratives) but also photographs, videos, radio messages, drawings and posters, the latter often developed by the stakeholder groups themselves. These are the basic materials that have permitted the elaboration of this paper.

This paper is to a large extent a narrative of a development process and practice. It is not a success story – but aims to provide some fresh perspectives for development practitioners – and hopefully for the theoreticians and the economists in particular, too.

### **Competitiveness: A few methodological observations**

Before we begin the narrative (i.e., results) part, it may be useful to discuss the concept of a competitive strategy somewhat further. Competitiveness depends on the value of the products and services produced, on their uniqueness and quality, and on the efficiency with which human, capital and natural resources are being used to this end. Recent debates on competitive strategies are very much based on the framework provided by Michael Porter (Porter, 1985, 1990). To understand this framework, it is important to make a

distinction between the industry and the individual firms that compete within a particular industry. Competitiveness of a firm depends on both the attractiveness of the industry and the relative competitive position of the firm within the industry. Porter defines five competitive forces that determine industry profitability; they are: 1) bargaining power of suppliers; 2) bargaining power of buyers; 3) threat of new entrants; 4) threat of substitute products or services and 5) rivalry among existing firms. The collective strength of the five (5) competitive forces determines if an industry is attractive, in other words if it will be able to generate, on average, returns in excess of costs of investment. Tomato and soybean production are industries, and we will discuss their profitability at the end of this paper.

In the next sections we will deal with the competitive position of smallholder producers in northern Togo vis-à-vis each other and vis-à-vis other producers in other areas. Two basic types of competitive advantages are distinguished here: cost leadership and differentiation. Strategies to improve relative competitive position typically focus on one of the two alternatives and not on both. Though we will make use of Porter's framework in this paper, explicit attention will be given to institutional arrangements that may help smallholder farmers to overcome the barriers to entry into factor and product markets. Where Porter already supposes effective integration of the industry in the value system – this is still something to win for the smallholder farmers producing tomatoes and soybeans in the northern region.

### **3. Results and Discussion**

#### **3.1 Results**

The northern region is part of the sudanian, northern Guinean zones. Yearly rainfall is between 800 and 1100 mm. Rains often fall in a few heavy showers and, as a consequence, farmers often consider the distribution of rainfall as a more critical constraint to agricultural production than its total amount. Farming systems are largely based on cereal production – sorghum and millet, with an increasing importance of maize production. Maize production has also grown because of its responsiveness to fertilizers and is, therefore, often cultivated after cotton to profit from the residual effects of the cotton fertilizers. Farmers frequently indicate that rural density is increasing very fast in their regions, due to immigration of farmers from other areas (e.g., Burkina Faso) and of pastoralists gradually settling down in the less densely populated areas. There are also accounts of farmers progressively occupying (semi-) protected forest areas. As a consequence there are many clans and ethnic groups living together in this area, with significant differences in culture, and also in access to land and traditional occupations. Conventionally farmers cultivate on the higher parts of the landscape, but in the last few decades farming systems have progressively occupied the lower parts. However, for a very long time after the rainy season, the lowlands were mainly used by the pastoralists and by the women of farm households to collect fruits and wood. Only a few farmers – both women and men – cultivated some vegetables (e.g., okra, sorrel, local egg plant and spinach) during this period. Only part of this production was sold, and the benefits were generally very low (between 7,500 – 15,000 Fcfa; 505 Fcfa = \$1, 11/2004). The youth often left their villages to find a job in Dapaong or Kara, or most of those in the southern areas profited from the longer agricultural season.

RAFIA was formed in the early 1990s as a follow-up to a development project financed by “Iles de Paix.” The strengthening of farmer organizations was and still is one of RAFIA's main goals and has resulted in the development of the CAPs (see above). The CAPs that were created in the early 1990s (1 in 1991, 3 in 1994, and the last 2 in 2002) were based upon the “greniers collectives,” a cereal bank system that was promoted to fight against hunger and poverty. The cereals stored were progressively used as a “savings deposit” enabling farmers to access credit. Each CAP developed its own credit system.

