COMPETITIVE AGRICULTURAL SYSTEMS AND ENTERPRISES (CASE)

a grassroots approach to agribusiness development in Sub-Saharan Africa

Volume 1: Reference framework and early experiences

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Front cover design by Anna B.M. Piederiet. The cover is based on a Ghanaian symbol ('Funtumfunafu') of unity in diversity, showing two crocodiles – lizards, according to my Ghanaian colleague Victor Clottey (but I secretly prefer the crocodiles!) – sharing a single stomach ("Sharing one single stomach, yet they fight over food"). The symbol exemplifies a principal aspect of the CASE approach: to balance competition and coordination.

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Acronyms

	English	French
1,000s+	From Thousands to Millions	Des Milliers à des Millions
ABC (PEA)	Agro-Business Cluster	Pôle d'Entreprise Agricole
ABIP (PICA)	Agribusiness Information Points	Points d'Information Commerciale Agricole
ABU	Ahmadu Bello University (Nigeria)	
ADP	Agricultural Development Program (Nigeria)	
AGRA	Alliance for a Green Revolution in Africa	
AGRODIA	Association of Agri-Inputs Wholesalers and Retailers (Burkina Faso)	Association des Grossistes et Détaillants d'Intrants Agricoles (Burkina Faso)
AISSA	Agricultural Intensification in Sub-Saharan Africa	Intensification Agricole en Afrique Subsaharienne
AMEDD		Association Malienne d'Eveil au Développement Durable
ANPAT		Association Nationale des Producteurs Avicoles du Togo
AOPP		Association des Organisations Professionnelles des Paysans (Mali)
APFOG	Apex Farmers Organization of Ghana	
AUC	African Union Commission	
BRS		Banque Régionale de Solidarité
BSS (SAE)	Business Support Services	Services d'Appui aux Entreprises
CAADP (PDDAA)	Comprehensive Africa Agriculture Development Program	Programme Détaillé pour le Développement d'Agriculture en Afrique
CAM		Commission des Activités Maraîchères (Togo)
CAP		Centrales d'Autopromotion Paysanne (Togo)
CASE	Competitive Agricultural Systems and Enterprises	Systèmes Agricoles et Entreprises Compétitifs
CC-P	Consumer-Competitor-Price	

CCPM		Comité de Communication des Produits Maraîchers (Togo)
CIDA	Canadian International Development Agency	
C.i.f.	Cost-Insurance-Freight	
CMDT		Compagnie Malienne de Développement de Textile
CPP	Crop Protection Product	
DATE	Diagnosis – Action Planning – Trying things out – Evaluation	
DCE	District Chief Executive	
DED	German Development Agency	
DGIS	Directorate General International Cooperation (the Netherlands)	Direction Générale de la Coopération Internationale (Pays-Bas)
EAFF	Eastern Africa Farmers Federation	
ECOWAS (CEDEAO)	Economic Community of West African States	Communauté Economique des États de l'Afrique de l'Ouest
FEPAB		Fédération des Professionnels Agricoles du Burkina
FCFA		Franc Communauté Financière Africaine
FfF	Farmers for the Future	Paysans pour le Future
FSAD	Fertilizers and Sustainable Agricultural Development	Engrais et Développement Agricole Durable
FUPRO		Fédération des Unions de Producteurs (Bénin)
GAABIC	Ghana Agricultural Association's Business Information Centre	
GAIDA	Ghana Agricultural Input Dealers Association	
GDP	Gross Domestic Product	
HIV/AIDS (VIH/SIDA)	Human Immunodeficiency Virus/Acquired Immunity Deficiency Syndrome	Virus de l'Immunodéficience Humaine/Syndrome d'Immuno Déficience Acquise
HQ	Headquarters	Siège
IAC	InterAcademy Council (The Netherlands)	
IAR	Institute for Agricultural Research (Nigeria)	

ICRA	International Centre for Development-Oriented Research in Agriculture	Centre International pour la Recherche Agricole orientée vers le Développement
ICRISAT	International Crops Research Institute for the Semi Arid Tropics	
IER	Institut d'Economie Rurale	
IFAD (FIDA)	International Fund for Agricultural Development	Fond International pour le Développement Agricole
IFDC	International Fertilizer Development Center	
IFA	International Fertilizer Industry Association	Association Internationale de l'Industrie des Fertilisants
IITA	International Institute of Tropical Agriculture	
IPM	Integrated Pest Management	
ISFM (GIFS)	Integrated Soil Fertility Management	Gestion Intégrée de la Fertilité du Sol
MFI	Microfinance Institutions	Institutions de Micro-Finance
MIR	Marketing Inputs Regionally	Marché d'Intrants Régional
MIS (SIM)	Market Information System	Système d'Information sur les Marches
MISTOWA	Market Information Systems and Traders Organizations in West Africa	Renforcement des réseaux régionaux des systèmes d'information du marché et des associations professionnelles en Afrique de l'Ouest
MMW4P	Making Markets Work for the Poor	
MOU	Memorandum of Understanding	
NCST (ENRC)	National Capacity Strengthening Team	Equipes Nationales de Renforcement de Capacités
NEPAD	New Partnership for Africa's Development	Le Nouveau Partenariat pour le Développement de l'Afrique
NGO (ONG)	Non-Governmental Organization	Organisation Non Gouvernementale
NRM (GRN)	National Resource Management	Gestion des Ressources Naturelles
PLAR	Participatory Learning and Action Research	
PO (OP)	Producer Organization	Organisation des Producteurs
PP-C	Product-Place-Cost	
PPP	Public-Private Partnership	Partenariat entre Secteur Public et Privé
PRODEPAM		Programme de Développement de la Production Agricole au Mali

PTD	Participatory Technology Development	
RAFIA	Research, Support and Training for the Initiatives of Self-Development	Recherche Action et Formation aux Initiatives d'Auto-développement
ROPPA	Network of Farmers' Organizations and Agricultural Producers of West Africa	Réseau des Organisations Paysannes et des Producteurs Agricoles de l'Afrique de l'Ouest
SAADA	Strategic Alliance for Agricultural Development in Africa	Alliance Stratégique pour le Développement Agricole en Afrique
SARI	Savanna Agricultural Research Institute (Ghana)	
SCEO		Société de Commercialisation et d'Exportation des Oléagineux (Burkina Faso)
SOCOAK		Société Coopérative Agricole de Kouroumari (Mali)
SOTOCO	Togolese Cotton Company	Societé Togolaise du Coton
SSA	Sub-Saharan Africa	
TGC	Transaction Governance Capacity	
USAID	United States Agency for International Development	Agence Américaine pour le Développement International

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1. Introduction

Sub-Saharan Africa (SSA) faces several intimidating development challenges. Economic progress appears to be more difficult on this continent than anywhere else. Poverty and food insecurity are widespread and persistent. Rural communities in particular stand out as extremely vulnerable. A productive agricultural sector is essential for most of them. Yet, agriculture is a pivotal sector for everyone in SSA, and agricultural development is rightfully seen as a condition *sine qua non* for overall economic growth in this region.

Recent debates on increasing agricultural growth to fuel development have brought much-needed attention to the linkages between farm and rural non-farm sectors, and to rural-urban relationships. To strengthen linkages between farmers and markets and to increase their income-earning opportunities, new emphasis has been placed on input accessibility, value addition and market outlets. As a result, interest has increased in local economic development, commodity value chain development and in creating policy and institutional environments, which enable agriculturally linked enterprise development and trade. At the same time, alternative avenues are proposed for those farmers that mainly produce for their own subsistence needs.

Linking farmers to markets is easier said than done, however. Rural communities operate within very limited windows of opportunity, and market integration is a risky venture for most of them. Misguided, hurried approaches to promote, nurture and 'push' market integration have tremendous potential to do more harm than good. This guide aims to propose a novel and pragmatic pathway for agricultural intensification and market development in SSA. We will argue for a cautiously implemented grassroots approach, which links to local 'champions' and empowers rural communities. Among other things, the approach calls for a reversal in development thinking – in other words from macro- to micro-economics. This is not to say that macroeconomics – or nation- and sector-wide policies – is without importance; rather, it is our opinion that economic development first and foremost develops from grassroots initiatives and the systemic and gradual empowerment of rural and urban citizens. It is also our belief that structural changes in policies and markets have a much better chance to take place when there is already some critical and powerful bottom-up support.

The approach, known as Competitive Agricultural Systems and Enterprises (CASE), will be outlined in some detail in this document. CASE was developed by IFDC over a period of approximately eight years in collaboration with many partner organizations, including producer and trader organizations. In fact, CASE stems from a series of projects that involved another important IFDC approach to agricultural development – Integrated Soil Fertility Management (ISFM).

In these ISFM projects, emphasis was put on agricultural productivity and in particular on an efficient combination of organic and mineral fertilization to increase yields and optimize fertilizer efficiency. It was quickly realized that for sustainable agricultural growth a more encompassing 'reference framework' was required – enabling researchers and facilitators to work together with farmers and other stakeholders on all sorts of interlinked areas, like rural

finance, competitive intelligence, and marketing issues. The alternative approach we were looking for had to be 'light' and 'focused.' Light, to ensure that the initiative would continue to be led by its own champions, and to avoid creating artificial competitive advantages; focused, to avoid the pitfalls of the many holistic – integrated – rural development programs we had seen and participated in. It is noted that CASE was developed in areas with major problems regarding agricultural intensification and agribusiness development (i.e., in areas with limited access to services and markets, with inadequate infrastructure and populated by 'poor' and 'vulnerable' rural inhabitants). CASE claims to be useful in areas that have potential for agricultural intensification and agribusiness development, but where, for a variety of reasons, such dynamics do not happen automatically.

The CASE framework comprises pillars, concepts and values (or design principles). The three pillars are:

1. Agribusiness cluster formation
2. Value chain development
3. Strengthening of transaction governance capacities

Though all three pillars are relevant and equally important, we will focus more on agribusiness cluster formation in this booklet. Agribusiness cluster formation is the strengthening of local capacity (i.e., of farmers, traders, business support and financial services within some restricted area) to learn, interact, and engage in coordinated action. The latter essentially aims for sustained integration in promising commodity value chains and for efficient bottom-up advocacy for business ethics and policy changes that improve transaction governance.

The basic concepts of the CASE approach are:

1. Competition
2. Coordination

We believe that competitiveness at various levels (i.e., cluster – value chain, local – national – regional) depends on an effective balance between competition and coordination. Development has been and sometimes still is pretty blind for the competitive playing fields that both drive and constrain business and innovation. CASE aims to provide a pragmatic, and probably less romantic, approach that values collective strategy, but with an adequate eye for (potential) conflict and exclusiveness. Our final goal is not collectiveness per se, but competitive strategy at cluster and chain levels.

A critical issue that also requires effective balancing relates to the roles of the private sector and the government. Local entrepreneurs, including farmers, work within complex and often highly uncertain environments. The government plays an essential role (together with the private sector and the civil society organizations) to improve the institutional context to do business and to invest in research, education and training that supports professionalism and competitiveness in specific sectors.

Finally, the three core values, or design principles, of CASE are:

1. Ownership
2. Empowerment
3. Economic sustainability

CASE works best when the 'external' facilitators do not compromise on any of these values. This means, among other things, that the local actors themselves should be in the 'driver's seat' of agribusiness cluster formation. CASE facilitators essentially support the three pillars through capacity strengthening for action-research, for extension and networking, and for lobbying and advocacy. They provide guidance to a process of innovation and change; they are not driving it.

This document describes the framework and some initial experiences with the CASE approach arising from the IFDC project 'From Thousands to Millions' (1,000s+). It is divided into three parts.

Part 1 concentrates on the reference framework itself, and aims to link CASE with relevant theory in economics, management and communication sciences. It starts with a brief chapter on the issue of agriculture *for* development (Chapter 2). The relationship between agricultural growth and overall economic and pro-poor development is currently dominating the policy debate. This chapter aims to draw the larger picture within which IFDC and other agencies operate, and provides the background for the CASE approach. Chapter 3 introduces the three pillars of CASE. In the process of stimulating agribusiness development and of strengthening the first two pillars of CASE (i.e., agribusiness cluster formation and value chain development), two different 'trajectories' may be distinguished. These trajectories, characterized within CASE as key concepts, are competition and coordination. In Chapter 4 we discuss the 'art' to strengthen and to balance these two essential, but sometimes contradictory, drivers of competitiveness and innovation. Chapter 4 concludes with a section on competitive strategy.

In Part 2, the emphasis shifts to CASE facilitation. Part 2, however, begins with a chapter on ISFM, to illustrate some of the learning-in-action that led to CASE. Chapter 6 tackles the design and implementation of CASE. The chapter starts with an introduction of the design principles (i.e., the CASE values). We distinguish three stages in the implementation process of CASE: mobilizing business ideas, action planning, and implementing action plans. These stages are labeled as the design elements and presented in Section 6.2. Finally, we come back to facilitation roles and the skills that we think are needed to act as a CASE facilitator. In Chapters 7 and 8, we will specifically refer to the 1,000s+ project. 1,000s+ is a regional project designed to scale-up CASE. Chapter 7 presents the 'project setting,' describing the grant mechanism developed to support local entrepreneurship and the strategy that should lead a rich and diverse 'portfolio' of business clusters. Some of the results achieved during the start-up phase between 2006 and 2008 will also be briefly presented. Chapter 8 concludes Part 2, and focuses on two major cross-cutting themes within 1,000s+: finance and information. Finance and information are the 'oils of business,' but mobilizing finance for cluster and chain actors requires a strategy that combines grassroots and sector level action; the same is true for information, and in particular for what we will label competitive intelligence. Competitive intelligence involves the private and public sectors.

Part 3 presents in some detail several examples of agribusiness development in West Africa. The examples from Togo (Chapter 10), Nigeria (Chapter 11) and Ghana (Chapter 12) focus on aspects of agribusiness cluster formation activities – and are again based on results from the 1,000s+ project between 2006 and 2008. Part 3 starts with an example from Mali (Chapter 9) and from another IFDC-coordinated project – Marketing Inputs Regionally (MIR). MIR concerns the input sector in Mali and is a perfect example of CASE '*avant la lettre.*' In a second volume, we will focus more on these and other examples of CASE. The second volume will also contain more quantitative details on enterprise, cluster and value chain performance, before and after the 'intervention.'

To end this introductory chapter, we would like to offer some words of caution. Whereas CASE, as used in 1,000s+, has undoubtedly demonstrated a degree of effectiveness in stimulating agribusiness literacy and initiative, the approach itself provides nothing more (nor less) than a reference framework for learning and action. It explicitly does not give any simple 'one-size-fits-all' (or blueprint) solutions. Both prudence and (large amounts of) entrepreneurship are required to effectively deal with the inherent risks of increased market integration for producers and small-scale rural entrepreneurs. Facilitators are therefore encouraged to support critical self-assessment of the various actors and stakeholders in regard to their plans and strategies, including risk management. Moreover, quick successes are not what we should aim for. The proof is in the maintenance of competitive advantages and of profitable commercial relationships – beyond their initial establishment. This is a hard struggle which will require creativity and endurance, and in this very complex world, probably some foresight, courage and good luck too!

1.1 Conventions used in this document

We will use the same colors for the different agents (cluster, chain, business system) throughout the whole document. They are:

Traders, Processors

Input Suppliers

Bankers

Business Support Services

Farmers

The text contains several examples to support the main text and illustrate how CASE can work in practice. Elaborated examples are separated from the main text by a single grey line.

We have also added a few discussion points that were often raised in training and coaching sessions on CASE (e.g., on the boundaries of an agribusiness cluster, on the 'exclusion' of intermediaries in value chains, etc.). Discussion points are separated from the main text by a double line.

! Large exclamation marks are used for emphasis or as a warning when we feel that we have something to explain (e.g., a significant change in a concept). The reader is reminded that CASE emerged out of practice and reflection and we continue to consider CASE a 'work in progress.'

PART 1: Theoretical background and CASE framework

2. Agriculture and agribusiness as drivers of economic growth in Sub-Saharan Africa

2.1 The case for agriculture as driver of rural and urban economies

SSA is home to about 800 million people, of whom 60-70 percent lives in rural areas. Though poverty is not just a rural phenomenon, 70-80 percent of the poor (e.g., people living on less than $1 per day) live in rural areas. Despite the fact that agriculture accounts for only about 20-40 percent of gross domestic product (GDP) in most SSA countries, the majority of the rural population depends predominantly on agriculture for food and income. In addition, a large number of city dwellers are also farmers and involved in a varied array of farming activities alternating from purely subsistence farming to intensive horticultural production. In many countries, the agricultural sector employs between 60 and 90 percent of the active population. Agriculture is therefore an important economic base for both rural and urban economies in SSA.

At least 200 million of the 800 million people and between 25 and 50 percent of the smallholder farm families in SSA are seasonally, or even chronically, food insecure. Likewise, hidden hunger (i.e., shortages of micronutrients and vitamins) is widespread in SSA. Although a growing number of children seem to go to school, educational systems are weak and students often lack the strength and motivation to learn effectively. Again, poor health – often as a consequence of poor nutrition – and poor education disproportionately affect the rural populations. Whereas non-farm income is quite important for many rural households in SSA (contributing between 20 and 60 percent of total income), it is most easily obtained in areas with relatively 'high' farm incomes. For these reasons, agriculture is obviously a sector to focus on in order to improve food security and alleviate poverty.

In most parts of the industrialized world, agriculture has been the basis for overall economic growth. Agriculture has numerous forward and backward linkages with other economic sectors, within both the rural and the urban areas. Timmer (1988), for example, summarized the essential roles of agriculture for economic development as follows.

Agriculture:

1. Increases the supply of food for domestic consumption
2. Releases labor for industrial development
3. Enlarges the size of the market for industrial output
4. Increases the supply of domestic saving
5. Earns foreign exchange

These roles are often regarded as complementary, but they may in fact be quite contradictory. For example, increased agricultural productivity typically translates into lower per unit production costs, thereby effectively lowering food prices. Lower food prices, in turn, are supposed to provide incentives for investment in manufacturing and service sectors, particularly

in the early stages of their development.[1] This seems to be a good thing, also because of the fact that the domestic markets in SSA are particularly demanding. As income distributions are highly skewed, there are only a limited number of consumers that have the purchasing power to pay a reasonable price for agricultural products. On the other hand, the benefits of lower commodity prices (for both food and raw materials) are merely relative and they should not endanger profits and re-investment in the rural areas themselves.[2]

The doubtful benefit of low world market commodity prices

Mazoyer (2001) convincingly argued that low world market prices for food were to a large extent responsible for keeping farmers (and low wage laborers on large-scale farms in Latin America) in developing countries 'trapped' in poverty. International commodity markets were, in Mazoyer's words, 'residual' markets (i.e., the prices on these markets merely reflected extremely low wages on outsized *['latifundi]* farms in Latin America and distorted policies in the U.S., the European Union countries and some Asian exporting countries). As a consequence, these producers were able to sell surpluses on the world market below the real production costs. Farmers in SSA were, in general, unable to compete against such prices; when cheap food imports were allowed to invade domestic markets, the impact was even worse. In addition, steadily increasing prices for agricultural inputs (fertilizers, in particular) further undermined the potential for sustainable agricultural development and intensification.

The challenge for agricultural growth policies (and related programs) therefore lies in advancing beneficial linkages between agriculture and other key economic sectors, for which opportunities to develop competitive advantages exist. This is, of course, much more easily said than done. In addition, spin-offs should preferably occur as much as possible within local rural economies to stimulate pro-poor economic growth.

Kydd *et al.* (2002) distinguish the following four types of linkages that may occur between different activities in rural economies:

1. Direct upstream production linkages
2. Direct downstream production linkages
3. Investment linkages
4. Indirect consumption (or expenditure) linkages

[1] Paul Collier (2007) argues that other developing countries, in particular China and India, have developed considerable competitive edge and economies of scale in low-cost manufacturing (and servicing) industries, and in doing so have significantly constrained the opportunities for SSA countries to develop along similar patterns of growth.

[2] That is precisely why several authors referred to the 2008 increase of commodity prices on the world market (due to, among other factors, rapidly increasing wealth and changing consumption patterns in Asia, and biofuel production) as a 'blessing in disguise' (i.e., potentially beneficial for all those farmers that may have the capacity to produce for domestic and international markets but catastrophic for poor urban consumers and many other rural net buyers of food).

The linkages describe the way additional income is circulated through a local economy. The boundaries of the local economy serve to make a difference between a positive linkage (spin-off, 'multiplier' effect) and a negative one (or leakage). Figure 1 below presents – schematically – the four types of linkages and some of the major factors that impact these linkages.

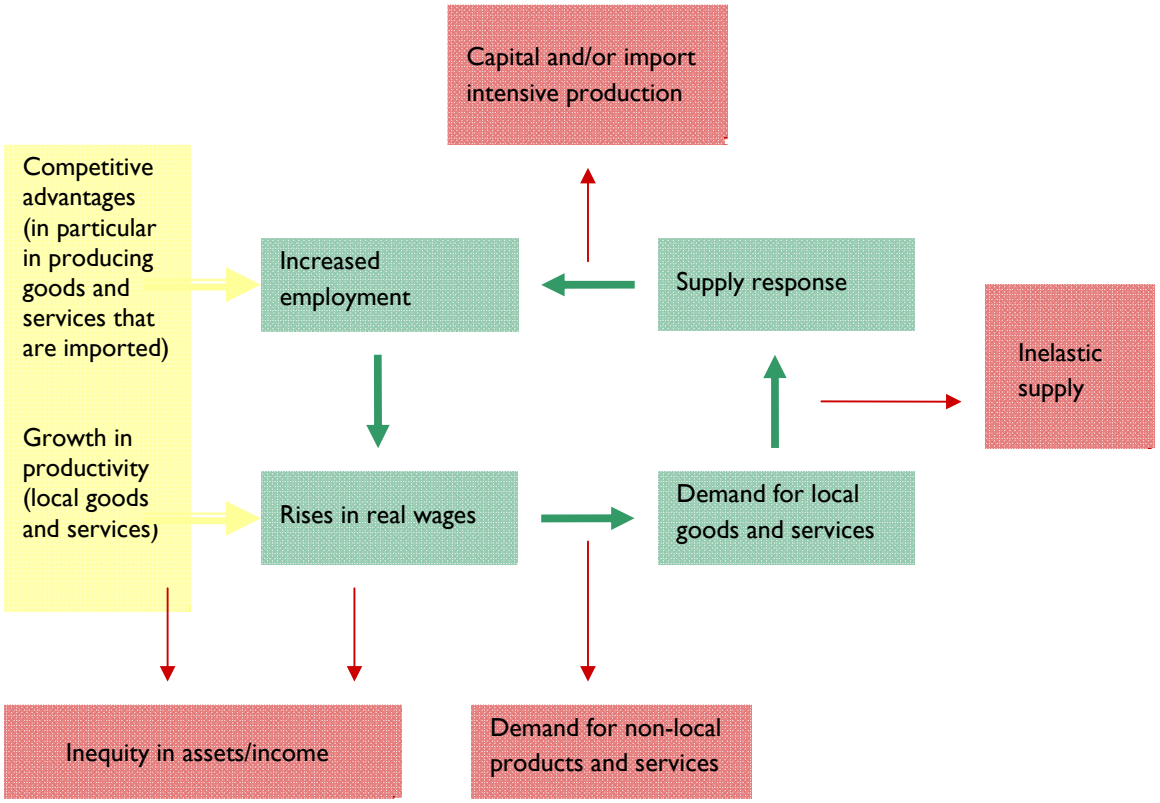

Figure 1. Linkages and leakages in a local – rural – economy (adapted from Kydd *et al.*, 2002)

In Figure 1, the growth linkages are indicated in green, the leakages in red and the major factors that cause development in yellow. Competitive advantages, for instance, are supposed to lead to increased employment, which in turn may trigger a series of spin-offs, starting with rises in real wages, which in turn may trigger the demand for locally produced goods and/or services. When the local capacity to expand the production of goods and/or services is high enough, such additional demand may be produced without (too much) inflation. Inflation offsets the gains and should be considered as a 'leakage' effect. Employment again leads to rising incomes, which installs a virtuous circle in the local economy. It is crucial to understand the arbitrariness of the notion of a local economy, as used here, and its consequences. The larger the area under consideration, the larger is the potential multiplier effect. In fact, what we define as a leakage – from the perspective of a local region A – may be seen as a multiplier when we look at a much larger area.

Nonetheless, there are certain leakages that should be considered as a loss for SSA countries. They are two-fold:

- Leakages that occur due to lack of re-investment, when social and socio-political networks limit innovation and expansion of trade within the SSA region, and because of uneconomic 'saving'[3]
- Leakages that cut across the SSA boundaries when growth triggers higher imports – i.e., from outside SSA – or when revenues are invested outside of SSA[4]

Agricultural policy and programs have to deal with this complexity and with the dynamic interactions both within rural economies and between local – rural – and national, regional and international economies. As a result, the policy measures needed to accelerate agricultural growth and to ensure its impact on overall economic development are far from obvious and interfere with a large and often relatively unknown set of factors. Such factors include the degree of inequality in the distribution of assets and incomes, prevailing rural-urban linkages and over-ruling policies with regards to the currency exchange rates and the 'openness' of the economy. Indeed, policies also tend to interact with each other. Structural adjustment programs have heavily impacted on the institutional capacities within developing countries and on state – civil and private sector – relationships. The almost total dismantling of key services for the agricultural sector (e.g., research and technology development, extension and other public information services) is just one major example.

It is important to bear in mind that within SSA countries, rural economies and conditions for agricultural production differ widely from one country to another. Food security, agriculture and agriculturally linked activities can be influenced by an array of conditions including:

- Climate
- Soil characteristics
- Population densities
- Hard and soft infrastructure
- Land tenure landscapes
- Rural-urban linkages including opportunities for value addition
- Governance institutions
- Law enforcement capabilities, business ethics and policies

The heterogeneity of agricultural production systems and rural economies defies every attempt to propose a blueprint approach to agricultural and economic development, especially pro-poor approaches. A differentiated, context-sensitive approach to agricultural development in SSA is

[3] See Delgado *et al.* (1998) for a review of agricultural growth linkages, with specific focus on SSA. See Fafchamps (1999) for one of several papers on the dominant role of (in)formal networks that shape – and contain – market development in SSA or his book, summarizing Fafchamp's work to date on market institutions (Fafchamps, 2004). See Chabal and Daloz (1999) for a treatise on socio-political networks and how such networks may profit from disorder (e.g., the lack of an overarching hierarchy, whether through government or corporations).

[4] There are no hard figures about the amount of money Africans have invested offshore. *The Economist* however, makes mention of an estimated 40 percent of privately held wealth that is invested offshore (*Economist*, 2004).

also strongly recommended by an ambitious study executed by the InterAcademy Council (IAC) upon request of Kofi Annan, the former Secretary General of the United Nations, and involving a large number of senior academics and experts all over the world (IAC, 2004). The report identified four crucial agricultural production systems, which are deemed to hold the most promise for investment and support from the research-to-extension continuum: (1) maize-based systems, involving also cotton and livestock production; (2) mixed cropping systems of cereals and tubers; (3) irrigated production systems (rice); and (4) agro-forestry systems, in particular those based on coffee, cocoa, oil palm and/or rubber. We will refer to this advice later in this document.

2.2 Agricultural development back on top of the development agenda

In the process of economic development, the share of agriculture in GDP decreases, along with the number of farmers and agricultural workers employed. Nevertheless, the long-term process of structural transformation of economic sectors does not imply that policymakers in developing countries should not invest in agriculture and use all of agriculture's revenues, in particular from the exports of primary products, to stimulate manufacturing and other economic sectors (Timmer, 1988). Urban biases in economic policies, often inspired by socio-political reasons, have a meager track record.

Direct investment in the agricultural and agriculturally linked sectors decreased considerably between the 1980s and 2000 for various reasons, including donor perceptions of and, perhaps disappointment with, results of rural and agricultural development projects. However, after decades of relative neglect, agriculture is finally receiving increased attention from both SSA and donor governments, as well as from other donors. As a result, agriculture genuinely appears to be back on the agenda. The World Bank, in a report specifically dedicated to the agricultural sector, suggests a reconsideration of agriculture and its potential role for overall development (World Bank, 2008).

Three different phenomena may have played a role in the revival of attention for the agricultural sector in developing countries, in general, and SSA, in particular:

1. The widespread prevalence of poverty, especially in the rural areas in SSA and Asia, points to the need to re-consider agriculture as a contributor to economic growth. As 2015 approaches, lack of achievement towards the first Millennium Development Goal (i.e., eradication of hunger and poverty) in different continents and regions is receiving more and more critical attention. This critical attention often leads to reversals in thinking.
2. Increases in commodity prices have triggered worldwide attention on food security (and sovereignty) and agricultural productivity. Whereas the recent surge in food prices has not continued, there is sufficient reason to expect considerable upward pressure on food prices in the long-term, probably accompanied by higher variability. A steady upward trend may be expected as a result of increased demand for cereals in Asia (e.g., urban populations of China and India) related to improving welfare and changing diets (i.e., meat consumption) and the biofuel movement. Agriculture has traditionally provided food, feed

and fiber,[5] but fuel seems to have been added to its scope of work. Among other things, higher variability will result from speculation, decreasing supply elasticity and uncoordinated policy responses.

3. Enthusiasm and reluctance vis-à-vis the still largely unknown opportunities offered by biotechnology has direct implications and applications for agriculture, involving research communities, industries, consumers, and policymakers worldwide.

The centerpiece of Africa's agricultural policy is the Comprehensive Africa Agriculture Development Program (CAADP) developed under the New Partnership for Africa's Development (NEPAD). Endorsed by African heads of state and government in 2003, CAADP aims to increase public investment in agriculture together with other regional and national level policies and declarations. CAADP targets accelerated growth in agricultural productivity at 6 percent per year, the promotion of dynamic intra- and inter-country markets for agricultural commodities, promotion of agro-food export chains and the achievement of more equitable distribution of wealth. According to CAADP, agricultural growth is not only the basis of economic growth, it is also a vector of pro-poor growth, benefiting the rural and urban poor. Nevertheless, trade-offs exist between profits for poor consumers (including many net buyers in rural areas) and poor producers. Unfortunately, the implementation of the integrated and coordinated approach as foreseen within CAADP has been slower than expected.

