



One finger cannot lift a rock

Facilitating innovation platforms to trigger institutional change in West Africa

**Suzanne Nederlof and
Rhiannon Pyburn**
Editors

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FACILITATING INNOVATION PLATFORMS TO TRIGGER
INSTITUTIONAL CHANGE IN WEST AFRICA

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Editors



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Convergence of Sciences - Strengthening Innovation Systems (CoS-SIS)

www.cos-sis.org/



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Cover photo: Packaging shea butter ready for sale in Mali.
Photo: Suzanne Nederlof

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Paul Mundy is the language editor of this book. We are really sorry to have locked him up in a hotel in Bamako for his entire stay, and we are thus even more grateful for his hard work and devotion. During the writeshop he never tired of probing until things became really clear, and also later he put an enormous effort into finalizing this book.

The production of this book has been co-funded by CoS-SIS and KIT. KIT's contribution to this publication has been made possible thanks to core support received from the Dutch Ministry of Foreign Affairs.

We hope that you get a sense of the joy we experienced in making this book, and that we have managed to translate some of this enthusiasm to you.

Suzanne Nederlof and Rhiannon Pyburn (editors)

Preface

Arnold van Huis

CoS-SIS international coordinator

Bart de Steenhuijsen Piters

Director, Development Policy & Practice, Royal Tropical Institute

AFRICAN SMALLHOLDER farmers produce most of the tea, coffee, cotton, cocoa, and, yes, cut flowers, fresh vegetables and pineapples that the continent exports to Europe. Most of these smallholders are outgrowers for some centrally managed company or parastatal that ensures the interlinked services and other conditions that they need to produce the commodity.

So why can these farmers not ensure food security for their own people? Why does sub-Saharan Africa, though blessed with huge under-utilized resources, continue to import a growing part of its food requirements? Why is it that the Green Revolution has not taken off in the region?

Research comparing Asian and African countries to answer this question concluded that “a pervasive bias” exists “against the small farm sector on the sub-continent”. For food producers, the enabling conditions experienced by export crop producers do not avail. This conclusion places INSTITUTIONAL CHANGE¹ at the heart of the analysis, with four major institutions implicitly indicated: a transparent state, functioning markets, adequate support services (e.g., banking systems), and farmer capabilities to access markets. The question “*If Asia could do it, why not Africa?*” seems to demand an institutional rather than a technological answer.

That in turn calls for a paradigm change on the part of the agricultural development establishment, i.e., the agricultural scientists, donors, economists and development organizations who determine agricultural policies. Why? For decades, the consensus had been that productivity in sub-Saharan Africa is constrained because of a lack of appropriate technologies. Therefore, the focus has been on investing in science institutions that create and improve agricultural technologies, and on transferring these to farmers. However, assessments of the impact of agricultural research often show that the percentage of recommended technologies accepted by smallholders is low. Such cracks in the dominance of technology creation and transfer create space for other innovative pathways.

The word “INSTITUTION” can lead to misunderstanding. If you ask an agricultural researcher or economist about institutions, he or she may get no further than calling the World Bank “an institution”. But we use the word differently: institutions can be defined as the rules of the game that reduce uncertainty in human interaction. Examples of institutions are land tenure, markets, VALUE CHAINS, certification, cooperation, corruption and exploitation, and how men and women relate to one another. Effective institutional arrangements often represent “bundles” of institutions that together create opportunities for smallholders.

¹ Words in SMALL CAPITALS are explained in the Glossary at the end of the book.

The research programme Convergence of Sciences (CoS, 2002–6), funded by the Dutch Ministry of Foreign Affairs, went through a learning process with respect to what determines opportunity for African smallholders. Typical for the time when it was conceived, CoS focused on participatory technology development in eight West African communities. The conclusion was that, yes, optimally appropriate technologies can help smallholders, but the institutional setting often makes them either impossible or unattractive to implement. Smallholders face such small windows of opportunity that appropriate technology is often irrelevant. What emerged is that opportunity can be captured only by creating appropriate conditions, i.e., by tackling institutional factors.

Of course, CoS was not the only one to recognize these issues, but it was among the few that started to experiment with changing institutions. Our African doctoral candidates proved very inventive in this. They started to experiment with land tenure agreements, collective action to control pests and diseases in adjacent farms, and coalitions to stop corruption and theft. The sequel to CoS, CoS-SIS (2008–13) focuses explicitly on experimenting with institutional change through “strengthening INNOVATION systems” (SIS) in Benin, Ghana and Mali. This book is about this research programme.

At the time of writing, CoS-SIS still has two years to go. Its research is ongoing. So this book cannot deliver the programme’s final conclusions or report on institutional change. Instead, it describes the experiences of nine part-time “RESEARCH ASSOCIATES”, who facilitate forums created by CoS-SIS, called “CONCERTATION AND INNOVATION GROUPS”. These nine forums, one per FACILITATOR, each deal with a topic area (or “DOMAIN”) in one of the three countries. The domains were selected by senior national ACTORS as development priorities. The idea is that these forums create space for interaction, hopefully leading to institutional change, and so creating realistic opportunities for smallholders and increasing food security. It is the job of the research associates to catalyse this interaction through their facilitation work. CoS-SIS aims to find out how this interaction can be shaped so that the actors in the forums can engage in meaningful innovation, enhance their performance and benefit from the results.

There is growing consensus on the value of multi-STAKEHOLDER approaches to natural resource management, institutional change, poverty alleviation, climate-change mitigation and adaptation, and food security. Using such approaches to foster institutional change implies a special twist. This book presents the hands-on experience of facilitators who have struggled at the coal face with this approach. We hope that others in this emerging profession will be able to learn from their experience.

CoS-SIS: A summary

Project name and duration

Convergence of Sciences: Strengthening agricultural innovation systems in Benin, Ghana and Mali (CoS-SIS). Five years, 2008–13

Objectives

- Food security through mobilizing productive capacity of African smallholders
- Improve smallholders' opportunities through an enabling institutional environment
- Test an innovation-systems approach to institutional change
- Facilitate nine INNOVATION PLATFORMS engaged in institutional experimentation around carefully identified entry points
- Monitor and evaluate mechanisms and impact
- Draw and institutionalize policy relevant lessons.

Partners

Benin: Université d'Abomey-Calavi

Ghana: University of Ghana at Legon

Mali: Institut Polytechnique Rural/Institut de Formation et Recherche Appliquée (IPR/IFRA) at Katibougou

Netherlands: Wageningen University & Research Centre, the Royal Tropical Institute (KIT) and Agriterra.

Domains

CoS-SIS works in nine domains, selected by national working groups in accordance with national priorities and smallholder LIVELIHOOD interests:

- **Benin:** water resources management, oil palm, cotton
- **Ghana:** oil palm, food security, cocoa
- **Mali:** crop/livestock integration, water resources management, shea nut

In each domain, a post-doctoral **research associate** has been recruited from a CoS-SIS partner organization and employed part-time as a facilitator of an innovation platform (Concertation and Innovation Group or **CIG**). The research associates are also the principal researchers of CIG mechanisms and impact. They are expected to operate at a higher than local level.

Doctoral candidates work with local groups to identify constraints and develop solutions (until Dec. 2012).

Management

International coordinator: Prof. Arnold van Huis, Wageningen University. He is assisted by a programme management committee and a scientific advisory committee.

Regional coordinator: Dr Dominique Hounkonnou

Programme management teams are responsible for the national programme.

Programme management and staff

Benin

Chair of national programme committee: Prof. Jean Claude Codjia, dean of the Faculty of Agriculture

National programme coordinator: Prof. Dansou Kossou

Research associates/CIG facilitators

- Water resources management: Dr Aliou Saïdou
- Oil palm: Dr Pierre V. Vissoh
- Cotton: Dr Elisabeth T. Zannou

Ghana

Chair of national programme committee: Prof. Kwame Offei, provost of the School of Agriculture and Food Sciences

National programme coordinator: Dr Owuraku Sakyi-Dawson

Research associates/CIG facilitators

- Oil palm: Dr Samuel Adjei-Nsiah
- Food security (small ruminants): Kofi Adade Debrah
- Cocoa: Dr Richard Adu-Acheampong

Mali

Chair of national programme committee: Mme Anna Réjane Dembele, executive secretary of the Comité National de la Recherche Agricole

National programme coordinator: Prof. Mamoudou Traore

Research associates/CIG facilitators

- Crop/livestock integration: Dr Bara Ouologuem
- Water resources management: Dr Soumano Lassine
- Shea nut: Dr Fadiala Dembele

Funding

CoS-SIS is an action research programme financed (€4.5 million) by the Netherlands Ministry of Foreign Affairs through its Directorate General of International Collaboration (DGIS/Research and Innovation Programme).

Facilitating institutional change

A woman with dark skin and short black hair, wearing a red halter-neck top, is carrying a large black plastic bucket filled with palm fruit on her head. She is smiling slightly and looking towards the camera. The background is a lush green field with various plants and trees.

Oil palm: an important source of cooking oil and income for families in West Africa

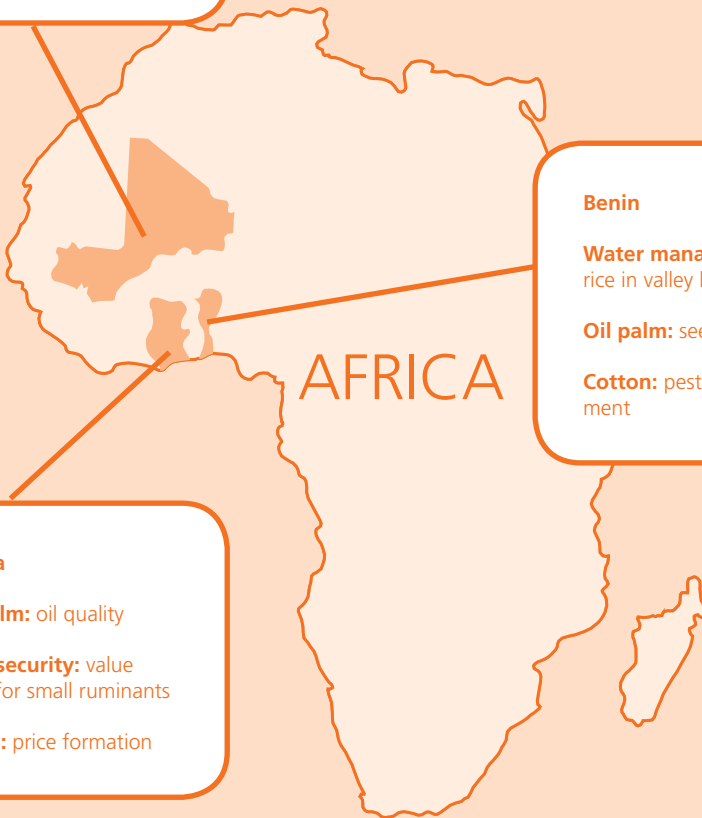
Photo: Suzanne Nederlof

Mali

Crop–livestock Integration: dairy farming

Water management: water users associations

Shea nut: market access



Benin

Water management: rice in valley bottoms

Oil palm: seed system

Cotton: pest management

Ghana

Oil palm: oil quality

Food security: value chain for small ruminants

Cocoa: price formation

Three countries, nine domains for testing approaches to institutional change

1

Introduction: Enhancing innovation

Suzanne Nederlof and Rhiannon Pyburn

WEST AFRICAN smallholders face many challenges in building a livelihood for themselves and their families. They often lack opportunities for growth and expansion, market information and access to knowledge. Even when opportunities arise – a chance to sell to a new market, get credit or access extension services, or when new regulations open possibilities – smallholder farmers are often constrained in being able to take advantage of the changing situation.

So they can reap the benefits of such opportunities, **CONCERTED ACTION** is required. Stakeholders in the sector need to come together to find solutions to problems and come up with ways of capitalizing on opportunities. These stakeholders may include farmers, researchers, entrepreneurs, service providers and policymakers. Interaction amongst these stakeholders can result in new ways of working together – in **innovation**. Innovation here refers to the combination of technical, institutional and organizational change as explained further later in the chapter.

But interaction and concerted action do not just happen. They require stimulation and facilitation. This book is about the role of the facilitator in these processes.

In 2008, Wageningen University in the Netherlands began a second phase of a research programme with partner universities in Mali, Benin and Ghana known as “Convergence of Sciences – Strengthening Agricultural Innovation Systems”, or **CoS-SIS** for short. The predecessor of this programme, known simply as “Convergence of Sciences” or CoS, started experimenting with institutional change to widen farmers’ windows of opportunities (van Huis et al. 2007). Other attempts to experiment with an innovation systems approach include:

- Forum for Agricultural Research in Africa’s Sub-Saharan Africa Challenge Programme, www.fara-africa.org/our-projects/ssa-cp/
- The British Department for International Development’s Research Into Use programme, www.researchintouse.com
- IFDC’s clusters, www.ifdc.org/Expertise/Agribusiness/CASE.

For a more detailed overview of these experiences see Nederlof et al. (2011a).

The experiences in CoS inspired CoS-SIS to experiment with an innovation systems approach to institutional change. The CoS-SIS programme engaged two types of researchers:

- **Doctoral candidates** who are working towards their PhD degrees. They focus on local-level experiments with smallholders in selected sectors in each country. All these doctoral candidates have a dual registration at the University of Wageningen and their home university in Ghana, Benin or Mali.

A trader loads chickens on his motor-bike to take to the market

Photo: Kofi Adade Debrah



- **Research associates**, who work within CoS-SIS at a higher systems level to **facilitate institutional change**. A higher systems level refers to some level above the farm or village, for example a district, a sector (such as cotton in Benin), or a value chain (such as shea nut butter in Mali). Their challenges and learning in operationalizing this role within the CoS-SIS programme are the focus of this book.

This book is written for development professionals who are interested in facilitating innovation. They may be in a similar position to our research associates, or they may be individuals or organization involved in facilitating multi-stakeholder processes, organizations interested in building partnerships, or students and professionals in the field of innovation, institutional change or agricultural services.

It may seem strange to target practitioners when this book is the outcome of a university scientific programme. But an important part of CoS-SIS is its commitment to support and improve practice. It does this on the one hand by experimenting with new ways of doing things through action research; on the other it shares its learning with the scientific community and with people working in the countries and sectors it covers. Lubchenco (1998) refers to this as the scientific community's "social contract". This book is an opportunity to reflect on the challenges in facilitating institutional change and to contribute to development practice for the benefit of others who also aim to facilitate change.

This introductory chapter provides a background to the CoS-SIS programme. We start with presenting the context where the programme is working – the areas and sectors where it is trying to facilitate institutional change. We then introduce the idea of Concertation and Innovation Groups (CIGs) – the CoS-SIS name for the group of stakeholders brought together in each domain. We then describe the common steps that facilitators went through in putting the CIGs in motion, with an emphasis on the facilitators' role in doing this. We say a few words about the rather unique process of writing this publication, and close the chapter with a guide to how to read the rest of the book.

COS-SIS

The **Convergence of Sciences - Strengthening Agricultural Innovation Systems in Benin, Ghana and Mali programme**¹ aims to improve the livelihoods of West African farmers through exploring new pathways for agricultural innovation.

Before beginning our story, we need to explain what we mean by **innovation**. An innovation refers to something which is new and useful, in our case within the agricultural sector. An innovation is more than just a new technology in and of itself, like an improved plough. Only when farmers use the new technology does it become an innovation. For example neem, a botanical pesticide, may be introduced to a community, but it only becomes an innovation when farmers have access to it, know how to get the seeds, grind them, and use them to control pests in their own fields (Dormon 2006). This distinction is important because innovation is often understood as being a technology, whilst in CoS-SIS we consider an innovation as (Smits 2000: 10):

“a successful combination of hardware (the equipment), software (the idea) and orgware (the embedment), viewed from the societal and/or economic point of view.”

Leeuwis and van den Ban (2004) explain software in terms of “new ways of thinking” and “mindsets”. Orgware concerns both organizational and institutional conditions. So the basis for an innovation is not necessarily technology as presumed earlier; it could also be institutional change, for example.

By **institutions** we mean the informal and formal rules and regulations that govern human action (North 1990, Douglas 1986). Think, for example, of the rules of a football game, or the notion of marriage. These are societal institutions that set the parameters for interaction – be it between opposing teams in a football match, or between partners in a marriage. However, institutions are not necessarily positive. Corruption, for example is also an institution. The word institution may be confusing given that organizations such as the World Bank are often referred to as “institutions”. But we use a specific terminology, which is well explained by Hounkonnou et al. (2012), who discuss the theoretical background of the CoS-SIS programme.

CoS-SIS takes the position that it is the inappropriateness of the existing institutions that is the main problem for farmers to take advantage of opportunities. This is also what the predecessor Convergence of Sciences programme concluded, and what led CoS-SIS to experiment with an **innovation systems** approach towards institutional change. Hall et al. (2006: 16) explain that:

“An innovation system can be defined as a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect their behaviour and performance. The innovation systems concept embraces not only the science suppliers but the totality and interaction of actors involved in innovation. It extends beyond the creation of knowledge to encompass the factors affecting demand for and use of knowledge in novel and useful ways.”

¹ See www.CoS-SIS.org. CoS-SIS is a follow-up of a first phase called Convergence of Sciences (CoS), which was meant to stimulate convergence at two levels: between different disciplines (natural and social sciences) and between farmers and scientists.

Klerx (pers. comm.) has added that although there is much emphasis on knowledge creation, exchange and use in the above definition, innovation systems need to fulfil several other functions that are essential for innovation. These functions include fostering entrepreneurial drive and activity, vision development, resource mobilization (e.g., capital), market formation, building legitimacy for change, and overcoming resistance to change by means of advocacy and lobbying (Hekkert et al. 2007).