#### **Access to inputs and finance; and the start of soybean production**

In the mid-1990s, RAFIA started to focus on agricultural techniques, including improved soil fertility management to avoid the declining yields and to improve the efficiency of the low levels of external inputs used. The CAPs were quite effective in organizing farmers and succeeded through pooling of demand at the village-level to improve the accessibility of external inputs (fertilizers, seeds, and crop protection products) – on credit – to the farmers. An autonomous credit structure (CMEC) evolved out of this process. In short, farmers express their demand to the CMEC and receive – if creditworthy – a receipt which they can use to receive the fertilizer or any other product from the CAP. The CAP receives the authorization and the money from the CMEC to buy the required inputs. As demand is pooled they often succeed in receiving

fair prices and reducing transaction (including transportation) costs. The relationship between the CAPs and the private sector is ambiguous. On one hand, CAPs have succeeded in purchasing inputs, in particular, fertilizers but also other products and farm equipment from the private sector. However, because fertilizers are also distributed by a governmental organization (i.e., the DRAEP--Direction Régionale de l'Agriculture de l'Elevage et de la Pêche) at subsidized prices – farmers prefer to buy first from that organization. Since the quantities that can be bought from the DRAEP are rarely well-known on beforehand, the private sector is often faced with last-minute orders and quite unable to anticipate the volumes that the CAPs want to buy; fertilizer imports also take several months. As a consequence, farmers are often unable to take all the fertilizers they had requested. One possible way to overcome this constraint has been tried through a project initiated by the European Union and intended to strengthen the capital of the CMECs. In this experiment the CAPs were asked to buy and distribute fertilizers (for a total amount of 40,000,000 Fcfa) on a 50/50 basis (i.e., 50% from the DRAEP – at 7,500 Fcfa per bag of 50 kg, and 50% from the private sector at 9,500 Fcfa per bag). This enabled the private sector to anticipate the demand. In turn farmers had to agree to pay an average price that was slightly higher than they were used to. Though the experiment succeeded – in the sense that the CAPs were able to buy and distribute all the (additional) fertilizers, and farmers also reimbursed above the 95% that was required by the European Union, this promising venue has not been developed any further yet.

The cereal stocks no longer function as a savings deposit; instead, farmer groups have a savings account and are only allowed to receive credit up to three times their cash deposit. However, recently some initiatives to improve the savings and credit structures have been undertaken. A tour to southern Niger has been organized for representatives of the CAPs and the CMEC to study the warrantage system, which links access to finance and inputs of farmer groups with shared control of part of the cereal harvest. A feasibility study has been executed upon demand from RAFIA and the CAPs.

Farmers also received assistance and training on agricultural techniques. Learning plots have been started in a number of pilot villages to promote innovation based on mutual learning by both facilitators and farmers. The collaborative efforts have permitted experiments with new crops (like soybeans) and varieties (like high-yielding varieties for sorghum and maize that are widely used in the region), and improvements in cropping methods. Improving fertilizer use (i.e., efficiency), by combining soil amendments (e.g., crop residue recycling, use of compost) and mineral fertilizers, crop rotation, and soil and water conservation methods, has been an important learning objective over the last few years. Soybean cultivation – as an alley crop or in rotation with maize has taken off; and improved crop rotation with soybeans and targeted fertilization have yielded important production increases. Farmers are, however, quite reluctant to increase fertilizer doses beyond a certain limit because the markets for maize are quickly satisfied. The feasibility study mentioned above also addresses the potential to increase revenues by storing maize collectively and profiting from price rises later in the year. However, during the past few years prices of maize are not really increasing that fast any longer, and the cautious strategy to keep production costs low and the surpluses of maize produced seems very appropriate.