Several organizations have committed to providing increased attention to the agricultural sector and agriculturally linked development. The initiative for an Alliance for a Green Revolution in Africa (AGRA), started by the Bill and Melinda Gates Foundation and the Rockefeller Foundation, also provides a startling example of a new commitment to provide support to agriculture and to rural populations in SSA. Nevertheless, despite the increased interest and the growing number of publications and workshops, it still seems premature to take for granted an effective implementation of a vast program for agricultural progress. Historically, whether promoted by donors, governments, or regional institutions in SSA, development plans for SSA have a poor implementation record. As we also will discuss later, the translation of 'plans' into viable action is not always as straightforward as it may initially appear. The avenues for development are context-sensitive, dependent on many factors such as leadership and motivation at various levels within the society. Vague notions of 'what' to accomplish are often quite useless for development facilitators and practitioners, who have to decide on the next best step (i.e., 'how' to get agriculture moving). In addition, contradictory approaches continue to exist in regard to the means to foster agricultural growth. Two fundamentally opposing schools of thought currently exist:

- The 'massive' aid (or 'threshold shifting') flow idea, enabling poor farm (and other rural) households to climb out of the 'poverty trap.' Massive aid flows will boost the assets of farmers beyond a minimum level, and reinforce investment in remunerative activity. Contrary to this approach is the idea of cautious investment without distorting markets

[5] With regards to uses of agricultural products in SSA, we should also add pharmaceuticals and building and cooking materials (e.g., straw, timber).

and discouraging private individual and collective initiatives based on homegrown processes.[6]

- The 'push' versus 'pull' arena: pushing agricultural growth by improving producers' access to agricultural inputs, and by fostering technology development or pulling agricultural development through a focus on farmer and product (i.e., output) market linkages, often including post-harvest technology development, thereby adding value.[7]

In this document, we will advocate a grassroots approach to stimulate agricultural and agribusiness development; an approach that carefully combines action research, advisory and brokering services to support innovativeness and competitive strategy at enterprise, cluster and chain levels. We also argue for context-sensitive approaches, tailored to the ambitions and needs of so-called local 'champions,' and adapted to the variety of conditions that are prevalent in SSA. CASE facilitators do not select regions and products, and we do not claim that CASE will work everywhere in SSA. Sustainable agribusiness development is not easy to achieve and hinges as much on the availability of local champions as on the competitive potential of the location (i.e., is this region adequate to produce this commodity for that market?). In fact, a major fallacy of many prevailing agricultural growth propositions in SSA is their claim to universality. The diversity of conditions in SSA and the unpredictable nature of the human being simply defy any blueprint solution.

[6] Jeffrey Sachs (see Sachs, 2005) is currently the most important advocate of a 'massive aid' approach, advocating a 'big push' through blueprint approaches and by making use of campaign-like methods. See Cabral *et al.* (2006) for a critical comment on the Millennium Villages project – started by Sachs *cum suis*. Easterly (2006) probably contains the most belligerent analysis of the 'massive aid' strategy and, in fact, of most of the international and bilateral development aid over the last decades.

[7] Certainly, the rapid rise of commodity prices on world markets provides novel arguments for 'pushing' agricultural production through improved access to inputs and technology transfer, in particular for agricultural products that may compete on world markets either directly through exports, or indirectly by substituting for more expensive imported commodities. However, to supply food to poor consumers (i.e., to 'net' buyers of food in both urban and rural areas) and to promote growth of domestic markets (through value addition and by optimizing multiplier effects), the challenge of promoting efficient market linkages will likely remain. Note the difference between a 'push' strategy and the 'big push' strategy – as proposed by Sachs (2005), footnote above.

Discussion: Small family-based farming and entrepreneurship

An issue that frequently pops up in discussions on agricultural intensification and market development in SSA is whether smallholder (family) farmers are sufficiently equipped to trigger accelerated agricultural growth and agribusiness development.[8] Larger, commercially oriented farms, for instance, may profit more from economies of scale and may also have easier access to input and produce markets. Linking to both upstream input traders (retailers) and downstream processors and traders involves investment in social relationships and access to financial means, which gives the larger farms a relative advantage. The issue here is mainly about scale, and not so much about the family-based nature of farming. Larger farms typically also profit from a family-based structure because this increases flexibility, stimulates inter-generational learning and decreases, to some extent, the monitoring (e.g., supervision) costs.[9] The agricultural sector in SSA is mostly dominated by smallholder farmers, however. Any reasonable roadmap for growth should therefore be based on the involvement – and maybe gradual transformation – of these smallholder farmers. In addition, the transition to larger farms will, in many cases, imply significant changes in land tenure (property) systems, enabling the more competitive farmers to buy or to rent additional land from others. The individual and societal consequences of such profound institutional changes are not so easy to oversee (Dangbegnon *et al*., 2003). For now, the most sensible strategy, from our point of view, is based on smallholder farmer investment and participation and on competitive collective strategies (i.e., cooperatives and other producer organizations [POs]) to strengthen linkages to markets.

[8] See Hazell *et al*. (2007) for a paper on this issue.

[9] Several POs have made family-based farming a key issue in their advocacy work – arguing that policymakers generally disregard rural families and smallholder farms as the basis for agricultural (and agriculturally linked) development. See the website of the Network of Farmers' Organizations and Agricultural Producers of West Africa (ROPPA), www.roppa.info.

3. The pillars of CASE

3.1 Introduction

Essentially, the Competitive Agricultural Systems and Enterprises (CASE) approach is an actor-oriented grassroots approach to agricultural and agribusiness development, based on action-oriented interactive learning and empowerment processes. The approach has benefitted from insights from management science and institutional economics. However, it developed largely from practical experience – in particular IFDC's ISFM projects implemented between 1998 and 2005 in several West African countries.[10] During the ISFM project period, so-called 'learning plots' were designed and implemented together with village-level producers and resource persons, often from National Agricultural Research and Extension services. Non-governmental organizations (NGOs) also became involved to stimulate adoption of more efficient use of expensive 'external' inputs, including improved seeds, fertilizers and crop protection products (CPPs) (Gross *et al*., 2005). Whereas farmers were generally quite enthusiastic about the lessons they had learned from the learning plots, the emphasis on agricultural productivity alone was clearly insufficient to address the multiple challenges that the farmers were facing. These challenges were related to the accessibility as well as the affordability of 'external' inputs, the perceived lack of market outlets and the financial risks associated with the use of 'external' inputs under very uncertain conditions. As a consequence, the ISFM projects progressively supported many other types of activities, including:

- Strengthening of producer groups to pool demand for agricultural inputs and link and negotiate with suppliers.
- Networking between producer groups and traders and/or agro-food processors.
- Support to POs to improve collective marketing strategies of specific commodities/products.
- Support to local entrepreneurs – often originating from the farmer community – to establish or improve management of storage warehouses, and processing strategies (equipment, marketing).
- Support to producer groups and local entrepreneurs to formulate business plans and link with financial institutions.
- Training of business support services (BSSs) to provide market intelligence to producer groups and/or local entrepreneurs and to facilitate research-action on inventory credit systems, market analysis and marketing strategies.

[10] The ISFM projects were supported by the International Fertilizer Industry Association (IFA) through the 'Fertilizers and Sustainable Agricultural Development' (F&SAD) project and United States Agency for International Development (USAID) through the 'Farmers for the Future' (FFF). IFAD also co-funded activities directly related to 'technology transfer' of ISFM. IFA still co-finances activities within 1,000s+, mainly fostering input supply linkages, and capacity-building of POs and input dealers (e.g., pooling of demand, business and financial management, negotiation, advisory services – all related to agricultural inputs).

- Support to POs to implement farmer-to-farmer extension services, also involving rural radio and local NGOs.

During the initial stage, these activities were simply referred to as agribusiness development.

It soon became clear that the most successful experiences had some characteristics in common. CASE developed out of this recognition, and only after an intensive period of experiential learning. Pillars, key concepts and values (or design principles) together form the CASE reference framework that is being used within several IFDC-coordinated projects and in particular the 1,000s+ project. The three pillars, which are the focus of this chapter, are:

1. Agribusiness cluster formation, or the strengthening of local level capacity for innovation and entrepreneurship, involving a diversified array of actors and stakeholders
2. Value chain development, aiming to link farmers to consumer segments, emphasizes the integration of other local actors (i.e., the local entrepreneurs who are also part of the agribusiness cluster)
3. Transaction governance capacity-building, which involves both public and private stakeholders, and fosters improvements in the institutional environment for agribusiness development

The pillars of the CASE approach are schematically presented in Figure 2.

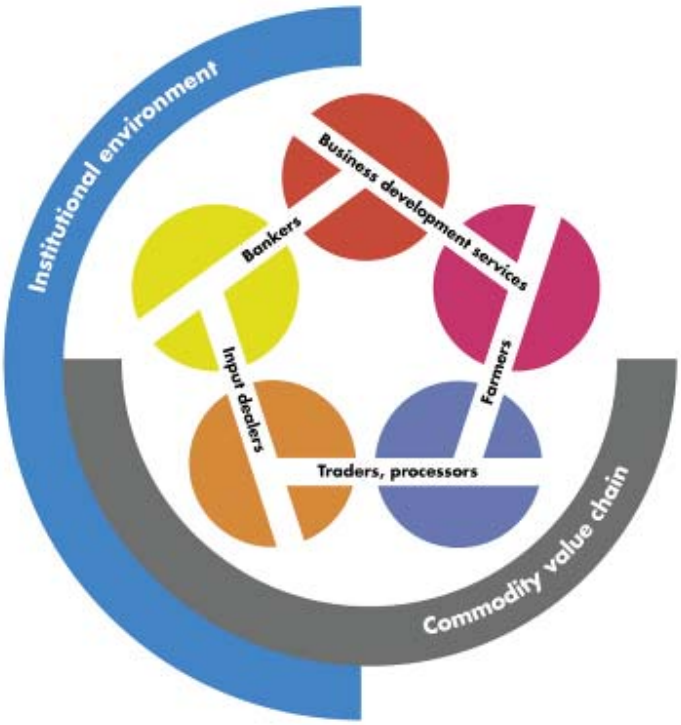

Figure 2. Schematic representation of the three pillars of the CASE approach

In this figure, the agribusiness cluster is illustrated by the five inter-connected circles. The agribusiness cluster links farmers, local entrepreneurs (involved in supplier and channel value chains), bankers (financial services) and BSS in the target region. The commodity value chain is visualized as the grey arc at the bottom. In practice, market integration may concern more commodities, and commodity value chains, but a certain degree of specialization in commercial orientation fits well with our agribusiness cluster philosophy. We will come back on this issue later. The institutional environment appears in the figure as the blue arc on the left. It refers to governance institutions in the widest sense and includes business ethics and regulations. Strengthening the institutional environment obviously involves not just policymakers and civil society, but private sector agents as well. Again, in CASE, specific attention may be given to local (decentralized) levels of governance.

! It is noted that previously ISFM was also mentioned as one of the main pillars (Maatman *et al.*, 2007). Progressively, however, it appeared that ISFM – though critical in all the target areas – was not always perceived by farmers (and local entrepreneurs) as their first priority to strengthen linkages with markets. It was felt that ISFM, and all agronomic issues related to increased agricultural productivity, should be seen as an integral part of agribusiness cluster formation. We will come back to agricultural productivity and ISFM in Chapter 5.

3.2 Agribusiness cluster formation

Farms and agriculturally linked firms in SSA are increasingly engaged in a competitive battle to improve profits and to stay ahead of their competitors. Essentially, such strategies focus on the costs to produce or to process, store or transport a product, the quality of the product and its delivery. Sustainable competitive advantages, however, rarely rely solely on farm or firm performance but on the joint performance of an array of inter-linked actors, including input suppliers, managers of POs and of collective warehouses, processors and local or (sub-) national level traders. This ensemble of inter-linked local and non-local actors form a (commodity) value chain (see next section). Farmers and other local entrepreneurs who regularly sell part of their produce are 'integrated' in one or several commodity value chains.

Market integration is risky (Figure 3) and it would be wrong to suggest that local actors simply stand to win from participation in value chain development. In fact, without sufficient information and bargaining power, local actors may quickly see their economic rents squeezed and captured by better organized actors, up or down the commodity value chain. Additionally, and perhaps more insidiously, they often carry the greater risk burden. For example, in the case of prolonged drought, farmers will bear the costs of re-seeding; when harvests fail, they may even be forced to use other non-farming revenues or to sell some of their livestock to reimburse the loans that were obtained to purchase agricultural inputs or equipment. Dwindling prices when supply exceeds demand may also squeeze farmers' returns. In certain cases it may even lead to the canceling of contracts because traders can obtain the products easier and/or at lower costs in neighboring markets. We argue that effective and largely profitable participation of local agents in commodity supply chains depends on many things but mainly on the capacity of these local agents to learn and work together, to innovate and to implement coordinated

action. It is emphasized that capacity, from our perspective, comprises individual competencies (technological and managerial) as well as collective ones. As we all know, collective capacity develops from relationships among farmers themselves ('horizontal' relations), between farmers and other local entrepreneurs (local processors, traders) downward and upward in the value chain ('vertical' relationships), and with local-level service providers. Such relationships essentially nurture trust, joint learning, and coordinated action (and investment).

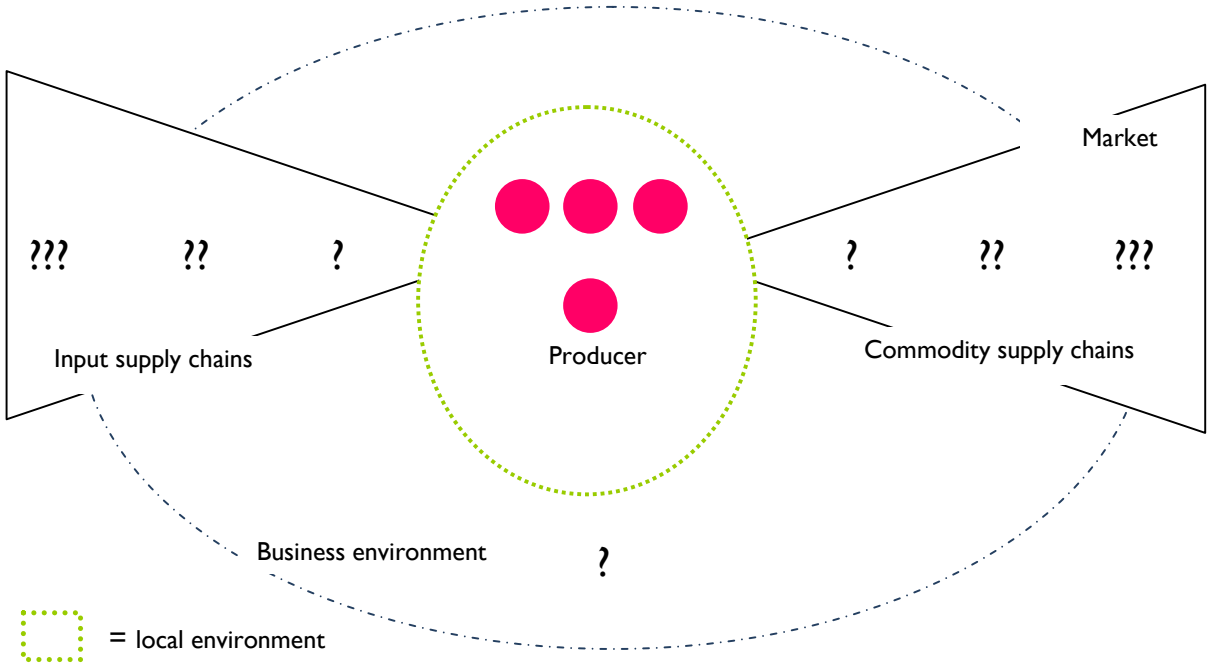

Figure 3. Market integration is risky!

The idea to concentrate on and nurture the competencies and inter-relationships among local actors is also grounded in management theory. According to Porter (1998), the following determinants shape regional or national competitive advantages for a certain 'industry' in a specific location (the industry cluster, see Box):

- Industry structure (number of actors involved, production costs and volume of sales, equipment and other capital invested) management and rivalry strategies within the specific location
- Demand conditions within – or at close distance – from the specific location
- Presence of related and supporting industries (including microfinance institutions [MFIs] and BSSs)
- Factor conditions (labor/skills, capital, natural resources) within the specific location

Cluster

The term 'cluster' was coined by Michael E. Porter, one of the world's leading authorities on competitive strategy and international competitiveness. Porter emphasizes in his book *The Competitive Advantages of Nations* that the competitive industries of a nation are never evenly distributed across the country. Instead, successful industries tend to have strong and nearby (!) vertical (immediate buyers, end-users, suppliers) and horizontal (technology/business development and financial services, competing firms) relationships. Both attract and profit from related industries (industries that contribute specific complementary activities). Nations typically have only a few successful industry clusters (Porter, 1998).

N.B. With 'industry' we refer to actors involved in the same activity (milling of cereals, processing of horticultural crops, production of cereals or production of rice). The boundaries of the 'industry' depend on the 'activity' that is being considered, and on the geographical scale (region, country, world). From our perspective, an 'industry' may consist of all farmers in a particular region involved in tomato production, i.e., the 'tomato production' industry in northern Togo.

The factor conditions have received ample attention in the past and they determine the region's (or the nation's) comparative advantage. However, building competitiveness on comparative advantages (such as low labor costs) is seen by Porter *cum suis* as a self-defeating strategy. Comparative advantages may provide a starting point, but strategies based on such advantages alone are often easy to replicate. Competing industries in other regions and nations may quickly take over. Therefore, a competitive strategy should – eventually – address the other three determinants as well. This includes attention to:

- Strengthening of 'industry' structure within the region, i.e., improving the nature of rivalry between firms/farms, competencies (technical, managerial) and bargaining power relationships with suppliers/buyers
- Development of home demand relationships to improve linkages with end-user markets and enable firms/farms to respond adequately to changes in consumer preferences and quality requirements in channel and buyer value chains
- Development of related and supporting industries (e.g., to improve services, decrease transaction costs and/or increase returns to investment in industry-specific infrastructure and research and development)

The notion of cluster formation, as one of the CASE pillars, naturally evolves out of this location-specific competitive advantage framework. What does this mean for our specific case of agribusiness development in SSA? Again, agribusiness cluster formation aims to strengthen individual and collective competencies, and professional inter-farm and farm-firm relationships at a local level.

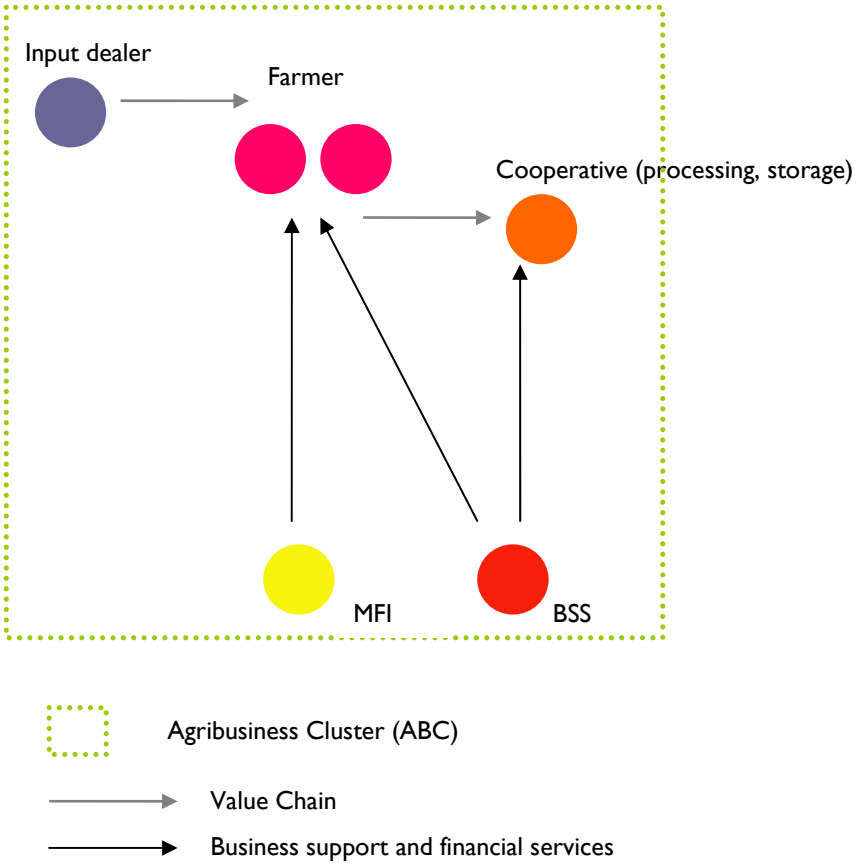

Figure 4. Schematic representation of an agribusiness cluster

Often such local entrepreneurs are either farmer groups in the process of professionalization and progressively accepting the idea that professional POs may need specialized staff, or sons and/or daughters of farmers that have started an agriculturally linked enterprise. Agriculturally linked enterprises may prove effective on both sides of the production segment by selling inputs, renting equipment, providing storage facilities and post-harvest processing. However, agribusiness clusters comprise not just the local agents (actors) directly involved in the flow of goods – through a commodity value chain. They also comprise the supporting services, which provide information, capacity-building and finances (i.e., stakeholders).[11] We generally distinguish between financing institutions (mainly MFIs – at the local level) and BSSs. The agribusiness cluster is illustrated in Figure 4.

It is central to our argument here that all actors and stakeholders of any agribusiness cluster have a common agenda. This common agenda is determined by the product that is produced, processed, stored and traded, and – to a lesser extent – by the specific market segment that is

[11] Local level policymakers, though not explicitly included here – they are part of the third pillar – are often seen as another group of stakeholders in the cluster formation process.

targeted with this product.[12] The notion of a common agenda may or may not be explicitly recognized by some or all of the actors and stakeholders involved. Awareness of inter-linked interests among actors and stakeholders is a critical factor as it enhances collaboration and reduces the risks of opportunistic activity that may undermine cluster competitiveness. We will return to opportunism and the need for stronger coordination in the next chapter. Not all actors living in the same locality automatically belong to the same cluster. Groundnut and tomato producers do not necessarily share the same cluster, even when they are both farming in the same region. If both grow tomatoes and sell part of their production through the same 'channels,' both will be considered as members of the tomato cluster. In addition, farmers that specialize in groundnuts may be part of the groundnut cluster as well.[13] BSSs with specific skills in groundnut processing may not be part of the tomato cluster. On the other hand, BSSs with generic skills in agricultural extension may provide services to both groundnut and tomato producers and be considered as stakeholders in both clusters.

Agribusiness clusters do not develop without explicit attention. They need local actors who invest substantially in getting the right people together and who drive the formation process. We call such actors the 'local champions.' If the process is supported or triggered by a BSS, we define the BSS as the facilitator or the catalyst.[14] Sometimes, the cluster formation process is driven by an external actor, e.g., a wholesaler or supermarket chain subcontracting a series of producers to supply a commodity. We define such an actor as the lead firm, not as the local champion, and not as a facilitator (catalyst).

In the next example we describe an agribusiness cluster in Togo that comprises two different types of producers: one group that grows maize (and is willing to invest in growing a specific variety of maize as feed for dairy farming) and the other comprised of dairy farmers and their association, that are progressively intensifying their dairy farms to cover increasing demand, mainly from urban citizens in southern Togo.

[12] To a lesser extent, because groundnut producers that produce for different markets (e.g., local/urban, or local market for non-processed/processed groundnuts) may share common concerns with respect to input supply relationships, varietal selection, agricultural production technologies, etc. Whereas the 'barriers to entry' are quite low for many value chains supplying relatively cheap food products for local and urban markets, farmers may leave channel choices open and supply the same groundnuts through different value chains.

[13] Obviously, there might be some 'inter-relationships' between tomato and groundnut production, and clusters within the same region (e.g., when financial services are provided by the same institutions for both the commodities or when buyers [traders] are interested in groundnuts and tomatoes for the markets that they serve, etc.). These linkages provide opportunities for diversification.

[14] BSS refers to an organization that provides business support services. BSSs can be private/public organizations, for profit and not-for-profit. In Chapter 6, on facilitating CASE, we discuss in more depth the meaning and scope of work of a BSS – from our perspective.

Example The yellow maize cluster in the coastal area of Togo: an interesting lesson

In the first half year of 2007, contacts were established between maize producers and poultry farmers within the Association Nationale des Producteurs Avicoles du Togo (ANPAT). The idea was quite simple: There are a growing number of poultry farmers in southern Togo. Many of them rely on expensive, imported products to feed their chickens. On the other hand, there is a large group of cereal producers looking for a reliable market. In fact, both groups were active in different clusters and involved in distinct commodity value chains (see Figure 5).

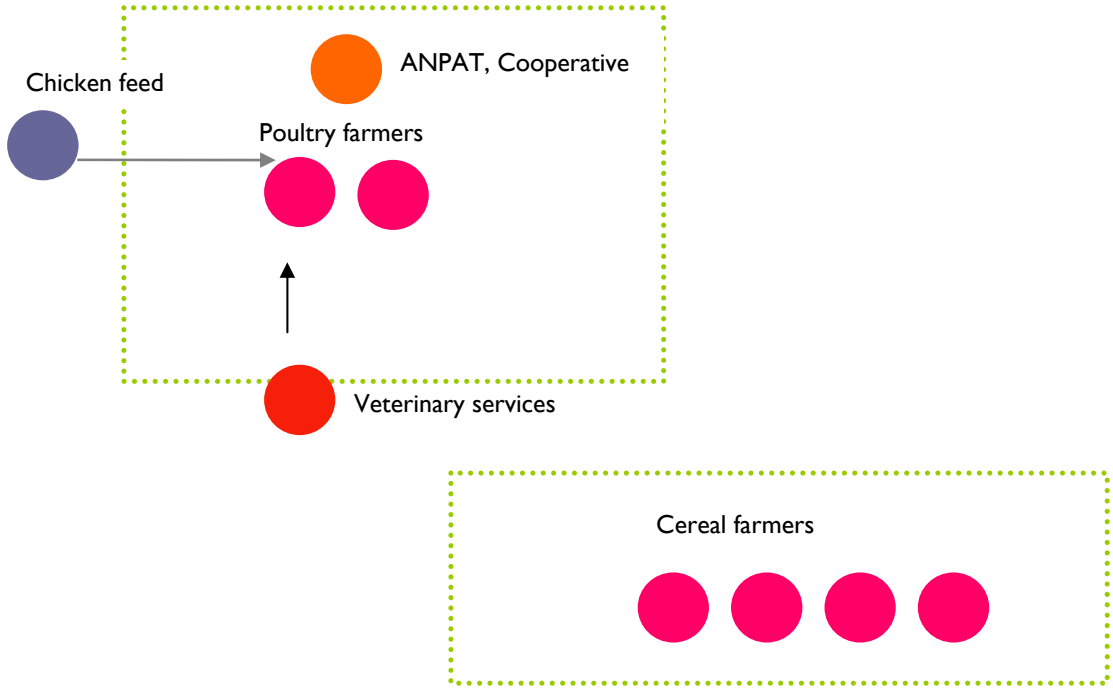

Figure 5. Schematic representation of the initial poultry cluster in Southern Togo to which the cereal farmers were not connected

Several meetings were organized and an informal agreement was finally reached on quantities (170 metric tons [mt], to be provided by the POs of Afagnan, Ahépe, Tabligbo and Agbélové communities, all in the southern coastal area of Togo) and prices (100 FCFA/kg for the normal local varieties of white maize and 120 FCFA/kg for yellow maize). The maize would be collected at the farm gate after drying and packaging by the farmers. ANPAT was supposed to propose a formal contract to the POs. The four POs received a first draft contract, but for various reasons the final contract was never signed, and as a consequence, the amendments proposed by the POs were not taken into account. Collectively, only 64 mt were delivered by the four POs.

A closer look reveals that ANPAT asked the farmers not to use CPPs after harvest; CPPs are normally used by farmers to avoid insect attacks. The farmers agreed to this, on the condition that ANPAT would collect the maize within one week after harvesting. ANPAT was not able to respect this agreement,

however, and their visits were scattered over a period of six weeks. After the 2007 harvest, the maize price quickly rose (due to bad harvests) and the producers decided not to wait for ANPAT but to sell part of their stock at the local market. This included a delivery of 50 mt of maize to the hospital in Afagnan. Increased insect damage also affected their choice. The financing of purchases appeared to be a problem as well. Only a few members of ANPAT provided funds, and ANPAT had to pre-finance the purchases from its own reserves. According to ANPAT, however, the payment was not delayed because of insufficient finances but due to the low average weight of the bags collected (only 86 kg on average against the expected 100 kg). Apparently, the bags were not weighed at the point of delivery and farmers made use of local bowls of varying volumes to fill the bags.

Despite the difficulties, all actors insist that they like to continue with the exercise of bringing two separate clusters together, as depicted schematically in Figure 6.

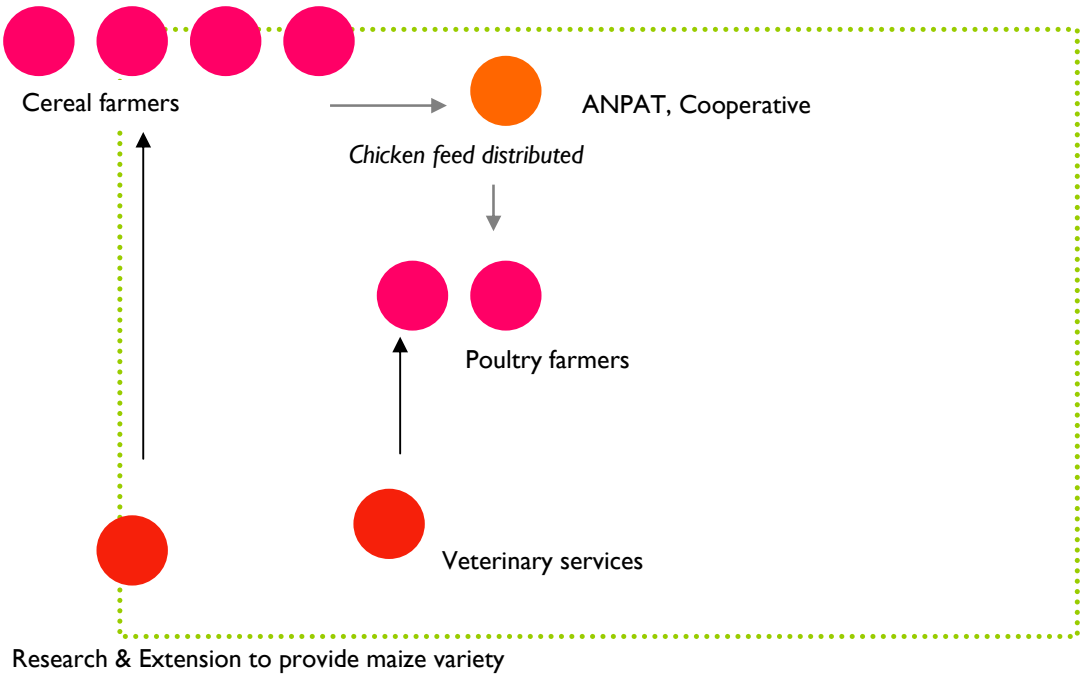

Figure 6. Schematic representation of the poultry cluster in Southern Togo with cereal farmers supplying yellow maize to feed the chicken integrated.