CoS-SIS tries to create “institutional space” by adapting existing institutions, or even by creating new ones. The research associates who tell their stories in this book focused on institutional change, while their doctoral candidate counterparts focused on experiments at the local level, generally more technological than institutional in nature. The programme promoted this process of institutional change through “**Concertation and Innovation Groups**” (CIGs), which are coordinated by the research associates who contributed to this book.

CoS-SIS has both developmental and research objectives.

- The **developmental objective** is to remove INSTITUTIONAL CONSTRAINTS at a higher systems level so as to improve smallholders’ livelihoods. This is done through action research.
- The **research objective** is to investigate which pathways lead to innovation. It focuses specifically on creating institutional space.

Through its action-research activities, the CoS-SIS programme aims to inspire other organizations in how to stimulate innovation. This area of study – institutional change – is quite new, and the CoS-SIS programme is well-positioned to contribute to it.

INSTITUTIONAL CHANGE

Table 1.1 summarizes the “domains” (the commodities or subject areas) explored in each country and the entry point for exploring institutional change. Below are brief descriptions of the cases. The detailed cases are presented in Chapters 3 to 14.

Benin

Rice is an important commodity for farmers in parts of the country and offers opportunities for improving farmers’ livelihoods. Demand is higher than local production, so Benin imports large quantities of rice. Problems facing producers include the maintenance of the irrigation infrastructure, a lack of market outlets, a lack of access to credit at affordable interest rates and terms, conflicts over water management, and poor governance of farmers’ organizations. All these harm the functioning of the rice value chain. Water management was the entry point for the CIG. The case describes how different stakeholders negotiated about rules and regulations to increase rice production.

Oil palm is an important cash crop for farmers and, along with cotton, is a valuable source of export earnings. Yet yields of oil are low, mainly because of the quality of the oil palm seedlings. Farmers who buy what they think are superior varieties have no means to check this, and have lost trust in nursery owners who raise and sell the seedlings. This case shows how different dimensions of the seedling-production system require facilitation to lead to improved systems in close collaboration with the oil palm farmers.

Table 1.1. Summaries of cases

Country, domain, focus	Entry point
Benin	
Water management: rice in valley bottoms	Improving irrigation practices to allow smallholders to capture the expanding market for local rice
Oil palm: seed system	Improving the system of distributing improved oil palm seedlings to smallholders
Cotton: pest management	Creating capacity and opportunity for farmers to improve pest management methods that depend on the availability of certain pesticides, including neem
Ghana	
Oil palm: oil quality	Improving the quality of oil produced by small-scale women processors to enable them to supply the huge demand for high-quality oil
Food security: value chain for small ruminants	Focusing on the savannah zone of northern Ghana, to develop technical practices and value chains so as to allow smallholders to benefit from markets for small ruminants now exploited by people from across the border in Burkina Faso
Cocoa: price formation	Differential farm gate payment for categories of bean quality
Mali	
Crop–livestock integration: dairy farming	Establishing viable zero-grazing dairy farming, based on crop residues and fodder made possible through new technical practices and management changes in the Office du Niger
Water management: water users associations	Improving management of tertiary canals after their devolution to water users associations in the Office du Niger-controlled irrigated area
Shea nut: market access	Improving the inclusiveness of women’s cooperatives that benefit from marketing high-quality shea butter

See also Adjei-Nsiah et al. (forthcoming) and Hounkonnou et al. (2012).

Cotton is the main cash earner for farmers in northern and central Benin. Pests are a major problem in production. Since cotton is so important for both the government and large international players such as the pesticide industry, constraints to cotton production often occur at a much higher level than the farm. The case describes an attempt to influence high-level decisions on cotton production.

Ghana

Palm oil is an important domestic and industrial commodity used in the food and cosmetic industries in Ghana. In spite of the large amount it already produces, Ghana still imports large quantities of crude palm oil every year to meet its domestic requirements. There is little export because Ghanaian palm oil falls short of international quality standards: techniques used by small-scale processors often result in high levels of free fatty acids. Such processors produce about 80% of Ghana’s total

crude palm oil output. The absence of policies regulating small-scale processors also often results in environmentally unfriendly and unhealthy practices that impede their entry into industrial and international markets. The case describes experiences in facilitating interactions amongst those concerned and in finding a balance between environmental concerns and profits.

Sheep and goats contribute to **food security** by providing meat to eat or sell, producing manure for the soil, and acting as savings that can be cashed in during the lean season. But farmers in northern Ghana raise and sell fewer small ruminants and are less productive than they might be for various reasons: fear that their animals will be stolen, the lack of government commitment to immunizing livestock, a lack of access to water, and limited tractor services. This case reports on facilitating the interaction amongst stakeholders towards the development of a new value chain for the north of Ghana, addressing several constraints simultaneously.

Ghana is **cocoa**; cocoa is Ghana. It is the main foreign-exchange earner and therefore important both for the government and many rural people. Farmers receive the same price for their cocoa beans regardless of quality. The idea of changing this by paying more for higher-quality beans led to the creation of the CIG. However, this proved controversial, and the CIG MEMBERS decided to focus on raising the overall price instead, as this would boost the income for all cocoa-producing farmers. This case demonstrates how power differences were managed and powerful actors intervened strategically to reach joint objectives.

Mali

Integrating crops and livestock-raising is a preoccupation of farmers and livestock raisers in the area administered by the Office du Niger (a parastatal organization responsible for irrigation) in Mali. Livestock keepers and farmers often come into conflict over land use: farmers want to grow rice, while livestock keepers need to graze and water their animals. There are formal rules, laid down in a convention, that regulate this land use. But the rules are not widely known and are difficult to apply. The CIG attempts to revise these rules to make them workable, and at the same time adapt the livestock system to avoid conflict.

Water management is a second sector in Mali where a CIG is operating. Canals in the irrigation scheme administered by the Office du Niger are not well maintained, even though rules on their maintenance are stated in a “contract plan” between the farmers and the Office du Niger. The case shows an attempt to bridge power differences between these groups.

Shea nut is one of the few sources of income for rural women in Mali: they process it into a type of butter used for cooking and cosmetic purposes. However, they are typically not well enough organized to improve their incomes from selling this butter. This case describes a pilot attempt by a group of women producers to access credit. This approach can be scaled up so other cooperatives can also get credit to support their enterprises.

CONCERTATION AND INNOVATION GROUPS

When the CoS-SIS programme was being formulated, national working groups identified subjects for research that seemed to be a national priority and have potential for improving smallholder farmers’ livelihoods. These are our nine “domains”. Further scoping and exploration led to the identification of entry points within each domain, as listed in Table 1.1. Around each of these entry points, stakeholder groups were formed to stimulate concerted action. The programme refers to

CoS-SIS team members are technical specialists. They had to learn a range of facilitation and institutional skills.

Photo: Suzanne Nederlof



these stakeholder groups as “Concertation and Innovation Groups” (CIGs): the word “concertation” was coined by CoS-SIS to mean “concerted action” – acting in a coordinated fashion. Other initiatives refer to comparable stakeholder groups as “innovation platforms”, “innovation networks”, innovation coalitions” or “innovation configurations” (for descriptions see Nederlof et al. 2011a, 2011b, Hawkins et al. 2009). CIGs create space for their members to interact. They link different spheres in the innovation system and enable to build broader networks to enable institutional change to happen. The CoS-SIS research assistant facilitates the CIG, and the CIG facilitates institutional change.

CIG membership is flexible. Different stakeholders can be brought in or leave at different times to ensure that the current issues can be addressed by the right actors. They may include:

- Value chain actors, including smallholder farmers,
- Service providers, and
- Regulators.

Service providers and regulators can originate from the public or private sectors. While membership is flexible, the tendency is for a core group of people to meet regularly. What the CIGs look like varies considerably, and will be discussed in the country chapters.

Although the CIGs have played out differently in Benin, Ghana and Mali, some common ground can be seen. For example, most CIG activities do not take place locally but at some higher level, such as a sector or a value chain. This enables them to address the institutional constraints that prevent small-scale farmers from taking advantage of opportunities. The challenges at a lower systems level, often of a more technological nature, are addressed by the CoS-SIS doctoral candidates. These frequently report to the CIG on their results, and gather views of the CIG members on their research work.

WHAT HAS HAPPENED SO FAR FOR ALL CIGS?

The CoS-SIS programme recruited facilitators to form and coordinate the CIGs. These facilitators were known within the programme as “research associates”. All except one have PhD degrees. Most are researchers based at a university or a research organization; one is a staff member of a non-governmental organization. They were selected for their research skills in the natural or social sciences, rather than for their background, personal attitudes or skills in facilitating, coaching or brokering. Indeed, the research associates were all interested in researching what happened, and in publishing the findings. This has informed how they have played their roles, and how their roles have changed over time: analysing the situation, setting up and facilitating the CIG, and studying the CIG’s functioning and achievements. They have increasingly played the role of **monitors** (Laurens Klerkx first used this term, Oct 2011) in addition to being facilitators. But we will come to that later.

The research associates tailored their role and contributions according to the needs of the sector and the CIG members. Nevertheless, all the CIGs went through some common steps:

- **Identification of priorities in the national innovation system** (domains) by the national working groups before the programme started. National working groups were composed of key actors in the agricultural sector in each country, including deans of university faculties, managers of major NGOs, and directors of national research institutes.
- **Scoping** of key issues in each domain through exploratory and diagnostic studies. Research associates in each of the nine domains undertook scoping studies and documented the results comprehensively in a jointly written scientific paper (Adjei-Nsiah et al., forthcoming). The methods used for the scoping phase included interviews with key informants identified through the “snowball” method, unstructured interviews and focus group discussions, observations during meetings with key stakeholders, literature studies (including analysis of grey literature), value chain analysis, and diagnostic studies by doctoral candidates (Jiggins, in press).
- **Identification of entry points.** Entry points were chosen on the basis of the above. To enable research on institutional change, issues surfacing from the previous steps were summarized in an analytical framework based on the following dimensions: (1) current undesirable activities of the actors in the domain, (2) institutional reasons, (3) activities to carry out, (4) institutions to be changed, (5) actions to be taken by CIGs, and (6) consequences (events and processes). The first four of these are described in Chapters 3 to 14.
- **Identification of potential members.** Research associates undertook several types of analysis to identify the right stakeholders to invite to join the CIG. What is “right” very much depends on the issue at stake, but criteria such as importance, influence and power were used to assess the potential candidates. The research associates mapped the actors and analysed the value chain to make these decisions.
- **Establishment of the CIG.** Once they had undertaken these steps and understood their domain, the research associates had to decide on membership and get people to start working together: they had to establish the CIG and put it into action.
- **Process management.** Once the CIGs were established, the research associates had the difficult task to facilitate the CIG interactions. This book looks specifically at this task. It contains the research associates’ accounts of their roles, the opportunities they found, and the challenges they faced.

As the research associates' needs evolved, the Royal Tropical Institute (KIT), one of the partners in the CoS-SIS programme, guided them through a series of workshops. One of these, held in early 2009, covered value chain analysis; it aimed to help the research associates understand their domains in the scoping study phase. In October of the same year, another workshop focused on analysing actors to help research associates identify people to bring into the CIGs. This workshop also introduced the research associates to other initiatives that focus on stakeholder interaction.

This kind of support is important because facilitating institutional change is not easy. It demands a broad set of skills and capacities as well as credible leadership and a good understanding of the technical basics of the subject area. We must stress, however, that the CoS-SIS programme is only halfway through, so we cannot conclude whether it has actually achieved the desired institutional change.

As it has proceeded, the CoS-SIS programme has deepened its understanding of facilitating institutional change and innovation. The research associates' terms of reference and expectations, as well as the skills required of them, have thus evolved. This led to some confusion as to the roles of both the doctoral candidates and the research associates. A lack of clarity about programme expectations and confusing messages hindered some of the research associates in creating their CIGs. In June 2010, a workshop on "agricultural innovation coaching" clarified their roles and redefined the CIG's functions. Another workshop in October 2010 discussed progress and identified activities for all CIGs. It was at that time that the building blocks were ready for the CIG to tackle institutional change.

Simultaneously a scientific approach to "causal process tracing" was introduced. This allows for a systematic analysis of change in complex systems and integrates both qualitative and quantitative biophysical and social data. It is oriented towards testing hypotheses of causality, which are developed by the research associate in advance and go far beyond simple descriptions of the process (Crane and Richards 2009). Causal process tracing aims to understand in hindsight why innovation took place (or not), and to trace the causal processes that led to this.

THE WRITESHOP PROCESS

The bulk of this book was produced through an intensive participatory "writeshop", held from 29 October to 3 November 2011 in Bamako, Mali.

The writeshop approach was pioneered by the International Institute of Rural Reconstruction in the Philippines. KIT has a long experience with the writeshop methodology and uses writeshops as a way to get on paper the experiences and thoughts of practitioners and to make the work of scientists more accessible. Writeshop participants discuss and explore ideas with one another and with the writeshop facilitators. An editor helps them refine their manuscripts and express themselves in an easily understandable way.

A writeshop is an intensive process in which a book is written collectively with on-site editing over a short period of time – in this case, 6 days. Prior to the writeshop in Bamako, the research associates drafted their cases based on guidelines developed by KIT with input by the CoS-SIS national programme coordinators and the research associates. Each contributor brought a draft manuscript to the writeshop. These drafts were rewritten and underwent peer review and editing over the course of the writeshop. The process of writing, getting comments and revising took place at the same time, considerably shortening the often-difficult process of writing, editing and

publishing. In effect, the writeshop provided an opportunity for technical peer review by a large number of reviewers, as well as pre-testing for comprehension and field relevance by a group of the intended readers.

The writeshop participants were the nine research associates and three country national programme coordinators of the CoS-SIS programme, along with two advisors from KIT who work closely with the CoS-SIS programme to support the research associates in the field, and an editor experienced in the writeshop process. The KIT advisors organized and coordinated the writeshop and the preparation and finalization of the book. The editor guided the contributors in telling their most meaningful stories for the book, and edited the text after the writeshop. The draft that results from this was sent to several peer reviewers as well as the contributors and helped in improving the draft. Also, the lessons as described in the concluding chapters were discussed during a group discussion in Aburi, Ghana, in February 2012.

STRUCTURE OF THE BOOK

The next chapter goes into more depth on the analytical framework used to situate the many stories told in the book. We draw from and elaborate on existing thinking on the facilitation of innovation and the brokering role that the research associates play. This analytical framework will be used in understanding the research associates' experiences in the concluding chapter.

The bulk of the book is divided into three main sections, one each for Benin, Ghana and Mali. These describe the research associates' experiences in attempting to promote institutional change in their domains. Each country section has four chapters and is preceded by a map showing the domains selected. The first three chapters each introduce one of the domains and main issues it faces. They then describe the CIG's membership and the institutional changes envisaged. We note that in many cases infrastructural or technical constraints also exist, but the main focus in the case descriptions is on institutional issues. The research associate then describes specific issues related to his or her role, recounts several facilitation experiences, and draws lessons from these stories. These lessons are directed towards practitioners who may be playing a comparable role. The next page shows the icons we use to depict the various types of lesson.

The fourth chapter in each country section was written by the national programme coordinator for that country. These chapters provide some background on the choice of domains and the national context, and reflections on the implications of the programme for the national level.

In the conclusion of the book, we turn back to the analytical framework introduced in Chapter 2. We bring together the lessons from each case and situate them in a larger framework. This helps the reader to gain insights in facilitating institutional change by referring to the experiences described in the preceding chapters. An Epilogue by Sietze Vellema relates the CoS-SIS experience to action research on institutional change.

At the end of the book, a glossary of key terms can be found as well as brief biographic details of each contributor to the book.



Build motivation and manage expectations from the start



Be sensitive to gender dynamics



Create a common understanding



Adjust to socio-cultural norms



Learn how to facilitate institutional change



Plan for consultation amongst constituencies



Carefully consider the composition of the innovation platform



Adjust platform membership, as needed



Be prepared to invest time



Consider the formality of organization required



Manage power imbalances and mitigate power relations



Monitor external factors



Mediate conflicts



Use your own absence creatively



Respond to opportunities



Embed critical platform functions in local structures



Strengthen member capacities, where needed



Consider sustainability

2

An analytical framework

Rhiannon Pyburn and Suzanne Nederlof

IN RECENT years facilitating institutional change has become better understood. Some authors refer to it as “brokering”, others as “facilitating innovation”, “coaching innovation” or “intermediation”. In this chapter we turn to this literature and draw out key concepts and models to inform our analysis of the research associates’ experience. This gives a framework for understanding the unique experiences in Chapters 3 to 14 in relation to our growing understanding about how to facilitate institutional change, the steps in the process, and the changing demands on the research associate at different moments in an innovation platform’s life.

To begin, we review the major contributions to the scientific understanding of brokering or facilitating innovation. We then describe the framework which we use to understand the experiences described in the cases, and examine its different components in relation to the CoS-SIS programme. The chapter closes with a few remarks on the relationship between the theory and practice of facilitating institutional change.

THEORIES BEHIND FACILITATING INSTITUTIONAL CHANGE¹

As we mentioned in the first chapter, CoS-SIS experiments with an innovation systems approach towards institutional change. Here we briefly review the progression of thinking in this field.