The soybean market, however, is still growing. Training in simple processing of soybeans (into mustard and cheese) has also increased its marketing potential considerably: the soybean mustard is collected by individual traders from Lomé, while the soybean cheese is mainly used for home consumption. Soybeans are also bought on the local market by an association, which uses the soybeans for the production of baby food – sold in many pharmacies in the northern region (with the assistance of a development project sponsored by UNICEF). The marketing channel, however, is not yet well-organized. RAFIA is considering a similar initiative in the southern region of Togo, where a medium-sized enterprise has emerged, which provides farmers with inputs, and technical advice – based upon a mutual agreement that gives the enterprise the authority to market a specified quantity of the soybean production. The enterprise had a net benefit of 5,000,000 Fcfa in 2001 and is rapidly growing, in particular, since it succeeds in ensuring timely and high-quality products to larger traders and upstream enterprises.

### **The tomato project**

The tomato project, started by RAFIA in the mid-1990s, had the specific aim of stimulating young farmers to stay in the northern region after the agricultural season. The idea behind the project was quite simple and

was based on the both the relative abundant availability of lowlands in this region and the recognition that most of the tomatoes consumed in Lomé came primarily from Burkina Faso (i.e., Komienga, at 70 km from Dapaong) and also Ghana and Benin. Truckloads of tomatoes passed through the region on their way to Lomé. RAFIA first organized a series of study tours to Burkina Faso and Benin with representatives from farmer organizations and village groups to see how farmers were exploiting the lowlands. After these visits a specific program was developed to assist farmers with the development of horticultural production. Wells (up to a total of 35 wells) have been constructed with financial assistance from VECO, a Belgium NGO, and INTERMON, a Spanish NGO. RAFIA provided technical advice to farmers--from simple measures to harvest and retain water to the digging and maintenance of irrigation canals; advice on agricultural techniques was also provided. Though diagnostic studies indicated a large potential for several other horticultural crops – like onions and cabbage – most farmers have chosen tomatoes as their principal crop.

In 1994 a small group of farmers started to grow tomatoes on about 15 ha. The results were already such that RAFIA was asked to assist in the marketing of the agricultural produce and, in particular, in connecting farmers with (larger) traders. RAFIA quickly succeeded to divert some large (female) traders from their usual collection sites in Burkina Faso to the producers in the northern region. Of course the anticipated decrease in transportation costs and avoidance of customs duties was attractive to them. The farmers, however, generally received very low prices because of a lack of coordination between the farmer groups and insufficient knowledge of prices and market outlets. With assistance from RAFIA a start was made to set up farmer-based committees to organize the marketing of the vegetables produced ('Comité de Commercialisation des Produits Maraîchers', CCPM). The role of these committees was to collect information on prices and market outlets, to contact traders, and to negotiate on behalf of (specific) farmer groups with these traders. Though the negotiation process took place in the town of Dapaong, many farmers felt that they lost control, and they were also often not satisfied with the final result. Some farmers even supposed that the committees were cheating them, as one farmer stated: "According to the CCPM we get 6,000 Fcfa/ basket, but I have heard that traders pay 8,000 Fcfa/ basket. Apparently they share the difference together." Because there were many CCPMs, i.e., one CCPM for every farmer group, traders could easily play farmer groups against one another. To improve both bargaining power and control on the negotiation process, a new institution was created--the Committee of Horticultural Activities (Commission des Activités Maraîchères, CAM). The CAM is directly affiliated to a CAP and covers many village groups and CCPMs. Traders now first discuss prices (i.e., bottom and ceiling prices) with the 'interlocuteurs' of the CAM. Results of these negotiations are communicated to all the members before the traders go into the field and make the final deal with the farmer groups (and the CCPMs who are still there). Today, the farmers all seem to be quite satisfied with their 'interlocuteurs,' though some of them feel that the CAMs could be more proactive in identifying alternative marketing channels.