No party seems to be ready to take the initiative. This is still very much left to the cluster advisor of IFDC/1,000s+, who acts as the facilitator. The experience demonstrates several lessons: (1) the importance for all parties to better understand their shared interests, and to evaluate their own and each other's capacities to honor engagements (e.g., funding mechanisms and logistics management within ANPAT); (2) to push contract negotiations to their conclusion (i.e., informal agreements are not enough, contracts also need to anticipate risks, yield/price fluctuations and clearly define responsibilities of each party); and (3) the importance of appropriate risk management and sharing models.

Discussion: The boundaries of an agribusiness cluster

A question often asked is what does 'local' mean, or how are the geographic frontiers of any agribusiness cluster defined? There is no simple answer to this question and probably not even just one 'right' answer. The most important consideration, however, is that cluster actors typically should be able to meet each other regularly, in order to build trust, to understand each other's business, and to monitor inter-firm/farm agreements. In the context of SSA, in particular due to the bad shape of many roads in rural areas and the tendency to 'distrust' the stranger, this may lead (initially) to a very limited geographic area, involving just a few neighboring villages. Preferably some bigger towns and business centers should be within a reasonable distance to enable farmers to link up with local enterprises and to develop insights into consumer preferences (i.e., the 'demand relations' mentioned earlier). Such insights including consumer feedback are crucial to strengthen competitive strategies and to develop new ideas with respect to products and market development. With time, the geographical area of the agribusiness cluster may expand, entailing more or less radical changes in communication strategies. In a recent training program, a participant from Burkina Faso asked if the National Agricultural Research Institute, which was regularly involved in the mentoring of farmer-field schools in the southern part of the country, was to be considered as part of the agribusiness cluster (Figure 7).

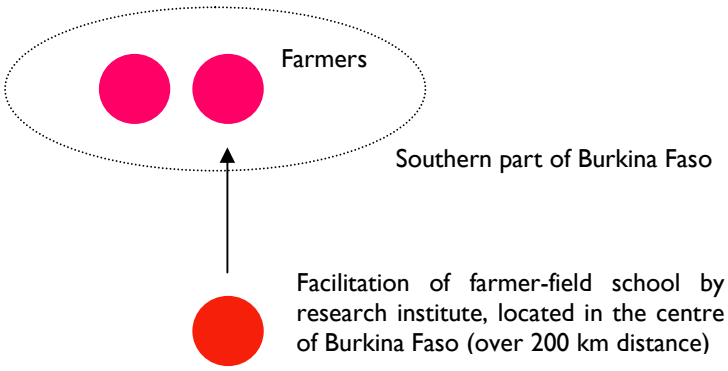

Figure 7. Locality and cluster agents: example from Burkina Faso

Our preference, under the given circumstances, was to consider the research institute, which was based at a relatively large distance from the farmers, as 'external' to the cluster. In fact, the costs of the services were relatively high as they included substantial expenditures for travel and DSA of key staff involved. It was therefore advised to look for a local BSS that could (gradually) take over part of the services provided by the national research institute. The researchers of the national institute would still be involved, in the short-term for the training of the key staff of the local BSS, thereafter, for technical backstopping of the BSS and for any other critical input that required their specific knowledge and competence.

3.3 Value chain development

The overwhelming attention to value chain development over the last decade or so is certainly inspired by an increasing awareness of the complexity of strengthening the participation of smallholder farmers and entrepreneurs in domestic and global markets.[15] This awareness stems from the unsatisfactory results of single actor and/or locally restricted rural development interventions, and also by macro-economic adjustments. The former failed to connect local actors and stakeholders durably to other agents, and the latter failed to bring widespread market development. Both failed to advance the private sector beyond its already limited confines.[16] As a consequence, emphasis has shifted from government policies and sector-specific and more or less territorial approaches to development, to the inter-relationships between farm-households and other local and non-local actors actually or potentially involved in market development.

What is a value chain? A value chain describes a range of activities that are necessary to bring a product or service from its conception through the different phases of production to the final consumers. It may also include the final disposal of the product or service after use (adapted from Kaplinsky and Morris, 2000). Value chains describe inter-linked activities both within and between firms and farms, and traverse several economic sectors. A key issue is that value is being added at each segment in the chain. Value can be added to a commodity in several ways: by producing it (as farmers do), by transforming it (as processors do), by making it accessible at the right place and time (as traders do) and by adding services to it (as some traders do – e.g., agro-input dealers that provide advice to farmers).

The notion of the value chain is somewhat ambiguous. Much of the earlier value chain literature concentrates on the intra-firm value chain (i.e., on the flow of the raw materials and sub-products within the factory until the finished product). The term 'supply chain management' largely refers to such firm level management of supply chains, including the buying (sourcing) of the raw materials. For our purposes, it is sufficient to keep in mind that value chains may comprise both intra-firm and inter-firm relationships. Nevertheless, we tend to concentrate on the inter-firm relationships, and thus on the flow of the product from one segment (i.e., chain function) and actor to another.

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[15] Recent contributions are Bijman *et al*., 2006; Ruben *et al.,* 2007; and Vorley *et al*., 2007. It is noted that much of the literature on agro-food value chains is devoted to international chains – e.g., exports of agro-food products from SSA – and the impact of globalization (and supermarket-led global value chains) on smallholder farmers. A totally different set of contributions, involving both researchers and practitioners, comes from the 'making markets work for the poor' (MMW4P, Ferrand *et a*l., 2004) movement; MMW4P also includes attention for integration of 'poor' consumers in domestic and world markets (Prahalad, 2006).

[16] See Collier *et al.* (1997), Jayne *et al.* (2002), Kherallah *et al.* (2000), World Bank (2002) and Dorward *et al.* (2004) for discussions on this issue. Kherallah (2002) and Jayne *et al.* (2002) emphasize incomplete and poor implementation as limiting the potentially positive effect of structural adjustment. The World Bank (2002) points to failing institutions to support market development, an argument supported by Dorward *et al.* (2004) though focusing specifically on transaction costs and coordination problems in value chains. Collier *et al.* question the adequacy of the adjustment strategy as policymakers in developing countries were generally unwilling – or unable – to restructure their large bureaucracies.

Filière

Another notion that frequently causes some confusion, in particular in francophone countries, is the concept of a *filière*. Whereas in principle the differences with a value chain approach or analysis do not seem significant (Kaplinsky and Morris, 2000), the use of a *filière* approach in agribusiness in SSA actually often suggests a much broader orientation – i.e., involving several value chains at once (e.g., the *filière riz* in Mali comprises all rice farmers in Mali and all other actors involved in processing and marketing of rice). The emphasis in a *filière* approach is on the systemic relationships between input distribution, production, processing and trade for a specific commodity; each sector (e.g., production) is in itself regarded as a sub-system. As a result, the *filière* approach puts less emphasis on the specific actors that are involved in the various segments (e.g., input distribution, transport, production, processing, etc.) and the degree of interrelation and connection between these actors. In our opinion, this is what really separates the *filière* approach from a value chain approach.

A simple presentation of a value chain is given in Figure 8.

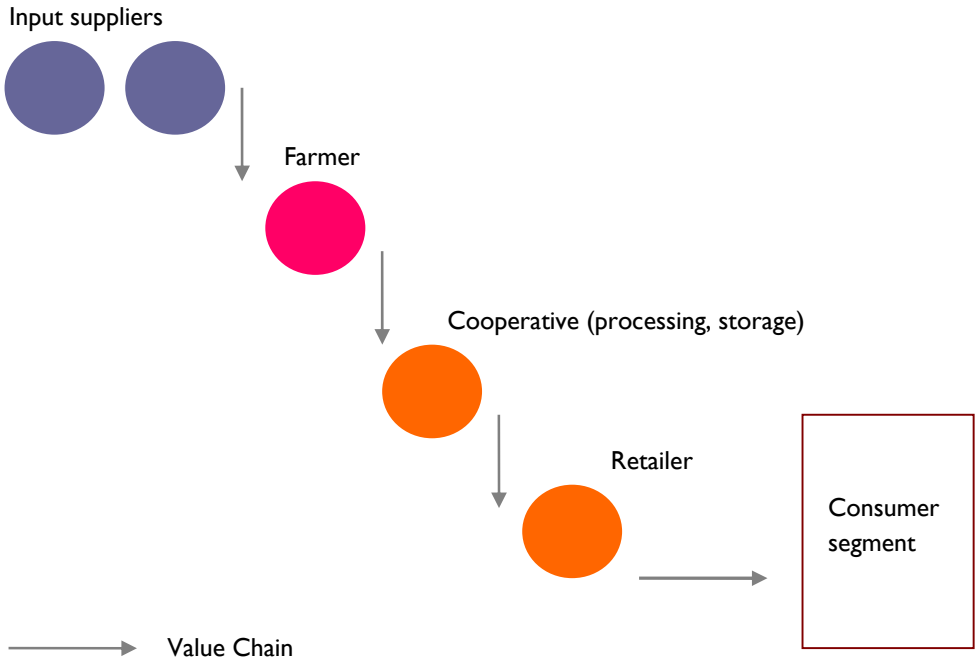


Figure 8. Schematic presentation of a value chain

In fact, Figure 8 can be said to contain several value chains (i.e., the agro-input value chains and the commodity value chain that brings the product from the farmer to a precise consumer segment). The chains that supply inputs to farmers are quite different from the chains that transform and supply a commodity to their final consumer. Seed, fertilizer and CPPs, all involve different value chains as well. Market integration of farmer-entrepreneurs, as a result, involves two different but closely related trajectories:

1. Upward integration in agro-input value chains
2. Downward integration in commodity value chains

A word of caution on the notion of a consumer may be needed here. Farmers are consumers too (e.g., of agro-inputs); many farmers are buyers of agricultural produce for home consumption. Whereas availability and affordability are essential chain characteristics to supply agricultural products to consumer segments, these characteristics are equally important for agro-input supply chains that target smallholder farmers.

CASE promotes the use of a very specific actor-oriented notion of a value chain. The value chain, from our perspective, involves only those actors that effectively engage in the transactions of a product on its way to its final form and destination. Value chains are supported by financial and business service providers. A transporter who does not 'own' the product, but simply brings the product from one 'owner' to another, is seen as a service provider. In doing so, we only consider those actors as part of the value chain or the business system, who really have something to share. They stand out to gain directly from knowing each other better (i.e., trust), from learning together and/or sharing of information, and from improved coordination of action (and investment).

In Figure 9, a highly stylized example is given of various value chains involving mango producers and traders in Mali.

How many different (mango) value chains do we see here? There are quite a lot, actually, if we follow the rationale of the CASE approach to the letter. In fact, the chain that leads directly from producers in Koulikoro to consumers in the same area has to be distinguished from the chain that targets the same consumer segment but involves intermediary local traders. The chain that leads from the mango producers in Koulikoro via traders to Bamako is another one. This chain is, by the way, not the only one that serves the consumers in Bamako. There is another value chain, which involves the mango producers from the Sikasso Region and the traders that buy their mangoes and supply these to the same market. When two value chains supply the same market segment, competition may come into play. The competition may be between the producers from the two regions, if the traders involved are the same (e.g., they buy mangoes – directly or indirectly – from the Sikasso and Koulikoro Regions) or operate within a well-coordinated network. Producers from Sikasso and Koulikoro may also coordinate their activities – as to decrease the level of, or even avoid competition. The more we would know about the whole system, the more detailed the diagram would become. Local traders may be distinguished from traders that operate from a distance (e.g., from Bamako). Collectors may be linked to a specific group of traders (e.g., the exporters). In addition, the stringent quality requirements in the mango export chain will lead to subordinated value chains for those mangoes that have been selected. Note: the chain map presented lacks substantial information in terms of volumes that flow through each channel; it also lacks detail on costs and profit margins. Such information may not always be available or easy to collect, and not all actors will have the same capacity (and incentive) to invest in collecting this information. We will come back on the issue of information to develop and maintain competitiveness in Chapter 8.

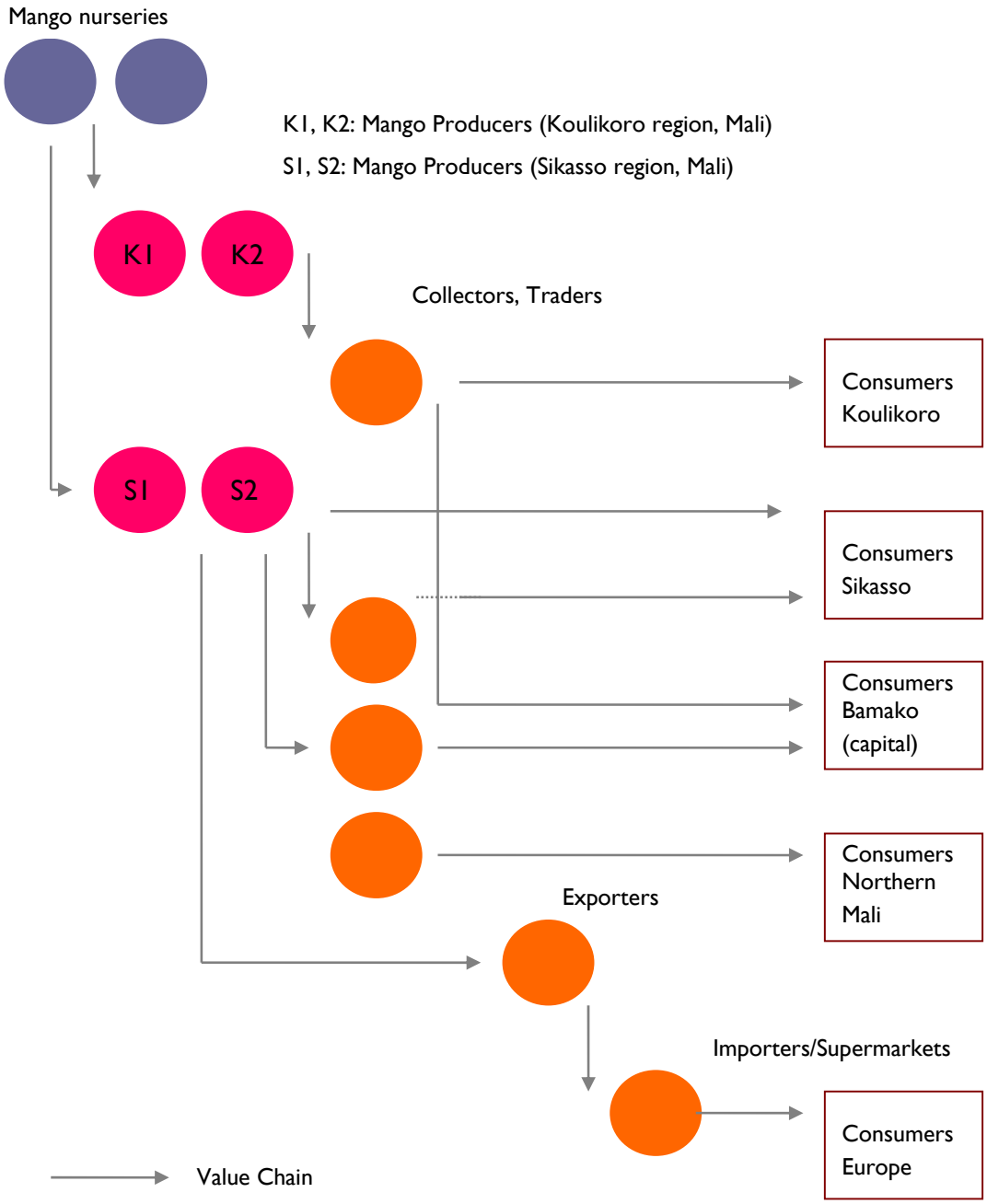


Figure 9. Example of different mango value chains in Mali

! As the number of inputs and intermediary goods grows, the value chain network may become quite complex to describe (and to visualize). As with all methodologies to structure a problem situation, simplification is essential. The most important question when drawing a value chain or a network of value chains ('value chain mapping') is not whether all actors are presented, but whether it presents sufficient detail to analyze major bottlenecks (e.g., access to inputs) and critical factors for success.

Tiger nuts may provide a means to diversify sources of income for farmers in the cotton areas of southern Mali. Currently, the tiger nuts are sold on local and urban markets; tiger nuts are used in several local dishes. However, producers have started to contact their Burkinabe colleagues to discuss opportunities for collaboration. Demand for tiger nuts on the world market is growing; in particular, Spain imports large quantities. Contacts with exporters have already resulted in contracts worth over 50 million FCFA (US $100,000). The main concern of the tiger nut producers is to raise their productivity through appropriate fertilization. The photographs respectively show a learning plot (see Chapter 5), women sifting the straw and the sand from the nuts, packaging of the tiger nuts for transport, and transport of the tiger nuts.

(Top photograph by Alain S. Traore; all others by Fatoumata Keita)

Example: Soybean value chains in southern Togo

Several soybean value chains in southern Togo are supported by 1,000s+. Whereas in central and northern Togo soybean was seen as an interesting leguminous crop in rotation with maize or cotton, it was decided in 2006 that more specific attention should be given to soybean producers and to opportunities to link actor groups in clusters and through value chains. PVD, a local NGO, formerly supported and trained by the German Development Agency (DED), was identified as a BSS to kick-start this process and, in particular, to facilitate intensification and market development. Unfortunately, due to poor seed quality and bad rainfall, yields in 2006 were catastrophic. Germination rates were below 5 percent in many farmer fields, and limited seed availability constrained opportunities for re-seeding. Despite the difficult circumstances, producers reiterated their interest in soybean production because of its ease of cultivation, modest input requirements and positive impact on soil fertility. As demand for soybean was growing, producers felt they could capture significant margins on soybean production – sometimes far beyond returns on cotton production. Markets are, however, relatively little known and perceived as highly volatile; soybean is also not yet perceived as a commodity for home consumption.

To ensure producers of a 'secure' market for at least part of their soybean production, 1,000s+ contacted Agrinova, a trading company involved in, among other things, the import of vegetable oils and the export of soybeans. Between January and May 2007, Agrinova started a series of discussions with 17 POs involved in soybean production in southern Togo, to negotiate prices and to ensure itself of the willingness and capacity of the POs to increase soybean production.

In June 2007, a contract was signed between the 17 POs and Agrinova in Togo, involving 264 producers, who will grow soybeans on an area of about 90 ha – which is five times the area on which they formerly grew them. (Photograph by Udo Rudiger)

Agrinova developed a business plan, which has been submitted to the 'Banque Régionale de Solidarité' (BRS) in Togo. This will enable Agrinova – a starting enterprise – to pay producers immediately upon delivery, instead of waiting for sale of the processed products.

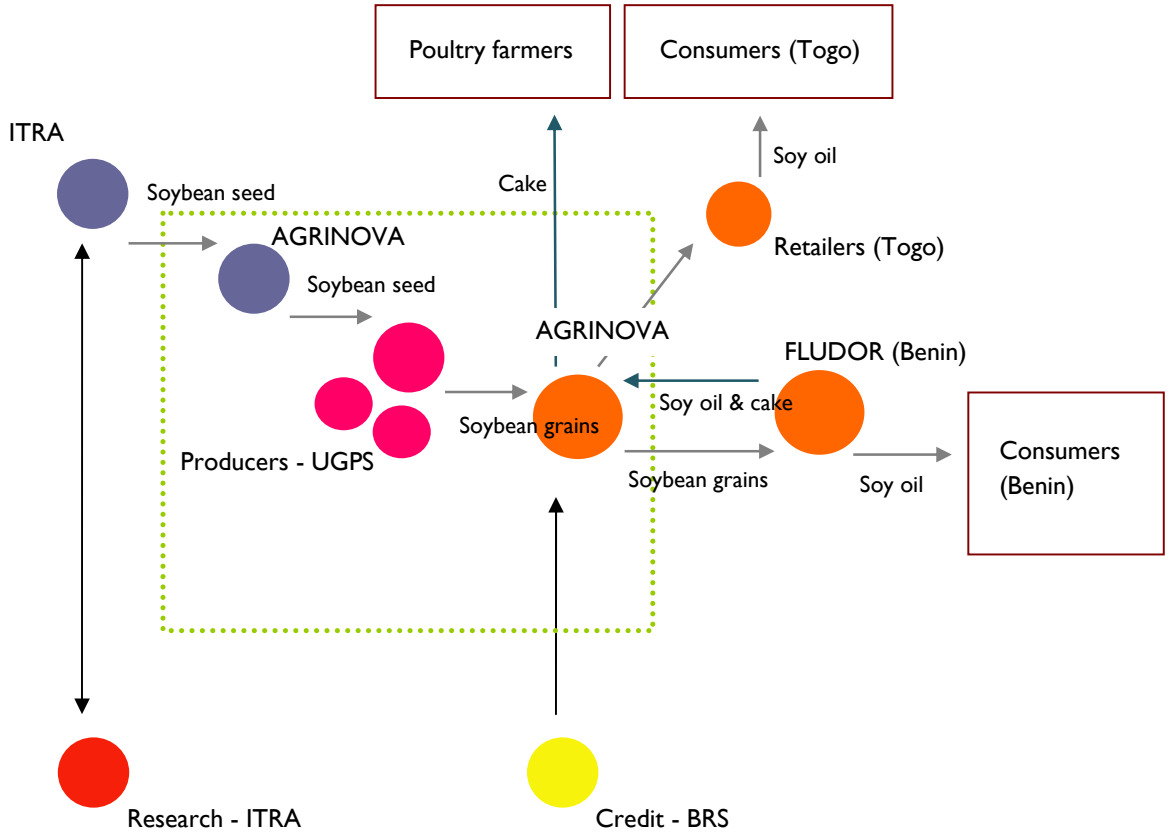


Figure 10. The soybean value cluster in Togo and related soybean value chains

3.4 Transaction governance capacity-building

The concept of transaction governance capacities has been taken from C.K. Prahalad's inspiring book, 'The Fortune at the Bottom of the Pyramid.' In the words of Prahalad, "*transaction governance capacity is about making the entire process as transparent as possible and consistently enforced.*" The third pillar of the CASE approach was initially labeled as the 'strengthening of the institutional environment for agribusiness' or 'lobbying and advocacy for an enabling agribusiness environment.' Both definitions were basically acceptable, although somewhat vague, all-encompassing, and with little direct linkage to the first two pillars of the CASE approach. In fact, the CASE approach is not meant to address the huge challenge of improving overall institutional frameworks at regional and (sub-)national levels. The more limited notion of transaction governance capacity is to the point because it draws attention specifically to those essential elements of the agribusiness environment that directly stimulate the expansion of trade.

Cluster formation and value chain development have a greater chance to flourish when the rural (or agribusiness) investment climate improves. Governance here refers to all sorts of institutional arrangements that facilitate and generate coordination. We take institutions as encompassing norms, business ethics, laws and (micro-) regulations and even organizations.[17] Institutions may have a public character, i.e., established through government or civil society, or a private character, e.g., induced by a lead firm specifying the quality characteristics of a certain product.

We distinguish three aspects of governance:

- Rule-making
- Rule-monitoring
- Rule-enforcement

Rule-making governance refers to the processes by which laws, rules (micro-regulations) and standards are set by government institutions, civil society and/or the private sector. Of course no standard set is a 'governing' principle immediately; legitimacy of the public, civil society and private sector agents involved in setting such principles may still have to be assured. The 'power' of lead firms and consumer associations may also play a role and directly or indirectly influence cluster and chain actors to live up to their expectations. Rule-monitoring governance is about the processes by which adherence to laws and standards set is checked. This can be done by the actors involved in the 'industry' or the value chain, or by BSSs specifically hired or established for such tasks. From our CASE perspective, rule-enforcement relates to all the processes that enable cluster and chain agents to comply to laws, rules and standards set, as well as to the capacity to exercise sanctions (including 'exclusion' from the specific cluster or value chain).[18]

To avoid confusion, we will refer to transaction governance capacity only when we deal with the wider business environment. Agribusiness cluster formation and value chain development deal with the institutional arrangements specifically designed and implemented at a cluster or chain level. In practice, we will not always be able to make a clear distinction between the wider institutional environment (also referred to in this document as the 'windows of opportunity') and cluster- or chain-specific arrangements; in particularly when the micro-regulations are in fact tributary to government policy, prevailing business ethics or otherwise inspired by wider institutional dynamics.

[17] Transactions within organizations follow a separate set of rules, which are typical for the organization.

[18] The classification is very much in line with Kaplinsky and Morris (2000), who distinguish legislative, judicial and executive governance. Their distinction refers, from our perspective, a bit too much to laws and governance through government institutions.

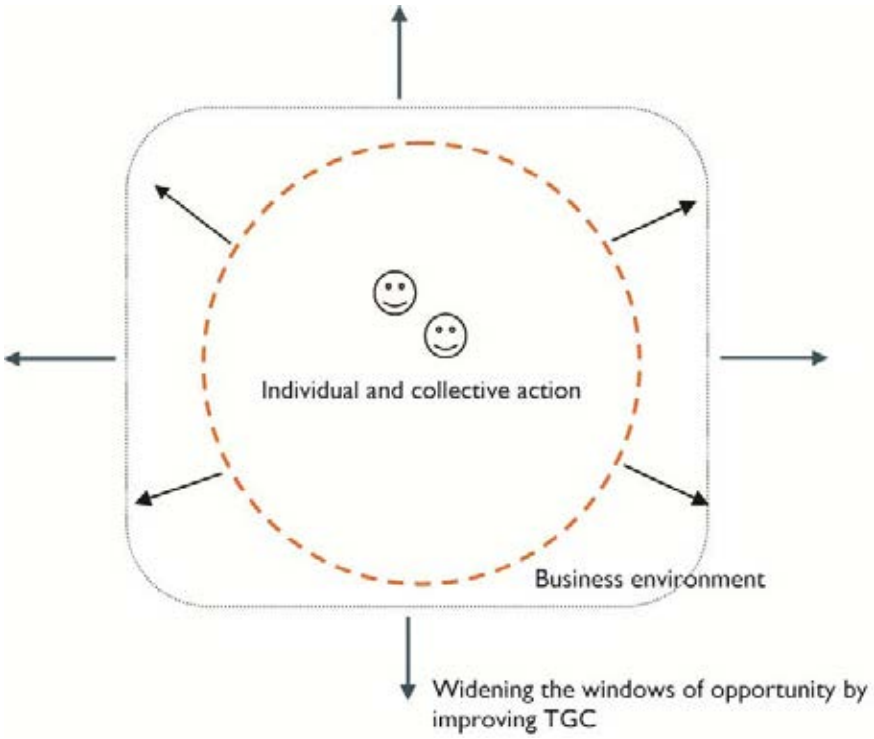


Figure 11. The business environment (including Transaction Governance Capacity [TGC]) constrains the scope for individual and collective action from the grassroots

The late Joseph Houngnonvi, extension agent and prefect of Klouekanme community (Benin), actively sustained changes towards more land tenure security, in particular for women and young farmers. After complaints of women farmers involved in ISFM learning plots, who were unable to reap the fruits of soil fertility investment (as landowners often withdrew the land from them after only one season), he introduced a 'formal' contract, enabling farmers to rent land from larger landowners for a certain period. Typically, such contracts would involve land just planted with palm oil trees, and the contract would cover the period until these trees reached maturity (three to four years). (Photograph by A. Maatman)

Example: The CASE approach used to support fish farming in the Kwaebibirem District of Ghana

In 2007, a group of farmers in the Kwaebibirem District interested in fish farming and eager to convert some of the so-called 'waste' land into aquaculture contacted the secretariat of IFDC partner Apex Farmers Organization of Ghana (APFOG) to assist in developing their business and association. Following the request, the consortium to which APFOG belongs, the Ghana Agricultural Associations Business and Information Centre (GAABIC), visited to the ponds and held meetings with association leaders and the directorate of both the Ministry of Food and Agriculture and the Ministry of Fisheries. As there were fish traders among the membership of APFOG, the farmers were linked to the fish traders who visited the ponds. Subsequently, the ponds were harvested and the fish sold, creating a linkage between the farmers and the fish traders from Accra. The fish farmers expressed interest to join APFOG and started procedures to legalize their association by registering with the Registrar's General Department and APFOG. They are now full-fledged members of APFOG under the name Kwaebibirem Fish Farmers Association.

Kwaebibirem fish farmers visiting Tropo Farms in the Volta Region in 2008 to lobby for a larger supply of fingerlings. The farmers used the visit to learn about how floating hampers (in the background) can be used to produce fish in running water. (Photograph by Victor A. Clottey)

The fish farmers' association was faced with an inadequate supply of fingerlings. The collaboration with the Ministry of Fisheries enabled the Kwaebibirem Fish Farmers' Association to be included in the national fingerlings distribution program. The objective of the program is to distribute fingerlings (male tilapia) to fish farmers across the country to increase fish production. As a result, the association accessed 55,000 fingerlings through Tropo Farms. Feed for the fingerlings was also provided free of charge by the Ministry of Fisheries. Though the initiative is a step in the right direction, the support was insufficient as compared with the promised 200,000 tilapia fingerlings by the ministry. The association is now in direct negotiations with Tropo Farms to increase the supply of fingerlings to them.

Aqua Farms – a new actor in the fish cluster ready to build capacity and supply inputs. (Photograph by Victor A. Clottey)

The Association is taking steps to get its own source of fingerlings. One of its members in Nkawkaw has started producing fingerlings for his own farm and for those of other members. The technique he uses still needs some improvement because he is not able to produce all the male fingerlings that are required. The APFOG secretariat contacted Aqua Farms to have some members of the Kwaebibirem Fish Farmers Association included in their training program to learn techniques of sex-reversal and hand selection of male fingerlings.

A major challenge in this cluster area is access to land. The presence of minerals in the area, mainly diamond, has compounded the issue because much of the land that was originally meant for agricultural purposes has been turned into mining areas. For this reason traditional leaders and policymakers are reluctant to release land to fish farmers. Since most fish farmers and potential fish farmers have expressed their concern about this, GAABIC facilitated meetings to address the problem. They met with the traditional leaders to seek their assistance and met with the district chief executive (DCE) and the Kwaebibirem District Assembly to ask them to lend support to the initiative. Finally, as a result of the official launching of the Kwaebibirem Fish Cluster in October 2007, all parties to seek their assistance, traditional leaders, the district assembly and the Kwaebibirem Fish Farmers Association, are collaborating to ensure the success of aquaculture in the district. The DCE continues to play a key role and is working with GAABIC to provide a clear-cut process for fish farmers to have access to land for their activities.