In the 1960s and 1970s, **technology transfer** was the main model used for understanding and approaching agricultural innovation. The idea was that scientists would develop a new technology, extension agents would “transfer” it to farmers, who would then apply it in their own fields. This model was widespread and was institutionalized through the training-and-visit approach, which was promoted by the World Bank and continued until the early 1990s. But it had its limits and critiques. For example, it did not consider the knowledge held by farmers as a part of the dialogue between researchers, extension agents and farmers. In fact, the farmers were seen as passive recipients of scientific developments, and it was assumed that technologies at the farm level would lead to agricultural development (see Hounkonnou et al. 2012 for an explanation of the emergence of these ideas).

Farming systems research developed as a response to the reductionist character of the technology transfer model. It focused instead on the entire farming system (Dixon et al. 2001, Collinson 2000). But again, the approach had its limits: the “farming system” was complex, and

¹ For a detailed account on the history and “innovation of innovation” see Chapter 2 in Pyburn and Woodhill (forthcoming).

Washing shea nuts at the Zantié-bougou cooperative, Mali. Many products in West Africa are processed using simple, labour-intensive technologies. Introducing a new technology may depend on institutional change.

Photo: Suzanne Nederlof



it was almost impossible to keep track of so many factors – biological, social, technological – in research. It made decision-making slow and cumbersome.

From the 1980s **participation** became more central to working with farmers and in developing relevant knowledge for rural development. Methods used both in research and development such as rapid rural appraisal and participatory rural appraisal emerged (Chambers 1990, 1994, 1997), taking farmers and rural people as central players in knowledge development.

Building on both farming systems research and the notion of participation, **participatory technology development** aims to develop technological options through interaction between farmers and outside facilitators (Wettasinha et al. 2003, Reijntjes et al. 1992). This approach was used in the Convergence of Sciences programme that preceded CoS-SIS, and proved effective. But if opportunities are lacking, these technologies still allow only for marginal changes. Small-holders themselves often cannot change the rules, norms, procedures and laws that determine such opportunities. Institutional change at a higher level is required (see also Hounkonnou et al. 2012), because it is the institutions that determine the opportunities.

Agricultural knowledge and information systems came into vogue in the 1990s (Röling and Wagemakers 1998). A toolbox to analyse the actors, communication links and knowledge was developed by Engel and Salomon (1997) which was called the “rapid appraisal of agricultural knowledge systems”. Agricultural knowledge and information systems was a precursor to what later was coined “innovation systems” thinking.

Small-scale processing is vital to the economies of many rural areas. How to make it more productive and rewarding for the poor?

Photo: Suzanne Nederlof



The focus shifted more and more towards joint adult learning. **Farmer field schools** – season-long platforms of around 25–30 farmers who meet regularly to learn and exchange – pioneered this learning approach (Fliert 1993).

The more recent waves of thinking in this field made it increasingly clear that both constraints and opportunities depend on more than just one key stakeholder. Multi-stakeholder platforms were established to trigger discussion and collaboration amongst stakeholders, mainly in the field of natural resources (for more information on multi-stakeholder platforms, see <http://portals.wi.wur.nl/msp/>). Over the past few years, the need to focus on market opportunities has become central, and value chain approaches focusing on linking farmers to markets and on building multi-stakeholder coalitions are increasingly important (KIT et al. 2005, KIT and IIRR 2007, KIT and IIRR 2010).

The **innovation systems** approach took shape in the 2000s (see Chapter 1 for an explanation of innovation systems). Rajalahti et al. (2008) underscore the importance of establishing networks and partnerships to strengthen the innovation system. Different programmes have experimented with innovation platforms, which forge linkages between stakeholders and lead to changes through improved interaction. Nederlof et al. (2011a) describe some examples of these programmes.

INNOVATION BROKERS

As discussed above, CoS-SIS is testing whether indeed institutional change at a higher-than-local level is instrumental in improving farmers' opportunities. CoS-SIS is studying whether bringing different stakeholders together in innovation platforms, or CIGs, can do just that.

Stakeholders do not always come together spontaneously: some facilitation is needed. Klerkx and Gildemacher (2011) refer to the need for an **innovation broker**: a person or organization which aims to enhance innovation by bringing stakeholders together, and by facilitating their interaction. In CoS-SIS these innovation brokers are the research associates.

Winch and Courtney (2007: 751) defined an innovation broker as:

“an organization acting as a member of a network of actors [...] that is focused neither on the organization nor the implementation of innovations, but on enabling other organizations to innovate”.

Klerkx et al. (2009) wondered whether innovation brokers – intermediaries who communicate between stakeholders in a particular domain or sector – could be instrumental in strengthening agricultural innovation capacity. They concluded that innovation brokering has worked successfully for the Netherlands: such brokers have increased innovation capacity in Dutch agriculture. There may be much to be learned from the Dutch experience that might support the development of the role of innovation brokers in sub-Saharan Africa. Of course, brokers need to be adapted to the local context, and blueprints do not exist. Recently evidence of effective platforms in Africa has also become available (Pamuk et al. 2011).

Tennyson's (2005: 12) categorization of the types of brokers is particularly relevant for this book. She distinguishes four types of innovation brokers: **internal organizations** (partnership units within an organization), **external organizations** (external intermediary organizations), **internal individuals** (an individual based within one of the partner organizations), and **external individuals** (someone from outside). External brokers may be appointed by one, several, or all of the partners involved to build or develop particular aspects of the partnership.

The CoS-SIS programme has recruited external brokers. These (Tennyson 2005:10) are contracted to:

- **Explore** the feasibility of adopting a partnership approach. CoS-SIS undertook exploratory and diagnostic studies for this aim.
- **Facilitate** negotiations to develop a partnership. CoS-SIS organized workshops to bring the stakeholders together, and had individual consultations with those involved.
- **Maintain or monitor** the effectiveness of the partnerships over time.
- **Build institutional capacity** to deliver partnerships and sustain outcomes effectively.

The innovation brokers in the CoS-SIS programme, the research associates, have brought multiple stakeholders together and are undertaking the above-mentioned duties. Tennyson's partnering model allows us to analyse their experiences on facilitating institutional change.

The programme management teams that oversee CoS-SIS work in each country represent the major organizations involved in the CIG. Their members are encouraged to institutionalize facilitation of institutional change in their respective organizations.

THE CONCERTATION AND INNOVATION GROUP CYCLE

Innovation platforms tend to follow common steps, including developing a common vision, scoping, strategic networking and process management (Klerkx et al. 2009, Klerkx and Gildemacher 2011). Chapter 1 described the steps that all the CIGs have gone through so far. They include a scoping and exploratory phase, in which people who could make a difference in each domain were mapped and the membership of the CIG was established.

Tennyson's (2005) **partnering cycle framework** shows how a partnership progresses over time and explains the essential functions that enable its members to work well together. It illuminates the role played by facilitators, and outlines the many tasks that a facilitator may undertake. Figure 2.1 adapts her model to reflect the steps that the CIGs followed.

Below we introduce each phase in this cycle. We will also return to this model in Chapter 15.

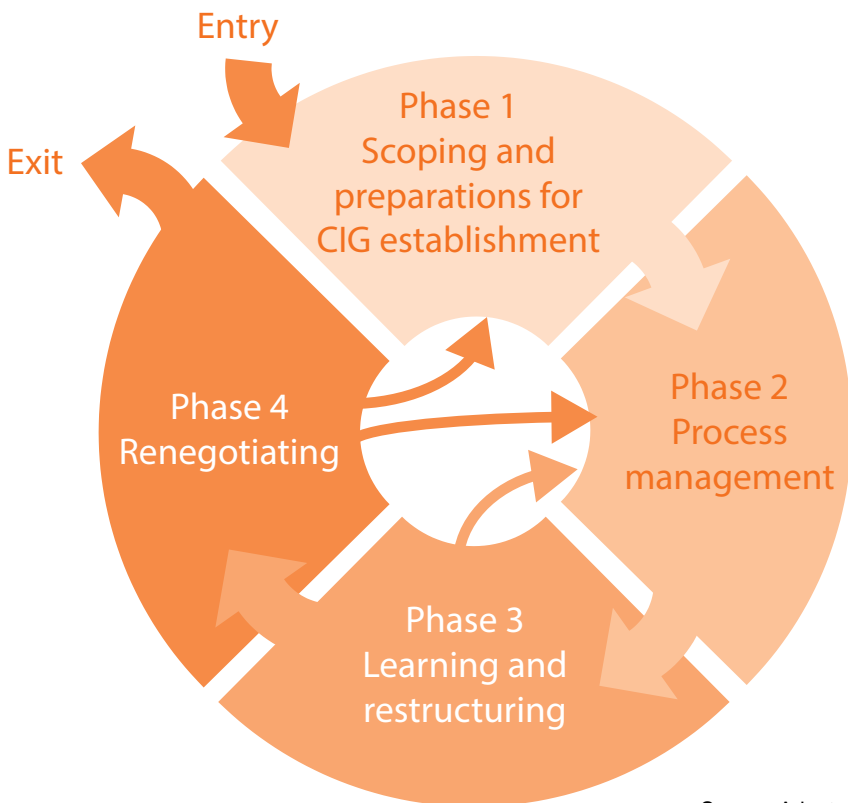
PHASE 1: SCOPING AND PREPARATIONS FOR ESTABLISHING THE CIG

Tennyson considers this phase to be preparatory, in anticipation of the collaboration. It may require raising awareness among the stakeholders of the need to work together.

During the scoping phase (the period leading up to the establishment of the CIG), the research associates needed to gain an in-depth understanding of the nature of the opportunity identified by the national working groups, as well as the constraints preventing stakeholders from taking advantage of it. To get this understanding, they undertook scoping studies (Adjei-Nsiah et al. forthcoming), and the doctoral candidates carried out diagnostic studies (Jiggins, in press).

PHASE 2: PROCESS MANAGEMENT

During this phase, facilitators help members to agree on a structure for the platform and to start tackling the constraints identified. Once activities are agreed, the platform begins to operate. According to Tennyson (2005), facilitators play two invaluable roles at this stage: facilitating communication within the partnership and to external stakeholders, and putting in place workable governance arrangements. In this phase, key activities for the facilitators are to help members



Source: Adapted from Tennyson (2005): 60

Figure 2.1. CIG cycle framework

identify resource needs and then to work with them to secure those resources. By resources, we mean funds – including transport allowances and indemnities – as well as human resources (people), equipment, venues, knowledge, contacts, and specialized skills.

PHASE 3: LEARNING AND RESTRUCTURING

According to Tennyson, in this phase the facilitator helps assess whether the innovation platform members are achieving their goals. This may be an appropriate time for restructuring the platform, for considering revising its membership, and for making radical changes. Tennyson (2005: 46–7) distinguishes different types of records that members may find valuable. These include letters of intent, memoranda of understanding, partnering agreements, minutes of meetings, partnership ground rules, project descriptions, resource records, newsletters, case studies and information for the general public or media.

PHASE 4: RENEGOTIATING

At this stage in the CIG cycle, the question is how outcomes can be sustained, rather than the partnership itself. The broker helps the platform members consider long-term options. At the same time, they need to agree on an exit strategy for the external broker, which may include appointing an internal broker. In some cases the platform, or part of it, can be registered as a new organization for follow-up activities.

According to Gildemacher et al. (2011) there are a number of reasons for closing an innovation platform, including that the platform has achieved its goals, or because others have taken over its functions.

CASES AND THE CIG FRAMEWORK

In the chapters that follow the research associates of each CIG tell us their stories, experiences and the lessons they have drawn. We do not give a full account of everything that has happened in each CIG, and we do not reflect on how this has led to institutional change. Instead we focus on the research associates' facilitation activities. In Chapter 15, we will return to the CIG cycle and relate the experiences in the following chapters to it.

Benin



Sorting oil palm fruits

Photo: Suzanne Nederlof

Cotton is the main source of income for smallholders in northern and central Benin. It is the country's biggest export, so is a vital contributor to the national economy. The biggest problem in cotton production is controlling the many pests that attack the crop. The cotton CIG is addressing this by exploring the use of neem-based bio-pesticides, with the aim of introducing integrated pest management on a wide scale.

Water management. Benin imports large quantities of rice from Asia. This is a big drain on the country's foreign exchange. There is the potential to boost the production of rice and other crops such as high-value vegetables by improving the management of existing irrigation schemes. The marketing of rice is also a challenge: it is dominated by traders, so farmers do not get a good price for their product. Two new rice factories offer a new market for rice. These issues are being addressed by the water management CIG.

Oil palm is the main crop in southern Benin. It is used for cooking and is a feedstock for various industries and export. The government sees it as a priority crop to avoid over-dependence on cotton. There are plans to build a modern facility to increase the supply of seedlings so farmers can rejuvenate their plantings with superior stock. The efforts of the oil palm CIG to improve the system of seedling nurseries fit well within this context.



3

Water management in Benin

Aliou Saïdou

CANALS CLOGGED with weeds and silt are of little use for irrigation. But they are all too common in Koussin-Lélé, an irrigation scheme in central Benin. Built in the 1970s, Koussin-Lélé draws water from tributaries of the Ouémé River, the country's biggest. Along with two nearby schemes, at Zonnon and Bamè, it irrigates a total of 218 hectares, enabling farmers to grow rice and vegetables.

But the management of the scheme leaves much to be desired. Originally built by a Chinese project, it was handed over to the government in the 1980s. A series of changes led to management being entrusted to associations of local farmers. But this has not worked well. The association members are supposed to clear weeds from the canals, repair the walls and dredge out silt. They put a lot of effort into taking care of the smaller canals that feed their fields, but are reluctant to devote as much attention to the main canal that feeds the smaller ones. They say that maintaining the main canal is the government's job. As a result, the canals become clogged and many fields stay dry, cutting rice yields.

Further problems occur in allocating the smaller amounts of water that flow sluggishly through the tall grass that lines the banks of the canals. Powerful farmers – often the leaders of the rice grower groups – are in charge of managing the water distribution and divert more water into their own fields. Less influential farmers have to do with less water, at infrequent intervals.



Women transplant most of the rice in the Koussin irrigation scheme

Photo: Aliou Saïdou

Box 3.1. Members of the Benin rice CIG

Value chain actors

- Rice producers (10)
- Gardeners' organization (5)
- Vegetable traders (2)
- Rice traders (2)



Service providers

- Union nationale des Riziculteurs du Zou (UNIRIZ) (department-level association of rice growers) (1)
- Conseil Consultative des Riziculteurs du Bénin (CCRB) (national network of rice growers) (1)
- Centre Communale pour la Promotion Agricole (CeCPA, district extension service) (4)



All this has a big impact on rice output. Yields remain stubbornly low – around 2 tons per hectare. With better water management, they could be double that.

THE RICE CIG

The Benin rice CIG is an alliance of a dozen organizations that focuses on rice production and marketing problems in the area. The CIG brings together a number of actors who had not collaborated previously: rice producers and vegetable growers and local traders, as well as various service providers at the department and district levels (Box 3.1). The CIG was founded to improve the management of the irrigation water that rice and vegetable growers in the valley need.

The CIG decided to focus on various institutional problems affecting rice production and marketing in the areas served by the irrigation schemes. These include water management, fertilizer availability, and relationships between rice producers and traders. The CIG aims to change the rules and practices governing the maintenance of irrigation facilities, and improve the input supply and rice marketing systems (Table 3.1).

The research associate was involved in the Convergence of Science programme, the precursor to CoS-SIS, so was familiar with the areas and experienced in facilitating interactions among the stakeholders. He does not come from the area, but speaks the local language.

REDESIGNING RULES FOR IRRIGATION

Poor water management was the first problem that the CIG addressed. It held a series of meetings with representatives of the rice growers' associations. These first analysed and prioritized the problems facing the farmers. The rice growers came to realize that there was no point in waiting for the government to help: they would have to take responsibility for managing the main canals themselves. They decided on a set of rules: each farmer had to spend two days a year cleaning the main canals at the start of the wet season. Water distribution was set according to a strict calendar. Sanctions were imposed for farmers who broke these rules: for example, someone who failed to take part in the cleaning work would not be allowed to grow rice that season. Groups

Table 3.1. Framework for the Benin rice CIG activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Poor water management	Farmers' organizations do not follow rules for water use	Improve management of farmers' organizations and quality of extension service	Extension approach and regulatory framework (rules, norms and sanctions) guiding farmers' organizations
Access to granular urea fertilizer	Absence of formal contracts and regulations between input suppliers and farmers' organizations to supply fertilizer on time Black market for bad-quality fertilizer	Reorganize input supply system	Input supply system
Informal contract arrangements between traders and rice growers	Improper rice market structure	Reorganize rice market structure	Rice market structure

that did not follow the calendar would be fined and have their water blocked. These rules are now in force, and the CIG is monitoring progress. The extension service is taking the lead on this, making it likely that this activity will continue after the project ends.

Was intervention from the CIG necessary to help the farmers design such rules? Yes – because the powerful farmers would not want to act against their own interests and restrict their ability to take water when they wanted. And while the group as a whole saw the need to clean the canals, they did not know how to organize themselves to get the job done. A push from outside was necessary to overcome both these hurdles.

- *By tackling a relatively easy problem first, the CIG gained credibility and the support it needs to tackle more complex issues.*



IMPROVING MARKETING AND CHANGING POWER RELATIONS

At the start of each rice-growing season, farmers need cash to buy things like seed and fertilizer, and to pay for land preparation. Many farmers borrow money from rice traders, and promise in return to give the traders a certain number of sacks of rice at harvest time. The traders are in a powerful position: they can set a low price, and the farmers have little choice but to accept.

The CIG is addressing this problem in three ways: it is trying to find alternative sources of credit, it is seeking new buyers for the rice, and it is helping the farmers increase the value of their product.