Some information on the evolution of horticultural production in the northern region is given in Table 1. Today 22 farmer groups and about 3,000 farmers – mainly young men – are involved in horticultural production in this area and linked to the CAPs/ CAMs. The horticultural season covers the period between October and February and, in a few cases, also March. In the 2001/02 season tomatoes were threatened by insect attacks, and this severely reduced production and incomes. With assistance from technical staff from RAFIA, farmers are now implementing a rotation scheme, combined with other methods to reduce insect damage. In the beginning farmers were quite reluctant to apply rotation schemes and lose money (in their opinion)! Tomatoes still occupy about 70% of the total cropped area. Yields vary between 30 and 40 tons/ha if fields (crops) are not damaged by pests/ insects.

Table 1. Evolution of no. of farmer groups, cultivated area and production of tomatoes in the lowlands of the Northern Region, Togo.

Campaign	No. of Farmer Groups	Cultivated area (in ha)	Production (in tons)
1998/99	10	72	No Data
1999/00	13	131	1 465
2000/01	15	137	835
2001/02	16	134	2 000
2002/03	22	153	1 005
2003/04	22	106	3900

Source: RAFIA.

Rural radio has also played an important role. Information on prices of horticultural crops in various markets – also the Lomé market – is disseminated by radio. As farmers are better informed about the prices on the various markets, they are also better equipped to interact with their ‘interlocuteurs’ at the CAMs and the CCPMs.

### 3.2. Discussion

#### The relative competitive position of soybean and tomato producers

To improve the competitive position of smallholder farmers in the northern region significant attention has been given to cost leadership. Participatory learning and action – research programs and farmer-to-farmer extension methods--have been used to develop and disseminate effective agricultural technologies, specifically fostering optimal efficiency of external inputs. In the case of soybean production, simple processing technologies have also contributed to extend both household consumption (nutrition) and marketing opportunities. Tomato producers have been able to develop cost leadership vis-à-vis their Burkinabè colleagues by focusing on the regional and Lomé markets (see Table 2).

Table 2 Production costs, farm-gate prices and marketing costs for tomatoes produced in Burkina Faso (Kompienga area), Ghana and Togo (northern region).

Costs / Prices are in Ffa/ ton.	Burkina Faso (Kompienga)	Ghana	Togo (Northern Region)
Production costs	No Data	No Data	
- Labor			3 500 – 5 000
- Inputs			5 000 – 7 500
- Other costs			1 500 – 3 000
- Total			10 000 – 15 000
Farm-gate price			
- January / February	22 000 – 30 000	60 000 (at Kumasi	24 000 – 32 000
- March	15 000	market; prices go up	15 000
- April/ Mai	55 000 – 75 000	after December)	80 000
Transportation Costs	20 000 – 25 000	5 000 – 7 500	17 500
Customs/ Road Blocks	4 500 – 5 500	3 500	1 000
Handling/ Packaging etc.	1 600	1 600	1 600
Wholesale prices Lomé			
- January / February	80 000	80 000	80 000
- March	50 000 – 60 000		50 000 – 60 000
- April/ Mai	120 000		120 000
Producer benefit	-	-	
- January / February			> 10 000 ...
Trader benefit			
- January / February	> 18 500	> 7 500	> 28 000

Source: Interviews with traders in Lomé, and farmer groups in the northern region, Togo.

There also seem to be some differences in quality of the tomatoes produced in the various areas, probably related to differences in ecology and/or fertilization methods. “The quality of the Dapaong tomatoes is

better than those from Kompienga. Tomatoes from Kompienga have plenty of water, and it's difficult to keep them well during transportation," as one of the 'interlocuteurs' of the Dapaong farmers explained. It is important to keep in mind that all this would, in itself, probably not have been enough to increase the margins of smallholder farmers in the northern region who produce tomatoes because traders would still have been able to use their bargaining power to keep the margins low. Coordination between the farmers, however, and improved knowledge and information of market outlets (alternative trader networks) and prices have balanced the power relationships between the traders and the farmers.