4. Competition and coordination. In search of a delicate balance

Agribusiness cluster formation and commodity chain development depend on the capacities and competencies of the major stakeholders and the relationships between them. These relationships are shaped by two interacting concepts: (a) competition and (b) coordination.

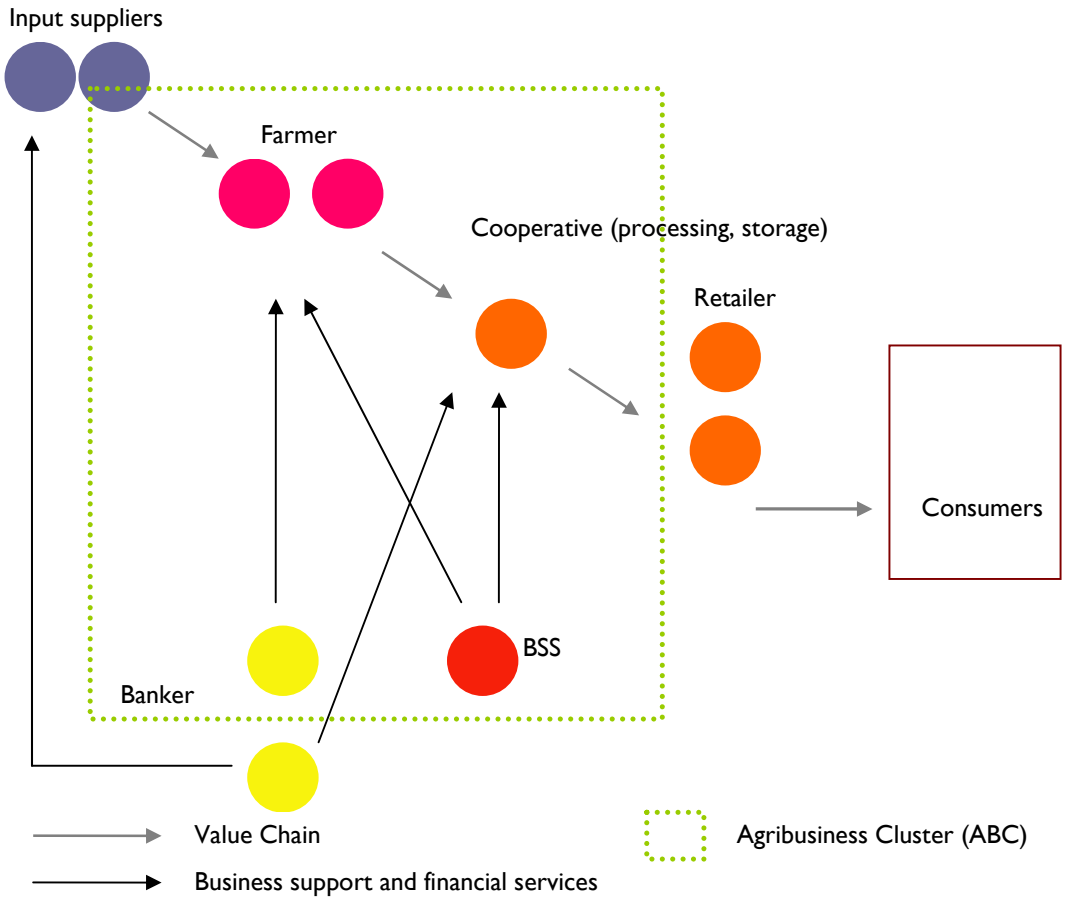


Figure 12. Schematic representation of agribusiness clusters, value chains and (sub-)national BSSs and MFIs involved in value chain development

Schematically, the following 'playing fields' for competition and/or coordination are distinguished:

- Between similar actors and stakeholders involved in the agribusiness cluster (e.g., farmers competing against each other to optimize agricultural productivity; farmer-controlled economic interest groups, pooling demands for inputs, or collecting and distributing market information; study-groups who invest and work together to solve specific problems)

- Between the different actors and stakeholders involved in the agribusiness cluster (e.g., farmers negotiating with BSSs on the contents and costs of their services; farmers working together with local entrepreneurs to analyze market – and channel – opportunities)
- Between the agribusiness cluster and its actors and up- and down-stream actors involved in the same commodity value chain
- Between similar agribusiness clusters, in various locations (e.g., collaboration between actors from different clusters to avoid non-respect of contracts with 'external' buyers, and/or limit price falls as a consequence of large uncontrolled fluctuations in supply)
- Between agribusiness (cluster and value chain) actors and the government (competition between public and private enterprises; or dialogue with decentralized authorities to define complementary public investment, which strengthens business performance)

In the next two sections we will give some specific attention to the notions of competition and coordination. Contrasting competition and coordination have proven to be efficient in stimulating a better and shared understanding of the issues at stake in agricultural and agribusiness development. Competitive strategy, which is dealt with in Section 4.3, profits from and is involved in balancing competition and coordination.

4.1 Competition

Competition drives or motivates innovation, and innovation is generally considered the principal process by which competitiveness is established and maintained.

Innovation may refer to technological as well as organizational and inter-organizational or institutional change. Regarding value chain development, the current notion of upgrading is gradually replacing (or encapsulating) the concept of innovation. Upgrading puts less emphasis on the 'newness' of technologies, procedures and/or arrangements. Upgrading refers to all sorts of measures and pathways that strengthen the competitiveness at firm, cluster and/or value chain level. Such pathways also include simply 'doing old things a little bit better' or 'copying/adopting best-bet technologies from others.' In this document, we will make no major difference between both concepts. Innovation and/or upgrading in business involve the following two aspects:

1. Improving the product or service concerned (in terms of costs, quality and delivery) at :
   a. Enterprise (farm/firm) level
   b. Cluster level (through better relationships and logistics)
   c. Value chain level (through better relationships and logistics)
2. Expansion of the consumer segment (market) that is served. A distinction may be made between:
   a. Expansion of the number of consumers served within an already known market/segment
   b. Targeting a totally new consumer segment (e.g., 'richer' consumers)

Competition in agribusiness is progressively changing from firms/farms operating within the same industry, to competition between agribusiness clusters and, subsequently, between

different commodity value chains supplying the same market segment. Such changes are important to keep in mind. In CASE, we tend to concentrate on the 'direct' competitors, i.e., firms/farms, clusters and/or value chains supplying a similar product to the same consumer segment. From this point of view, the producers of potatoes in the Sikasso Region (Mali) who all produce for the Bamako Market are largely competitors. Producers of onions for the local market and those that produce for a supermarket chain are not direct competitors. Of course, many producers do not supply for just one market segment and may therefore compete in different arenas. Suppliers and producers are not seen as direct competitors because they occupy different functions. However, they are opponents in one of the many negotiation processes in the value chain. Their relative bargaining power is considered here as a competitive force.

Figure 13 schematically presents the competitive playing fields for the tomato producers in northern Togo who serve a specific consumer segment (Lomé Market for fresh tomatoes). Competitive forces are presented for two different value chains involving tomato producers from two regions (A and B), supplying the same market segment.

Obviously, the tomato producers within the same region (region A in Figure 13) will compete against each other to minimize production costs and to ensure quality and delivery characteristics agreed upon with the trader/traders involved. Differential factor productivity translates into higher profits. Therefore, if some producers succeed in decreasing the production costs against others who do not, their profits might increase. Larger profits also enable producers to invest in agricultural inputs that strengthen productivity further. This depends on the prices that the farmers are able to negotiate with the traders. Traders that are aware of the decreasing production costs and who have strong bargaining power may insist on re-negotiating the price. Too much competition between tomato producers in the same region may become devastating for the competitive position of all of them. This may occur if tomato producers try to make individual deals, by proposing lower prices than the minimum price advised by the PO of the regional tomato producers. In the long run, the tomato producers in region A have something to gain from 'healthy' competition, which restricts the degree of rivalry and includes tomato producers collectively in the innovation process. Supply from region A may also augment if there is additional effective demand or if their market share can be increased. In doing so, the tomato producers may compete more intensely with other producers from region B.

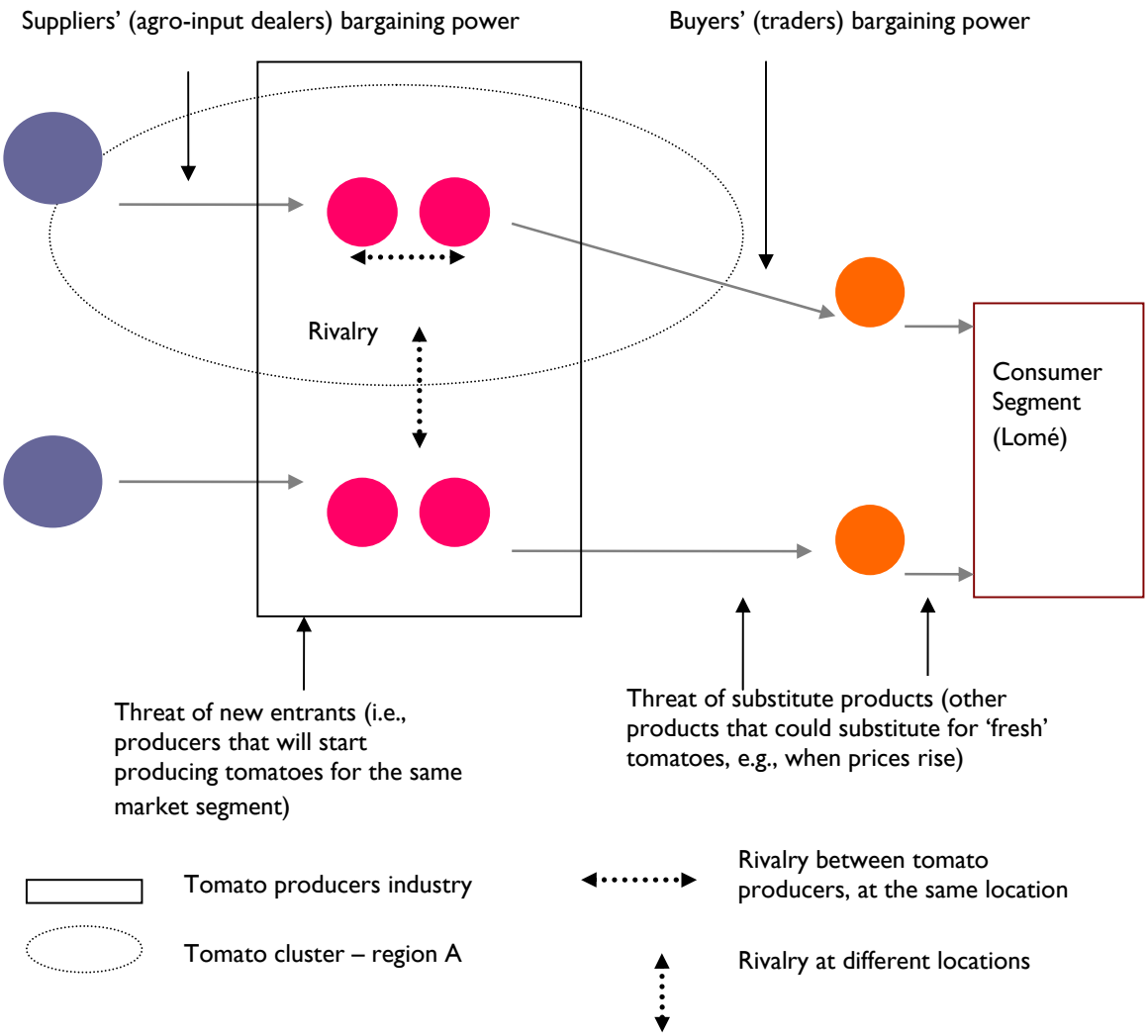


Figure 13. Competitive forces in a (tomato) value chain

Tomato producers in region A may also gain from cluster formation by linking up with input suppliers, BSSs and MFIs, thereby decreasing the costs or improving the quality of the tomatoes produced. Cluster advantages are more difficult to copy than individual farm-level advantages and may be more profitable and of longer duration (i.e., they raise the barriers to entry). Finally, the agribusiness cluster may strengthen its integration in specific tomato value chains through vertical integration or through more 'exclusive' input supplier-clusters and cluster-buyer contracts. The latter will generally involve a shift to more specific and higher quality products, with opportunities for branding. We talk of vertical integration when actors invest in additional activity located down- or upwards in the commodity value chain, e.g., when a tomato producer invests in drying tomatoes or when a PO invests in buying and distributing inputs.[19]

[19] For those interested in management theory. The example describes precisely the five competitive forces, as identified by Porter (1985) but adapted to our case, i.e., the tomato production industry, northern Togo.

Discussion: The role of intermediaries

Discussion on the role of intermediaries may be useful here. The term may lead to some misunderstanding. Almost all actors could be considered intermediaries because most chain agents deal with both up- and down-stream agents. However, we normally use the term 'intermediary' only for those actors involved in the distribution of a product (i.e., inputs, outputs) and not in any transformation (production, processing). Collectors of agricultural produce, traders and retailers are all intermediaries. Market chains in SSA are often characterized by a series of intermediaries between the producer or manufacturer of agricultural inputs and the farmer, and between the farmer, processor and the consumer. Some of these intermediaries may offer little real added value and are merely there because the business network simply functions that way. Vertical integration of POs may be an efficient means to bypass intermediaries. However, cautiousness may be required to ensure that the PO is effectively capable to provide the intermediary services/functions, at a lower cost.

Input dealer in Sikasso (Mali) and Jean-Luc Z. Sanogho, staff member of the Institut d'Economie Rurale (IER). Small-scale retailers play an important role in supplying fertilizers to horticultural (and other non-cotton) farmers in the Sikasso/Koutiala region. (Photograph by Arno Maatman)

Transport of cereals by motorbike in Southern Benin. (Photograph by Edi Kpogan)

4.2 Coordination

Commodity value chain development in SSA is severely hampered by high transaction costs. With transaction costs we mean all the costs involved in preparing, making and monitoring, ensuring the exchange. For a buyer, this includes:

- Finding out what product/service is wanted
- Finding out where to find it and at what cost
- Going there, waiting for the person
- Bargaining or negotiating a contract
- Monitoring (e.g., of labor), and all other activity necessary to ensure that all stick to the agreement

The seller has more or less similar costs, including all costs related to enforcing payment. Commission costs for brokers are also part of the transaction costs. Transaction costs are different from 'transformation' costs, which include all costs related to production, processing and transportation of the commodity. Transformation costs add value to the product, whereas transaction costs do not. When transaction costs are too high, the exchange may not take place. If this happens, economists speak of a transaction failure. Three sources of transaction costs can be distinguished (adapted from Dorward *et al*., 2004):

1. Costs related to risk of corruption: Corruption is a socio-politically constructed mechanism to ensure privileged access of public agents to the economic rent accruing to targeted private sector agents. Corruption involves rent-raiding and refers in a certain way to the opportunism of government officials (see below).[20]
2. Costs related to risk of opportunism: Opportunism refers to inefficient behavior of other economic agents from the viewpoint of the entire commodity value chain. Opportunists are actors that cannot be trusted, or that abuse monopolistic bargaining power. Opportunistic behavior includes any failure of an agent to comply with (in)formal agreements, e.g., simply because alternatives seem more profitable to him/her.
3. Coordination costs: Coordination is needed between agents in the same commodity value chain because the returns to their activities (investments) are inter-dependent, e.g., when an investment somewhere in a commodity value chain depends on complementary investments further down or further upwards in the same chain. This may quickly become a 'prisoner's dilemma,' when no single actor is willing to invest first, if he is not assured of the actions of the other actors. This is especially true for inter-related investments in commodity value chains in a context of thin and fragmented markets as is the case in much of SSA.

[20] Rent-raiding is an appropriate term here because it acknowledges that the government is entitled to some kind of rent-seeking in commodity value chains as a consequence of their effective involvement (effective law/contract enforcement, establishment of proper regulations and services for quality control, truth-in-labeling, investments, e.g., in research and development), Dorward *et al*., 1998.

Coordination problems often stem from a lack of reliable information with regards to the capacities of other actors potentially involved in parallel activities and/or investments to live up to their promises. To supply high-quality potatoes to an upper market consumer segment in Ouagadougou, producers may need to invest in high-quality seeds and improved crop management methods. Traders need to invest more or less simultaneously in timely transportation, and appropriate packaging and handling of the superior quality potatoes. Other actors may be involved, e.g. the seed supplier, the truck driver, and an MFI. The lack of confidence in the ability of the trader to develop sustainable linkages with his or her clients may deter the producer from investing. A lack of trust from the MFI in the ability of the producer to respect the crop management methods and to assure timely delivery may cancel the loan. The loan could also be canceled if the MFI is simply unaware of the existence of a trader or uncertain of the reliability of a trader who seems to be willing to buy the superior quality potatoes.

Within the context of CASE, coordination problems, refer to difficulties in aligning activity (and investment) in actor groups (such as POs), or within clusters and along value chains. Aligning activity requires institutional arrangements (or coordination mechanisms). Four different drivers of coordination (mechanisms) are distinguished:

1. Informal/formal (i.e., contractual) relationships between cluster and/or chain partners that ensure alignment of activity
2. Organizational development, i.e., through horizontal and vertical integration, or by integrating financial (self-financing) and BSSs
3. Regulations – e.g. laws or policies that stimulate coordination – enforced through government
4. Business ethics, as part of culture, or enforced by business associations and/or civil society

We refer to the first set of mechanisms as 'alliances' and to the second one as 'do it yourself.' Alliances also include the relationships along value chains as enforced and supervised by a lead firm (e.g., a supermarket chain). The cotton marketing boards are an appealing example of the third case. Here, so-called 'hard' (i.e., exogenously established) institutional arrangements ensure coordination. The state-owned marketing board assures access to credits and inputs, and exercises monopolistic power on the cotton purchasing and exportation (see also the box on interlocked contracts). Though the failures of many state-owned marketing boards are well documented, the private sector, left to itself, has not been able to overcome the coordination problems.[21] Legislation and business ethics are part of transaction governance capacity (Section 3.3).

[21] As a result of structural adjustment (cf. Dorward *et al.,* 1998, 2005, and Kydd *et al.* (2004).

Interlocked contracts

Formal or informal contracts between two or more parties, involving a series of inter-related agreements over a certain time period – e.g., to enable production by agent A and to secure access to (part of the) output for agent B – are called interlocked contracts. Interlocking of transactions may be quite efficient to ensure access to inputs (easier to obtain by a 'larger' trader) for a certain group of producers, and access to agricultural produce for the trader (or processor).

Example: (Cluster) Financing – strategy

In several cases, POs and local entrepreneurs already have relationships with financing institutions, in particular the MFIs. Access to credit remains severely limited, however, due to several interacting factors: lack of quality loan applications, high interest rates (due to the perceived riskiness of the loan application and lack of saving and/or guarantee funds), and limited capacity of MFIs to provide long-term loans (availability of capital). In addition, MFIs typically provide small amounts of loans to each client through credit rationing. 1,000s+ implemented a series of local training workshops involving POs, local entrepreneurs and MFIs to strengthen capacities of local actor groups in formulating and negotiating loan applications and in building trust among the local actor groups and MFIs.

The fear for coordination risks of loans at the MFIs can be reduced by showing the cluster linkages and/or chain relationships that are established by the loan applicant and by explaining how chain coordination is ensured. In addition, coordination risks can be reduced through chain and/or cluster financing, in which the loan application is developed jointly by two or more inter-linked cluster and chain actors. Each actor then receives a part of the loan, which enable him/her to align activities and investments.

The 1,000s+ project approached the 'Banque Régionale de Solidarité' in Togo, Benin, Burkina Faso and Mali to expand opportunities to access credit for partner organizations. The BRS is a relatively new structure and very much willing to consider loan applications related to agricultural production (e.g., inputs, storage of agricultural products, small-scale equipment for processing and trade). They accept applications from 'marginal' groups, but processing is lengthy for both parties. IFDC ensures BRS of technical backstopping to loan applicants. Coordination risks are further reduced because IFDC ensures that each loan application is part of a coordinated action plan at cluster and chain levels. The partnership between IFDC and BRS has been formalized through an MOU, signed in May 2007 in Burkina Faso and in June 2007 in Togo.

Signature of MOU between IFDC (Togo) and BRS-Togo (left), and IFDC (Burkina Faso) and BRS-Burkina Faso (right). Photographs by A. Diallo (Burkina) and U. Rudiger (Togo).

4.3 Competitive strategy

CASE aims to improve competitiveness and therefore supports competitive strategy at enterprise, cluster, and chain levels. Again, all the different actors and stakeholders within the same cluster and within the same value chain have their own resources, objectives and strategies. They may compete with each other in order to reduce production costs even further and, to increase profits; they will make use of their 'bargaining' power to optimize returns to investment and profits. They also share a common objective, i.e., to supply the targeted consumers with the commodity they are expected to 'want' in terms of availability (in time, space), quality and price, and to ensure that the commodity chain outcompetes alternative competing chains supplying similar products.

Competitive strategy is difficult to achieve in an environment of opportunism and distrust. In Section 4.1, we argued that too much rivalry undermines competitiveness. The same could be said for negotiations that are too stringent between different actors of the same value chain: the entire chain becomes weaker if one of the actors is unable to re-invest in his/her business. In Section 4.2, we argued that corruption, opportunism and coordination problems raise transaction costs (and risks), and that relatively high transaction costs undermine local economic growth. The actual situation in SSA is that (too) many smallholder farmers are tempted to engage in markets, and that they are scattered and inefficiently organized. Farmers in SSA still generally sell incidental 'surpluses', i.e., surpluses not planned beforehand. Whereas the volumes of these surpluses vary per farmer, for most traders they are small. The predominance of many smallholder farmers bargaining on often remote spot markets with only a few buyers (or buyer networks) affects the farmers' profits and may even impede transactions. As a result, smallholder farmers often appear locked in a system of ad-hoc sales and cautious partial integration in markets (Fafchamps, 2004). In addition, the incentives for traders to compete on those scattered spot markets are minimal and they often assert

themselves to a precisely defined, and maybe even mutually negotiated, area. Transactions of larger volumes occur – if at all – through relational and trust-based networks of collectors and small-scale traders, reaching out to a limited number of markets (and/or farmers).[22] These intermediaries subsequently suffer from more or less the same disadvantages as the local farmers and micro-enterprises; much work for meager benefits with a high degree of risk. The same argument holds for input value chains, which only serve a small, often well-known, clientele of POs.

At this point, it could be argued that the principal role of a facilitator within the CASE approach is to support the various actors and stakeholders involved, in finding an effective balance between competition and coordination. The reader is reminded, however, that competitiveness requires uniqueness: a unique product tailored to the needs of the targeted market segment. This requires entrepreneurial capacity at the level of the input supplier, the producer, the cooperative, the processor, the trader, etc. 'Smart' coordination and 'healthy' competition along the value chain and within the agribusiness cluster are important but not sufficient conditions for such uniqueness.

The art of balancing competition and coordination engages many actors and stakeholders at different levels and with different capacities, roles and interests. A careful approach seems indicated to support the various actors in developing the relationships that support healthy competition and nurture the interactive processes required to learn smarter coordination. Such a learning process preferably starts with some concrete activity, linking producers in a target region together, or linking BSSs to a PO, to upgrade internal processes of production, transformation or trade, or to access information on markets, consumer preferences and competitor strategies. Trust gradually develops through repeated exchange, more insight in each other's contribution (investments, distribution of risks and of the returns to investment) and the realization of common interests. Since risks form an important part of any coordination problem, risk minimization strategies, including models to share risks among actors and stakeholders, may need to be integrated explicitly in the search for 'alternative' coordination mechanisms.[23] Healthy competition and smart coordination are in fact institutional arrangements. Novel arrangements also generate so-called adaptive expectations, which may sustain growth and enable a continuously larger portion of the rural population to contribute to

[22] Networks can be established through bottom-up and top-down mechanisms, or – more often – a combination of both. They generally rely partly on socio-familial relationships, partly on processes of trust-building. Networks tend to protect themselves from 'competitors' through socio-political alliances and 'power play,' and may gradually evolve into business cartels. All (profitable) networks risk elite capture.

[23] External shocks (weather, price fluctuations of inputs, services and substitute products) and unexpected behavior from cluster or value chain agents cause risks. Risk minimization strategies comprise: (1) risk avoidance through investment in irrigation, vertical integration and other comprehensive control mechanisms such as peer-controlled networks, (2) risk reduction through portfolio development, (cautious) sequential decision-making, investment in confidence building, information- and risk-sharing mechanisms and (3) insurance. Insurance has considerable potential to strengthen coping capacity but may be costly and vulnerable to opportunism ('moral hazard') and will only work if the risks insured do not occur frequently.

and profit from market-driven development (Arthur, 1988).[24] At some point, the action may also include advocacy and/or lobbying in support of 'healthy' competition at higher hierarchical levels.

Figure 14 shows the major competitive playing fields in agribusiness: between producers (and within other actor groups), between the stakeholders in the same agribusiness cluster, between the actors of the value chain, and between value chains. It now also illustrates some coordination measures.

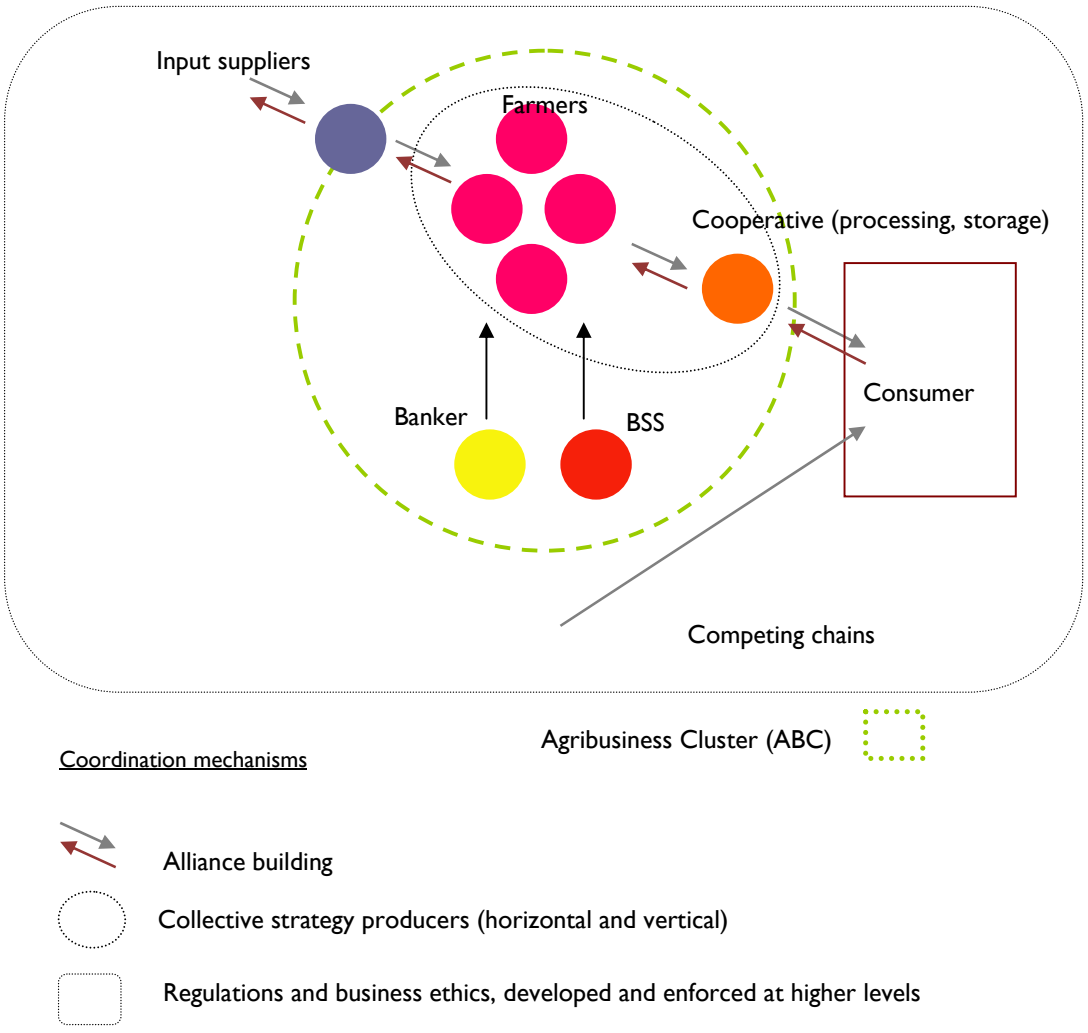


Figure 14. Illustration of coordination mechanisms in agribusiness development

[24] Adaptive expectations are instrumental in pushing 'self-reinforcing' processes of market development. It refers for instance to the belief of economic actors that when a process or activity starts to grow in size, these will continue to do so ('snowball effect').

Input shops managed by POs may not only strengthen access to appropriate inputs for producers in the more remote areas; they also strengthen professionalism. In northern Mali, IFDC supported POs to establish input shops. The POs involved buy inputs collectively with retailers/wholesalers in Bamako. They re-package inputs (in smaller quantities) and employ temporary staff able to provide advice on input use. The input shop also serves to collect produce and facilitate networking between traders and producers.

POs in central and southern Mali have also started input shops. Whereas the input shops in northern Mali fill in a crucial gap (the absence of on-the-spot input dealers), the input shops in other areas have to compete with local-level input dealers. (Photographs by Alain S. Traoré)

PART 2: Facilitating CASE

5. Interlude. Integrated Soil Fertility Management (ISFM) and 'learning plots' as a starting point to build confidence and understanding of farmers' realities

Improving agricultural productivity is a key element in agribusiness cluster formation. Agricultural productivity often depends on making better use of 'external' agro-inputs. In fact, in most parts of SSA, agricultural intensification without using external inputs (better seeds, fertilizers, and in some cases appropriate CPPs) and without using them efficiently, is almost unimaginable. Current use of improved seeds, fertilizers and CPPs is extremely low throughout SSA; significant increases are needed to reverse accelerated erosion and soil fertility decline and to boost food production. This holds in particular for the more densely populated areas in SSA, where markets provide opportunities for agricultural intensification.[25]

In this chapter, we will briefly discuss ISFM as a means to improve agricultural productivity. IFDC promoted ISFM through so-called 'learning plots.' The design and implementation of 'learning plots' mostly follow a farmer field school approach. In the ISFM projects, the sites were selected in such a way that agricultural intensification was a realistic option, and the learning involved both productivity and economic issues. The ISFM projects led to the CASE approach. At the end of this chapter, the reader will understand how CASE not only complements ISFM but why it is so different as well.