New sources of credit. The extension service, a member of the CIG, has an informal understanding with the local branch of the Caisse Locale de Crédit Agricole et Mutuelle (CLCAM), a

semi-public microfinance provider. The extension service organizes farmers into groups and provides them with advice on farming techniques. It recommends the groups to the CLCAM, which provides them with loans, repayable after the harvest. The loans are based on social collateral: the group as a whole guarantees that each member will repay, and applies social pressure to ensure that individuals do not default. It is not necessary for the extension service to provide a formal guarantee of repayment.

New buyers. The CIG is negotiating with SONAPRA, the Société Nationale pour la Promotion Agricole (a government body that owns a large rice-processing factory in central Benin) to buy the farmers' rice. The idea is for the association of farmers' groups to sign a contract with SONAPRA to supply rice in bulk to the factory. The extension service will supervise this arrangement. Such a scheme would also make it easier for the farmers to get credit for inputs. SONAPRA pays a fixed price for paddy, which is normally better than that offered by the traders. This is likely to force the traders to increase their price. The risk is that local traders will decide to withdraw from the CIG as they lose some of their power. However, the CIG tries to avoid this by involving the traders in the marketing of the parboiled rice which will soon be processed in the area.

New products. At present, the farmers sell milled rice. The CIG is exploring ways of increasing the value of this product by processing it in various ways. One is to parboil it: the unhusked rice is boiled before it is dried and then milled. That kills insect pests that can damage the rice during storage, and results in a quick-cooking product that consumers like. Another innovation is to clean the rice after milling to remove stones and other debris. A third innovation is to package the rice ready for sale to consumers, making a product that can be sold in shops and supermarkets. All of these products fetch a higher price than regular bulk milled rice.

Introducing these techniques will involve institutional changes: farmers will need to organize themselves to manage them, get credit to pay for equipment and labour, and forge links with new actors in the value chain. The CIG will provide training for farmers, help them identify potential partners and negotiate with them, and lobby for government support.

The proposed changes will also mean collaborating with new sets of actors: SONAPRA for marketing, and CLCAM for credit, for example. These are not currently members of the CIG. It would be advantageous to involve them in the CIG to ensure that their views are incorporated into plans.

► *Initiatives may make it necessary to bring in new members into the innovation platform. Changes in focus may require a change in membership of the CIG.*



These ideas all came from the farmer members in the CIG. The extension service is becoming aware that it needs to expand its mandate away from a narrow focus on production to cover marketing and other issues.

It may be necessary to register the CIG as a formal organization in order to negotiate with bodies such as SONAPRA. The extension service is looking into this possibility. However, this has consequences for the functioning of the CIG: it would need formal rules, fixed roles (such as a president), a constitution and elections – all of which might make it less flexible in its activities and composition. It would be harder to add or drop members as the CIG's focus changes. One possibility is for a sub-group of the CIG to register with the authorities if needed. Introducing these changes will transform the power relations between the rice growers and traders. The traders will

Ploughing a flooded rice field in Koussin

Photo: Aliou Saïdou



tend to lose: there is a danger that they will block the initiative or even withdraw from the CIG if they see their interests are threatened. But it is important to keep them in the CIG in order to find win-win solutions and to address other problems in rice marketing where their views and inputs are important.

- ▶ *Consider carefully the implications of registering and establishing a formal structure for the innovation platform.*
- ▶ *Strive to maintain a balance in the power relations among members in the platform. Seek win-win solutions in order to keep all the members motivated and involved.*



AUTHORITY OF CIG MEMBERS

Ideally, the members of a CIG should all have the authority to make decisions on behalf of the organizations they represent. In practice, this is not always the case: a regular member may be unable to attend, so may send a colleague instead. The colleague may be unfamiliar with the CIG, so valuable time is lost explaining the CIG activities to this new person. Even if the regular member is present, she may still have to check with her office before committing staff and resources to a particular initiative.

The Benin rice CIG has faced all of these problems. The research associate has managed to overcome them in different ways.

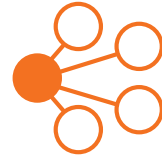
The research associate has made sure that leaders of each of the farmers' groups in the irrigation scheme are members of the CIG. That both strengthens the voice of the smallholder farmers on the CIG, and makes sure that issues discussed in the CIG are widely shared among the farmers. This has proved effective: after the discussion on maintaining canals, all the groups quickly organized to clean their own canals.

In one case, the head of the extension service nominated one of his technical staff to sit on the CIG. This staff member lacked the authority to make decisions, but was good at reporting back

to his boss after the meetings. The boss quickly realized that the CIG was discussing important issues – such as negotiations with SONAPRA – that concerned the extension service. He decided to take the seat on the CIG himself.

The research associate keeps all the CIG members informed about discussions and decisions made. After each meeting, he visits the key members who were unable to attend. This is a time-consuming but necessary task to keep these people on board.

- ▶ *Sometimes CIG members cannot avoid the need to discuss proposals with their colleagues before they can agree to them. It is important to have the right people on board that have credibility and authority within their own organizations to get the issues discussed and decisions made. The CIG agenda has to be structured and paced to take any delays into account.*



CHAMPIONS AND THE RISK OF COOPTATION

The district extension service (CeCPA) acts as a “CHAMPION” – an individual or organization who is enthusiastic and spreads the word about the platform’s activities – for initiatives debated in the CIG. The director allocates staff to undertake activities, pushes forward the agenda, and makes sure that things get done. There is a possibility that the extension service can take over the running of the CIG after the end of the CoS-SIS programme.

All this is good. But this has its dangers. There is a risk that the extension service takes over the running of the CIG, turning it into an extension function, rough-riding over the interests of the other members, and losing the advantages of the multi-stakeholder platform.

The current, independent, research associate makes sure that all voices – especially those of smallholder farmers – are heard, and that the extension service does not dominate proceedings. He has alerted the extension service to the danger of taking too much control, and will try to make sure that they continue to run it as a multi-stakeholder activity.

- ▶ *Balance between the advantages of embedding functions in local platforms and the risk of competition among the platform members.*



4

Oil palm in Benin

Pierre V. Vissoh

OIL PALM grows wild in many areas of southern Benin. Farmers used to harvest the trees that happened to grow on their land. But the yields are poor, and farmers now want to plant high-yielding hybrids developed by the oil palm research institute in Pobè. Nurseries buy pre-germinated certified seed from the research centre, and sell 6- to 8-month-old seedlings to farmers.

A farmer can tell easily whether a mature tree is a poor-quality local variety or a hybrid. With fertilizer, the hybrids grow quickly and start producing fruit in just 2–3 years. There are only a few fruit bunches, but they are heavy. Cut open a fruit, and it has a small nut and a thick layer of flesh that contains the palm oil. Local varieties, by contrast, grow more slowly, and may take up to 10 years to mature. The fruit flesh is thin and surrounds a large nut.

Unfortunately there is no way to tell whether a young seedling is a local variety or a hybrid. The government runs a certification scheme for nursery holders, but some nursery owners are not authorized. Others cut corners – sometimes without intending to. They lack the right planting soils or fail to provide enough fertilizer to the young trees. In the dry season, there may not be enough water for the trees. Some nurseries even cheat deliberately: they sell seedlings of local varieties, pretending they are hybrids. The farmer realizes the error only after a couple of years, when the trees fail to bear fruit.



Selling palm oil in the market

Photo: Pierre V. Vissoh

Box 4.1. Members of the Benin oil palm CIG

Value chain actors

Large-scale farmers

- President of the national federation of oil palm growers, Fédération Nationale des Producteurs de Palmier à Huile (FNPPH)
- President of the communal union of oil palm growers (Union Communale des Producteurs de Palmier à Huile (UCPPH), Sakété district)
- Other large-scale farmers (3)



Small-scale farmers

- President of the communal union of oil palm growers (UCPPH Zè district)
- Chief of Akouègbadja village, Klouécanmè
- President of the communal union of oil palm growers (UCPPH Klouécanmè district)
- General secretary UCPPH (Lokossa)



- Farmers from the villages of Ita-Djèbou, Guèhounkon and Aïfa (3)

Service providers

- Representative of nursery holders Sakété district
- Director of oil palm research centre (CRAPP Pobè)
- Heads of rural development from the districts of Zè, Lokossa, Sakété, and Klouécanmè (4)
- Oil palm breeder, Centre de Recherche Agricoles Plantes Pérennes (CRA-PP), Pobè
- Nursery manager



Regulator

- Representative of Sakété district



Researchers from the Centre de Recherches Agricoles Plantes Pérennes (CRA-PP, the national centre for research on perennial crops in Pobè) supplies pre-germinated seedlings to licensed nurseries. Researchers used to check these nurseries; if they discovered that the nursery owner had been cheating by adding wild seedlings, they destroyed all the seedlings – both wild and high-yielding, as there was no way to tell the difference. Angry nursery owners reported this to the police, who refused to support the researchers as there was no law to give them permission to destroy the young trees.

All this reduces the level of trust the farmer has in the nursery owner: farmers have come to suspect even licensed nurseries, and they have no avenue of recourse if they find they have been supplied with substandard seedlings.

THE BENIN OIL PALM CIG

The Benin oil palm CIG is composed of 21 members from several districts in southern Benin. It includes large- and small-scale farmers, as well as researchers, extension managers, nursery owners and regulators (Box 4.1). Several members of the CIG perform multiple roles in the value chain: they raise seedlings, grow the trees, as well as processing and trading the oil.

A series of exploratory and diagnostic studies were made before the CIG was formed. These identified several institutional problems: low quality of oil palm seedlings, a difficulty in finding high-yielding planting materials due to poor nursery management, a lack of potassium fertilizer, a land tenure system in southwest Benin that prevents tenants from planting trees, and a lack of credit for oil palm production. This chapter deals with only the first problem – poor-quality seedlings.

Table 4.1. Framework for the Benin oil palm CIG activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Access to planting materials Access to fertilizers	Poor functioning of the distribution system Lack of laws and regulations	Improve how distributors work Adopt recommended technical packages	Organization of the actors Laws, norms and regulations
Lack of credit	Credit institutes see agriculture as risky	Organize producers to have access to credit	Management of micro-credit system
Functioning of cooperatives	Politicization of cooperatives Lack of respect for rules in cooperatives Non-payment by cooperative members	Manage conflict Ensure transparency in management	Application of cooperative laws Depoliticization of cooperatives

The CIG's central aim is to strengthen oil palm farmers' organizations. Actors in the oil palm value chain are more or less organized at different levels, but these organizations need to become stronger for farmers to find solutions to the problems they face. Better organized groups could negotiate with partners and grasp opportunities to raise their productivity and income. For this to happen, other value chain actors must be involved. The CIG foresees various activities to meet these aims:

- Improving the quality and availability of seedlings through training new nursery owners in seedling-management techniques.
- Educating farmers on the importance of high-quality planting materials.
- Designing laws and policies to ensure that good-quality planting material reaches the market – and to prevent inferior material from being sold.
- Helping farmers negotiate better access to inputs such as fertilizers.
- Managing conflicts between landowners and tenants.

The first of these activities is the focus of this chapter. Most of the rest have not yet started. Table 4.1 shows the institutional changes that the CIG is working to address.

“NOBODY KNOWS EVERYTHING, NOBODY KNOWS NOTHING”

The research associate, along with the heads of the district extension services and the CoS-SIS doctoral candidate, invited key individuals to an initial stakeholders' meeting and to become members of the CIG.

Some of the invitees were sceptical at first. One farmer said that he thought it would be “just another talking shop” without concrete results. But the research associate asked him to wait and see – and emphasized that the CIG's success would depend on the members themselves.

Bringing an oil palm seedling to plant on the farm

Photo: Pierre V. Vissoh



Some members feared that external people – researchers, extension staff and donors – would dictate what the CIG did. They were surprised to learn that the programme was participatory and everyone could raise questions or topics for discussion. The research associate assured them that they would work together to build their knowledge and find solutions to the constraints: “nobody knows everything, nobody knows nothing”. The members responded enthusiastically when they saw they would be sharing experiences and making decisions.

► *You need to trust people and treat them as responsible individuals who are capable to take initiatives to overcome their constraints. You must listen carefully. At times people deviate completely from the topic at hand; they need to be allowed time to finish their ideas before a facilitator intervenes. Often completely divergent points of view emerge; this requires tact in order to avoid frustration.*



HELPING NURSERY OWNERS WIN BACK FARMERS' TRUST

The story that began this chapter describes a situation of mistrust between farmers and the nurseries. To overcome the problem of poor-quality seedlings and to enable nurseries to win back the trust of farmers, the CIG decided on three courses of action:

- It is conducting an information campaign to inform growers about licensed nursery holders in their area, and to encourage them to buy the high-yielding seedlings.
- Representatives of the nursery holders in the CIG have started a campaign of peer pressure to discourage fraudulent nursery holders and to ensure that nurseries use the technologies recommended by the research institute to raise seedlings.
- The research institute is planning to control the licensed nurseries every year and will withdraw certification from those who cheat.

The first two actions will lead to a system of self-control; the last one will reinforce this with independent outside monitoring.

Since it is difficult to distinguish improved seedlings from the wild planting material, farmers rely on authorized nursery owners who distribute licensed planting material. But how far can farmers trust the nurseries? And on what basis? The CoS-SIS doctoral candidate is addressing this issue together with a platform of researchers, nursery owners and farmers.

In the meantime, the CIG tries to build trust by stimulating:

- Direct communication between the nursery holders' association and farmers' organizations through lobbying.
- Involving representatives of farmers' groups in the systems that deliver oil palm planting materials. That will help ensure that authorized nursery holders follow researchers' recommendations for producing standard, licensed, hybrid planting materials.
- Supervision by research centres applying controls and imposing sanctions on those who do not comply with the rules.
- Regular meetings involving representatives of farmers, extensionists, authorized nursery holders and researchers to provide feedback to each other and devise actions to overcome problems.

► *Trust is essential in both business and decision making. Authorized nursery holders need to convince small-scale farmers that their oil palm seedlings are genuine hybrids.*



SELECTING TRAINEES TO RUN NURSERIES

The associations of oil palm farmers in Zè and Klouécánmé districts requested training on how to produce high-quality seedlings from germinated seed supplied by the national research centre at Pobè. The idea was that each farmer would set up a nursery in his or her home village to serve growers in the locality.

There was room for only 10 farmers to attend this training: five from each district. A dispute arose on who should be selected. Some of the larger, more powerful farmers wanted to attend. But the CIG felt this would be unfair on smaller-scale producers. It also suspected that the large farmers might not be able to devote the attention needed to raise the seedlings, and would hire untrained labourers to manage them.

The research associate suggested that the CIG set criteria for selecting participants. The CIG chose four:

- The future nurseries had to be evenly distributed throughout the district to ensure that all farmers could buy seedlings easily.
- The trainees had to be available to attend the training and to establish and manage a nursery.
- The trainees had to have enough water to supply a nursery.
- The chosen sites had to be easily accessible.

An improved oil palm variety inter-cropped with maize at Sakété

Photo: Pierre V. Vissoh



Using these criteria made it much easier to select the trainees. Twelve villages in each district nominated someone as a candidate, and the CIG then used the selection criteria to choose five of them. The powerful farmers were not selected, but they accepted the results of the process because they knew that it had been based on objective criteria.

A diverse group inevitably involves powerful and less powerful people. Powerful actors may dominate meetings, squelching other opinions and ideas. A neutral facilitator with no decision-making authority needs skill to manage such power differences. He or she has to:

- Establish an agenda and ground rules up front, and ensure that all participants (including the chairperson) stick to them.
- Help the group to manage the discussion, stay on track and resolve problems that arise.
- Ensure that all participants are fully engaged and have the opportunity to be equally involved throughout.
- Help the group establish a joint action plan at the end of each meeting, with concrete follow-up and assigned responsibilities.

► *Strategic facilitation can deal with power and differences within a stakeholder group through negotiation and consensus. This can result in a win-win situation that strengthens the relationships between the protagonists.*



EXPANDING THE CIG TO INCLUDE TENANTS

In southwestern Benin, the situation of small-scale farmers is complicated by the land tenure system. Many farmers are long-term tenants rather than land owners. Planting trees (such as oil palm) allows farmers to claim the land as their own, so landowners are reluctant to allow them to do so – even to replace old trees. Disputes between landowners and farmers are common.

Unfortunately the CIG is dominated by land owners: there are very few tenants. The tenants have raised the land-tenure issue, but efforts to discuss this and other issues affecting tenants have so far been rejected. The research associate has suggested that more tenants be invited to join the CIG in order for these issues to be discussed and to explore win–win solutions. The CIG is currently considering this suggestion.

- ▶ *The members of the CIG at a given time will discuss only those constraints of interest to them. They will ignore problems that non-members may regard as important. That will make it hard to strengthen small-scale farmers' organizations.*
- ▶ *Making the CIG a formal body would risk consolidating the hold of existing members, excluding less-powerful people from negotiations. As the CIG is not formalized, the research associate has room to identify and involve actors that have been left out – in this case, the tenants.*



5

Cotton in Benin

Elisabeth T. Zannou

“COTTON HAS a broad back”, say farmers in northern Benin. It is a reliable crop that brings in cash that the farmers can use to invest in other parts of their farm enterprise as well as to buy food, pay school fees and pay for other essentials.

But cotton producers face various problems. The chief one is labour: growing cotton takes a lot of work. The land has to be ploughed at the beginning of the season. The seeds have to be sown in rows, and the fields must be weeded at least twice: a back-breaking task. Finally, large numbers of nimble hands are needed to harvest at the end of the season. Whole families turn out to pick the white fibre, put it in baskets and bring it home to store it until it can be sold.