In Porter's parlance, the smallholder farmers in the northern region have developed something close to a system of 'healthy competition', i.e. collaboration (and/or coordination) 'externally' to attract (new) traders, and deal with down and upstream value chains, and competition 'internally' on production technologies / innovation. Facilitating institutions have played an important role in this process – linking complex farming systems, producing a wide range of products for a diverse range of purposes – with commodity-specific trader networks. The solutions found to this date will certainly have to be adapted for tomorrow's world. In fact, the type of linkages that have been developed may well provide only an intermediate short-term solution. As with growing competition and increased market integration, some kind of specialization will probably be needed. A last word on collaboration externally, according to Porter, such collaboration may also be useful to ensure effective delivery of orders. The latter is in our case (i.e., tomato production) very important but still a problem. Farmers are only gradually becoming used to produce constant quality and coordinate delivery in order to live up to the expectations of the traders. There still is a large difference between the traders who think in 'days' and 'truckloads' and smallholder farmers who just want to sell some 'baskets' of tomatoes, and may face difficulties to deliver on a specified day. However, unreliable delivery – varying volumes and so on – increase the costs of traders to collect the tomatoes and may provide incentives to look for other potential producers or producer areas. Training in management tools of the farmer representatives in the CAMs is, therefore, essential to improve mutual understanding between traders and farmers and to professionalize tomato production in the region.

### **Industry profitability (restricted to the tomato industry)**

The farmers in the northern region have successfully integrated the tomato value system, which is defined according to Porter as the total set of downstream and upstream value chains, e.g., from the suppliers' value chain to the buyers' value chain. However, the sustainability of their strategy not only depends on their relative competitive position within the industry but also on the long term profitability of the whole industry. We will not discuss all the five (5) factors in this paper – but will concentrate on two of the most important factors, determining long-term profitability; i.e., the buyers bargaining power (in this case the bargaining power of the traders vis-à-vis the producers and their competitors in other regions) and the threat of new entries.

Farmers in the northern region essentially have three potential market outlets: (1) the Lomé market, (2) the Kara market and (3) the Dapaong market. Both (2) and (3) only provide small markets, and the Kara market – only in case of insufficient production around Kara. The Lomé market is, therefore, the main market outlet. It is common knowledge that trader networks in West Africa are often heavily organized and have, as a consequence, a large advantage when negotiating prices. However, interviews with traders in Lomé made it very clear that within their networks considerable competition exists. Traders have their own cars or transporters with which they work, and though they often agree beforehand on ceiling prices, they compete heavily to link up with retailers and consumers. In Lomé there are two trade unions for tomato traders, who are operating independently. This has increased competition between the traders and improved the bargaining power of farmers. Competition has also increased as individual traders not connected to one of the trade unions – have entered the market. However, these traders are merely grasping an opportunity and do not yet constitute very secure marketing channels.

In the northern region, growth of tomato production is constrained by access to water (wells). However, because many NGOs and development projects/ programs are interested in horticultural development investments in wells and related irrigation infrastructure and equipment is growing – also in other areas that could try to compete with the northern region for the Lomé market. Without considerable growth on the demand side, the industry risks sharp price declines in the near future. Already now, farmers are trying to



be the first to bring tomatoes on the markets or to extend the period of cultivation beyond the peak periods to get the highest possible prices. Pressure from farmers on RAFIA and other institutions to undertake studies and attract donors to invest in tomato processing industries is growing. At a regional level this may not yet be very realistic, but opportunities to develop agriculturally linked enterprises should be taken very seriously at both regional and national levels.

#### **4. Conclusions**

##### **Institutional development and porter's competitive analysis framework**

Though Porter's framework addresses institutional issues like (strategic) collaboration between (competing) firms, the framework is not developed to deal with the pervasive market constraints that limit agricultural growth in sub-Saharan Africa. Missing and incomplete markets are, however, a dominant feature in sub-Saharan Africa – and (second best) solutions to overcome market failures crucially hinge on (creative) institutional arrangements. As a consequence of missing and incomplete markets, many smallholder farmers are more or less trapped in self-subsistence farming and risk-minimizing strategies. This is, of course, unfortunately a self-reinforcing process. To improve market access of smallholder farmers, in particular to inputs and finance, and to open up new markets for their agricultural products, linkages between farmers and traders need to be developed and strengthened. A two-tier approach is needed – focusing both on farmer demand (in the case of inputs) and/or supply (in the case of outputs) and on trader behavior. Traders also typically try to avoid the distant places and the individual smallholder farmer and prefer to stick to their well-known clientele, and the larger markets (Omamo, 2003). Institutional arrangements that foster mutual learning, and coordination and are able to generate adaptive expectations are crucial to improve rural livelihoods and enable a larger portion of the rural populations to contribute to and to profit from market-driven development (Arthur, 1988).