5.1 Integrated Soil Fertility Management (ISFM)

ISFM refers to the judicious use of mineral fertilizers combined with locally available organic and mineral amendments to increase land productivity while maintaining or enhancing soil fertility. The basic rationale behind ISFM is simple: using organic resources alone to sustain soil fertility and increase productivity is a losing battle. Organic inputs generally have low nutrient contents, and large amounts of them would be required to maintain soil fertility levels; therefore, sufficient quantities are seldom available. Similarly, the opposite strategy, the sole use of inorganic fertilizers, is often not viable. It may lead to yield gains in the short term but usually it is unaffordable to the smallholder farmer, may have a negative influence on soil fertility (through e.g., acidification) and may lead to declining yields in the long term.

[25] Please note that population density is a relative concept. Whereas population density may be considered (too) high in relation to the natural resource base, and with reference to a largely agriculturally oriented society that makes only very limited use of 'external' inputs, such a density may still be considered quite 'low' to trigger market development through specialization and agriculturally linked economic growth (Van Keulen and Breman, 1990, Breman and Debrah, 2003). There are several (though too few) examples of agricultural intensification processes in SSA, directly triggered by urbanization and strong rural-urban linkages (Tiffen *et al.*, 1994, Wiggins, 1995). The relative scarcity of such examples however already confirms the tenacity of 'rural poverty' and the multitude of factors – ecological, socio-cultural and economic – influencing (and limiting) agricultural and agribusiness development.


(Left) Farmer applying fertilizer to her tomato field (Benin); (Right) Litter park (Burkina Faso). (Photographs by Willem-Albert Toose [left] and Arno Maatman [right])

The best strategy to improve productivity and maintain soil fertility in SSA is therefore a combination of inorganic and organic fertilizers, in which the inorganic fertilizer provides most of the nutrients and the organic fertilizer increases soil organic matter status, structure and buffering capacity. Combined use of inorganic and organic fertilizers improves efficiency of both nutrient and water use. The increases in fertilizer-use efficiencies enable farmers to maintain or increase production while reducing financial risks and reversing soil fertility degradation (Wopereis and Maatman, 2002). IFDC and partner organizations have produced a large number of viable ISFM options for the West African environment (IFDC, 2005).[26]

ISFM is a key component of 1,000s+ and other IFDC-coordinated projects. In most regions, agricultural intensification necessitates the use of fertilizers. As fertilizer prices continue to rise, the efficiency with which fertilizers are used is critical to farmers, particularly for smallholder farmers in SSA who lack the financial means to buy enough fertilizers. In addition, the variable context within which most farmers produce warrants the need to incorporate risk management strategies in ISFM, e.g., by applying fertilizers sequentially (following seed establishment and rainfall distribution) and by combining ISFM with soil and water harvesting and conservation technologies. ISFM is promoted through so-called 'learning plots.'

[26] See Clottey *et al.*, 2006, for some learning experiences on composting in northern Ghana.

5.2 'Learning plots'[27]

Learning plots are guided group learning processes and bring together farmers, extension staff, researchers and possibly other stakeholders. Learning plots provide the opportunity for these stakeholders to study and understand a range of alternative technologies that all aim for agricultural intensification and improved efficiency of fertilizer use. Simultaneously, the process of experimentation, including facilitated sessions to observe, analyze and evaluate alternative technologies and agro-ecological processes, enables farmers to strengthen their innovative capacities. As a result of both the joint experiments with alternative technologies and the larger lessons learned in terms of improved innovative capacities, each individual farmer supposedly selects and fine-tunes the 'system' that is most appropriate for his or her own specific agro-ecological and socio-economic situation. Learning plots are therefore not an end in themselves, but rather a vehicle to trigger individual and collective learning processes. The learning plot methodology is based on social and experiential learning theories.

- Social learning: Learning processes organized around learning plots always take place in groups. Learning in a group permits members to exchange experiences and ideas, discuss possible options, deliberate arguments and compare perspectives to develop new insights. Exchange with other farmers (groups) including those outside the village increases access to information. The social learning process provides a favorable environment for innovation: information sharing becomes more natural and new knowledge may be acquired much more easily. Being part of a group or a social network makes approaching other actors (i.e., traders, inputs dealers and credit institutions) easier too.
- Experiential learning: The facilitation of learning plots is based on theories of experiential learning and non-formal adult education, which argue that adults learn best if they feel a need to change a situation and when the learning topic is closely linked to that situation and their experiences (Kolb, 1984). Facilitation of learning plots aims to value farmers' knowledge and is grounded in their experiences and actual agricultural practice; the emphasis is on the inventory, appraisal and adaptation of alternative ideas rather than on the adoption of one specific technological package. In practice, this means that farmers decide which topics will be addressed in the learning process and how the learning process will be structured and implemented. The learning process may, for instance, deal with the development of a better understanding of actual practices and their consequences, the improvement of actual technologies or the development of new, alternative technological options. Farmers may also decide that instead of technology development, institutional change has become the significant learning objective of the group. Shifting learning processes from technical to institutional issues is an essential characteristic of 'learning plot' methodology.

[27] This section is adapted from Gross *et al.* (2005), which contains a much more elaborate discussion of learning plots.

Learning group (Togo).
(Photo by Mariette Gross)

Several participatory approaches such as Participatory Learning and Action Research (PLAR) (Defoer and Budelman, 2000), farmer field schools (FAO, 2000) and Participatory Technology Development (PTD) (Jiggins and De Zeeuw, 1992), also make use of group processes and relate to experiential learning theories, as described above. In addition, the specific tools and methods proposed by these approaches are also being used for learning plots. The main difference between learning plots described here and the participatory approaches is in the intimate linkage with agricultural intensification processes, including issues such as credit, purchases of inputs, processing and sales of agricultural outputs. As a part of the CASE approach, the learning groups proactively strengthen linkages with input and output markets and seek to improve their competitive advantage within specific commodity value systems. This implies that farmers and other stakeholders learn to deal with a much larger spectrum of inter-related complex issues, which stem from poor socio-economic infrastructures, business cartels, poorly known consumer preferences and (contradictory) national agricultural and trade policies. The learning plots have a more specific focus (i.e., intensification) but comprise a very broad area of (learning) activities.

More specifically, ISFM projects typically involve coaching and training farmers on issues such as economic profitability and efficiency.[28] Consequently, a learning plot primarily focuses on farmers who are interested in and willing to invest in increased market integration. In view of the argument that adults learn best if the learning topic is closely linked to their situation and experiences, farmers' groups engaged in learning plot activities preferably include several farmers who already have some experience with more intensive agricultural practices and with the marketing of their products.

[28] Efficiency here relates the results to the use and costs of the various resources involved in the agricultural production process, including financial, natural and human (and social) capital.

Learning plots for cotton in Benin

Between 2006 and 2009, IFDC coordinated a project at community level in two cotton-producing regions (Banikoara and Dassa-Zoumé) in Benin. The two regions served as learning centers for improving competitiveness of the cotton sector. Interventions concentrated on (1) ISFM and Integrated Pest Management (IPM) methods to improve productivity and sustainability of cotton production systems on degraded soils; (2) improved quality of cotton produced through better harvesting and storage methods and more efficient use of CPPs; (3) improved market access for both cotton and other agricultural products; and (4) advocacy and lobbying capacities of farmers' and traders' organizations. The overall objective was to strengthen the capacities of village-level producer groups to reduce poverty and improve livelihoods, and to increase sustainability of cotton production and natural resource management. The project was linked to the 1,000s+ project. It was anticipated that by the end of the project, 10,000 farmers would have the capacity to increase sustainable cotton productivity by 30 percent and to increase family incomes by 30 to 50 percent. The organizational capacities of farmer groups in the pilot areas would have improved.

Despite a very late start of the project in 2006, 25 learning plots were installed with a major focus on learning IPM methods. ISFM activities began earlier. The farmer learning groups met regularly at the field site for monitoring and application of IPM methods ('threshold-based' pest management) and training. The learning process was highly appreciated. Yield levels obtained at the learning plots were without exception two or three times higher than normal yields. Production costs were lower because of a decrease in the use of CPPs. In 'threshold-based' pest management, CPPs are carefully used, based upon regular observations of the (type of) insects present in the field (and the plants) and the level of infestation. No routine treatments are applied. To apply 'threshold-based' management properly, farmers should be able to identify the various insects appropriately and determine the degree of infestation. Learning plots, the use of visual tools (photographs, drawings) and exchange visits promised to be very efficient in accelerating learning and extension of lessons learned.

Production of manure in litter parks.
(Photograph by Kokou Djagni)

In 2007, more emphasis was put on the scaling-out of learning plot exercises on IPM and complementary research-action on ISFM methods. To this end, subcontracts were established directly with the POs, with adequate competencies in participatory action-research and extension. Learning plot exercises were implemented in 80 villages, of which 60 were in the Banikoara Region and 20 in the Dassa-Zoumé Region. Various ISFM methods were tested, depending on the resources of the farmers involved (particularly, the possession of livestock): having several pens to rotate animals, manure production by keeping animals in stables or temporarily fenced fields, incorporating crop

residues in the cotton fields, and combining organic matter application with chemical fertilizers – the latter mainly during the cropping season. Yields and productivity were consistently higher on the learning plots than on the control fields, even when discounted for the additional labor involved.

The implication of the POs in the design and implementation of the 'learning plots' was very useful as it encouraged the participation of a large number of producers and the dissemination of information. The producer groups were also able to renegotiate the prices for the CPPs when used for 'threshold-based' pest management. There were (at the time) no differences between the types of products used for 'threshold-based' pest management and the classical treatments. Farmers applying the latter typically buy packages of inputs, whereas farmers who want to try out 'threshold-based' pest management buy smaller quantities and often only one specific product at a time. Input dealers wanted to discourage farmers from using 'threshold-based' pest management and therefore asked higher prices for 'non-package' deals.

Training session on cotton harvesting in the field (Photograph by Edi Kpogan)

The proactive involvement of women producers in the training and learning sessions was received with considerable approval – by both male and female producers. Women often do the harvesting, and are generally more often in the fields (for weeding, etc.) and are likely to be the first ones to observe insect infestations. As a consequence, they play a major role in increasing the efficiency of cotton production, including harvesting hand-picking methods. Unfortunately, most training and capacity-building efforts are oriented toward the 'owners' of the fields, the men – who are not always the ones that do the work, nor the ones that regularly supervise the work. Women are also involved in farmer-to-farmer extension. A stimulating role was also played by rural radio (in the Banikoara Region). Several programs were developed to discuss learners' experiences. The programs attracted the attention of other cotton producers and stimulated exchange between cotton POs.

An interesting learning topic arose towards the end of the project: the management of varying stocks of CPPs as the incidence of pests and diseases is not known beforehand. Farmers would prefer to buy the CPPs at the moment t they need them. At that time, however, input dealers have run out of stock and treatment may start too late. This may not be a crucial issue now, but it is a totally new one. With 'classical' treatment strategies, the required volumes of CPPs are more or less known beforehand, as the use of CPPs normally follows pre-determined recommendations that do not depend on insect and pest manifestations as they appear during the season. Adequate management of stocks of CPPs, if the demand is not known beforehand, requires that researchers, extension agents and farmers 'predict' the probabilities for various insect infestations per region; it also requires coordination between managers of local and regional stocks of CPPs – whether done by the POs themselves or by private input dealers. Aat the time, however, availability of inputs for cotton and

non-cotton production was an even more challenging problem in Benin, and consequently the primary concern of producers and their organizations.

In several regions, the ISFM projects could be considered successful. A major problem remained the selection of the sites and the identification and selection of farmer groups. Farmer-market integration is a risky endeavor. The more the activity is seen as a 'project activity', the higher the chance that farmers engage opportunistically, or, that they have a limited sense of responsibility for the outcomes, even if they are interested and willing to co-invest. Opportunism here refers to farmers that participate for the wrong reasons (from our perspective!). They either want to stay informed of what the project is doing in their community to ensure that it will not influence existing power relationships, or they simply hope to profit from some free inputs. Even really interested farmers may perceive the project and its staff to be their safety net, i.e., when things go wrong, the project will act (and pay). Such situations occurred frequently when prices dropped after a good harvest and farmers experienced major difficulties selling their produce and reimbursing the loans that were taken to purchase the necessary agro-inputs. Clearly, the project needed to do a better job in the identification of local champions and the promotion of effective ownership of the innovation and market-integration process. A reversal of thinking and in design of the projects was needed to effectively stimulate farmer entrepreneurship. The reversal involved a shift from thinking 'for' poor smallholder farmers to thinking 'with' local champions. As a result, also the importance that we attached to our own 'expert' perceptions of what the major market opportunities were and which actors and regions had the highest potential advantages to serve these markets, had to be adjusted. The first question we had to ask ourselves was how to identify and how to link up with the local champions? At this point, CASE really took off.

6. Mobilizing ideas, empowering people and facilitating change

CASE suggests an approach that is based on the potential of real (effective, sustainable) competitiveness, an approach that strengthens the capacities of rural champions and inter-linked actors to innovate technically and economically and to lobby and network for their own future. This is much more easily said than done. In this chapter, we will discuss some major lessons learned with regard to the profession of facilitating changes from the grassroots and for the long term. We will do so by first addressing the three key values or design principles of the CASE approach: 'ownership,' 'empowerment' and 'sustainability.'[29] The 'key-values' are essential for the effective implementation of the CASE approach. Then, in Section 6.2 we will discuss the major steps in the design and implementation of CASE. Three stages are distinguished: (1) the mobilization of business ideas; (2) the development of action plans; and (3) the implementation of – and support to – action plans. In Section 6.3, we will return to the concept of facilitation; what does it mean (to us), and what are the major requirements for being a 'good' facilitator.

6.1 CASE values (or design principles)

Ownership

Agribusiness clusters can only become effective and sustainable when driven by the local actors themselves. Competitive strategy depends on local champions who innovate and act to involve other actors and stakeholders in a coordinated strategy. Agribusiness development defies the notion of an external (and exclusive) 'problem solver'! Instead, agribusiness cluster formation requires locally driven mechanisms for continued (and interactive) learning, exchange of information and innovation. CASE supports local ownership by emphasizing (and sometimes ensuring):[30]

- Championship of local actors and stakeholders. They control the agribusiness cluster formation process
- Co-financing of activities foreseen in the action plan (see below) by farmers and local entrepreneurs
- Communication strategies that stimulate internal flows of information among the strategic players involved
- Availability of technical assistance from professional (public and private sector) business support services
- Organizational strengthening to promote joint (interactive) learning and coordinated action and to link grassroots organizations to regional and (inter)national organizations/ associations for advocacy and lobbying

[29] Note that increased competitiveness and ownership of the processes of agribusiness cluster formation and maintenance are the principal drivers behind economic (and also social) sustainability.

[30] See also Binswanger and Atyar, 2003.

Careful design and facilitation of multi-stakeholder platforms and decision-making procedures are needed to ensure effective dialogue among the various layers of stakeholders. Paternalistic or top-down relationships, which limit ownership of the agribusiness cluster formation at the 'grassroots,' should be avoided.[31]

To strengthen ownership at the level of the producers and/or local entrepreneurs and to involve local BSSs, a two-pronged approach is necessary. In this dual approach, the local actors are the owners of a cluster formation process or action plan. The owners may opt to, or may even be advised to, subcontract – partly with funds from 'outside' (e.g., IFDC) – the BSS. The BSS may, in turn, receive additional capacity-building and training through the project in order to improve its services. The relationships are shown schematically in Figure 15.[32] Privileged relationships between the CASE facilitator and (sub-)national and local BSSs should be avoided. Again, this is contrary to normal practice. Most development projects and support programs operate through preferred BSSs, or become otherwise entrenched in the 'kingdom' of just one or a few BSSs, often well before they can engage with the local actors themselves.

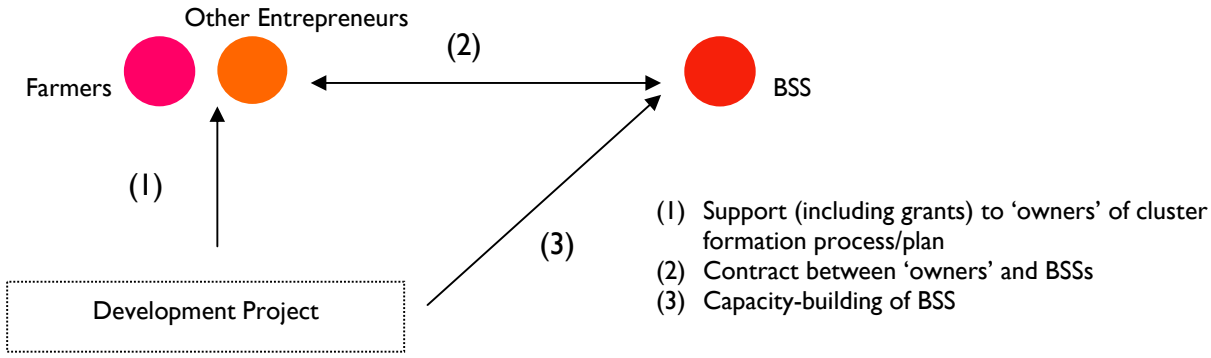


Figure 15. Contracting, subcontracting, and capacity-building to sustain an agribusiness cluster formation process

Empowerment

Agribusiness cluster formation and value chain development involve several actors and stakeholders with different competencies and negotiating power. The process invariably yields uneven outcomes that also change over time. Agribusiness development is a competitive 'game'

[31] It is noted that the concept of ownership used here is essentially related to the innovation process itself (and the problem situation, Section on Empowerment) and not (necessarily) to the decision-making procedures with regard to a granting mechanism.

[32] Some caution is warranted in regard to the status and professionalism of the local actors, including their capacity to formulate and negotiate appropriate contracts with BSSs and to ensure timely payment. In addition, an excess of bureaucracy should be avoided and constraints for local structures to become effectively involved explicitly addressed.

and often generates both winners and losers.[33] A major aim of the CASE approach is to ensure the effective (more equal) participation of relatively vulnerable groups (farm households, firms and also the more vulnerable groups within farm-households and firms). Their participation should result in an increased ability to raise their income and improve their livelihoods, not just for the duration of a project but well beyond. There are no easy roads to 'empowerment.' The only thing a CASE facilitator can do is to organize support to strengthen the capacity of the more vulnerable groups through advice, coaching and training. Whatever the choice, he/she engages in a power struggle!

Briefly consider the concept of 'power' itself. Ultimately, power is about the freedom to make choices (Hogan, 2000). Empowerment in the CASE context refers particularly to the ability of individuals and organizations to make informed enterprise choices and to protect their investment. This includes, at a minimum, the following aspects:

- Access to information and knowledge of the business in which the actor or actor group operates.
- Access to financial means and ability to cope with 'external' shocks (through own reserves or insurance).
- Degree of horizontal organization and strength of bargaining power vis-à-vis other cluster actors and up- and downward-value chain agents.
- Vertical relationships (alliances) with other cluster actors and the ability to shift to other actors and channels if needed.

Empowering action often encounters numerous barriers and blockages including political, social, cultural and economic. Business cartels, undisclosed agendas of policymakers and other powerful actors and skewed information networks all undermine the quest of vulnerable groups for more equality and effective participation in agribusiness development. In several cases, a radical transformative approach may be required. The intention of the transformative approach however should preferably not be to break with the past in the most brutal way but to support local initiative to articulate, negotiate and implement change that improves equality. An approach that explicitly aims to demonstrate the benefits of effective participation to the more powerful actors (in terms of cluster and/or chain performance and competitiveness) as well may progressively widen the scope for inclusiveness and empowerment.

Facilitators and facilitating organizations can play an active role in the empowerment strategy by assisting farmers and local entrepreneurs to lobby for more information, for better services from public and private organizations, for the protection of and respect for their rights, and for transparency at the relevant levels of policymaking. Capacity strengthening to re-balance power

[33] In the long run, agricultural growth for economic development will probably be beneficial for a large majority of the population and may even have a relatively greater impact on poor farmers and consumers alike (Chapter 2). However, in the short and medium term, any process of transformational change inhibits elements of struggle and loss; agribusiness clusters and value chains are often perceived by the actors and stakeholders themselves as arenas and agribusiness development as a complex game, with sometimes pretty unfair characteristics. See Stewart (1995) and Hope and Timmel (1996) for useful guides on participatory, empowering work (inspired by the work of Paolo Freire).

relationships should always start with a careful consideration of the actual situation. This may include cluster and value chain analyzes that reveal the distribution of profits, in-depth study of the negotiation processes linking vulnerable groups to suppliers and/or buyers, and appraisal of the financing and information systems (who has access to what) and of the business environment (the 'windows of opportunity' for the various stakeholders involved).

An inclusive approach needed to reach out to all the relevant local actors and to avoid marginalization of the more vulnerable groups is not necessarily contradictory to the CASE approach, which fosters rather exclusive competitive processes. Whereas an inclusive approach is needed to start an innovative process and stimulate new actors' involvement, some exclusiveness is needed further in the process to stimulate competitiveness and avoid opportunists from taking advantage of the investments of others. The challenge lies in the design of mobilization strategies to which poorer and more vulnerable people can easily adhere. The facilitator may, for instance, try to mobilize women or the youth explicitly, or to involve families living with or affected by HIV/AIDS. Moreover, innovativeness is not an inherent characteristic of the wealthy, powerful classes; instead, learning groups that discourage the 'automatic' participation of any group – including the powerful ones – are often more enthusiastic, have more results and are better able to sustain financing when project support decreases.

Examples: Participation of women in agribusiness cluster and value chain development activities in Benin, Togo and Niger

In collaboration with BSSs, the 1,000s+ project developed an inventory of female-led enterprises and women groups involved in agri-food processing and trading in larger urban centers in several countries in West Africa. Local BSSs were also asked to identify local-level women cooperatives involved in agricultural production, processing and/or marketing of agri-food products, which could be linked to other actors in emerging agribusiness clusters and/or value chains. The results exceeded expectations. Several female entrepreneurs could almost immediately be linked to producer groups involved in agribusiness cluster formation activities. For example, in Togo, Yayrali is an enterprise that processes soybean into milk and tofu; Rose Blanche and Socmel are two enterprises processing cereals into nutritious and baby food products; Mesifa processes fonio grains into milk and ice cream products. Contacts have been made with female-run enterprises and women associations involved in the processing of agricultural products in Benin (Achiribo, a women association of tomato processors and traders, and Awokonera, a union of female palm nut processors and traders of soap products) and Niger (a women group of rice processors and traders in Gaya Amont; the women union 'Sape Kgoe' with female groups based among others in Mankani and Malgoro; and a female onion traders' union in Guidan Idder).

MESIFA (Togo), a female-run enterprise, processes fonio into milk and ice cream products, which are sold in Lomé.
(Photo by Edi Kpogan)

SOCMEL (Togo), another female-run enterprise, makes baby food and nutritious flours from cereal products.
(Photo by Edi Kpogan)

The enterprises were supported to develop business plans and to strengthen their visibility through participation at trade fairs. Local women associations received training in processing techniques (improving the quality of palm oil and palm oil based soaps, braising rice; and processing cassava into flour and different grades of 'gari') and marketing. Women associations in southern Niger also started a research-action program on inventory credit.

Members of Awokonera (Benin) explaining the soap production process to Edi Kpogan, 1,000s+, gender and HIV/AIDS specialist. The soap is highly valued within local communities as it contains no soda and has a neutral smell.
(Photo by a member of the association)

Sustainability

Sustainability in agricultural and agribusiness development refers to the capacity of all actors and stakeholders involved to maintain competitiveness within their respective industries, without compromising the livelihoods of others working in the same target area or of future generations. In this regard, sustainability has three dimensions: economic, social and ecological or environmental. We will start with economic and social sustainability which are conditions *sine-qua-non* for ecological sustainability. In other words, the incentives to invest in ecological sustainability require economic and social safety.

The economic sustainability of any activity fostering agribusiness cluster formation depends on the adequacy with which real potential competitive advantages are transformed into actual ones and on the efficiency with which 'exit' strategies are implemented. Social sustainability depends on the degree to which the community as a whole is affected by the activity and on whether the changes induced by this process will be accepted by the community and strengthen social capital or not.

Economic support programs often combine poor design, based on a poor understanding of entrepreneurship and business dynamics, with 'haste.' Such programs run, as a result of their quest for quick impact, a very high risk of weakening markets and social capital instead of strengthening them. Take the example of a project that supported a group of women to become local beer ('*dolo*') brewers. The women had limited experience with beer brewing, but when asked about their ambitions, they couldn't think about anything else than to increase their share in the *dolo* market. The project provides them with better materials and equipment and some advisory services to upgrade the processing and improve their marketing skills. Obviously, these brewers will be able to sell their *dolo* below the price of other brewers, and they probably will do so to increase their market share. Their competitive advantages are temporarily and largely 'artificial,' however, and it is likely that their market share will decrease as soon as the support ends. In the meantime, brewers that have invested their own funds will be losing money and may even decide step out of business. Unfortunately, several projects have created artificial, unfair and non-sustainable advantages in a specific area or for a specific target group through misguided investment and support.

CASE facilitators must therefore analyze the situation together with the principal actors and stakeholders involved in the feasibility study of the business and/or cluster formation activity; such an analysis typically includes an effort to come to understand competitor strategies in other – perhaps better situated – regions. This is not to say that initiatives for successful agribusiness development should always start in the more 'favorable' regions (with regard to agro-ecological characteristics, as well as its location vis-à-vis the targeted market segment, and the costs involved to transport the product to this market) (Schreurs *et al*., 2001). Even very remote communities may have specific knowledge and skills (and may sometimes have access to areas with very specific agro-ecological conditions) to produce a unique product for which demand is (or could be) effective.

Discussion: Should we then just forget about ecological sustainability?

Efficient linkages within the agribusiness cluster and adequate integration of local actors in attractive commodity value chains will increase incomes and allow for multiplier effects and overall economic growth. It is our belief that sustainability in all its dimensions (including the ecological one) essentially follows empowerment and economic growth and not the other way around.[34] In other words, increased competitiveness influences both the capacity of and the incentives for (willingness) to the local actors to invest in social capital and sustainable land resource use.

This is not to say that sustainable land resource use is irrelevant; on the contrary. It is obviously crucial to safeguard the natural resource base on which all (small-scale) producers depend. Soil nutrient depletion and environmental degradation are severe constraints to agricultural intensification in several areas of West Africa. It is also noted that natural resources do not only provide the basis for agricultural production, they also offer a range of other critically important services and products, including wild food products (e.g., edible leaves), staking materials and firewood.
Policymakers and BSSs that offer environmental services need to be involved throughout the implementation of the CASE approach to ensure sustainable land use.

6.2 Design elements: from business ideas to action plans

To implement CASE at least three steps need to be taken:

1. Interesting business ideas from local champions need to be identified
2. Business ideas will need to be discussed and translated into action plans. These action plans will foster competitive strategy involving the local champions and any other relevant local and non-local value chain actors.
3. Action plans need to be implemented. The process and the results need to be monitored and evaluated.

Mobilizing business ideas

The CASE approach explicitly aims to support entrepreneurship from the grassroots. We believe that the best way to do so is by 'searching' for the (emerging) farmer and other local entrepreneurs and aligning support activity to their business ideas. This is easier said than done. Development professionals have been educated for a very long time to solve problems. Some

[34] Though many farmers and other local actors will quickly agree on the importance of ecological sustainability, this may be more related to their perceptions of our (or the donor's) interests than an adequate translation of their major concerns.Moreover, facilitators entering the target regions with 4x4 vehicles and an 'ecological footprint' that is a multiplier of that of their target group, may feel uncomfortable promoting sustainability first, while dealing with a group of local actors that may have virtually no other alternative than to deplete natural resources to survive.

of them even pretend to 'know' both the major problems and the most appropriate solutions in a particular region or for a specific target group. It is not easy to adopt a 'wait-and-see' attitude. This is exactly what is needed, however. Any other attitude will compromise what is crucial in CASE: championship. Entrepreneurship is out there; the only way to link up with emerging local entrepreneurs and to make them champions is by putting their business central.

There are several ways to identify and mobilize business ideas:

- By communicating the program and its purpose to the members of national and regional stakeholder organizations such as business associations and POs, or through chambers of agriculture/industry
- By making use of the media, including rural radio, newspapers, distributing information at social events, trade fairs, etc.
- Through proactive 'searching,' e.g., by being alert to opportunities at trade fairs, through study tours, networking with members of action-research platforms and fora, and with industry and chain leaders. The subscribers of web-based market information systems may provide an interesting target group as well.

The formats to present a business idea should be kept as simple as possible to also enable the less literate and those with limited time to apply for support. All business plans that are being received need screening. Such screening involves two different 'aspects' of the idea:

1. The champion: His/her character (reliable?), competency (experience?) and capital (co-investment?).
2. The idea itself: Is this something that could work in that area and for the targeted market (has the market been specified?)?

The screening obviously needs to be done very carefully. It is critically important to stay as neutral as possible and to avoid 'bias' (e.g., when certain ideas match better with personal priorities). Plain wish lists and obviously infeasible plans have to be discarded. Those who have 'seen' success elsewhere and want to apply it in the target area are more difficult to identify. Copying success from elsewhere is not a problem per se. When the original actors are close and serve a similar market, however, the idea should be discarded. The same holds for actors that have no experience at all in the proposed business. They simply fail the 'competency' criterion. An intelligent CASE facilitator will recognize a lack of originality and may then decide to discard the idea or to look for additional information. External advisors may need to be hired, in case of doubt, to visit the entrepreneur and discuss his/her ideas.

Action planning

At the end of this stage, the business idea will have been transformed into a comprehensive, one-or-more year plan that supports the champion and other related actors and stakeholders as well. The agribusiness cluster and the value chain concepts come into play here. In fact, it is up to the CASE facilitator to invite the champion for a deeper analysis of the idea. Such an analysis may take considerable time and involve visits to the targeted area and rapid appraisals to complement the information.