There are other problems too. Cotton plants attract hordes of pests that munch on leaves and flowers, gnaw at roots, and bore into the cotton capsules, reducing yields and turning the white lint a worthless black. Farmers try to control them by spraying insecticides five times or more during the six-month growing season. But there are not enough pesticides to go round, and deliveries are often late. Farmers are forced to skip sprayings, or use pesticides intended for other crops. That is ineffective, and over time, the pests become resistant to the chemicals.



Raising and selling a healthy crop of cotton takes the right mix of technical, socio-economical and institutional factors

Photo: Elisabeth T. Zannou

Box 5.1. Benin cotton CIG members

Value chain actors

- Cotton producers (5 farmers)
- Cotton ginner



Service providers

- Local cotton production extensionist (Conseiller en Production Cotonnière, CPC)
- Head of municipal agricultural promotion agency (Responsable Communal de Promotion Agricole, RCPA)



- National extension service and capacity building office (Direction de l'Information, du Conseil Agricole et de la Formation Opérationnelle / Ministère de l'Agriculture de l'Elevage et de la Pêche, DICA/MAEP)
- Remediation project in the cotton sector in Benin (PARFCB: Projet d'Assainissement et de Relance de la Filière Coton au Bénin)
- Regional director of the Research Centre on Cotton and Fibres (Centre Régionale Agricole pour la Recherche sur les Cotons et Fibres, CRA-FC)

Regulator

- Mayor of N'Dali municipality



THE BENIN COTTON CIG

The Benin cotton CIG includes 12 people: five cotton producers and a ginner, five from the research and extension services at various levels, and the mayor of N'Dali municipality, where the CIG is located.

The five cotton producers represent each of the five villages where the CoS-SIS doctoral candidate is conducting research on the biology and economics of pest control. If a particular person is unable to attend a CIG meeting, the village nominates an alternate.

Originally, the CIG included only people from several villages in the cotton-growing area of N'Dali. But after a misunderstanding about the functions of the CIG (described below), it was necessary to change the CIG composition.

The CIG works at the district level in N'Dali, a municipality in northern Benin. Its overall objective is overcome institutional constraints to improve the livelihoods of cotton growers in the municipality. It aims to help farmers adopt new varieties of cotton, reorganize cooperatives, lobby for improved prices of seed cotton, and improve access to inputs (Table 5.1).

The CIG research associate is based in Cotonou, while the CIG itself is based in N'Dali, some 500 km away. This makes it impossible for the research associate to coordinate CIG activities on a day-to-day basis – or even to attend all the CIG meetings.

That means one of the CIG members has to coordinate local activities. Who performs this role depends on the type of activity: a cotton-grower member may take responsibility for informing farmers about an upcoming meeting. The researcher may inform the other members about the results of research on a new cotton variety.

This system has advantages and disadvantages. The research associate has to travel a lot to attend meetings and must rely heavily on the telephone. Without her presence, the CIG does not meet as often as it might, and she has to follow up a lot to make sure that meetings take place and activities are implemented. On the other hand, it forces the CIG to be independent: members

Table 5.1. Framework for the Benin cotton CIG activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Non-adoption of new cotton varieties	Extension methods used for new varieties	Demonstrate new varieties with large group of farmers Apply new extension methods	Linkage between research and farmers Management and organization of extension
Organization of cooperative at farmers' level	Lack of respect for cooperative rules	Improve cooperative management	Management of cooperatives
Cotton price on local market	Cotton price regimes	Lobby on trade management	Reform of trade rules
Non-availability of pesticides	Lack of respect of rules by inputs suppliers Contracts to supply pesticides awarded to the same suppliers each season Lack of transparency in awarding contracts to input suppliers Political involvement in the cotton sector	Build capacity of the farmers to use botanical pesticides (such as neem) Adopt alternative pesticides Promote botanical pesticides Lobby for input market transparency	Transparent, competitive process to award contracts to supply pesticides
Access to inputs	Informal market for inputs Private monopoly for input purchase and sale Inputs intended for cotton are used for other crops	Lobby Change conditions of trade and distribution of inputs for cotton	Methods of supplying inputs

must make their own decisions and get activities going without relying on the research associate doing everything for them.

There is now more day-to-day contact between the researchers and farmers. Bringing the actors together in the CIG makes the farmers more enthusiastic about cotton research and more likely become involved in experiments because researchers become more farmer-oriented.

DEALING WITH A MISUNDERSTANDING: MECHANIZATION

When the stakeholder group that set up the CIG prioritized the problems facing cotton farmers, the lack of mechanization came out as the top priority. The farmer members said they needed a tractor for ploughing and for transport, and hoped that the CIG would provide them with a loan of FCFA 500,000 – half the cost of a tractor.

The research associate said she would check this idea with the CoS-SIS management in Cottonou. The management agreed to study the possibility; meanwhile the CIG started planning the

details: how to use the tractor, how much to charge for hiring it out, how to repay the loan, and how to invest the money they would earn from the contract services.

But then a CoS-SIS evaluation team vetoed the proposal: the programme was not designed to act as a credit facility, they said. The research associate told the CIG this news, and explained that the purpose of the CIG was to solve institutional problems, not to act as a conduit for credit. The farmers' hopes were dashed, and most left the CIG.

- *It is important to be clear from the beginning on what you will do and what you will support. Do not raise the expectations of CIG members or of local people.*



RESTRUCTURING THE CIG

After this episode, it was necessary for the CoS-SIS team to redefine and clarify the concept of the CIG to avoid such situations in the future. This was done through a CoS-SIS-wide workshop in Bamako in June 2010.

The CoS-SIS team then invited a number of new stakeholders to a meeting in N'Dali to rebuild the CIG. The new members came from throughout the cotton sector: they included actors such as the municipal mayor, extension and research managers, and a ginner. The team also identified a new group of people from other villages to join those who had opted to stay in the CIG. The composition of this group makes the CIG more able to address institutional problems that span several levels in the government hierarchy.

The membership of the CIG continues to change. For example, the CIG is considering addressing the use of neem as an alternative pesticide (see below). For this it may co-opt a new set of members.

- *A flexible structure and membership is useful to deal with new topics as they arise. Unexpected alliances with different types of members may lead to unexpected but desirable changes. It also allows for the CIG to adapt if unexpected problems arise (such as a misunderstanding over the CIG's role).*



INSTITUTIONAL CHANGES TO INTRODUCE A NEW TECHNOLOGY

Neem oil can be sprayed on cotton plants as a pesticide. The oil is made from the fruits of the neem tree, which grows widely in southern Benin but is not common in the cotton-growing north. It is also used as a traditional medicine and insect repellent.

Introducing neem as an alternative pesticide will take a number of changes, both technical and institutional:

- The effectiveness of neem against certain pests has to be tested.
- The use of neem needs to be promoted among cotton growers.
- It is necessary to plant neem seedlings in the cotton region.

Members of the CIG visiting an experiment site coordinated by the CoS-SIS doctoral candidate in N'dali

Photo: Elisabeth T. Zannou



- Farmers must learn how to extract and use the oil.
- They will need equipment such as presses to extract the oil. That means finding suppliers or manufacturers, and ensuring that farmers can get credit to buy the equipment.

Various actors will need to be involved in this effort: NGOs, radio stations, horticulturists, traditional medicine practitioners, pesticide suppliers, and representatives of the ministries of environment, handicrafts and industry. The CIG is considering the possibility of becoming engaged in this area. The CoS-SIS doctoral candidate is conducting field research on the efficacy of neem to control cotton pests.

- *It will be necessary to involve the pesticide suppliers in discussions about promoting neem in order to avoid creating unnecessary opposition to this initiative or by creating new opportunities for them.*



EXTERNAL FACTORS AFFECTING THE CIG

The feasibility of addressing the CIG's priorities depends on various external factors. These include the government's organization of village-level cooperatives and the provision of free insecticides, the strengthening of the extension services, a fall in the price of fertilizers, and a rise in the price paid to farmers for their cotton. Some of these factors are controlled by the government and AIC (the cotton sector's commodity association), and are aimed at boosting cotton production.

- *External factors have a huge influence on whether a CIG can reach its objectives. Government decrees and other changes can make the hope of achieving these objectives more – or less – realistic.*



6

Starting small and working up in Benin

Dansou Kossou

FOR THE last ten years, the government of Benin has promoted agriculture as a leading sector in national development. The document “Programme pour la relance du secteur agricole” (Programme to re-launch the agricultural sector) guides overall policy: it prioritizes food crops, export crops, peri-urban agriculture and water management to enhance off-season crop production. Key strategies to develop these sectors include mechanization, diversification, and a focus on development efforts in areas that enjoy ideal agro-ecological conditions for certain crops.

Various actors collaborate in this effort: universities, research institutes and the relevant ministries.

THE COS-SIS PROGRAMME

With its emphasis on involving multiple stakeholders in overcoming problems, the Convergence of Sciences programme fits well within this strategy. The first phase of the programme (2001–6) resulted in significant progress in developing technological innovations. But it did not address the institutional barriers that constrain development. This is the focus of the current CoS-SIS programme.

Choice of domains

Three domains were selected in 2008 during the CoS-SIS formulation mission. The choice was guided by the government’s programme to re-launch the agricultural sector. The discussions involved the key actors in the field: the University of Abomey-Calavi, INRAB (the national agricultural research institute), DICAF (the government extension agency), DAGRI (a government input supplier) and REDAD (a national farmers’ organization). These organizations had worked together previously on a successful action-research project in cowpea, so already knew each other and worked together well. They have continued their collaboration as members of the CoS-SIS programme management team.

Level of the CIGs

All three CIGs in Benin are based at the district level. The idea has been to identify and solve institutional constraints at this level, and then to pass on successful approaches to higher levels of government for implementation on a wider scale. Involvement in the CIG of representatives from higher levels enables direct contact between the local level and the corresponding structures higher in government.

This is a low-risk approach: by learning at the local level, it is possible to refine the approach before designing a policy at the larger scale. That avoids making costly mistakes in national policy formulation.

CIG functioning

The presence of high-level representatives in the same group as local actors did not seem to affect the functioning of the CIGs. Rather, the older members of the CIGs tended to take leadership, regardless of their official positions. This is a common aspect of Beninois society. There was no formal structure in the CIGs but some members took on leading roles. Younger members were able to take leadership in their areas of expertise.

Champions emerged spontaneously based on the nature of the problem being addressed.

Resolving differences

Members of a CIG tended to work in harmony with each other, and sought consensus rather than disagreement. Where disputes threatened to arise, they stressed their commonalities: the farmers said that they “bought from the same market” as the government officials, so they had much in common with them.

Perhaps this sense of harmony is because the CIGs have not yet tackled the most controversial issues. One such issue may be the introduction of neem oil to control pests on cotton. This may threaten the income of the input suppliers who sell artificial pesticides. These suppliers are not currently represented on the CIG, but it is planned to include them when the neem issue is raised. Finding agreement among the different actors may prove a challenge.

Gender

The subjects addressed by the CIGs depend on the membership of the group. Women are important in growing all three commodities: rice, cotton and oil palm. But they are not represented in any of the three CIGs even though women occasionally participate. This means that women’s issues are not deliberately recognized and have no way of being addressed. The CIGs are currently recruiting new women members to correct this oversight.

ROLE OF THE RESEARCH ASSOCIATES

Two of the CIG research associates worked on the previous CoS programme, so have a strong background in the philosophy and approaches used, as well as in facilitation skills. All three research associates are scientists based at the University of Abomey-Calavi, near Cotonou. Because they do not live in the area of their CIG, they have to travel a fair amount. This is a particular problem

for the cotton CIG research associate, who must make a round trip of some 2,000 km in order to attend meetings. Much of the coordination work is necessarily by telephone. (The job of the research associate would not have been possible only a few years ago before the widespread adoption of mobile phones in Benin.)

Distance also means that the CIG activities rely on locally based members taking initiatives in areas they are involved in. Fortunately such local champions have emerged in all three CIGs.

Costs of running the CIGs

Most CIG activities consist of meetings and field visits. These are not expensive. It is necessary to pay for transport, accommodation and food. But the group is small: that keeps costs down. The costs of activities such as training are often absorbed by the organizations represented on the CIG. A CIG costs an average of EUR 2,000 a year, excluding the research associate's salary and the costs of programme administration. The major investment in the CIG is hence in members and research associate's time.

SCALING UP

Using the CIG members

Because its members are drawn from different levels, a CIG can have an effect beyond the immediate locality. A member working in a national organization can take lessons and apply them at a national scale. The CIG can request members to undertake activities that will benefit not only the local area, but other areas too.

Box 6.1. Programme management team, CoS-SIS Benin

University

- Dean, Faculty of Agriculture, University of Abomey-Calavi
- Deputy Dean, Faculty of Agriculture, University of Abomey-Calavi



- President, Network for Sustainable Agricultural Development (REDAD)
- President, National Platform for Innovations in the Agricultural Sector (PNISA)

Research

- Director-general, National Institute for Agricultural Research (INRAB),
- Ministry of Agriculture, Livestock and Fisheries



Farmers

- Permanent secretary, Inter-professional Association of Cotton Producers (AIC)



Training and extension

- Director, Department of Agricultural Extension and Professional Training (DICA), Ministry of Agriculture, Livestock and Fisheries



CoS-SIS

- Coordinator, Benin CoS-SIS programme



An example of this is the Research Centre on Cotton and Fibres, a member of the cotton CIG. This is testing new cotton varieties with farmers in the CIG area. It hopes to identify improved varieties that can be promoted nationwide.

Another example concerns neem. A farmer member of the cotton CIG suggested introducing neem oil as a biological pesticide. The CIG discussed this and proposed studying the effects this would have on the cotton value chain. The University of Abomey-Calavi will get a graduate student to do this study. It is expected to identify the actions needed to introduce neem on a national scale. The national Tree Planting Day on 1 June is an opportunity to promote the planting of neem trees in the cotton-growing area.

Programme management team

The CoS-SIS programme management team consists of nine people (Box 6.1): directors of the national research and extension organizations, heads of a farmers' organization, university administrators, and the president of a private-sector marketing organization. The team performs two main roles: it guides the CoS-SIS programme of which the CIGs are a part, and it acts as a key mechanism to scale up the CIG results.

The team learns about the CIG activities through briefings by the CIG research associates and field visits to the CIG sites. It holds meetings every three months to analyse the constraints identified by the CIGs and the approaches used, and plans activities such as lobbying, training courses, meetings and workshops for other stakeholders. In this way it can influence both the actions of field extension staff (for example, by issuing directives, providing training courses or revising manuals), and of other government organizations. For example, a manual used to train extension specialists has been revised: it now covers techniques for participatory research with farmers and problem-solving in the field.

University teaching and research

The CIGs are also having an effect on teaching and research at the University of Abomey-Calavi. Staff are revising courses on problem diagnosis in agriculture: the CoS-SIS procedure of identifying problems and opportunities is now part of the academic curriculum at the bachelor's and master's levels. An opportunity presented itself to integrate the CoS-SIS approach in the curricula: the francophone universities are currently changing their system towards a bachelor's–master's–doctorate structure, making it easier to add additional changes.

For research, the CIGs have identified topics for PhD and master's-level research in cotton (gender in the cotton value chain, use of neem and the availability of pesticides), oil palm (seed provision, nursery management and the effect of leaf residues on soil fertility), and water management (mulching to improve water retention in the soil).

The collaboration with Wageningen University (which coordinates the CoS-SIS programme) has made it easier for the University of Abomey-Calavi to work with other universities elsewhere.

Ghana



Turning bunches of palm fruits into oil takes several steps. The processing method affects the quality of the oil.

Photo: Suzanne Nederlof

Food security. Poverty and hunger are widespread in Ghana's northern savannah lands. In addition to their crops, farmers in the Upper West Region, bordering Burkina Faso, raise sheep and goats to provide financial security: they can sell a few animals easily when they need cash. The CIG aims to find ways to improve small-ruminant production by providing supplementary feeding, making water more readily available, and reducing theft. It is also helping farmers get organized to hire tractors to plough their land at the start of the cropping season.

Oil palm is an important source of income for semi-subsistence farmers in the south of the country. It supplies Ghana's main vegetable oil as well as raw material for industry. Improving oil palm production offers the prospect of reducing rural poverty. But much of the country's output is processed by small-scale processors that use methods that result in low-quality oil and that pollute the environment. The CIG aims to help district assemblies, traditional authorities, the Environmental Protection Agency and the Ghana Standards Board overcome these problems.

Cocoa is the source of livelihoods for an estimated 800,000 people in Ghana. The country's main foreign exchange earner, it accounts for 30% of exports by value, and 4% of the gross domestic product. Because it is so important, the government manages the cocoa trade through the Ghana Cocoa Board. The prices that farmers receive for their dried cocoa beans are set by the Ministry of Finance. The CIG aims to influence the price and change the way it is calculated to reward farmers for delivering quality beans.



7

Oil palm in Ghana

Samuel Adjei-Nsiah

THE VILLAGE stinks of burning rubber. Walking among the houses, your eyes begin to sting. Get closer, and you discover the source of the stench: a large, blackened metal container, with burning tyres underneath. In the container – if you can see that far through the heat and smoke – you will find a mass of bright red fruits, boiling away for hours until they are soft.

The fruits come from the oil palm tree, the most important tree crop in Kwabibirim district in Ghana's Eastern Region. The owner of the container is processing them into oil: a viscous, bright red liquid that is rural Ghana's main source of cooking oil, as well as a major ingredient in refined cooking oils, soaps, cosmetics and biofuel.