##### **Lessons for development practice: The CASE approach**

The CASE (Competitive Agricultural Systems and Enterprises) approach – developed by IFDC and its partner organizations – emphasizes the importance attached to competitiveness, both related to the agricultural production systems within the target region and to the rural and urban enterprises that are directly linked to the agricultural production systems by providing inputs and market outlets (Maatman et al., 2004). The CASE approach fosters production chain development, as described in this paper, by strengthening the innovative capacities of the various stakeholders, including the service providers (e.g., research, extension organizations, NGOs) involved. Facilitating and collaborative activities may focus on different aspects and depend upon the bottlenecks identified by the main stakeholders themselves for improved competitiveness. They can be grouped in three categories: 1) improving the accessibility, both geographically and financially, of external inputs, for example, by stimulating the development of infrastructure (warehouses, local shops); through investments in private-sector capacity development, networking with savings and credit systems, and development of lobbying capacity to enforce effective regulations promoting competitiveness and fair trade; 2) development of market outlets for agricultural produce, for instance, by stimulating the development of agriculturally linked enterprises, the diversification of agricultural production, and improved coordination between consumers and producers; and 3) fine-tuning of technological options to improve the efficiency of external input use – mainly through investments in participatory and as much as possible farmer-led research and extension. Though all three categories of activities can be relevant, this article demonstrates that for important gains improved upstream linkages, i.e., in processing, market outlets, are crucial. The development of small and medium enterprises for processing and other services should therefore be stimulated as much as possible. Besides improving the competitiveness of smallholder farmers in the region, they also provide employment and additional incomes, which, in turn, may raise effective demand for agricultural products. Special attention may also be given to the range of non-financial services, now commonly called business development services. Business development services should, in principle, be considered as private goods, and care should be taken not to substitute for existing or potential commercial providers of training, information and other services (ILO, 2001). RAFIA seems to be well aware of their role as a facilitating institution, and even in those cases where they have been involved in the development and provision of business development services, and financial services, they have in all cases succeeded to transfer these activities to viable autonomous organizations. Most

importantly, the facilitating approach has led to a growing recognition within the region that improvement (i.e., competitiveness) is not something that projects bring and take with them – it is something to work for together.

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### **References**

- Arthur, 1988, Self reinforcing mechanisms in economy. *In*. Anderson, P.W., Arrow, K.J. and P. Pines (Eds.), *The Economy as an evolving complex system*. Addison – Wesley.
- ILO, 2001, *Business development services for small enterprises: guiding principles for donor intervention*. 2001 Edition – Committee of Donor Agencies for Small Enterprise Development. World Bank and International Labor Organization.
- Maatman, A., Wopereis, M.C.S., Debrah, S.K., Groot, J.J.C., From thousands to millions. Accelerating agricultural intensification and economic growth in sub-Saharan Africa. Paper presented at the AfNet Symposium on ‘Improving Human Welfare and Environmental Conservation by Empowering Farmers to Combat Soil Fertility Degradation’, Yaounde, Cameroon, May 2004. (In press).
- Omamo, S.W., 2003, *Policy research on African agriculture: trends, gaps and challenges*. ISNAR Research Report 21. The Hague: International Service for National Agricultural Research.
- Porter, M., 1985, *Competitive advantage. Creating and sustaining superior performance*. The Free Press.
- Porter, M., 1990, *The Competitive advantage of nations*. The Free Press.