It is crucial to identify and keep track of the various actors and stakeholders that should be involved throughout the whole process. The champion may be a bit reluctant at the beginning to accept that the project will not concentrate on his/her capacity alone. True entrepreneurs, however, will quickly understand that they cannot do this all by themselves. The most difficult parts of the process are how to identify the most relevant stakeholders and where (in what activity), when and how to get them involved. The CASE facilitator has to be extremely careful here. In fact, there are many stakeholders or otherwise interested parties (including potential competitors), all with different backgrounds, resources, competencies and interests, and all engaged in different networks and alliances. These alliances shape a highly dynamic and competitive environment. Naïve facilitation in these 'marshlands' of competitive playing fields may cause a lot of unneeded trouble. What then? The answer, unfortunately, is not that simple.[35] Let us limit ourselves here to the following observations of the process:

- It may be useful to make a list or map of the so-called 'problem-owners,' i.e., all stakeholders directly or indirectly affected by the proposed action or business idea.[36]
- A rapid appraisal may serve to identify the problem-owners' various perspectives on the business idea.
- Some in-depth inquiry may be needed to deepen the understanding of the various competitive forces and playing fields and to better understand the true 'potential' of the business idea (market analysis).
- The agribusiness cluster and the channel options should be identified and described, as well as the various stakeholders and actors that are (or may become) engaged in these. It might be useful to distinguish between stakeholders that stand out to 'win' from the idea and those that might lose. A distinction should also be made between stakeholders that will be interested to actively participate (the 'movers and shakers'), those that will follow, and those that might want to block (part of) the process (for various reasons, including reluctance to accept social change, or jealousy).
- For each activity, the leadership (who will take the initiative and who will be held responsible for the outcomes, if needed), the agenda and the network of anticipated participants should be defined. How the network will engage with other inter-linked stakeholders may have to be discussed and agreed upon beforehand as well.

The CASE facilitator should also be quite clear about the rules of working together within the framework of the action plan; these include what will be financed and what will not, how the funding will be implemented, how subcontracts will be monitored and if something else is expected from any of the participants, e.g., specific information to satisfy M&E requirements.

The action plan includes the most important support activities required to achieve competitiveness at enterprise and cluster levels. It should also identify the channel options that are available to supply the commodity from the targeted area to the targeted market. If needed,

[35] This is, in fact, a complex negotiation problem

[36] The notion of 'problem-owner' is taken from Checkland and Scholes (1999). The concept is extremely useful for development workers – and its use may help them to avoid taking over problems from the (real) 'owners'; the focus should be on the capacity of the problem-owners to do something about their situation.

some specific attention may also be given to coordination mechanisms along the value chain. The support services that foster agribusiness cluster formation may be classified as follows:

1. Strengthening of individual – farm/firm – competencies, comprising:
   a. Managerial (logistics, human resources, finances) aspects
   b. Technical aspects
2. Establishing and/or improving horizontal relationships (i.e., between similar actors), comprising:
   a. Organizational issues (including accountability, membership strategies)
   b. Managerial aspects
   c. Technical aspects
3. Vertical integration (at cluster level, mainly POs)
4. Establishing and/or improving cluster relationships, comprising:
   a. Down- and up-stream value chain linkages (involving local actors)
   b. Relationships of local actors with local BSSs
   c. Relationships of local actors with local MFIs
   d. Relationships of local actors with local policymakers

Support activities to value chain development are quite similar to those of cluster formation building, as described above. In agribusiness cluster formation, the emphasis is put on the capacities of and the linkages between local actors and stakeholders, whereas value chain development concerns both local and non-local chain actors.

Implementing action plans

Business support services are the heart of the CASE approach. Hence, choosing the right BSS to execute part or the entire action plan is important. From our perspective, the choice of the BSS should be, as much as possible, in the hands of the local champions (cluster actors).Preference should be given to those BSSs that are in close proximity to the cluster actors and that can potentially become a stakeholder within the same cluster. It is also important to understand the precise nature of each of the proposed support services:

- Networking/brokering services
- Facilitation of action-research
- Training, coaching and advisory services

Networking services foster relationships (e.g., learning networks, cluster and chain alliances).
'Action'-research may not be the best term to use here. We are in fact referring to all facilitation services that nurture experiential and interactive learning, with the aim to improve or establish coordinated action. Such learning may focus on technology issues (with regard to production, processing or packaging), as well as on organizational and institutional issues. Training, coaching and advisory services may focus on management and performance monitoring, accounting and finance, competitive intelligence, negotiation and communication. Not all BSSs have skills in all fields (see the box below); for some services, specific competency is required that cannot be subcontracted with a nearby BSS. In such cases, preference may be given to an 'external' BSS.

What is a BSS?

There is some discussion with regard to BSSs as organizations. What are they? We simply define them here as all organizations (including enterprises) that provide support services to producers and agriculturally linked enterprises (providing training, consultancy and advisory services, information and marketing assistance and business linkage or brokering services).

BSSs can be public or private organizations; they can be not-for-profit (NGOs) or profit-making enterprises. Any unit of a PO that purposefully offers assistance to their members is a BSS; and all public research and extension services are labeled here as BSSs.

Some organizations will offer a wide array of services whereas others may offer only highly specialized assistance (e.g., business-to-business relationships, subcontracting, competitive intelligence). A useful distinction may be made between 'operational' and 'strategic' support services; operational services involve support for day-to-day operations, and strategic services foster the medium and longer term issues (e.g., Tanburn *et al.,* 2001).

The attentive reader will have noticed that the notion of the CASE facilitator is no longer clear. In fact, in the first stage, the CASE facilitator is probably directly linked to the project or program that is in charge of promoting CASE; in the second and third stages, the CASE facilitator may be the same or another staff member from the project or a subcontracted BSS. In case the service is implemented by a BSS, the project staff member will be involved, whether directly or indirectly, in the process of facilitating the subcontracting process. Therefore, facilitation may occur at different levels. We refer to training, coaching and advising as facilitation as well. These services often strengthen the competencies of a restricted sub-group and therefore enhance the 'power' of this group, probably at the expense of other actors in the same cluster and/or chain. Some authors prefer to use the notion of facilitation mainly for the more 'neutral' act of linking actors together. We do not follow that convention here. In this document, CASE facilitation comprises all sorts of BSSs and thus is much more than the (more or less) neutral brokering act alone.

Finally, a last word of caution for the CASE facilitator: Do respect champion- and problem-ownership! Do not take it all on your own shoulder!

The picture on the left shows the container of the innovated chili paste (green chili), produced by Agrocomplex (Togo). The problem was that the opening of the bottle was too narrow, and cooks in hotels and restaurants complained that their spoons didn't enter easily; the paste was difficult to remove form the container. Now, with the new container (right) the spoon enters easily and hotels and restaurants are satisfied; since the improvement, demand for the product has significantly risen. Agrocomplex has started a publicity campaign involving television commercials. The action-research to improve the bottles and appreciate the market was co-financed by the 1,000s+ project. It also involved a series of laboratory tests as well as an input credit scheme to provide adequate seeds to out-growers. (Photographs Udo Rudiger)

6.3 CASE and facilitating change

Before we address the professional skills required to facilitate change, some inherent difficulties and contradictions in facilitating rural innovation and agribusiness development – and in making use of the CASE framework – may need to be clarified. The following two specific problem areas are highlighted:

- Facilitating both homegrown processes *and* empowerment – which implies making 'choices' – in complex problem situations with various 'problem-owners' and 'product champions'
- Maintaining 'focus' and facilitating specialization in risk-prone environments with local actors, minimizing risks and ensuring (food) security through diversification of livelihood strategies

First, facilitators of change support homegrown initiatives and preferably work together with local champions to strengthen innovative processes. However, as mentioned earlier, the situation in which facilitators work is not neutral; in fact, it is often better described as a development arena. As a result, facilitators are obliged to analyze power relationships and to anticipate possible winners and losers. Inclusiveness and empowerment point to the need of proactive facilitation involving vulnerable target groups and problem-owners. This may create tension when the choice (with whom to work and what capacity-building activities to

implement) affects power relationships in agribusiness clusters and value chains. Although choices for support activities will in principle not be made by the facilitator alone but in consultation with the local champions and only after a cautious process that involves actual and potential actors and stakeholders, choices are inevitable. However, at times a clear division of roles makes a huge positive difference. It might be argued, for instance, that the roles of trainer, coach and advisor should not be combined with that of a 'neutral broker' (discussion the end of Section 6.2).

Secondly, CASE promotes a focused facilitating strategy, involving preferably just one well-targeted commodity. The individual and collective professionalisms required to develop competitive edge from the grassroots (i.e., at the local level) may indeed contradict the capacity needed to manage highly diverse farming systems to ensure food security and minimize risks. These risks, and the ones added because of increased market integration, should not be underestimated, nor should the project take over all the (new) risks associated with market integration. This simply does not lead to sustainable development. Instead, a clear distinction should be made between food security and safety net programs, and programs that foster entrepreneurship in farming. The first programs aim to support the vulnerable food-insecure groups, without 'pushing' them into a new (often even more uncertain) future. The latter on the contrary, do take farmers to new and risky environments, and should only be implemented with farmers that understand the associated risks of increased market integration, and that are willing – and capable – to take these risks. The 'business ideas' should be theirs so that they know that they will be responsible for the outcomes as well. Obviously, this does not prevent the CASE facilitator from discussing with the local actors (and stakeholders) how risks can be effectively reduced and shared to stimulate specialization and agricultural transformation. There still is a lot of work to be done in this area.[37]

Now, what are the characteristics of a good CASE facilitator? Let us first re-define the major task areas of a CASE facilitator (Figure 16).

Figure 16. Major task areas for a CASE facilitator

[37] Specialization of BSSs – facilitators – themselves should also be considered as an essential part of such a process.

The competencies required for networking and brokering are different from those required for facilitating an action-research process or for training, coaching and advisory services. Networking and negotiation skills are more important for the 'broker,' and the advisor often needs specific knowledge and experience, in addition to communication skills. A few capacities that every CASE facilitator will need are: empathy, a capacity to listen (communication skills) and to ask the right questions (analytic skills), common sense and practicality, and a learning-by-doing attitude. The capacity to avoid 'fixing problems your way' may be given special attention here. A common mistake of the 'brokers,' for instance, is to push farmers into a contract with a larger enterprise; often without much discussion on the advantages and disadvantages of the contract in particular, and contract-farming in general; often without inquiring about the character of the targeted entrepreneur and the 'real' capacity of his/her enterprise; and almost always without exploring alternative options together with the producers involved. Whereas this sometimes helps to establish relationships quickly, it almost always culminates in disaster, i.e., in one of the parties failing to respect the clauses of the contract. This is not surprising, as both parties probably lack sufficient information and both may see the contract as the facilitator's decision, not theirs. Similar problems may arise in other task areas of the CASE facilitator, such as when the topic of an action-research program is enforced by the facilitator, or when an interactive, experiential learning process is orchestrated by the facilitator and not led by a local champion or the learners' network. Such mistakes are more common than one might think, simply because many of these facilitators try to 'fix a problem' and also genuinely believe in their own solution.

Discussion: Do we need professional facilitators?

One last question that is rarely asked but is nevertheless quite essential: is professional facilitation (i.e., facilitation by project staff or through a local or non-local BSS) needed at all, and if so, why exactly, and for how long? Indeed, people learn and change continuously without any external guidance. Farmers, local entrepreneurs and other stakeholders are often used to working in groups and exchanging experiences. Why then interfere? Why facilitate? From our viewpoint, it is the dynamic and to some extent 'novel' context of agricultural intensification and market development that provides the justification for guidance or facilitation of individual and collective learning processes. Increased integration into market systems and commodity chains is risky for farmers and local entrepreneurs in SSA. Cluster and value chain actors are confronted with rapidly changing market regulations and government policies. They need to establish new contacts to purchase inputs and/or equipment, to sell their products, and to acquire access to credit and information. Professional facilitators are instrumental in finding a way through the sometimes overwhelming amount of information: they can support cluster and chain actors with value chain and market analyzes, with the organization (and facilitation) of commercial meetings and study visits, and search for more effective (or alternative) channel options and market linkages. The experience to date with facilitating CASE confirms the above, and points in particular to the following: (1) Facilitation of complex processes of market integration through cluster formation and chain development require professional skills and knowledge. Naïve or opportunistic and amateurish facilitators often do more harm than good; (2) For adequate facilitation, some level of freedom to reflect and to act is crucial; the facilitator, who is also a cluster and chain actor, may be quite efficient in training, coaching and advisory services, but much less so in networking/brokering.

Deliberate and proactive facilitation should only last for a certain period of time. After a few years, facilitation or support to local actors should assume a more demand-driven character. This means that on the basis of their needs, local actors or their organizations contact local and (sub-)national level BSSs to receive (and even pay for) information, capacity-building and/or other facilitating services.

In Togo, an experiment was started to use bicycles to supply soybean products (soy milk) in the streets of Lomé. (Photo by Udo Rudiger)

7. 'From Thousands to Millions' (1,000s+). A farmer-led project to scale up the CASE approach

7.1 Introduction to the 1,000s+ project

The 1,000s+ project aims to scale up the CASE approach in West Africa (focusing on Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria and Togo) and transform the rural livelihoods of at least one million farmers. The 1,000s+ project is a farmer-led initiative:

- At the local level, farmer organizations are the key drivers in the agribusiness cluster formation process.
- POs at the national levels chair a multi-stakeholder committee responsible for the selection of business ideas and the agribusiness clusters and value chains that will receive support. The expected results of the project are shown in Figure 17.

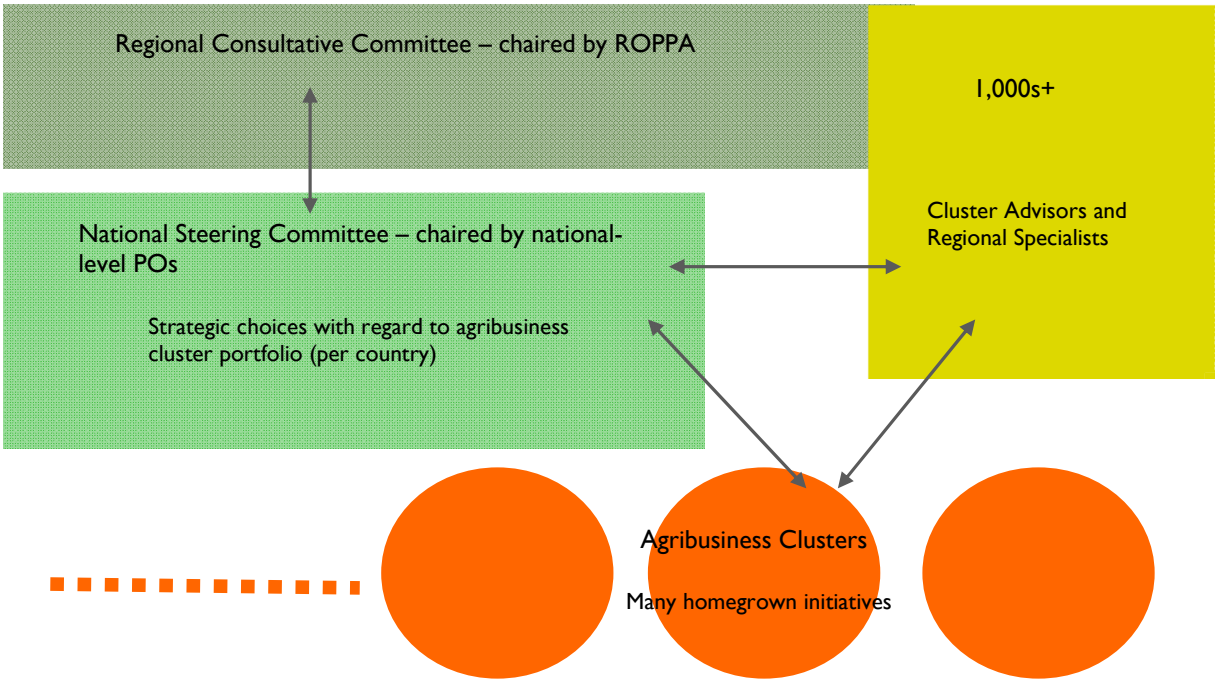


Figure 17. Steering and guidance through POs (ROPPA is a network of POs in West Africa)

The CASE approach initially developed through a rather ad-hoc decision-making process, largely based on personal contacts of IFDC staff and discoveries in the region, but a more 'formal' framework was needed to enable national-level stakeholders to actively participate in the selection of cluster formation ideas and to strengthen the leading role of POs. The institutional

framework for the 1,000s+ project is schematically presented in Figure 17. The national steering committees, chaired by a national-level PO, play a pivotal role in 1,000s+. It is at this level that the (strategic) decisions with regard to the commodities and regions are made. The process to establish the national-level steering committees was not simple. One of the major problems was the identification of the national-level PO that should lead the committee. The selection of other stakeholders proved equally difficult, leading sometimes to propositions of committees with an unworkable number of members. Likewise, not all stakeholders approved the fact of being 'led' by a PO as chair of the committee. The most important challenge continues to exist, however: to ensure that committee members choose the most 'competitive' proposals transparently. Given the importance of (social) relationships, it should be no surprise that the selection process is often seen as a networking opportunity. There are probably no easy solutions to this problem except clever facilitation and firmness with regard to the joint establishment beforehand and consistent use of a list with strict selection criteria.

The project fosters demand-oriented action: farmers and local entrepreneurs are perceived as the principal actors in the scaling-up of the CASE approach. The project team provides guidance to the national platforms to ensure that farmers and/or local entrepreneurs themselves develop action plans for cluster formation and link with other actors and stakeholders in the process. The project develops and uses organizational capacity by providing small grants to local and (sub-)national partner institutions, such as POs, BSSs, business associations, etc. Grants for cluster formation and value chain development activities generally do not exceed $10,000–$20,000 per year; this is to avoid dependency of cluster actors on project funding and to stimulate replication of efforts by others. Grants are monitored by project staff and the local POs; client–oriented mechanisms to strengthen feedback on the quality of services provided are actively promoted. The project adheres to the principle of 'subsidiarity,' i.e., what can be done at a local level will not be done by organizations operating at (sub-)national levels, and what can be done by (sub-)national-level organizations will not be done by IFDC staff. Consequently, 1,000s+ staff are almost exclusively involved in the training of facilitators of agribusiness cluster formation and value chain development. It is our hope that gradually a virtuous spiral will develop with strong empowered local actors, asking for even better BSSs; and strong local BSSs enabling farmers and local entrepreneurs to develop and maintain competitive edge within targeted value chains.

7.2 Scaling-up and out of the CASE approach

The 1,000s+ project nurtures an inside-out (or 'bottom-up') process but aims at the same time to develop a rich 'portfolio' of agribusiness clusters and chains that covers to at least some extent, the territory of each country. A three-pronged strategy is being implemented to develop this rich portfolio and to continue to engage a growing number of farmers:

1. Multiplication of agribusiness clusters, through proactive mobilization of business ideas
2. Expansion of the number of local actors involved in 'existing' and successful agribusiness cluster formation processes

3. Marketing of the CASE approach at (sub-)national levels and training of interested staff from national and (sub-)national stakeholders to develop the critical mass needed to support a grassroots' approach to agricultural and agribusiness development

Potatoes grown in southern Mali. The potato cluster in Mali faces immensely interesting challenges, which comprise among others: productivity aspects (adoption of ISFM and clever rotation schemes to maintain fertility and fight diseases); quality concerns (storage characteristics to extend the period of supply); channel issues (which markets – domestic, and regional – to serve and through what kind of networks); chain empowerment issues (POs examining the opportunities to engage in marketing themselves); and problems related to access to inputs (in particular potato seeds – which are still imported – and 'specific' fertilizers) and finance.

The photograph also illustrates the two major ways through which 1,000s+ intends to scale up the CASE approach: through multiple and ever larger clusters. (Photograph by Alain S. Traoré)

Multiplication of agribusiness clusters

The committee decides on the 1,000s+ cluster portfolio essentially through careful selection of cluster formation 'concept notes' (Figure 17). These concept notes are based on a business idea; any local actor (producer, entrepreneur) can submit a business idea. All members of the multi-stakeholder committee (POs, entrepreneurial networks and associations, NGOs, Chambers of Agriculture, Ministry of Food and Agriculture) are invited to mobilize their network and identify local champions that might need and qualify for support. The 'old' way, involving personal contacts and discoveries through IFDC staff and/or others, is being used as well. The format for a business idea is kept very simple to ensure that as many people as possible can apply for support. All the applicants of sensible ideas (i.e., no wish lists, realistic, and with some indication of an entrepreneurial spirit) are visited and assisted to develop their idea into a more elaborate concept note. Once the national committee has selected the concept note, a detailed action plan is developed through workshops and (hands-on) training. Between 2006 and 2008, 65 cluster formation plans had been approved; they covered a wide area, concerned various products (cereals, 'niche' crops/products, dairy and fish products, processed/packaged) and targeted different market segments (mainly within SSA!).

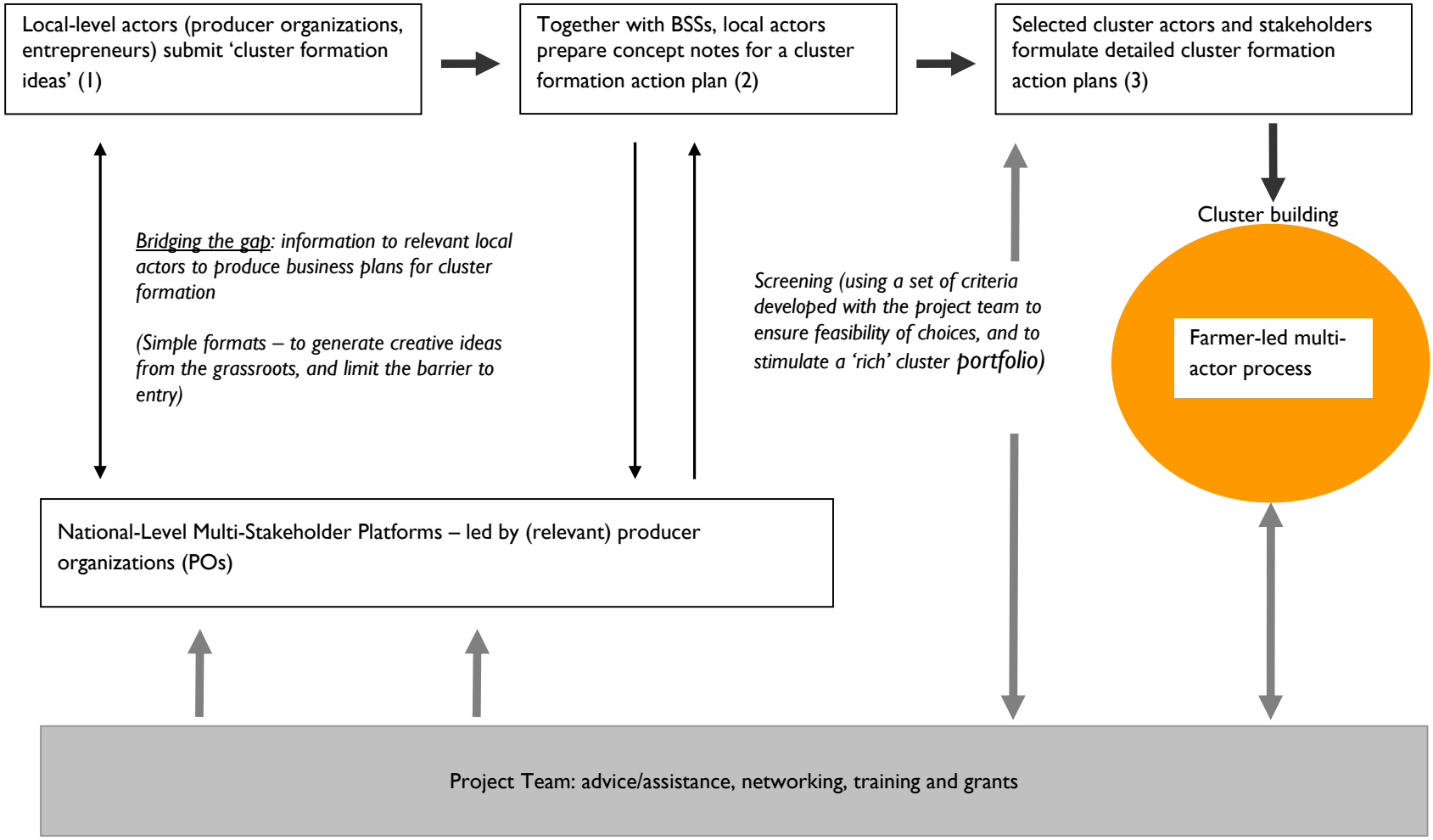


Figure 18. A three-stage farmer-led planning process to mobilize cluster formation action plans

Some examples of cluster activities are shown in the following photos:

Cowpea producers in southern Mali received individual (calculation of activity budgets) and organizational support and established linkages with several traders. In the first photo, a producer is presenting part of his harvest at a trade fair in Koutiala (Mali). The trade fair was organized by a local BSS and was used to discuss experiences and lessons learned with agribusiness cluster actors. In the second photograph, producers are negotiating with traders during a 'commercial' meeting'. (Photographs by Alain S. Traore)

Several small-scale enterprises in Togo were supported to present their products at an international trade fair. They also received training in business management and marketing through a sub-national BSS. (Photograph by Udo Rudiger)

In northern Togo, experiments have started to process tomatoes – to add value, and to expand the period during which tomato products can be sold. The tomato producers face severe difficulties to smooth supply and avoid over-flooding of both local and urban markets. The first photo shows small-scale tomato dryers; the second photo is a training session on tomato processing. (Photographs by Udo Rudiger)

See Chapter 9 for a discussion on the tomato industry in northern Togo.

Producers visit SITRAC, a medium-scale food processing enterprise in Burkina Faso. SITRAC is negotiating with POs in several provinces to ensure a stable supply of maize, which is processed into flour. 1,000s+ supports producers and SITRAC to come to an agreement, and strengthens capacities of POs to collaborate and negotiate prices and conditions collectively (including additional services, e.g., access to seeds/inputs through interlocked contracts). (Photograph by Asseta Diallo)

International CASE training organized on behalf of the Eastern Africa Farmers Federation (EAFF), Nairobi, Kenya, 2006. The first photo shows a field trip; the second a work group.

(Photographs by Ted Schrader, CDI)

Mango producers were linked to a BSS to improve packaging and transportation of mangos to northern (local) markets. (Photograph by Alain Sy Traore)

Expansion of number of actors involved in agribusiness clusters

Expansion of the number of actors within an existing agribusiness cluster essentially relies on communication. However, sustained success requires a dynamic, endogenously driven process of continued innovation and specialization. It may take some time for local actors to move out of a self-subsistence orientation and to sidestep an over-cautious and primarily defensive attitude toward increased market integration (and dependence). Expansion of the number of local actors involved in the same business widens the network for interactive learning and coordinated action; clusters may become stronger when vertical integration becomes feasible, or when the scale of operations attracts the establishment of other (vertically linked) enterprises, BSSs or MFIs. Some caution may be needed as well, particularly when some business attracts huge numbers of copy-cats. The tricky issue is that successful innovation and increased competitiveness require processes that are to a large extent exclusive and not easy to replicate. The case of the tomato producers in northern Togo (Chapter 9) provides a good example. Once they succeeded to enter the Lomé market, other producers in similar – sometimes even better located areas – quickly started growing similar quality tomatoes for the same market. This soon led to over-flooding of the targeted market segments, and for the producers concerned, to rapidly decreasing bargaining power and lower profits. The latter phenomenon is what we have called in the CASE training programs the *zémidjan* syndrome (see photograph).

Zémidjan is the motor-taxi in Cotonou, Bénin. A brilliant idea, the motor-taxi is well adapted to the weather and road conditions in and around Cotonou; they could operate in places that were difficult to reach for a normal taxi. However, an enormous number of motor-taxis are in Cotonou today because of the simplicity of the idea, the minimal capital required to start a motor-taxi service (many rented a motor-taxi first, with the aim of repaying later) and the large number of unemployed. (Photograph by Abdou Konlambigue)

Again, there are no easy recipes to avoid the *zémidjan* syndrome, other than a continuous search for even more inter-related competitive advantages that are less easy to copy and succeed in satisfying market demand.

Critical mass for CASE or similar approaches

The 1,000s+ project implements an ambitious training program to strengthen capacities of the BSSs. There are not many BSSs capable to provide CASE facilitation services, e.g., brokering/networking, facilitating interactive learning or training and coaching of coordinated action in agribusiness (see the following discussion point).

ICRA provides training and capacity-building to (sub-)national staff members of key stakeholders in rural innovation – including CASE. In the photograph are participants from Benin and Mali.

Although the 1,000s+ project concentrates on action at the grassroots levels, it values and understands the importance of interacting with national- and international-level structures. Such interaction might, for instance, foster leadership in political and economic networks and organizations in support of grassroots-based action, or might simply help to create more awareness of the transformational potential of local economic (agribusiness) development. The 1,000s+ project will give some specific attention to the educational system as well, and in particular to those university departments and professional business schools that will supply the personnel for the next generation(s) of BSSs.

For example, the integration of (local) producers in input supply value chains (downward linkages) is often hampered by national-level constraints (inadequate/bureaucratic regulations, corruption, lack of transparency and monopolistic business networks). These constraints add up to limit overall accessibility and availability of inputs within the country. In such cases, national-level capacity-building and advocacy are required. In the following example, a short overview of three activities which aim to improve linkages between input dealer associations and POs at the national level (through training of marketing agents – linking local POs to input dealers – trust-building and a series of training programs intended for POs as well as for input dealers and their associations) , is presented.

Strengthening linkages of local POs to input supply chains

Input distribution from truck (distribution point) to farmer.

Farmers use motorbikes, bicycles, donkey carts and – though not pictured here – their heads, to transport the fertilizer from the distribution point to the compound.

Photo of a Cotton farmer association in Kenedougou province, Burkina Faso. (Photographs by Yves Duplessis)

With funds from IFA, 1,000s+ specifically focuses on input value chains and on the linkages between POs and the other actors involved in input supply and provisioning. This includes advisory services to promote and disseminate information on proper and efficient use of 'external' inputs. In addition, to conform to the recommendations of the *Abuja Declaration on Fertilizers*, emphasis is given to input dealer

training (preferably through national input dealer associations; IFDC trains the trainers of these associations) and brokering services linking farmer groups and cooperatives to input dealers/retailers and financing institutions. The downward linkages of farmers (and agribusiness clusters) are strengthened mainly through the development of professional input supply chains in the target regions. The development of input suppliers into private extension agents for their farmer clients is a concept taken from previous IFDC projects in SSA. This involves, among others, a series of training programs oriented toward the private sector agents, including:

1. Managing your business
2. Knowing your products and services
3. Winning and maintaining customers
4. Financing your business

In addition, follow-up visits and support to business groups provide 'hands-on' guidance, in particular to translate the topics of the classroom training into current practice. Audio-visual aids may be developed (e.g., pamphlets on various products in local languages) to support the extension agents. The 1,000s+ project modified the typical capacity-building program to include agents from national-level POs, who would subsequently serve as marketing agents, linking POs and input dealers. Additionally, the marketing agents were supported to organize local-level workshops involving producer groups and local input dealers. During these workshops, information was given on ISFM and various external inputs available. The major aim however was to assist POs to make a realistic forecast of their demand for agricultural inputs.