Eighty percent of Ghana's crude palm oil is produced by smallholders in the southern part of the country. These smallholders typically have around 2 ha of trees. When the clusters of fruit are ripe, the farmer cuts them from the trees and takes them to a local mill for processing.

Extracting the oil is a complicated process: it involves boiling the fruit, mashing it in a machine, and then pressing it. The resulting liquid is then boiled again, and the oil is scooped off and put into drums for sale.

Because many mills are sited in the centre of villages, the residents have to endure the unpleasant, poisonous smoke. They cannot drink rainwater collected from their rooftops because it is contaminated with soot from the burning tyres. Many processors tip untreated, oily effluent into rivers, where it suffocates fish.



Women cleaning palm fruits before processing at a small mill in Asuom, Ghana

Photo: Samuel Adjei-Nsiah

Box 7.1. Oil palm in Ghana: CIG composition

Value chain actors

- Smallholder farmer
- Small-scale processor (woman, member of District Assembly)
- Mill owner (woman, member of District Assembly)



Service providers

- Ministry of Food and Agriculture (MoFA)



- Ghana Regional Appropriate Technology Industrial Service (GRATIS)

Regulators

- Ghana Export Promotion Council (GEPC)
- Ghana Standards Authority (GSA)
- Environmental Protection Agency (EPA) (woman, added when the environment became a major issue in the CIG)



Processors know that by storing the fruit for several weeks before processing it, the fruits lose water and become soft and easier to press. They also believe that storage improves the oil yield. But storage for more than a week increases the amount of free fatty acids, reducing the quality of the oil and making it unsuitable for industrial use.

As a result, even though Ghana is a major oil palm producer, it cannot export high-quality oil, and it imports a large amount of palm oil to fulfil its annual demand of over 250,000 tonnes.

THE GHANA OIL PALM CIG

Addressing these problems was the task of the Ghana oil palm CIG, a group of eight people representing different stakeholders in the small-scale palm oil industry (Box 7.1). This CIG was formed at the national level, but operates largely in Kwaebibrim district, one of Ghana's main oil palm-growing areas and home to over 100 small-scale mills.

During the initiation workshop, the research associate helped the CIG analyse the current undesirable activities of actors in the small-scale palm-oil processing industry, and the institutional reasons behind these activities. The CIG first identified problems with what processors currently do: mills are located close to residential areas, they burn used lorry tyres as fuel, and they dispose of effluent improperly. The research associate helped the CIG plan how to overcome these problems.

Linked to the CIG are two local platforms which aim to support small-scale processors in improving their output for export and for industrial markets:

- An **experimentation group** that tests processing practices in a participatory way. For example, it experiments on how long to store the palm fruits before processing to produce good-quality crude oil that meet the standards of the export and the industrial markets.
- A **district-level stakeholder group**, made up of all stakeholders of the district's small-scale palm-oil processing industry. This group sets the agenda for experiments and provides inputs at different stages of the research.

Table 7.1. Framework for the Ghana oil palm CIG activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Locating mills close to residential areas	Absence of policies and bylaws guiding activities of small-scale processors	Establish industrial parks for relocating mills	Enactment of bylaws or regulatory frameworks to guide the operations of small-scale processors
Burning used lorry tyres as fuel for processing		Use alternative fuels	
Improper disposal of mill effluent		Dispose of effluent	
Inappropriate processing practices			

LOBBYING AGAINST SMOKE

When the CIG started, it had no information on the adverse effects of the processing on the environment and human health. It tasked some of the CIG members to study the issue and brief the CIG so it could share the information with policy makers and other actors along the value chain. This task was taken on by CIG members from the regulatory institutes with relevant expertise: the Ghana Standards Authority and the Environmental Protection Agency.

After reviewing the findings, the CIG delegated four of its members to lobby the executives of the Kwaebibrim District Assembly about these issues. Two CIG members happened to be assembly members; together with another CIG member (the district director of agriculture), they persuaded the assembly's presiding member to meet the delegation to discuss these issues.

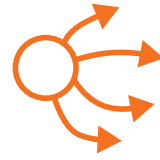
Convinced by what he heard, the presiding member organized another meeting with a small group of district executives and assembly members, and invited the CIG to give a presentation.

The presiding member then – at only two hours' notice – called the CIG to make a presentation to the full assembly. The CIG team presented the problems in the industry and suggested solutions. After much discussion, the assembly agreed to make bylaws to prohibit the burning of tyres and to force mills to relocate to the outskirts of the villages. It asked the CIG to explain the need for such rules to local people and village chiefs.

The CIG has started these publicity activities. In the first village, Subi, home to 16 mills, the villagers agreed enthusiastically with the need for change: they were already concerned about the pollution and its effects on their health. The villagers also feared that buyers were deterred by the pollution and the poor quality of their oil. So the CIG's information campaign reinforced local opinions and stimulated them into action. The village chief is looking for land on the edge of the village to allocate to the millers.

The opportunity was a result of the CIG's lobbying activities with the presiding member of the assembly, which were in turn made possible by the fact that two of the CIG members were also members of the District Assembly. A third was a high-ranking official: the director of agriculture for the district.

- ▶ *It was vital to grasp the opportunity to make a presentation to the District Assembly, even though it was at such short notice. Such opportunities do not come often, and it is important to be flexible enough to respond to them when they arise. Navigating planned and unplanned events is important.*



INVOLVING WOMEN

Three of the eight CIG members are women. Two – the small-scale processor and the mill owner – have limited education and poor English language skills. The other CIG members are higher-status, have master's degrees, and hold official positions. There was thus a risk that the women would be sidelined in the CIG – as frequently happens in other groups in Ghana.

The research associate makes sure that the women have an equal chance to speak, and encourages members to use Twi (the local language) rather than English if they wish. Although most mills are owned by men, it is women who do most of the actual processing. As entrepreneurs, the two women CIG members have insider expertise in the industry. They are also District Assembly members, so can play a key role in opening doors to the local legislature – as the story above shows. The research associate makes them feel they are valued members of the group, who can teach the other CIG members a great deal.

The woman mill owner has shown other mill owners that processing the fruits early increases the oil output – contrary to the common belief that storing results in higher yields. That has persuaded many to change their practices. In a community where one of the women CIG members lives, a processor set up a mill in a residential area. The residents complained about the smoke, but to no avail. The CIG member took the matter up. She exerted a lot of pressure until the processor installed chimneys to carry the smoke higher into the air.

Because the palm oil industry is dominated by women workers, involving women as CIG members has given the CIG as a whole a lot of useful information. All three women members have made significant contributions. The two with limited education have gained in confidence through their continuous interactions with other CIG members, and they have become empowered to play advocacy roles in their community.

- ▶ *Women should not be token representatives on the CIG. The members should not be chosen because they are women, but because they are in the best position to represent the interests of a particular group and to engage with the other members. All CIG members – including women and other vulnerable groups – should be there for a good reason, and they should be able to contribute. It is the research associate's role to seek out and support these actors so that they can participate to the benefit of the initiative.*

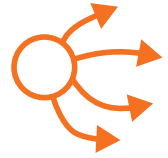


SCHEDULING MEETINGS

Several of the CIG members have busy work schedules, which sometimes conflict with CIG meetings. Ensuring they could come to meetings was a major challenge for the research associate at first. One successful approach was to discuss possible dates with these members before scheduling a meeting to avoid timetabling conflicts.

The CIG meets four times a year. It is not possible for all the CIG members to attend all the meetings – indeed, it is not necessary, as many of the meetings do not require the expertise of some of the members. If an agenda item requires someone to attend, the research associate makes sure that that person can be present. If necessary, the meeting is rescheduled.

- ▶ *CIG meetings should be scheduled at times and places that are convenient for members. It is not necessary for all CIG members to be present at every meeting. Flexibility is needed to make sure that key members are able to attend. Who is “key” will depend on the topics to be discussed.*



ADDING MEMBERS

The CIG realized early on that the environment was a problem in palm oil production, but that it did not have the expertise necessary to deal with it. The research associate approached the Environmental Protection Agency, a national government body responsible for regulating medium- and large-scale processing industries. The agency's executive director nominated one of his staff with experience in the oil palm industry to join the CIG.

The CIG has recognized the need to include a representative on health to deal with the smoke issue. It has approached the district director of health, but she has been too busy to attend meetings so far. She has agreed to contribute to the CIG's activities even if she cannot attend.

The CIG has not yet explored other possibilities, such as temporary membership or inviting in experts on a one-off basis.

- ▶ *The CIG has high-calibre members who are able to convince policymakers of the need to regulate processors. The potential to make interdependent and complementary contributions to improving the conditions of smallholders should be a criterion for recruiting CIG members.*



ENSURING OWNERSHIP

How to ensure that the CIG functions continue after the end of the CoS-SIS project? The research associate ensures that the district director of agriculture facilitates as many activities as possible in the district. For example, the director arranges information meetings with people who grow oil palm and produce oil, organizes processors, and gets in touch with village chiefs and groups such as the district millers' association. He delegates many of these tasks to his staff – thus ensuring that the work is institutionalized within the directorate of agriculture.

The other CIG members who are based in Kwaebibrim district also play an active role, organizing local people, lobbying district organizations, and sharing information with other local actors.

The CIG members based in the central government in Accra play a less active role, but are important because they provide information and access to organizations in the capital and throughout the country. These links will be vital to the district CIG members in the future.

The research associate delegates tasks or assignments to individual members of the CIG based on their expertise, contacts, and ability to influence change. For instance, to engage with people in the communities, the CIG relies on its members from the local organizations or district organizations. CIG members who are themselves palm oil processors share their ideas and expertise when discussing with other actors in the value chain.

- ▶ *Different members of the CIG play different roles, depending on their organization, place in the value chain, and the level (local or national) that they represent. It is important to have a balanced mix of members to ensure that different types of tasks can be performed.*
- ▶ *Including representatives of local organizations in the CIG builds the capacity of these stakeholders to ensure the process continues after the funding has ceased.*



Using a digester screw press at a palm oil mill, Asuom, Ghana

Photo: Samuel Adjei-Nsiah

8

Food security in Ghana

Kofi Adade Debrah

SHEEP AND goats are vital to many farmers in the Upper West Region of Ghana. When the rains start in May, the hungry season also begins. It's time to plant, but the farmers have little cash to pay for a tractor to come to plough their fields. And their stocks of maize and millet are running low. To get by, many farmers sell their sheep and goats: a useful savings bank for when things get tough.

Despite this, over one-third of households in the Upper West Region are food insecure: they do not have enough to eat for five months of the year, from May to September. That is the highest of any region in Ghana.

At the same time, there is a big demand for sheep and goat meat in the cities of southern Ghana. The country currently imports large numbers of animals from neighbouring Burkina Faso. The Upper West has a big potential to increase its small ruminant production. Doing so would reduce hunger in the region and avoid the need for imports.



Sheep and goats are an important source of income for farmers in the Upper West Region of Ghana

Photo: Kofi Adade Debrah

Box 8.1. Members of the district and regional food-security CIGs

Districts (Lawra and Nadowli)

Service providers

- Veterinary service
- Animal production
- Crops service
- Non-governmental organization
- Research associate



Value chain actors

- Crop farmer
- Livestock farmer
- Trader
- Butcher



Regulators

- Police
- Chief's representative
- District Assembly



Region

Service providers

- Veterinary service
- Animal production (also a chief)
- Women in agriculture development department
- Livestock research
- Non-governmental organizations (3)
- Research associate



Value chain actor

- Livestock (and crop) farmer (previous winner of Upper West Regional best farmer award)



Regulator

- Chief (also a processor and medical practitioner)



THE GHANA FOOD SECURITY CIG

An initial meeting of 35 stakeholders representing various organizations, as well as livestock and crop farmers, identified factors causing food insecurity in the Upper West Region. They realized the important role played by sheep and goats during the hungry season, and saw opportunities to improve their production. Small ruminants are cheaper and reproduce more quickly than cattle. Unlike pigs, they do not need special feed. Raising small ruminants also promises to boost crop production in the region because the droppings can be used as fertilizer.

The meeting participants plotted the importance and influence of various actors in small ruminant production. This identified 11 individuals and organization representatives who were key to improving production in the industry. These 11 people were invited to form the core group of the regional CIG.

This smaller group then investigated the small ruminant question in more depth. They identified 11 problems that fell into three broad areas: policy, technical and socio-economic (left side of Figure 8.1).

A doctoral candidate working with the CoS-SIS programme in Lawra and Nadowli districts held a series of community meetings about small ruminant production. These confirmed the importance of livestock theft and of deaths due (among other things) to an important disease called *peste des petits ruminants*, or PPR. It added another top priority: the lack of water for the animals during the dry season. A meeting with stakeholders in Lawra district added a fourth topic: the need for

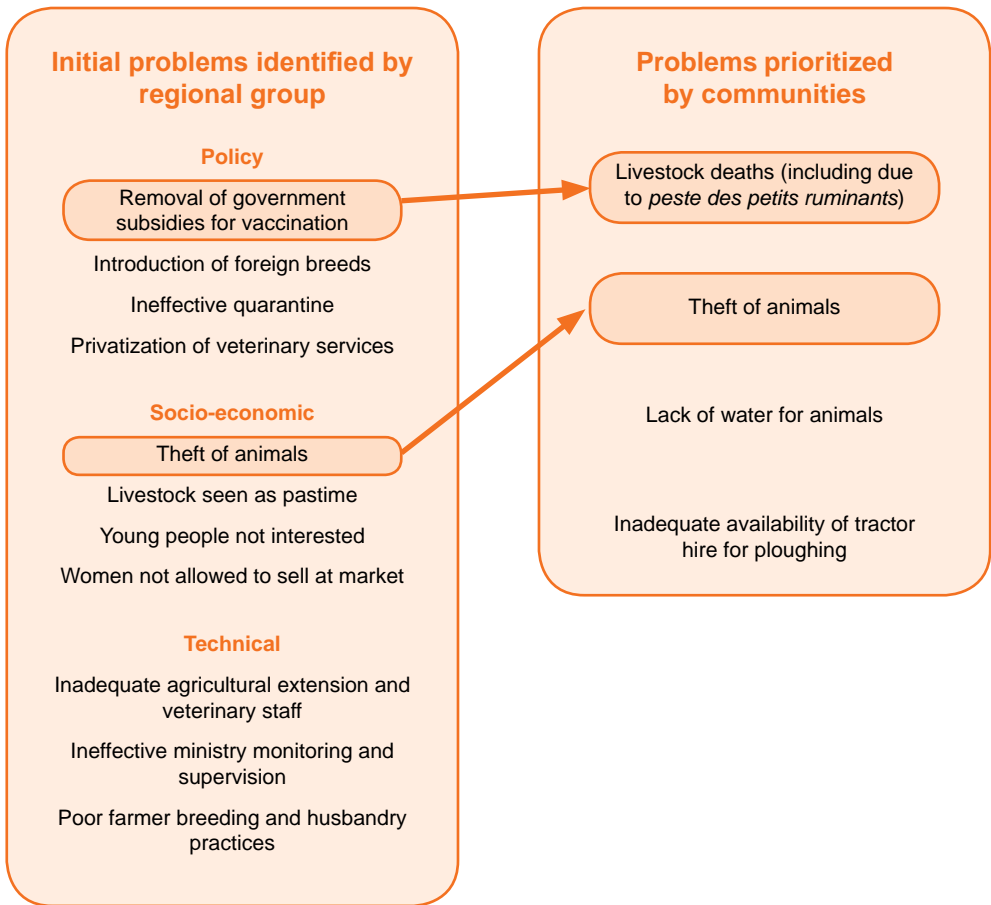


Figure 8.1. Choice of topics by the Ghana food security CIG

tractor hire services so farmers could plough their fields in time for planting at the start of the rainy season. These new priority topics are shown on the right side of Figure 8.1.

The regional CIG recognized that some of these problems had to be dealt with at the district level, as well as by a regional body. That led to the formation of two district-level CIGs. The regional CIG mapped the importance and influence of various district actors, and used this to identify organizations and individuals to form CIGs in each district. The research associate also requested the district director of agriculture to appoint individuals from his organization as members of the district CIGs.

There are thus now three CIGs in the Upper West: one at the regional level and one in each of the districts of Lawra and Nadowli (Box 8.1).

The district CIGs analysed the various problems facing small ruminant production and identified the institutional constraints (Table 8.1).

The CIGs also recommended that a national-level CIG be formed to press the government to strengthen the livestock and veterinary services.

Table 8.1. Framework for the Ghana district food-security CIGs' activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Inadequate water during the dry season	Communities not putting pressure on District Assembly to fulfil 5% responsibility for boreholes	District assemblies to pay 5% to match central government or donor funding	Community lobbying of District Assembly and member of parliament
High livestock mortality	Minimum investment in livestock husbandry, labour and capital (including time for vaccination, housing and supplementary feeding)	Devote more time and investment for livestock	Community livestock committees to foster changed attitudes
	Weak government structure for animal production and health care	Strengthen government support for veterinary and animal production	Formation of national CIG to lobby for change
Theft	Animals range freely Police ineffective, lack of trust in police	Encourage farmers to provide housing, supplementary feeding and watering to retain animals in area Revise policing and justice system	Education and action on animal housing and supplementary feeding Revival of traditional justice system
Inadequate tractor services	Fragmentation of farm plots through inheritance	Groups of farmers hire tractor to plough many fields in one go	Block ploughing to reduce tractor costs

Some farmers herd their animals to prevent them from damaging crops and to guard against theft

Photo: Kofi Adade Debrah



Owners give their goats supplementary feed and water

Photo: Kofi Adade Debrah



The research associate's main job is with an NGO that focuses on ending child poverty – for which food security is vital. This work has given the research associate rich experience in facilitation and monitoring in the field of food security.

REVIVING A TRADITIONAL INSTITUTION TO PREVENT THEFT

Many livestock keepers lose animals to thieves: outsiders who grab individual animals and speed away on a motorbike, or larger-scale thieves who come at night to drive a whole flock onto a lorry. Life is made easy for such thieves because most farmers allow their animals to graze freely and do not bring them home in the evening.

Even if the thieves are caught, they often go unpunished. Lodging a complaint with the police takes time and effort. The thieves may be released on bail, and if the case comes to court, the fines are paltry. That means that local people have lost faith in the formal justice system.

The CIG suggested two solutions to this problem: one technological and one institutional.

- The **technological** solution was for the owners to provide supplementary feed, water and salt licks to encourage the animals to stay near the homestead. It proposed educating livestock keepers on the value of these interventions.
- The **institutional** solution was to revive the traditional justice system. Under this, thieves are brought to a panel of community elders, who hear the case and dispense fines to those who are found guilty. The CIG suggested creating community livestock committees to organize surveillance and bring suspects to this panel.

In Tangasie in Nadowli district, villagers spotted a stranger who was acting suspiciously: a young man who had wet feet. They suspected he had come from the riverside, where many villagers had tethered their goats. They kept watch on him and caught him in the act of taking a goat. They brought him to the panel of elders, who fined him.

The villagers hope that quick, effective justice of this nature will deter thieves.

- ▶ *Formal government institutions (the justice system, in this case) may be overwhelmed and become ineffective. Traditional institutional arrangements can be revived to take on part of their tasks. Local people are often ready to recognize the authority of such traditional institutions. So far the formal system has tolerated the traditional one.*



COORDINATION WITH LOCAL AUTHORITIES TO IMPROVE WATER SUPPLIES

During the dry season from November to April, many livestock do not get enough water to drink. Boreholes are the main source of water in most villages, but during the dry season, some deliver only enough water for people, not enough for animals. Plus, many boreholes are not repaired when they break down. Villagers are reluctant to pay user fees to cover maintenance and repairs.

The central government and donors have programmes that invest in drilling boreholes or digging ponds for watering livestock. To ensure local ownership of the facilities, they require that the district assemblies pay a small portion of the cost – typically 5%. Members of parliament also control a fund they can use for local development projects. But even this small sum is often not forthcoming.

The CIG's solution was to encourage local livestock keepers to lobby for their rights with the district assemblies and members of parliament, and to persuade them to release these funds. Two of the CIG members also sit on the District Assembly in Lawra. They are lobbying their colleagues on the assembly to release the funds required.

The CIG has tasked some of its members to team up with Unit Committees (the lowest level of local government, covering several villages) to educate local people on the need to pay for the water they use. They have started a campaign to raise money in the form of donations from villagers and NGOs, and are pressing politicians to make good on their pre-election promises to improve the local water supplies.

This approach is bearing fruit. A member of parliament has promised to sink a borehole at Tangasie within the next five months.

- ▶ *When informed about the government's responsibilities, local people can press for the services they need.*
- ▶ *Community leaders should make sure that communities play their part in maintaining the facilities that are for their benefit. In this case, they should ensure that users pay fees for using water, and that these fees are used to maintain the facilities.*
- ▶ *Community representatives should be ready to challenge the current pattern of expenditure by district assemblies. They should not leave it up to the district officials to decide how to use the money.*



FACILITATING COLLECTIVE ACTION FOR TRACTOR SERVICES

The government helps the private sector to acquire tractors to hire out to farmers for ploughing. But there are still not enough tractors in Lawra district to plough everyone's fields. Farmers complained to the Lawra District CIG that they could not find a tractor to hire. The CIG realized that this was because the farmers' fields were a long way from the tractor-hiring points. And the farmers were approaching the tractor operators individually to plough their plots.

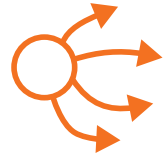
Because of the distance, it was unprofitable for the tractor operators to plough small individual plots as they would have to make several trips to the community. The CIG advised the farmers to pool their funds and hire a tractor as a group. The operator could then plough everyone's fields at the same time.

This approach worked well in a village called Zambo. A CIG member there who is a farmer managed to get a bank loan, which the group used to hire a tractor to plough their fields all at once. The farmers planted their crops on time and are expecting a good harvest at the end of the season.

Things did not work so well in another village, Oribil. Even though they got a loan, the farmers there still could not find a tractor on time. The CIG has advised them to start looking for a tractor earlier next season.

The CIG has introduced the idea of group hiring to food security organizations in the Upper West Region. This has the dual aim of ensuring that the approach continues after the end of the CoS-SIS project, and that it can be expanded to the regional and national level in the near future.

- ▶ *In times of need, social networks can be important in finding solutions. The Zambo CIG member who led the process of getting the tractor service was a former assembly member. It is possible that his connections made it easier for him to arrange a tractor hire quickly. Collective action is necessary to solve certain community challenges – such as hiring tractor services at rates that make it attractive for the tractor operator.*



9

Cocoa in Ghana

Richard Adu-Acheampong

YOU HARVESTED the ripe pods from your cocoa trees three weeks ago. You broke them open to remove the beans inside. You heaped the wet beans on banana leaves and let them ferment for six days. You turned the beans to make sure the fermentation was even. You carried the beans – they now had a delicate chocolatey scent – to your house and spread them out to dry on a raffia mat, raised above the ground to stop chickens from running over them. You have watched the weather anxiously over the last two weeks as the beans dried in the sun. You have rubbed them to remove the dried pith and to make the beans smooth. You have packed them into jute bags – each weighing 64 kg. Now it's time to sell!

But where can you sell the beans? In the village, where a buying company licensed by the Ghana Cocoa Board will pay you an amount fixed by the board at the start of the season? Or just across the border in Côte d'Ivoire, where the buyer might give you quite a lot more?

For many Ghanaian cocoa farmers, this was an easy choice. They would smuggle their beans across the border into Côte d'Ivoire or Togo, even though they risked being arrested or having to pay bribes to the police who were supposed to prevent such illegal trade. The result: a drop in Ghana's exports, a loss of tax revenue for the government, and less cocoa for local processors.

A farmer collecting harvested cocoa pods at Old Baika, Jasikan District, Volta Region, Ghana. The pods must be collected and broken up promptly to prevent the beans from germinating and being damaged by rodents and pod rot.

Photo: Richard Adu-Acheampong



Box 9.1. Members of the Ghana cocoa CIG

Value chain actors

- Farmers' representative
- Kuapa Kokoo Ltd (licensed buyer)
- Cargill Ghana Ltd (local processor)



Service providers

- Cocoa Inputs Company Ltd



Regulators

- Ghana Cocoa Board research department (formerly special assistant for cocoa affairs to Minister of Finance and Economic Planning)
- Quality Control Company Ltd
- Ghana Standards Board



But this is no longer the case. In 2010–11 Ghana's cocoa exports hit one million tonnes for the first time. Farmers now get a better price at home than in neighbouring countries. Smuggling has nearly stopped: in fact, there are rumours of Ivorian farmers smuggling their crop the other way, into Ghana, in order to get the better price.

THE GHANA COCOA CIG

Raising the price of beans was one of the goals of the Ghana cocoa CIG – a national-level alliance formed in August 2010 of six organizations, plus a representative of a district-level cocoa farmers' association (Box 9.1).

The CIG was founded to improve farmers' livelihoods by increasing their income from cocoa. The initial objective was to shift from the current system where farmers get a single price regardless of quality, to one based on the grade of the beans that farmers deliver (Table 9.1). This objective has changed over time because it proved unworkable (see below). The CIG currently aims to make sure that farmers receive a higher price for their output.

FORMING THE CIG

The research associate is an entomologist working with the Ghana Cocoa Board. That gives him a good background knowledge of the cocoa production system and credibility with the various members of the CIG. But it did not prepare him for the institutional and facilitation work needed as a research associate. He had to learn this through the CoS-SIS training workshops and on the job. There is no set way of forming and running a CIG, so he had to rely on his own initiative.

He visited the various stakeholder organizations to introduce the CoS-SIS programme. He talked to the directors of these organizations and tried to convince them of the need to collaborate with other organizations to overcome institutional constraints facing the sector. He had prepared a very brief introduction – an "elevator pitch" – about the need for such a group. The directors nominated members of their staff to attend the stakeholders' workshop that CoS-SIS was organizing.

Table 9.1. Original framework for the Ghana cocoa CIG activities

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Mechanism of pricing cocoa based on export price Single price paid to farmers regardless of quality	No alternatives to current pricing policies (based on export price)	Reward excellence in producing quality beans	Payment to farmers based on quality (Ghana Cocoa Board, Ministry of Finance and Economic Planning) Pricing beans based on return on farmers' investment (Ghana Cocoa Board, Ministry of Finance and Economic Planning)

He met the individuals who had been nominated, explained the goals of the group, and delivered invitation letters to them.

Why did these high-ranking officials agree to be part of the CIG? Partly perhaps because they knew that the research associate worked for the Cocoa Board. Partly also because they thought they could benefit from one another by sharing information at meetings: there was no equivalent platform in the cocoa sector in Ghana. They wanted to be members of what promised to be an important forum. Partly because the stakeholders' workshop generated a good deal of interest and debate on the institutional constraints that affect bean quality. And partly because the research associate tried to convey a sense of trust and honesty at the workshop. Almost everyone at the stakeholders' workshop in August 2010 agreed to form the CIG.

The CIG works on an entirely voluntary basis: members get an allowance to cover their transport costs, but no per diem. The CIG assigns tasks to its members: for example, one member might be asked to find out how buyers in other countries buy cocoa; another might be asked to find out how Ghana sets the prices paid to producers. The members obtain the information and report back to the next meeting of the CIG. This is the information that the CIG analyses and uses to negotiate with high-ranking government officials.

It is the research associate's job to coordinate all this, plan meetings and the agenda, facilitate the meeting (members rotate the chair between them), take minutes, and report to CoS-SIS and update members who are not able to attend.

SHIFTING PRIORITIES

The stakeholder meeting that set up the CIG selected an initial entry point for it: paying farmers more for delivering better-quality beans. The stakeholders suggested that the CIG explore introducing a system of grading at the farmer level. The idea was to check each farmer's beans, and to pay a premium for high quality.

Currently, farmers who deliver carefully fermented beans are paid no more than those who supply sackfuls of inferior product. The Cocoa Board used to have a farm-level grading system, but dropped it. (The Quality Control Company, a subsidiary of the Cocoa Board, checks the quality of bulked beans at the licensed buying companies' depots.)

The idea of reintroducing a farmer-level grading system proved controversial. Some members of the CIG argued that quality was not in question: Ghana's cocoa was generally excellent. For Ghanaian beans, the world market did not differentiate between different grades, and the Cocoa Board saw no reason to introduce such a system. National standards were already high, and were rising with the addition of new criteria. Introducing a grading system would be expensive and make it easy for the licensed buyers to cheat farmers by buying superior beans but paying for a lower grade. A farmer-level grading system would not solve problems such as poor storage at the buyer's premises. The CIG was also afraid of casting doubt on the reputation of Ghana's cocoa.

As a result, the CIG agreed to drop the idea of pressing for a price differential for superior beans. It decided to focus instead on other issues, including increasing the price for beans for all farmers.

- ▶ *A CIG is flexible in the issues it addresses. When the initial priority that brought them together appeared not acceptable, other priorities were brought up. In this way the real needs of the members involved can be addressed.*



LOBBYING FOR HIGHER PRICES

The price of dried cocoa beans in Ghana is fixed by the Ghana Cocoa Board and the Ministry of Finance and Economic Planning. The government announces a new producer price of cocoa at the beginning of every season in October. Normally farmers can expect to receive 70% of the export price of cocoa. But the price paid to farmers had not kept pace with the world market price, which had risen from US\$ 1,500 in 2007 to nearly \$3,500 per tonne in 2008.

In 2010, the government was considering raising the price by 20%, from GH¢ 150 to GH¢ 180, to take this rise into account. But this would still not bring the farmers' share of the export price back up to 70%. Farmers are very aware of the prices they are paid in Ghana – as well as what they can expect if they smuggle their beans over the border. They hoped the government would increase the price by more than the proposed amount.



A time-consuming task: a farmer picks out debris from drying cocoa beans at Akpafu-Adorkor, Hohoe district, Volta Region, Ghana

Photo: Richard Adu-Acheampong

The CIG members also agreed that a 20% rise was not enough: with inflation in double digits, they feared that farmers would continue to smuggle their output and that the government would not reach its export target of one million tonnes of beans. One of the CIG members was an economist who was special assistant to the Minister of Finance and Economic Planning, with responsibility for cocoa affairs. The CIG asked this member to lobby the minister for a higher price.

At a key meeting in the ministry, this member informed the minister about the farmers' expectations and the likelihood of smuggling. He suggested areas where costs could be cut. In this way he was able to convince the minister to raise the price by 33%, to GH¢ 200. The minister subsequently got approval for this increase from the Cabinet. Exports boomed, passing the one million tonne mark.

In the next year, 2011, world prices had begun to fall. It was not politically feasible for the government to cut prices, especially in the face of continuing inflation. But it was unsure what to do: keep the price the same, or increase it by just GH¢ 1 (US\$ 0.62) per bag. The CIG discussed this issue: it believed that the export success had been a direct result of the higher prices, and that farmers should receive a higher price to maintain output. The key member again persuaded the minister to raise the price further. The new price of GH¢ 205 was announced on 14 October 2011.

► *Having the right members on board of the CIG is crucial. Those members can approach the right people and play their role at different times. In addition it is the combined presence of different members that leads to the results. The research associate was essential in orchestrating that the right people got approached at the right time.*



OVERCOMING CONTROVERSY

The debate over pricing for quality had just been settled when it was reawakened by a proposal from the doctoral candidate working with the CoS-SIS programme. He was interested in experimenting with different pricing arrangements for quality grades. He made a proposal for a small-scale experiment in a few villages and requested the CIG for comments. He distributed this proposal on paper, but there was no time to explain it during the CIG meeting.

Unfortunately this modest proposal led to misunderstandings. Some of the CIG members saw it as an attempt to undermine the role of the Cocoa Board and damage the reputation of Ghana's cocoa. They disagreed with the timing of the proposal, as it was before the government had announced the prices for the next year. They were suspicious of the role of CoS-SIS in the cocoa industry – Ghana's most strategic economic sector. Two key members withdrew from the CIG.

The research associate knew he would have to handle this controversy carefully. The CIG members are powerful people who could block the entire CIG process. After discussing with the doctoral candidate and his superiors, the research associate paid personal visits to all the members of the CIG. He explained the restricted nature of the research and assured them of the good intentions of the CoS-SIS project. He told them that the group had got into a muddle but that it needed to work together to enhance their individual interests.

This approach seems to have solved the problem. All the members have rejoined the CIG, and the doctoral candidate's research will go ahead on a smaller scale. It should provide valuable information should the government in future decide to introduce differential pricing for quality beans.

- ▶ *A facilitator also has a role as a mediator. This requires certain skills such as humility and sensitivity to the feelings and needs of all different actors. In this case the approach where everybody was met privately helped to calm the conflict.*



HOW REPRESENTATIVE IS THE FARMERS' REPRESENTATIVE?

Many bodies that include farmers' representatives find it difficult to recruit people who are really farmers but who have the skills and confidence to speak up on behalf of their peers. Often, such representatives do not serve the interest of farmers at the grassroots, but align themselves with the interests of politicians. Many do not even produce a single bean of cocoa. Smallholder farmers fail to see the benefits of such representatives.

So it was important that the right person – someone who would truly represent the cocoa farmers – would be invited to join the CIG. The CIG is fortunate that the Paramount Chief of the Agona Nyarkrom Traditional Area of the Central Region agreed to take on this role. He owns large cocoa plantations, so is very familiar with the problems that farmers face. As a paramount chief, he also gets to hear of a wide range of issues. He has participated in a number of forums organized by the Ghana Cocoa Board and is a key figure in the Cocoa Inputs Company (which supplies inputs to farmers), so is familiar with industry-wide issues.

- ▶ *It is not enough to have all stakeholders on board. How these stakeholders are represented and how the information is fed back to those that are represented is equally crucial. Identifying the right person to play this role is a delicate and careful process.*



ACKNOWLEDGEMENTS

Thanks to all Cocoa CIG members for their support for the programme. This paper is published with the kind permission of the Executive Director of the Cocoa Research Institute of Ghana.

10

Putting theory into practice in Ghana

Owuraku Sakyi-Dawson

GHANA'S AGRICULTURAL development policy, as laid out in the Food and Agricultural Sector Development Programme II, aims to enable stakeholders to take advantage of emerging opportunities in the sector. It envisages a modernized agriculture that leads to a structurally transformed economy, improved food security and increased employment opportunities. To achieve this, the government hopes to increase the country's competitiveness in domestic and international markets, apply science and technology in food and agriculture development, and improve the coordination of organizations in the farming sector.