Losses occur at various stages within the input value chain. Careless loading of trucks is only one example. (Photos taken in Kenedougou Province, Burkina Faso, by Yves Duplessis)

In Burkina Faso, support was provided to FEPAB (national-level farmer union, with members in 37 of the 45 provinces in Burkina Faso) and AGRODIA (an input dealer association) to strengthen input supply to non-cotton producer groups. The support comprised the training of eight marketing agents (staff selected by AGRODIA) who in turn visited FEPAB member organizations to estimate demand and

establish procedures for agro-input distribution involving both members of AGRODIA and the FEPAB producer groups. The procedures that followed and the confidence established between FEPAB and AGRODIA (as formalized in a joint MOU) provided sufficient incentive for the BRS to accept a loan application from FEPAB worth 100 million FCFA (about US $200,000). Despite these efforts, only half of the ordered agro-inputs were delivered to the producer groups (about 100 mt of NPK and 75 mt of urea), and some were delivered with a significant delay; additionally, in some cases demand for a specific fertilizer formula was not respected.

The experience emphasizes the need for even more rigorous and timely planning. In addition, FEPAB members may pursue direct contracts with individual input dealers and foster separate contracts for different regions and/or agro-inputs. AGRODIA in turn could make better use of its marketing agents to forecast (effective) demand, train agro-input dealers (particularly at the retailer level) and maintain a database of stocks available – enabling timely adjustments in case individual agro-input dealers have insufficient stock. IFDC will continue to provide intensive coaching to FEPAB and AGRODIA, also involving the BRS, to strengthen input supply for non-cotton inputs. Despite the problems cited above, all parties concerned are enthusiastic and willing to strengthen collaboration further.

In Mali, the project established and trained marketing agents acting on behalf of a national-level farmer federation (AOPP), which re-groups about 170 POs throughout the whole territory of Mali, and two input dealer associations (CropLife Mali). As in Burkina Faso, the marketing agents (six) followed an intensive training program provided by IFDC. In turn, the marketing agents organized a series of workshops at the provincial level involving member organizations of AOPP and agro-input dealers. As a result, 51 subcontracts were established between POs and agro-input dealers, involving the delivery of 2,000 mt of NPK and 1,000 mt of urea (principally on commission ['depot-vente']). AOPP and CropLife Mali want to intensify their collaboration, involving the more remote areas in northern Mali.

7.3 Some observations on the road taken

At the end of 2008, the 1,000s+ project was working with an estimated 250,000 farm households.[38] Family incomes had increased by 30 to 50 percent due to improved access to inputs, technology and market outlets. Income increases due to improved post-harvest and other value-addition methods were not integrated in these measures. About 1,000 local entrepreneurs, including farmer cooperatives, engaged in specific agriculturally linked economic activities, and participated in agribusiness cluster formation. On average, they had been able to increase their sales by 50 percent. Close to 100 BSSs were in some way involved in cluster formation and value chain development activities; most of these BSSs also profited from training and/or coaching to strengthen their core competencies.

[38] The information in this section is based on information from the M&E unit of the 1,000s+ project, which receives its information directly from 1,000s+ partner organizations and a small group of 'external' consultants; all partner organizations involved in M&E have received training in data collection, and analysis. The data are validated by the actors supported through the cluster formation activities. See Kondo (2007) for more information on the M&E system (or mail: kkondo@ifdc.org). It is noted that the M&E system mainly collects information at the cluster level (capacities, impact) and to a much lesser degree at the value chain level (e.g., increased efficiency, reduced transaction costs). For the latter, separate case studies are foreseen.

It is noted that the 1,000s+ project essentially strengthens individual and collective capacity at the cluster level (primarily) and along value chains. Cluster and value chain actors themselves are responsible for making the best possible use of newly acquired knowledge, skills and/or relationships. The anticipated relationship between 'new' competencies and results, in terms of individual and collective performance levels (including improved productivity, lower costs or better quality of the targeted commodity and higher profits), is schematically presented in Figure 19 below.

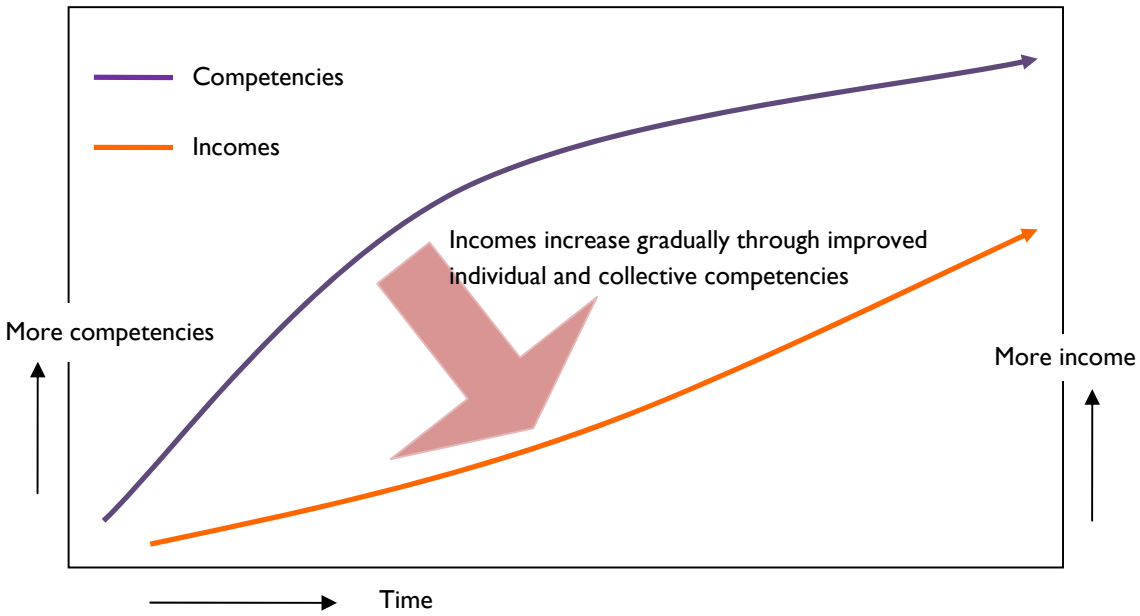


Figure 19. Schematic representation of the relationship between competencies (direct influence of project activities) and the results, as obtained by local actors themselves

It is certainly too early for any firm allegation with regard to the sustainability of the agribusiness clusters that have been and are being supported. We will likely witness failure, e.g., local actors and stakeholders that do not succeed in learning 'jointly' and who will fail to implement anything close to coordinated action; agribusiness clusters that establish themselves but appear not to be competitive enough. Failure has been factored into 1,000s+; the rich portfolio of agribusiness clusters however will hopefully produce many more successes. We are convinced that strong local actors are critical for a flourishing agricultural sector and for sustained agribusiness development. Obviously, there is a long way ahead for farmers, entrepreneurs, bankers and facilitators of change before all conditions for such sustained growth are met. Real progress, however, ultimately depends on the combined effort of creative local and non-local (chain) actors, 'poor' and 'richer' consumers in SSA buying locally produced goods and responsive policymakers – at regional and (sub-)national levels.

Discussion: How do you manage a rich and diverse portfolio?

The 1,000s+ project has limited staff. In each target country, there is one main facilitator, called the agribusiness cluster advisor. The project also employs a small team of regional specialists; they provide training and advice on specific themes (gender/empowerment, finance, marketing, M&E). This is essentially the core team that coordinates and implements CASE, although they receive assistance and guidance from the national steering committee members.[39] The management team of 1,000s+ comprises four members, a coordinator (the Chief of Party), an agribusiness team leader overseeing the overall cluster portfolio (all seven countries), and its development and administrative staff (subcontracting, accounting).

In early 2008, each cluster advisor managed about 10 clusters in and this was supposed to increase to between 30 and 60. Obviously, no cluster advisor will be able to manage such a portfolio if he/she wants to have in-depth interference with even only the major actors and stakeholders in each cluster and those involved in the upward (i.e., inputs) and downward value chains. On the other hand, we didn't want to grow much bigger; and in particular we wanted to avoid 'doing too much ourselves,' thereby substituting for local or regional BSSs. The experience in agribusiness development of most BSSs is very limited, however. Most of them have a history in either the facilitation of more or less participatory trials to raise agricultural productivity, in community-based natural resource management, or in social and educational activities. Some BSSs had a background in organizational strengthening as well. Most BSSs lack staff conversant in private sector development, marketing, business negotiation or any other profession close to agribusiness (except agronomy). As a result, much attention has been given to the training of BSS staff, and later to the training of the best of these, to become so-called agribusiness coaches. The cluster advisors manage the portfolio through this network.

An issue that frequently raises some questions is how management controls portfolio development, including selection, action planning and implementation processes. The honest answer is that management is not controlling any process upfront; instead, it inspires the overall process through coaching. The communication is intensive and involves both the coordinator (strategy, vision) and the agribusiness team leader (coaching of cluster advisors on a daily basis; advice when requested). The monitoring is results-oriented: i.e., what are the clusters that were selected and why?; what support activities have been agreed upon?; in which area do they belong, e.g., productivity (farming, processing), marketing/market analyzes, brokering? Cluster advisors have considerable autonomy. The role of the regional advisors is particular too: they essentially support the cluster advisor through advice and training of targeted BSSs or other actor groups on specific themes and require expertise that cannot be found within the country. This may seem normal, but that is not true at all. Development projects are often organized along strict hierarchical lines; decisions can only be made when approved at the 'top'; and the top only approves something when it has all the relevant information. We have all seen the bureaucracy, the fear for initiative (and errors!) and the heavy emphasis on M&E that develops out of such systems. Definitely, such an organizational strategy and process will never result in a 'rich' portfolio.

[39] Each cluster advisor would be accompanied by a counterpart from a national-level PO (and member of the steering committee). Financial support for these counterparts was to be organized by Agriterra, a Dutch agri-agency, but it had not yet materialized in the start-up phase of the project (2006-2008).

Udo Rüdiger (left), Agribusiness Cluster Advisor for Togo.

Kodjo Kondo (standing), Monitoring and Evaluation Specialist.

Aissatou Nobre (sitting at the right), Gender Specialist.

Victor A. Clottey (standing in the middle), AISSA Coordinator.

Moussa Kabore (right), Marketing Specialist.

Asseta Diallo (left), Agribusiness Cluster Advisor for Burkina Faso.

Kokou Djagni (standing in the middle taking notes), Agribusiness Cluster Advisor for Benin and Niger.

Edi Kpogan, Gender and HIV/AIDS Specialist.

Fatoumata Keita (left), Research Assistant.

Abdou Konlambigue (sitting on the left), Rural Finance Specialist.

8. Cross-cutting themes in 1,000s+: finances, information

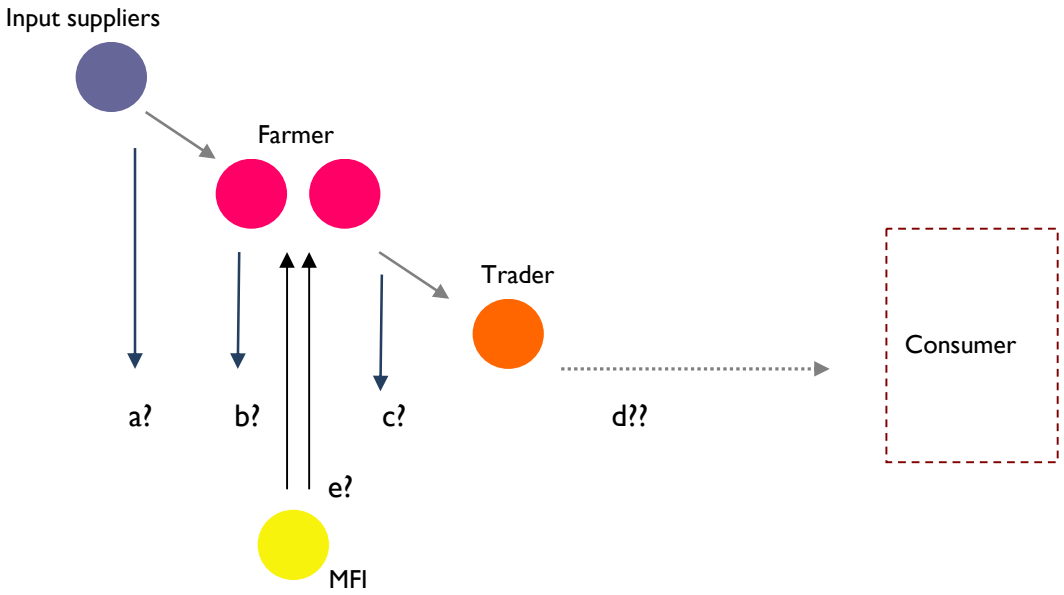
This chapter concludes Part 2 and focuses on finance and information. Finance and information are the 'oils of business,' but mobilizing finance for cluster and chain actors requires a strategy that combines grassroots action with specific cross-cutting action on financing services; the same holds for information.[40] Business intelligence requires action at local and regional levels and involves the private and public sector. Finances and business intelligence are special cross-cutting themes in 1,000s+; for both themes, the interaction between local- and (sub-)regional-level strategy and action plays a major role.

8.1 Finance

Financing plays a crucial role in agribusiness development, bot at cluster and at value chain levels. Finance institutions at the local level stimulate business thinking (by imposing business plans to support loan applications) and strengthen linkages and partnership thinking. Financing institutions, particularly MFIs, have developed a range of additional coaching and monitoring products to strengthen financial management of rural stakeholders. The story of financing in the rural agricultural sector is not yet a great one, however. There is considerable hesitation among formal credit and saving banks to provide credit to smallholder farmers. This is mainly because of the high transaction costs involved in processing and monitoring credits to a large number of small and often remote farmers, and because of perceived high risks of loan default (in the case of prolonged drought, etc.). Informal lending systems dominate the rural landscape, often using high interest rates; they are only accessible for farmers that are well-known by the lender. Rural credit and saving banks have grown rapidly over the last few years in West Africa, but the volume of loans is still very much behind demand and often limited to short-term commercial loans.

Yet, the factors that largely constrain rural credit and saving institutions from investment in the rural sector are lack of knowledge and lack of capital. Bankers do not know the smallholder farmer or the agricultural sector well enough. The MFIs that 1,000s+ has approached readily acknowledge that they fear the costs, risks and the trouble of appreciating both the loan applicants (character, capital, collateral) and their business plans under such uncertainty (Figure 20). Capital is a problem as well. Most MFIs in SSA have difficulty mobilizing savings; most of their capital comes from 'external' sources, e.g., from national, regional or international banks or international NGOs/donors. Such money is either targeted for specific purposes or channeled to short-term commercial loans (lower risks, high turnover).

[40] We have occasionally labeled trust as an 'oil of business' as well, and rightfully so! Trust is, however, both a result and a major element of transaction governance capacity (TGC); we have discussed TGC and trust in Chapter 3 (and to some extent again in Chapter 4).



Some questions that the MFI may have:

a? : Will the farmer be able to get the necessary agro-inputs, even with the loan?
b? : What is the capacity of the farmer to execute his/her business plan? Is it realistic? Does the farmer really need the amount he/she is asking for?
c? : Will the farmer be able to find a buyer? Is the farmer able to store his/her product and wait for better prices in case the price proposed is exceptionally low?
d? : What is the size of the market? Does the producer have a competitive edge to link to this market in the coming period? Is the chain efficiently organized?
e? : Should the loan be sourced to every individual producer? Or to a PO? Would a collective loan reduce processing and monitoring costs (and lead to some peer pressure to reimburse the loan)?

Figure 20. Why MFIs may be reluctant to finance smallholder producers

Some strategies to strengthen access to finance for smallholder farmers are:

- Producers to integrate horizontally (POs) and to ensure professionalism including safeguarding the four Cs that every banker wants to be assured of: character (reliability), competence, capital (co-investment) and collateral (e.g., through saving that serve as a partial guarantee)
- MFIs to develop financial products that are adequate for producers involved in agribusiness and at the same time reduce transaction risks (e.g., inventory credit systems)
- MFIs, national and regional banks to develop interlocked cluster and/or chain financing mechanisms and cluster and chain actors to propose joint (coordinated) business and investment plans (the example at the end of Section 4.2)
- National and international (agricultural) banks to support and coach MFI staff and to increase the amount of capital that MFIs can invest in agribusiness

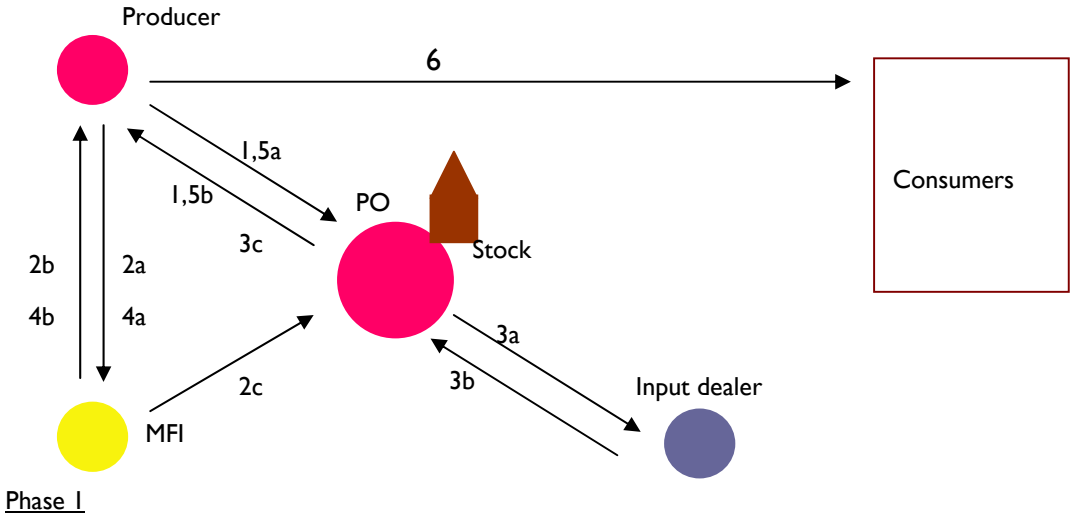
It is emphasized that both national- and local-level financing institutes are concerned with the development of new products and the scaling up of investment in agribusiness. The financing

specialist of 1,000s+ therefore works at both levels. Contacts have also been made to engage international agricultural banks in a joint effort.

The 1,000s+ project has experimented with inventory credit systems. Inventory credit has proven to be effective in strengthening producers' access to finance while at the same time assuring MFIs of collateral.[41] As indicated in the following example, there are various ways to implement an inventory credit system, with different consequences for the stakeholders involved.

Example: Inventory credit in western Africa

The inventory credit system is one of several alternative schemes to facilitate access to credit for farmers. Its implementation involves several actors, farmers' organizations, traders and banks or MFIs. The relationships within the inventory credit systems as tested in West Africa are schematically presented in Figure 21.



Phase 1

1a Deposit grains
1b Deposit certificate (PO to producer)
2a Presentation deposit certificate (to MFI)
2b Loan (MFI to producer) – for consumption
2c Loan (MFI to producer/PO) – for inputs
3a Pooling of demand/negotiation
3b Delivery of inputs
3c Distribution of inputs

Phase 2

4a Loan reimbursement
4b Return deposit certificate
5a Presentation of certificate (to PO)
5b Withdrawal of grain from stock
6 Purchases of grain

Figure 21. Inventory credit system as experimented by the 1,000s+ project in West Africa – inter-relationships (when all producers reimburse their loans)

[41] See Diaz and Hansel, 2007, for some other examples of risk-sharing models in financing agribusiness development.

There are various ways to organize inventory credit systems. Well in advance of the harvest, a tripartite agreement is negotiated with the bank, borrower (producers and PO) and warehouse operator. At harvest time, the borrower (PO) who wishes to get credit from the financial institution collects the grain from its members (producers). After drying and cleaning the grain, the produce is taken to the warehouse. The warehouse operator checks that the grain meets quality standards. If it does, the grain is stored and the producer is given a warehouse receipt showing the number of bags, the weight and the quality of the produce received. The borrower presents the receipt to the bank as security for the loan. The bank provides credit to the borrower; the amount is based on the market value of the grain at the time of the loan. The term of the loan will be related to the annual price pattern; the borrower is required to repay before the period when prices are expected to reach their seasonal peak.

The inventory credit system has been adapted in West Africa with two main characteristics to facilitate access to agricultural inputs. Instead of a professional operator warehouse (which is often not available), the grain is stored in the warehouse of the PO and locked by two padlocks, one for the PO and one for the financial institution. The loan obtained from the financial institution is divided into two parts. The first part is used to order agricultural inputs (well in time), and the second part may be used for family consumption and/or other economic activities. As soon as the loan and the storage fees are paid back, the grain is released. The PO will sell the remaining cereals of those producers that have not been able to reimburse their loans, and pay back the MFI before distributing any additional profits that result from the price increases of the cereals sold within the 'peak' season.

IFDC, and in particular the 1,000s+ project, are testing the inventory credit system in Niger (millet, rice), Togo (maize) and Mali (rice). In Mali, three areas were selected for action/research in 2008. In Kouroumari (Niono), 113 members of the cooperative SOCOAK received 40 million FSFA as a loan from the MFI Faso Jiginew. In the case of Kokry (Macina), 72 members of the association Gandakoye stored 341 mt of rice and an agreement was reached with the MFI Nyesigiso to loan 25 million FCFA. In the last case, two women organizations (COFRN and Fokaben) at Niéna and Loutouna are involved but there is no agreement yet with a financial institution.

8.2 Information

An entrepreneur in SSA operates in an extremely dynamic and uncertain environment. Market conditions and consumer behavior may change from one day to another. Chain partners (suppliers, buyers) may suddenly disappear or become engaged in competing alliances. Even at the local (cluster) level there will be changes: changes that widen the scope for interactive learning and innovation or changes that undermine the capacity to maintain a competitive edge. Adequate information is valuable. The information that a local entrepreneur needs to be able to operate his/her business includes:

- A proper understanding of one's own enterprise (performance)
- Understanding of the costs and profits involved for various actors and groups of actors, along the value chain
- Information on the capacity (i.e., capacity to deliver) and reliability of actual and potential business partners within the cluster and along the input supply and commodity value chains

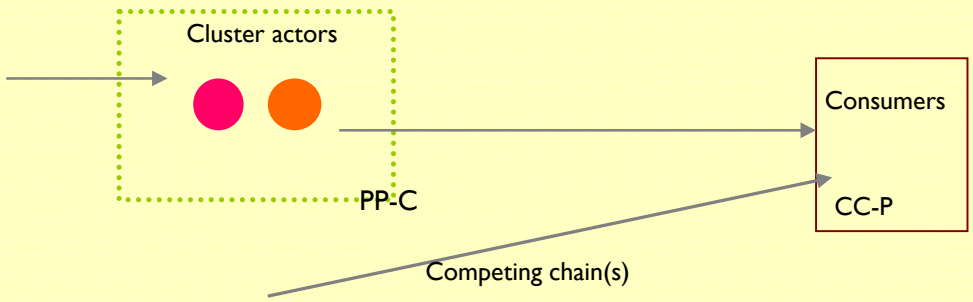
- Information on prices for agro-inputs and for the specific commodity at different (accessible/reachable) markets
- Information on consumer characteristics (preferences, and requirements in terms of affordability – price – and availability in time and space) and possible trends.
- Information on competitor strategies
- Information on alternative channel options (to supply the commodity to a targeted market segment)
- Information on (upcoming) regulations and policy measures that may influence the business environment

We call this business intelligence. Business intelligence can be divided into the following two categories:

1. Internal enterprise, cluster or chain information, which essentially comprises performance-related issues: productivity measures (yields, labor productivity), efficiency of agro-inputs, profits and unit costs and effectiveness (quality, volumes supplied)
2. External, competitive information or intelligence, which ranges from information on the capacity of business partners and the preferences of targeted consumer segments to information on alternative options and competitor strategies

PP-C and CC-P

PP-C and CC-P were developed by 1,000s+ staff to kick-start a process of developing the local capacity to monitor performance and to build a competitive intelligence system at cluster level. PP-C (Product-Place-Cost) stands for the internal performance monitoring system, and CC-P (Consumer-Competitor-Price) emphasizes the external environment and refers to market intelligence.



Business intelligence ultimately aims to improve decision-making and to inform competitive strategy. This may include exploring new alliances to improve bargaining power or to access new markets, or the design and implementation of alternative arrangements to improve coordination within a specific agribusiness cluster or value chain. Business information can be collected through web-based searches, surveys and interviews, study of relevant reports (e.g., business reports, sector studies) and study tours. Information is essential for the entrepreneur but the costs of collecting and analyzing information, either individually or collectively, can be

substantial.[42] Government and public institutions often also play a significant role, both in the collection, storage and analysis of relevant and accessible business information, as in communicating information to the wider audience (or to specific target groups). Readily accessible information, such as market prices, regulations regarding certain industries and commodity value chains and consumer behavior, contributes to 'healthy' competition, reduces uncertainty, and increases transparency in business. Public investment in market information systems is particularly justified when information asymmetry (i.e., when some actors have more or easier access to information than others) leads to unacceptable weak bargaining positions for specific actor groups (smallholder farmers), stimulates monopolistic behavior and business cartels, or otherwise limits the expansion of trade. There are no clear answers regarding the information that public institutions should collect and make available. But there are limits! Performance data, for instance, are – in principle – private data, and there is no reason to share such information widely. Actors/stakeholders within the same cluster or along a value chain may share such information to develop trust for joint learning or to inform a coordinated strategy. Governments may, however, decide to publish average and so-called benchmark data to stimulate entrepreneurs in the same industry (or sector segment) to improve performance. Other competitive information is probably best collected by the entrepreneurs themselves, either individually or collectively (e.g., POs, business associations).

Example: Agribusiness Information

Access to market information (prices) is crucial because it enables local actors to become knowledgeable of prices and price trends at various markets and strengthens bargaining power vis-à-vis downstream processors and traders.

The Market Information Systems and Traders Organizations in West Africa (MISTOWA) Project, coordinated by IFDC, has made a huge effort to make market information available – for several products and markets in West Africa. The information, collected by farmers and traders themselves is accessible through the Internet (www.tradenet.biz) and through cell phones. Local-level information

[42] BSSs may be subcontracted to collect relevant complementary information as well.

points have been established (Agribusiness Information Points, ABIP) to improve accessibility to the web. Much still needs to be done to sustain the market information system (websites, ABIPs) and to strengthen the capacities of local actors to make adequate use of market information. (Photographs by Ibrahim Kouyate, IFDC)

Discussion: M&E and business intelligence: a happy couple?

M&E systems have a long history in project design and implementation. They provide information on key indicators to project management and donors. Unfortunately, there is a tendency to stretch the concept of M&E to involve target groups (or beneficiaries), with the implicit message that what is relevant for donors and managers is probably relevant for them as well.

We do not believe in such a symbiosis. Instead, we believe that it helps to make a clear and non-hypocritical difference between what donors and project managers would like to know and what information really motivates stakeholders at the grassroots level and directly drives innovation. Information plays a key role in agribusiness development and the information that empowers smallholder farmers and stimulates entrepreneurship can be organized along two lines: performance monitoring and market intelligence. Together, we call this business intelligence. The information needed for business intelligence is very different from the key indicators that are normally required in project M&E.

Moreover, concerns of timeliness, ownership (and accessibility) and sustainability foster business intelligence systems that have little or nothing in common with traditional M&E. Performance monitoring and market intelligence are necessary to nurture innovation and to develop together with the skills and capacities of the rural stakeholders involved. This is quite different from the process by which M&E systems are and need to be designed.

PART 3: Early experiences with CASE

9. Input distribution in Mali

Uncomfortable with the centralized tender system and the prices negotiated through this system by the national marketing boards, the MIR project decided to support Faso Jigi, a farmer-based organization based in Ségou, Mali, to buy fertilizers directly on the international market.[43] Faso Jigi is a farmers' organization created in 1997 and has about 4,500 members. The farmers associated with Faso Jigi mainly grow rice, maize, sorghum and millet. The rice is grown on irrigated fields along the Niger River. Faso Jigi first concentrated on the collective commercialization of rice and maize. Over the last three years, the organization has been involved in fertilizer procurement on behalf of its members, i.e., pooling demand, buying (in Mali) and distributing fertilizers to its members. The farmers paid for the fertilizers in advance (cash).

After a training session on fertilizer procurement, international and regional fertilizer markets and negotiation techniques, the project and Faso Jigi signed an agreement to support the organization with the procurement of fertilizers during one complete season. In February 2005, the first contacts were established between Faso Jigi and international suppliers (visits to Bamako, telephone contacts). In March 2005, MIR staff analyzed market prices and trends together with Faso Jigi staff. The offers of various suppliers were compared, and negotiations took place with the international suppliers and if possible their representatives (e.g., affiliated wholesalers) in Bamako. By the end of March, the fertilizers were ordered (2,000 mt of urea, 600 mt of DAP and 400 mt of NPK). The fertilizers were delivered to the farmers in May. Suppliers were paid by the end of June. The facilitated process strengthened the competencies of Faso Jigi to purchase fertilizers on the international market, to compare prices and negotiate prices with suppliers, and to manage financing. It enabled them to avoid procurement from non-professional local retailers, to avoid corruption, and to establish contacts with professional suppliers. The prices that Faso Jigi was able to negotiate are shown in Table 2. The urea prices were at the same level as the prices that CMDT (the Malian cotton marketing company) had to pay for urea in the previous year, whereas prices had increased considerably on the world market during this period. Moreover, Faso Jigi succeeded in distributing the fertilizers at least one month earlier to the farmers than the Office du Niger, which also worked through a tender system.

Table 2. Comparison of prices obtained by CMDT and Faso Jigi for urea fertilizer

	Date of purchase	Quantity (mt)	Price (FCFA/mt)
CMDT	07/2004 (tender)	18,000	236,000
Faso Jigi	03/2005	2,000	236,000

Note: World market prices of urea increased about 30 percent between 07/2004 and 03/2005. Data collected by MIR project.

[43] Taken from Leturioner and Maatman (2005).

For the MIR project, the success of Faso Jigi demonstrated the potential of direct de-centralized fertilizer procurement and its competitiveness vis-à-vis the prevailing tender system. The tender system is time-consuming. It takes at least six months between the launching of the tender and the delivery of the fertilizers. Non-transparent bureaucratic procedures also offer ample opportunities for rent-seeking. Finally, the large volumes tendered by a few marketing boards in West Africa induce international suppliers to form coalitions, which reduce competition.

Stand of Faso Jigi at the 'Salon International de l'Agriculture,' Bamako, Mali, 2006. (Photograph by Fatoumata Keita)

There are ample opportunities to decrease fertilizer prices even further, as illustrated in Table 3. Major saving can be achieved on FOB (free on board) prices, financing costs, taxes, transportation costs, and retailer margins. The FOB price fluctuates, often significantly (yearly variations can be ± 30 percent). Decentralized fertilizer procurement will strengthen competition between fertilizer buyers (farmer organizations, retailers/input dealers) and stimulate buyers to monitor markets closely and negotiate prices when they are relatively favorable. Decentralized fertilizer procurement is less time-consuming, which adds flexibility in timing of fertilizer purchases. If the time between the order, delivery and payment of suppliers decreases, financing costs will decrease as well. Payment in Euros may also decrease financial costs. Taxes can be reduced – particularly for urea – to stimulate fertilizer consumption. This requires lobbying at national and international (e.g., Economic Community of West African States) policymaking levels. Transportation costs are relatively high, as a large part of the trucks return empty (70 percent of trucks delivering cotton fertilizers in Mali return empty). This situation, partly due to the monopoly of CMDT to transport cotton, may be improved. Retailer margins are artificially high in the tender system, particularly as most of the work is carried out by the international suppliers themselves. Strengthening competition among retailers, local input dealers and farmer-based organizations capable of purchasing fertilizers themselves (if required), will improve the efficiency in the fertilizer supply chain and reduce unnecessary transaction costs and artificially set margins. It is estimated that increases in efficiency and reduction of taxes could bring a saving of between 20 to 30 percent of the total price paid by farmers.

Table 3. Breakdown of fertilizer (urea) procurement costs – based on a tender system

	$/mt	$/mt (sub) totals	Scope for more efficiency
FOB Ukraine	230.00		Yes (1)
Sea freight	120.00		
c.i.f. Abidjan		350.00	
Unloading, transportation to warehouses, storage and bagging (incl. 2 percent losses)	10.00		
Cost-price (Abidjan)		360.00	
Gross margin supplier (5 percent)	18.00		
8 months financial costs (8 percent)	28.80		Yes (2)
Official taxes (15 percent of FOB price)	34.50		Yes (3)
Ex works Abidjan price		441.30	
Transportation to Mali	78.00		Yes (4)
Non-official taxes	6.50		Yes (5)
Retailer margin (10 percent of Ex Works Abidjan price)	44.10		Yes (6)
Sale price to cotton companies/farmer organizations		569.60	

Note: Prices in US$/mt Urea (April 2005 real prices).

To promote a decentralized fertilizer supply chain, retailers and local input dealers need to strengthen their capacities in business and financial management and customer relationships. Farmer-based organizations may want to engage directly in fertilizer procurement in international markets or pool demand and work together with professional retailers. Increased competition between farmer-based organizations and retailers and local input dealers will probably only improve the effectiveness of the fertilizer supply system. However, the more professional the retailers and local input dealers become, the more difficult it will be for general purpose farmer-based organizations to stay in the business of fertilizer procurement. West African countries are still quite far away from such a situation. Hopefully, the example of Faso Jigi inspires the various stakeholders involved in the fertilizer supply chain in Mali and elsewhere to re-orient fertilizer procurement and develop complementary strategies to build the competencies that are required for efficient decentralized input supply systems. For such change to happen, a reversal in thinking and vision is required. Behind the success of Faso Jigi lies the idea that decentralized planning and decision-making structures and more direct and proactive involvement of farmers and (local) entrepreneurs benefit economic growth – an idea that is not generally shared.

10. Tomato producers in northern Togo

In the mid-1990s, the tomato project started by Research, Support and Training for the Initiatives of Self-Development (RAFIA), an NGO in northern Togo, aimed to keep young farmers in the northern region after the agricultural season.[44] The idea behind the project was quite simple and based on the both the relative abundance of lowlands in the region and the recognition that most of the tomatoes consumed in Lomé came primarily from Burkina Faso (Kompienga, 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. Subsequently, a specific program was developed to assist farmers with the development of horticultural production. Wells were 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. Although diagnostic studies indicated a large potential for several other horticultural crops (like onions and cabbage), most farmers chose tomatoes as their principal crop.

In 1994, a small group of farmers started to grow tomatoes on about 15 ha. RAFIA was asked to assist in the marketing of the agricultural produce and in connecting farmers with larger traders. RAFIA quickly succeeded in diverting some large-scale female traders from their usual collection sites in Burkina Faso to the producers in the northern region. The anticipated decrease in transportation costs and avoidance of customs duties were attractive, but the farmers 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, farmer-based committees were set up to organize the marketing of the vegetables produced ('Comité de Commercialization des Produits Maraîchers,' CCPM). The role of these committees was to collect information on prices and market outlets, contact traders and negotiate with traders on behalf of specific farmer groups. Although 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 believed 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 (one for each farmer group), traders could easily play farmer groups against one another. To improve both bargaining power and control of the negotiation process, a new institution was created: the Committee of Horticultural Activities (Commission des Activités Maraîchères, CAM). The CAM is directly affiliated to Centrales d'Autopromotion Pyasanne (CAP) and covers many village groups and CCPMs. Traders now first discuss prices (bottom and ceiling prices) with the 'interlocuteurs' of the CAM. Results of these negotiations are communicated to all the members before the traders make the final deal with the farmer groups (and the CCPMs that are still there). Today, the farmers all seem to be quite satisfied

[44] This section is largely taken from Maatman and Konlambigue (2005).

with their 'interlocuteurs,' though some of them feel that the CAMs could be more proactive in identifying alternative marketing channels.

As from 2003/04, over 20 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, sometimes March. In the 2001/02 season, tomatoes suffered from insect attacks, and this severely reduced production and incomes. With assistance from RAFIA technical staff, 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 percent of the total cropped area. Yields vary between 30 and 40 mt/ha if crops are not damaged by pests/insects. Rural radio has also played an important role in dissemination of i Information on prices of horticultural crops in various markets, including the Lomé market. As farmers are better informed about the prices in various markets, they are also better equipped to interact with their 'interlocuteurs' at the CAMs and the CCPMs. 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. Tomato producers have been able to develop cost leadership vis-à-vis their Burkinabè colleagues by focusing on the regional and Lomé markets (Table 4).

Table 4. 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 FCFA/mt.	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/May	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/May	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 (2005).

There are some differences in the quality of 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 is difficult to keep them well during transportation," one of the 'interlocuteurs' of the Dapaong farmers explained. In itself, this would 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. However, coordination between the farmers and improved knowledge and information of market outlets (alternative trader networks) and prices have balanced the power relationships between the traders and farmers.

In Michael 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 downstream and upstream value chains, and competition 'internally' on production technologies/innovation (Porter, 1985). 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 date will 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, in our case of tomato production, is very important but still a problem. Farmers are only gradually becoming used to producing constant quality and coordinating delivery in order to live up to the expectations of the traders. There is still 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 delivering on a specified day. However, unreliable delivery (varying volumes, etc.) increases the costs of traders to collect the tomatoes and may tempt them to look for other potential producers or producer areas. Training of the farmer representatives in the CAMs in management tools is therefore essential to improve mutual understanding between traders and farmers and to professionalize tomato production in the region.

Baskets of tomatoes at the roadside in northern Togo – waiting for the trucks to come. (Photographs by Kodjo Kondo)

The farmers in the northern region have successfully integrated multiple tomato supply value chains in Togo (value chains that are serving different markets). However, the sustainability of their strategy not only depends on their relative competitive position within the industry (vis-à-

vis other competing tomato producers) but also on the long-term profitability of the whole industry. Two of the most important factors determining long-term profitability are 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. Kara and Dapaong only provide small markets. The Lomé Market is therefore the main market outlet. Trader networks in West Africa often obey a strict, informal hierarchical structure and consequently may have a large advantage when negotiating prices. However, interviews with traders in Lomé made it very clear that considerable competition exists within their networks. Traders have their own cars or transporters they work with, 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 because individual traders not connected to any of the trade unions have entered the market. These traders are merely grasping an opportunity and do not yet constitute very secure marketing channels, however. In the northern region, growth of tomato production is constrained by access to water (wells). Because many NGOs and development projects/programs are interested in horticultural development, investments in wells and related irrigation infrastructure and equipment are increasing– also in other areas that could 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. Farmers are already 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. There is a growing pressure from farmers on RAFIA and other institutions to undertake studies and attract donors to invest in tomato processing industries. At a regional level, this may not yet be very realistic, but at both regional and national levels opportunities to develop agriculturally linked enterprises should be taken very seriously.

Fruits and vegetables stand in Lomé.
(Photograph by Arno Maatman)

11. Soybean producers in northern Nigeria

Collaborative activities in northern Nigeria started in 1998. Whereas activities first focused mainly on developing more intensive cropping systems based particularly on maize and soybean alley cropping systems and rotating fertilizer applications, they gradually shifted to market integration and linkages of farmers with input dealers, rural bankers and traders. The Institute for Agricultural Research (IAR) of the Ahmadu Bello University (ABU) in Zaria implements the project in close collaboration with the Katsina State Agricultural and Rural Development Authority and local and regional authorities within Kaduna State (in particular the Danja Local Government Council – the Danja area has been selected as the main pilot area). Intensive mutual learning efforts on ISFM technologies and agricultural intensification (the so-called 'learning plot' exercises) started in seven pilot villages, with progressive extension to other villages, both within and outside the Danja area. The participating villages all formed farmer groups, which monitored and took the lead in the learning plot exercises, but also took up tasks such as input provisioning and financial intermediation. Some female farmer groups were established as well, such as the 'Unguwar Madaki Dararafe' women farmer association. Whereas the activities started with about 200 pilot farmers who received considerable training in ISFM technologies, sourcing of inputs, financing mechanisms, submission of requests for credits and post-harvesting techniques (processing and marketing of soybeans), the number of farmers that have adopted the ISFM practices in the pilot area grew to above 25,000 farmers.

Strip crop rotation of maize and soybean in northern Nigeria.
(Photograph by Arno Maatman)

ISFM technologies that have been developed together with pilot farmers include: strip crop rotation of soybeans and maize or soybeans and sorghum; strip crop rotation of cocoyam and soybeans, planting of early tomatoes on ridges and sorghum in furrows; inter-planting of early groundnut and sorghum; and flat, strip crop rotation of soybean and groundnut with sorghum planted across the legumes ('Girchi'). Fertilizer applications include the application of Crystallizer Super fertilizer (a phosphate fertilizer used on soybean strips to improve nitrogen fixation) next to urea and mixed NPK fertilizers. Methods including improved recycling of crop residues and the use of composting and/or animal manure (while using crop residues and leaves

as fodder) have been tested and adapted. Varieties were carefully chosen (see below) as well as distances between strips and IPM methods to reduce weed infestation and attacks of '*striga*.' Farmers that adopted ISFM technologies have experienced increasing yields and have been able to improve food security as well as cash incomes. Some farmers have invested in storage places and houses whereas others went on pilgrimage. Results with the pilot farmers have been extremely well communicated to local and regional authorities, and the large scale and consequent organization of open field days has had a huge impact on both adoption within the pilot region and on the degree of sensibility and support from authorities and management staff of research and extension services for the project.

Increased soybean production also resulted from research conducted by the International Institute of Tropical Agriculture (IITA). IITA and other research institutes have produced new plant varieties that could cope with high disease pressure, compete with parasitic weeds and grow in various soils. The new varieties have made it possible to expand soybean farming across large parts of the country. Soya bean is now grown beyond the traditional middle belt of Nigeria. Benue, Kaduna, Taraba, Kano and Kwara States remain the major producers. Statistics are scarce, but those who have seen the economic potential in this crop are expanding production fast. Soybean has quickly become an important part of the farming systems in northern Nigeria. Depending on the area, soybeans may be the first, second or third cash crop.

Introduced merely as a leguminous crop enhancing soil fertility through its nitrogen-fixing ability and biomass production, soybean has become a highly rewarding commercial venture. Training on the various uses of the soybean crop has stimulated farmers' wives to engage in value-added processing. Some of them have developed new recipes of soy-based snacks and food, which are consumed within the family or sold. In addition, farmers are using the soybean biomass (leaves) for forage instead of recycling it through composting or leaving it on the field as was originally proposed by the technical advisors. There also is a large pool of local processors who utilize soybeans to produce condiments such as *dadawa and awara* and soy-fortified recipes for people with diabetes and HIV/AIDS and the less privileged to cheaply augment their protein intake. Locally produced soy milk has become a common product in some local communities. It is produced in small quantities at a time because it does not store for long.

The steady growth in poultry farming is increasing the demand for soybeans (both whole and cake) as well. This demand is in addition to the introduction of soy-based processed products for human consumption. The increase in fish cultivation has led to the local production of fish feeds, which require high protein crops including soybean as well. Grand Cereals & Oil Mills Limited (GCOLM), a Nigerian integrated foods company, is currently installing machinery for fish feed production.

The soybean industry (Figure 22) is made up of a dominant traditional (informal) sector consisting of a large number of small operators, and a modern sector handling supplies to industrial users and large merchants. The traditional chain supplies the household and catering sectors, whereas the modern sector mainly sells to poultry farmers and industrial end-users. Informal traders make extensive use of local markets. Modern traders, on the other hand, contract agents who buy from the local markets, clean and repackage for supply to their clients. The informal chain starts with assemblers of various sizes who buy directly from farmers. They

finance their activities mainly from their own resources and sometimes with advances provided by other traders. Buying from these and also directly from farmers, secondary assemblers ship produce to central supply (wholesale). Farmers store part of their crop to take advantage of seasonal price rises. Larger farmers are better able to do this than smaller farmers; the latter will have to sell at low prices during the harvest season to be able to pay school fees and other demands. Most farmers sell their produce individually. Because of the small volume of produce, each farmer bears the costs of transportation. Efforts are made to strengthen trust among cluster members to work as teams to benefit maximally. Cooperatives that are too weak to deal directly with industrial users are being linked up with major traders; some cooperatives have also started to buy their inputs en-bloc from input dealers.

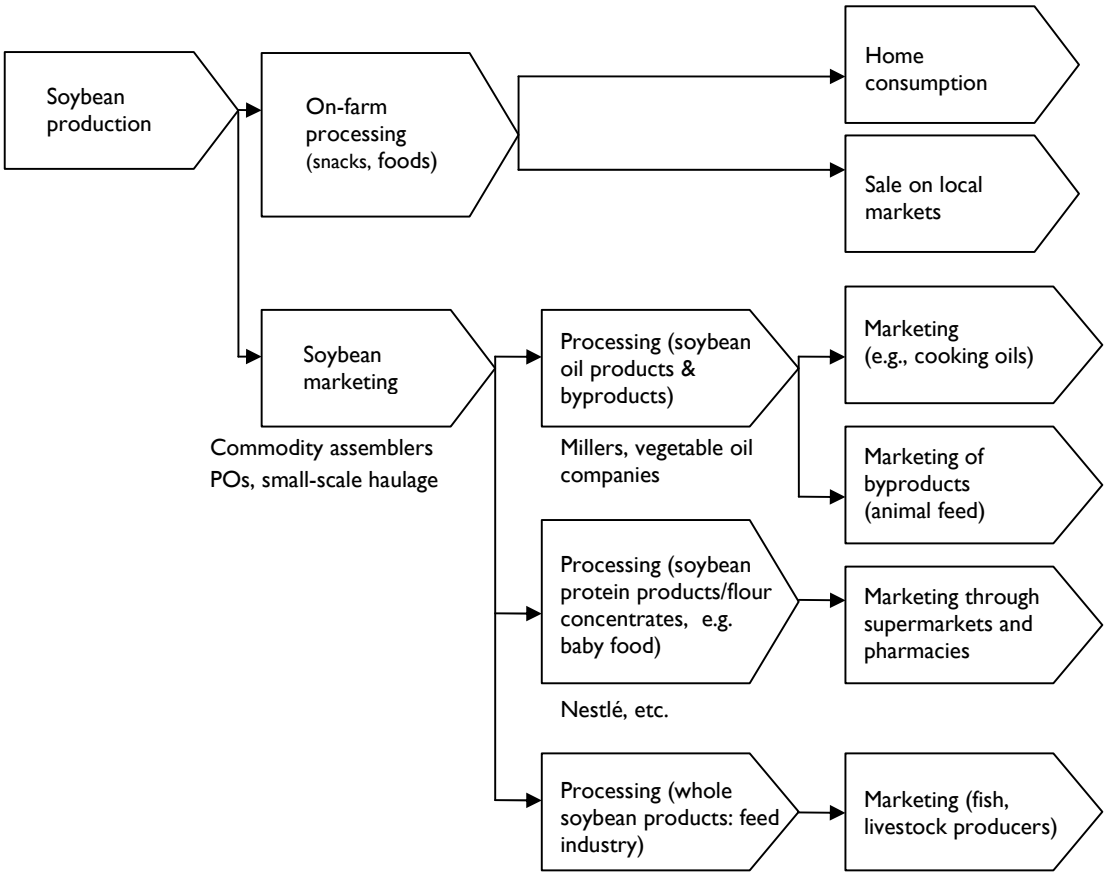


Figure 22. Examples of linkages between soybean production and soy industry in Nigeria

The federal government has been adopting policies meant to revive industries that are utilizing locally produced agricultural products. In addition to the agricultural banks, the Central Bank and various state governments have made resources available to participating commercial banks to serve as collateral in the agricultural sector of the economy. It is expected that many of the oil seed processing plants that have been down in the last years will take advantage of this window of opportunity to revive their operations, which will positively impact the demand for soybeans and similar crops. Viable community banks that had been scattered all over the country have been restructured, refinanced and converted into microfinance banks. The

financial institutions are therefore better able to finance good proposals from the agricultural and agribusiness sector. Agricultural input supply, especially for fertilizer, has been driven by the public sector. Whereas there is no barrier to the activities of the private sector, the subsidy and corruption which have been the bane of fertilizer supply, are being reviewed to reduce adulteration and importation of substandard fertilizers and agro-chemicals. A voucher scheme advocated by IFDC and other stakeholders was tried for the first time in 2008. The seed companies have been coping in producing certified seeds. Some of the agricultural development programs have also gone into seed multiplication but at a small scale only, so far. Farmers are being sensitized on the need to buy certified seeds for each planting season. There have however been reported cases of adulteration by traders/intermediaries. It is hoped that the linkages being developed and steps taken by seed companies will eliminate fake seeds.

Farmers visiting Grand Oil Mills, a large processor in northern Nigeria. (Photograph by Kodjo Kondo)

The 1,000s+ project in Nigeria is preparing for scaling-up. Strategies to promote ISFM technologies, which have been based on open field days, informal farmer-to-farmer extension, and training of extension officers working throughout Kaduna state, will be more explicitly based on farmer-to-farmer extension (with well-trained farmers working in close collaboration with extension services) and more efficient use of mass media (rural radio, etc.). The agribusiness aspects are being strengthened, particularly for market outlets and for value-adding storage and processing. The most important challenge is in the strengthening of forward linkages and the competencies of traders and intermediate processing firms.

The soybean story in northern Nigeria provides both a good example of agribusiness development and food for thought. Soybean production has profited from the ban on vegetable oil imports but the supply value chain is still largely uncoordinated. Farmers are under-informed and mainly sell their soybean production in the local markets. Assemblers are poorly organized, try to exercise 'monopsonistic' buying power and have limited success in stimulating production. Linkages with end-user markets are poorly developed, and the competitive position of the edible oil industry vis-à-vis competing industries in other parts of the world is very delicate and exclusively based on low labor and energy prices (comparative advantages). This

gives Nigerian edible oils almost no chance to compete effectively in intra- and inter-regional Central and West African markets. Whereas the ban on vegetable oils may create some comparative advantages for the soy industry, it may also support an inward-looking, inefficient industry, which will rapidly be taken over if bans are lifted, and will not enable Nigeria to become a competitive player in the region. Strategic targeting of end-user markets and product differentiation are needed to strengthen the soy industry in Nigeria and to carry it beyond its current status. Building the awareness and capacity of leaders from the soy industry and farmer and trader organizations is needed to develop new frames of reference, to envision strategies to profit from the ban on vegetable oils and to invest in a brighter future.

12. Pepper dryers in northern Ghana

Whereas research-action in northern Ghana first concentrated on ISFM options for sorghum and groundnuts, farmers themselves proposed to concentrate on pepper, which was already a major cash crop. Actors in pepper production are mainly male small-scale farmers. Farm sizes range from 0.25 to 3.5 acres. Farmers claim that income from pepper constitutes 60 to 70 percent of farm income. Most farmers sell their produce in their communities and neighboring village markets, where they sell to local traders as well as to traders from the city and from outside the region. Some farmers and traders in the villages send their produce to the city markets and as far as Kumasi and Accra to sell to wholesalers and retailers. The pepper producers are not organized into producer associations. In some communities there are weakly organized farmers' associations, however, that could serve as the platform for mobilizing the pepper producers into collective action.

Experimental plot with pepper.
(Photograph by Arno Maatman)

The pepper wholesale and retail markets (for both fresh and dry pepper) are dominated by women. Public transport is the major means of transporting pepper from the farm gate to wholesale markets. Traders work individually. Each wholesaler, however, belongs to a pepper traders' association, often headed by the commodity (pepper) 'queen'. The queen function exists for all farm produce sold on urban markets in Ghana and includes establishing informal commodity market rules (including setting the price for pepper as well as authorizing the entrance of new members) that are binding on all its members. Retailers are not necessarily organized or under the influence of the queen, although she is said to control entry into the trade. Few traders also dry the fresh pepper to add value. There are others who specialize in processing (grinding) the dry pepper into powder, which they sell to both retailers and

consumers. A most popular processed form of pepper is the pepper sauce referred to as 'Shito.' Consumers of pepper and pepper products are individuals buying it for home consumption, restaurant/'chop' bar operators, domestic bursars of schools and colleges and other institutions.

Drying pepper at the farm gate was noted as a price stabilizing factor that works in favor of farmers. A racked solar dryer was demonstrated to the farmers but the capacity was a limiting factor to a wide adoption. With IFDC and CIDA (Canadian International Development Agency) support, a greenhouse drying facility was developed at the Savanna Agricultural Research Institute and tested in the field. This facility is roomier and more durable, drying a 10 times higher volume than the racked solar dryer. This capacity is adequate for the staggered picking from a two-acre farm which yields about seven bags of fresh pepper a week. The costs of this drier and the average cost of drying one bag of pepper are estimated in Table 5. The analysis is centered on a farmer who cultivates the finger-like variety (*Capsicum frutescens*), commonly cultivated for drying.

Table 5. Estimated cost of a greenhouse drier and processing cost per bag of dried pepper

Items	Purchase value GH¢	Years in usage	Share#	Value per year GH¢
Construction and maintenance materials	1,010	10	1	101
Research effort and workmanship*	150	10	1	15
Cost of water and fuel wood for blanching per season	60			60
Total	1,220			176
Harvesting period = 4 months Drying time = 8 days Capacity = 5 dried bags/drying Capacity utilization = 75 bags per season Cost of drying per bag/year (176/75) = GH¢2.35				

Notes:
* Excludes in-kind (labor) contributions of beneficiary communities. Research cost incurred only involves cost of fuel for supervising the construction.
# Assumes the dryer is used for pepper drying only

Farmers inspecting the drying process of their pepper. (Photo by Robert K. Owusu)

The full potential of the drier can be exploited if an active ventilator is attached to it. This will shorten the drying time to about three or four days and enable the dryer to be used to process the produce from four acres of a pepper farm over a period of four months. The cost of the drier can be shared by two to four farm families reducing the cost of construction and maintenance per household considerably. To ensure uniform drying and high quality products, action-research on varietal selection and purification of seed stock is carried out with farmers' participation. The finger-like 'Legon 18' and 'Shito Adope' varieties that have export values have started to increase in acreages among the target farmers as they have realized the market potential of these varieties. A seed farm that was established in 2007 was affected by a 40-day drought yet there was sufficient seed left for 2008. The gradual shift in the production pattern of farmers from the fresh pepper to dried pepper is guided by the following analysis.

Retailers of agro-chemicals in farming communities and village markets buy different agro-inputs needed for pepper production from distributors and wholesalers; the agro-inputs are then sold to farmers with an average markup of about 25 percent. Largely, farmers' costs in the study zone are related to inputs such as fertilizers, pesticides, fungicides, seeds, labor for land preparation, nurseries, watering, weeding and harvesting. The ratio of one fresh to 0.75 dried pepper achieved using a greenhouse drying facility implies that 28 bags per acre of fingerlike variety will yield 21 bags of dry pepper. The cost per bag of producing one acre of dried pepper was estimated to be GH¢12.72, with a drying and handling cost of GH¢2.35 (see Table 5). With the mean selling price of GH¢40.30 to wholesalers, farmers make a turnover of GH¢18.50 (Table 6). The average cost per bag of wholesale, covering transaction cost (transport cost, market tolls, storage charges and miscellaneous cost) and purchasing price of the pepper amounts to GH¢41.30. A revenue of GH¢51.20 implies that the wholesaler makes GH¢9.90 per bag. Additional retail cost is estimated to be GH¢0.30. Consumers pay GH¢61.70 per bag of dried pepper, resulting in a turnover of GH¢10.20 per bag.

Table 6. Shares of value created along the dry pepper chain in northern Ghana

	Input Dealer	Producer	Wholesaler	Retailer	Consumer
Cost (value in process)	3.97	6.73	40.30	51.20	61.70
Value Addition (production & handling)	1.08	15.07	1.00	0.30	
Margin	1.68	18.50	9.90	10.20	

It is clear from the analysis that the value addition process has resulted in higher margins for the actors engaged in the dry pepper chain compared with the margins of GH¢0.40, 5.62, 5.80, 8.70 that, respectively, accrued to input dealers, producers, wholesalers and retailers engaged in the fresh pepper value chain in the same season. Farmers earn more by integrating production and processing steps in the chain (i.e., adding the additional activity of drying the pepper). The ability of producers to upgrade their activities is of vital importance to increase their shares in the values created in the pepper value chain. Upgrading the skills of farmers in the drying process could therefore enhance quality and lead to higher incomes.

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Appendix. The AISSA network

To enhance learning and dissemination of new ideas, capacity building and exchange between business development services is crucial.

Logo AISSA network

In March 2004, IFDC and its partners launched the Network for Agricultural Intensification in Sub-Saharan Africa (AISSA). The AISSA network emphasizes institutional development, empowerment and strengthening of organizations of farmers and local entrepreneurs rather than the more traditional focus on participatory technology development. Network members are consultants and BSSs involved in the facilitation of agricultural intensification and market development; the latter may include research and extension agencies, NGOs, POs and business associations – if equipped with specific training/service units. The objectives of AISSA are to:

1. Provide a platform for information and experience exchange
2. Develop and disseminate tools that facilitate the development of sustainable agricultural systems and competitive rural enterprises[45]
3. Join forces to get agricultural intensification on the agenda of decision-makers
4. Stimulate collaborative activities among members.

AISSA is a common woman's name in West Africa. There is indeed an intentional link. Through this name, the network's members acknowledge the essential role of women in African agriculture and the emphasis that the AISSA network places on gender-related issues in agricultural intensification.

AISSA is involved in building competencies for thriving agribusiness clusters and value chains, and lobbies, together with the local stakeholders, for enabling business environments. In

[45] Edited versions of facilitation tools and training guides used (and tested) by the partner institutions have been put together in the first edition of the AISSA Toolkit. The AISSA Toolkit is a 'work in progress,' and AISSA and IFDC will continue to collect and edit new tools/training guides. For more information, see the AISSA network website: www.aissa.org.

addition to traditional lobbying subjects, AISSA aims to promote a constructive dialogue between the private and public sector to raise consciousness regarding the micro-economic foundations of national-level competitiveness and related policy consequences. AISSA aims to become a unique and exclusive network that unites all types of institutions involved in the facilitation of agricultural intensification and market development (from the grassroots). To this end, AISSA will support its members to develop competitive strategies by improving efficiency in working together with local actors through leveraging their efforts (training-of-trainer approaches) and through specialization.


CASE
CASE is an actor-oriented approach to support agricultural intensification and market development in challenging regions of sub-Saharan Africa, specifically targeting smallholder farmers and local entrepreneurs.
CASE has been developed by IFDC & its partner institutions through a long process of experiential learning.
Institutional environment
Business development services
Bankers
Input dealers
Farmers
Traders, processors
Commodity value chain
CASE empowers vulnerable groups to foster rural innovation.
CASE is based on three pillars:
Agribusiness Cluster information
(to strengthen & link local actors & stakeholders)
Value Chain development
(to facilitate efficient linkages between national & international agro-food markets & local clusters)
Advocacy & Lobbying
(to create enabling agribusiness environments for smallholder farmers & local entrepreneurs)
C = Competitive
A = Agricultural
S = Systems and
E = Enterprises
IFDC

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IFDC is a public international organization addressing critical issues such as international food security, the alleviation of global hunger and poverty, environmental protection and the promotion of economic development and self-sufficiency. IFDC focuses on increasing productivity across the agricultural value chain in developing countries. This is achieved by the creation and transfer of effective and environmentally sound crop nutrient technology and agribusiness expertise.

IFDC is governed by an international board of directors with representation from developed and developing nations. The non-profit Center is supported by bilateral and multilateral aid agencies, private foundations and national governments. The Center was established in 1974 in response to global food and energy crises. To date, IFDC has provided assistance in nearly 100 countries. Website: www.ifdc.org

The Technical Centre for Agricultural and Rural Cooperation (CTA) is a joint international institution of the African, Caribbean and Pacific (ACP) Group of States and the European Union (EU). Its mission is to advance food and nutritional security, increase prosperity and encourage sound natural resource management in ACP countries. It provides access to information and knowledge, facilitates policy dialogue and strengthens the capacity of agricultural and rural development institutions and communities.
CTA operates under the framework of the Cotonou Agreement and is funded by the EU.
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