THE COS-SIS PROGRAMME

Choice of domains

A team from various key organizations in the Ghanaian agricultural sector (Council of Scientific and Industrial Research, Cocoa Research Institute, the University of Ghana, and the Ministry of



A group of CIG members analysing problems during a meeting at Lawra

Photo: Kofi Adade Debrah

Box 10.1. Programme management team, CoS-SIS Ghana

University

- Provost, College of Agriculture and Consumer Sciences, University of Ghana (chair)



Private sector processor

- Managing director, Ghana Oil Palm Development Company



Government

- Representative of Director, Extension Services Directorate, Ministry of Food and Agriculture



Development organization

- Ghana representative, IFDC



Research

- Director, Science and Technology Policy Research Institute, Council of Scientific and Industrial Research
- Deputy director, Cocoa Research Institute of Ghana



Farmers

- Director, Peasant Farmers' Association of Ghana, representing farmer-based organizations



CoS-SIS

- Coordinator, Ghana CoS-SIS programme



Food and Agriculture) chose three domains for the CoS-SIS programme. These key organizations are also represented in the programme management team (Box 10.1).

Level of the CIGs

The cocoa and oil palm CIGs include a wide range of members: value chain actors (farmers and their associations, processors, traders), service providers (public and private input suppliers, research organizations) and public-sector regulators (legislators, law-enforcement agencies). The food security CIG has a narrower membership: it includes farmers, traders and butchers, traditional authorities, law enforcers and public service providers.

The three CIGs also differ in terms of the levels at which they operate. Six of the eight members of the cocoa CIG are drawn from the national level, with the rest from the district level. The oil palm CIG has half its members from the national and half from the district level. The food security CIGs have no representation from the national level: half their members represent district bodies, and half are from the sub-district and community levels. Thus the more CIG members are recruited from the local level, the less diverse they tend to be.

CIG functioning

None of the Ghana CIGs has a formal leadership structure. Rather, the person taking the lead depends on the issue at stake, and is determined by that person's expertise or responsibility. The CIG members may decide collectively to delegate activities to a particular member. Or a subset of members may consult with each other to do so. The research associate helps the CIG members arrive at such collective agreements.

Resolving power struggles

Power influences naturally occur within the CIGs. An example of this was in the cocoa CIG, where a senior member from one of the private-sector subsidiaries of the Ghana Cocoa Board has persistently resisted attempts to put the question of paying more for quality beans high on the CIG's agenda. This member represents a powerful actor in the industry. This is a controversial issue because it raises questions on the quality of Ghana's cocoa (which is held to be excellent) and would require big changes in purchasing procedures. Also, the farmers have resisted it – they fear being cheated by local buyers on the ground, so wish to be paid the same price for all their beans. The farmers have been supported by other powerful members of the CIG. The research associate had to refer this impasse to the deputy director of the Cocoa Research Institute of Ghana for resolution. The decision was to drop the price-quality issue for now whilst more information is being collected on it.

CIG activities

The Ghana CIGs have undertaken seven main types of activities:

- Analysis and validation of institutional constraints and opportunities identified before the CIGs were formed.
- Information gathering, analysis and sharing among CIG members as a basis for planning proposals and activities.
- Liaison with public and private agencies for service provision.
- Lobbying district assemblies and traditional authorities for institutional change.
- Lobbying community and other appropriate structures for outreach and educational activities.
- Organizing CIG meetings.
- Self-monitoring and evaluation to learn and adjust their own approach. For example, the oil palm CIG added representatives of the Environmental Protection Agency; the food security CIG shifted focus from the regional to the district level.

Costs of CIG activities

The CIG activities are relatively inexpensive: expenses cover travel, meeting places, meals and refreshments. The major investment is the time that the research associate and members devote to the CIG. If the CIGs are found to be an effective mechanism for institutional change, a relatively low investment has the potential to have a big impact on a large segment of the population.

Linking the stakeholders on the CIG together

It is part of the nature of the CIG that its members come from different types of organizations (public, private, and self-owned entities), as well as from different levels in their organizations, and play different roles in the value chain (actors, service providers, regulators). The common strand that links them together is that they all benefit from sharing information and understanding each other's positions. For example, the representative of the Cocoa Inputs Company learned that some agrochemicals the company had sold to farmers contained banned ingredients. The company stopped importing these chemicals. The Ghana Standards Board was able to clarify its role

in inspecting cocoa beans and certifying them before export. In the food security CIG, the police were able to overcome the impressions they had been inactive in combating the theft of livestock.

ROLE OF THE RESEARCH ASSOCIATE

Recruiting and retaining research associates

Two of the Ghana CIGs (cocoa and food security) started late due to problems with recruiting and retaining research associates. It can be hard to find suitably qualified and experienced individuals willing to work part-time as research associates, especially because the remuneration does not cover the full amount of time required. People in the private sector have other, more attractive, opportunities; the one research associate working with an NGO was attracted by the opportunity it presented to gain knowledge and skills.

People in research and academia have fewer alternatives, and their main jobs give them a more stable base on which to add part-time facilitation work. For them, facilitation is a chance to write scholarly publications that can contribute to their career. The research associates have also come to realize that while research often tends to focus on technical aspects, the main constraints in a sector are often institutional.

Motivation of research associates is vital. It is “the ticks in the cattle’s hide that attract egrets to follow it”: the research associate must have a sufficient incentive to continue working with a CIG. Without the incentives, or “ticks”, working with a CIG becomes unattractive.

Technological vs institutional change

Many stakeholders try to solve problems by overcoming technological constraints. But the main barrier to development may be institutional. Such stakeholders may be reluctant to join a CIG that is dedicated to overcoming these institutional barriers. How to get them aboard?

The research associate has to be able to explain how institutions could constrain or promote development. He or she needs convincing arguments. In the food security CIG, the key piece of information was the fact that livestock keepers were not using government veterinary services even though they were free. So the problem was not technology or price. This realization was the basis for getting key stakeholders to explore the situation from the farmers’ point of view, and to realize that there were important institutional issues involved. That in turn convinced them that an institutional change approach would be valuable.

Personal credibility

Personal credibility is also important for the research associate to attract stakeholders to join and support the CIG. There are various dimensions to this. The research associate must have a firm background in the subject area and at the same time be able to detach from his or her expertise and think “outside the box”. A position in a suitable organization can open doors, especially to high-ranking potential members. A neutral organization is probably better than one that has a stake in a particular point of view: a university is likely to make a better home for the research associate than a big processor or a government monopoly trader like the Ghana Cocoa Board (though university staff also have to detach themselves from their own subject expertise).

The research associate must also approach potential CIG members in the right way. Sometimes this means using personal networks to get meetings. Introductions from other influential organizations or individuals can help. Patience and persistence pay off: it may be necessary to wait a long time to see the right person. Face-to-face meetings are important to help the potential members understand the approach and to explain the focus on institutional issues.

Re-composition of CIGs

As a CIG's work progresses, new issues may arise that require inputs from organizations that are not represented on the CIG. There are two solutions to this: to invite a new member to join the CIG, or to request a resource person to come in on a temporary basis.

The Ghana CIGs have used both approaches. For example, the cocoa CIG uncovered a problem with credit arrangements for inputs such as fertilizer. The benefits from such inputs typically occur two or three seasons after the fertilizer is applied, but the loan must be repaid at the end of the current season. The CIG invited a specialist on rural finance to join the CIG to deal with this issue. Similarly, the oil palm CIG invited someone from the Environmental Protection Agency and the district health service to join it in order to deal with environmental issues associated with the processing activities.

The food security CIG invited a police representative to act as a resource person, rather than to join the CIG as a full member. This was because the CIG wished to have specific questions answered: a resource person was sufficient to do this. For the cocoa and oil palm cases, a permanent CIG member was needed to facilitate a process of change.

Another example of re-composition was when a CIG's operations shifted geographically, or from one level to another in the administrative hierarchy. In the food security CIG, the focus shifted from the regional to the district level. This made it necessary to recruit two new, district-level CIGs. This was done by asking the regional CIG to suggest people who could be invited to join the district-level groups. Transparency, tact and diplomacy are vital in such cases to avoid misunderstandings.

SCALING UP

Spreading the word

The CoS-SIS programme management team has organized several national workshops to raise awareness of the need to tackle institutional as well as technological problems, and the CIG approach of doing so. These have involved various stakeholders: the parliamentary committee on agriculture and poverty, the Ministry of Food and Agriculture, research organizations, farmers' and processors' organizations, and academics. This and other efforts have raised interest among the national and district legislatures in the CoS-SIS approach to institutional change.

Working within organizations

The programme management team has used a similar approach to share its approach within each of the organizations represented on the team (Box 10.1). These workshops aim to enable information exchange and to institutionalize the multi-stakeholder approach within these organizations. A typical one-day workshop includes presentations by the CoS-SIS national programme

coordinator and by the CIG research associates and CoS-SIS doctoral candidates, followed by small-group discussions on how to incorporate the CoS-SIS approach into the organization's own research and development agenda. The output from these groups forms the basis of an action plan for institutionalizing the CoS-SIS approach in the organization.

The University of Ghana has a key role to play in developing human resources for the country as a whole. Incorporating the CoS-SIS approach into the university will require a review of the current academic programme and revising curricula to address institutional aspects and multi-stakeholder approaches. Similarly, new curricula are also needed at lower levels in the education system.

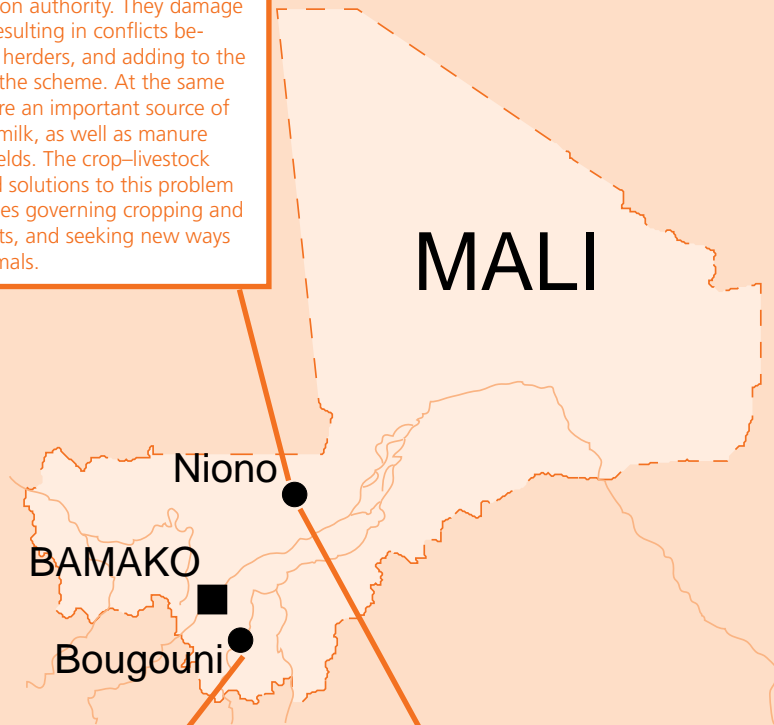
Mali



Cattle act as a store of wealth as well as a source of meat and milk

Photo: Bara Ouologuem

Integration of crops and livestock. Every year during the dry season, hundreds of thousands of cattle migrate into a large irrigation scheme managed by the Office du Niger, a government irrigation authority. They damage crops and canals, resulting in conflicts between farmers and herders, and adding to the costs of managing the scheme. At the same time, the animals are an important source of income, meat and milk, as well as manure that fertilizes the fields. The crop–livestock CIG is trying to find solutions to this problem by adjusting the rules governing cropping and livestock movements, and seeking new ways to manage the animals.



Shea. The shea tree, which grows wild throughout West Africa, produces nuts that can be turned into a “butter” that is used in cooking and is an important ingredient in cosmetics and chocolate. It is a big source of income for rural Malians. Almost all the shea production and processing is done by women, so it offers opportunities to improve their incomes and livelihoods. Much of the shea butter is of poor quality and fetches low prices. Shea producers are poorly organized, and marketing and the availability of credit are inadequate. The shea CIG is trying to help the cooperatives get access to credit. This should enable them to increase their output and quality, so they can earn more. This in turn will make it more attractive for shea producers to organize themselves into co-ops.

Water resource management. The irrigation scheme managed by the Office du Niger suffers from poor maintenance. Farmers are supposed to maintain the tertiary canals that deliver water to their fields, but they are unaware of their responsibilities, and misunderstandings and disputes are common. Maintenance of the larger canals (the responsibility of the Office du Niger and the state) is sometimes late, leading to poor flows and dry (or flooded) fields. Levels of mutual trust between the farmers and the official bodies are low. The CIG aims to address these issues.

11

Crops and livestock in Mali

Bara Ouologuem

IT'S OCTOBER, and the rainy season is over. There is less and less grass on the plains that line the broad Niger valley. There is less water too: the many natural depressions are beginning to dry out. Hundreds of thousands of cattle are on the move, heading towards the irrigated lands in the Cercle of Niono, 100 km from the regional capital of Ségou in central Mali.

But the rice is still not harvested. The farmers post guards to protect their fields of ripening grain. But many fields are trampled and grazed by the hungry animals. For the farmers, it means a shattered harvest.



As other water points dry up, cattle have to move into the irrigated areas to drink

Photo: Bara Ouologuem

Box 11.1. Members of the Mali crop–livestock CIG

Value chain actors

- Manager of small-scale dairy (1)
- Farmers/livestock keepers (6)
- Livestock keeper (1)
- Livestock trader (1)



- Faranfaci So (NGO involved in microfinance) (1)
- Livestock researcher (1)

Service providers

- Service Local des Productions et des Industries Animales (government extension service) (1)
- Private veterinarian (1)



Regulators

- Office du Niger (management of irrigation scheme) (1)
- Mayor of Niono (1)



RICE AND CATTLE DON'T MIX

Most of the 12 communes in Niono have agreements to regulate the movements of cattle: they specify when the cattle have to leave the area before planting time at the start of the season, and when they will be allowed back in to graze on the stubble and fertilize the fields with their dung.

But not everyone knows the rules, and not everyone follows them. Some of the rules are written only in French, Mali's official language, while the farmers and herders speak Bambara. The rules tend to be agreed on by councils of village chiefs, who fail to inform the villagers or the herders. And the agreements may be too rigid or too loose: they fail to reflect variations in the weather or the needs of farmers and herders. An early start to the rainy season may mean that farmers want to start planting early – meaning that the animals have to leave sooner than agreed. Poorly supervised cattle stray easily into neighbouring plots where crops may be growing. Fights break out between angry farmers and desperate herders.

THE CROP–LIVESTOCK CIG

The Mali crop–livestock CIG includes representatives of the farmers (many of whom also own cattle) and livestock keepers, as well as a dairy, a livestock trader, the extension agency and other service providers, the mayor of Niono and the Office du Niger (the government authority that manages the irrigation scheme) (Box 11.1).

The CIG is trying to find solutions to the conflict between the farmers and livestock keepers in Niono Cercle. These problems involve both institutional and technological aspects. Questions include how to reconcile the interests of farmers and livestock keepers, and how to adjust livestock management so it fits in an intensively cropped area. Livestock (which have legs so can move) tend to be more flexible than crops (which have a fixed growing season), so most of the changes necessarily involve adjustments to the livestock management system.

Table 11.1. Framework for the Mali crop–livestock CIG

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Damage caused by animals to crops and irrigation canals	Lack of understanding of rules and regulations governing cropping and animal movements	Change attitudes and behaviour of farmers and herders Raise awareness of rules and regulations Rules and regulations	Text of agreements
Behaviour of livestock owners and herders	Extensive livestock keeping in an intensive crop production area Animals kept for prestige rather than profit	Intensify livestock keeping practices	Traditional values of livestock keepers

“ONE FINGER CANNOT LIFT A ROCK”

Before the CIG was formed, its member organizations had relatively little to do with one another. Some did not even know that the others existed. The only real link was between the dairy and the livestock keepers who produce milk. The Office du Niger is a powerful body that tends to impose decisions in a top-down manner, without consulting with the farmers. The CIG has given an opportunity for the various organizations to come together to discuss topics of common interest on an equal basis.

At the outset, the research associate found it was necessary to stress the need to work together to achieve common goals. Two local proverbs were useful to explain this. “One finger cannot lift a rock” shows the importance of working together. “Don’t wait to be told what to do if you have to do it anyway” stresses the need to take initiative and not always rely on others. The research associate sometimes repeats such sayings at CIG meetings to convince members that they can achieve what they want if only they try.

RAISING AWARENESS

The CIG has identified three types of interventions to overcome the problem of animals damaging standing crops. The first of these is to make sure that everyone knows what the current rules are, and to enforce the rules in an appropriate way. The CIG is arranging for the key parts of the rules and regulations to be translated into Bambara and simplified so they are easy to understand. Copies will be made available to the chief of each village.

To help everyone understand the rules, the CIG organizes meetings in each village where an expert can explain the rules in Bambara, and can answer questions. A theatre group accompanies the team to present sketches on topics such as livestock management or a conflict between a farmer and a herder. Presenting the information in an entertaining way helps the local people understand the issues and how to avoid problems. A local radio station records interviews and debates for broadcast to a wider area.

It is best to resolve disputes locally if possible; indeed, the current rules provide guidelines for this. Part of the campaign is to make sure that people understand the procedures and refer complaints to the village authorities. Disputes are forwarded to the formal justice system only if they cannot be resolved locally.

The CIG monitors the impact of this campaign by recording the amount of damage caused by animals, the number of conflicts recorded in each village, and how each conflict was resolved.

► *Raising awareness on everybody's rights and duties is vital for harmony.*



REVISING THE RULES

The CIG's second general approach is to revise the rules so they are more appropriate. Neighbouring communes specify different dates for when the cattle must depart from the irrigated area, and when they will be allowed back in. But animals may stray across the commune boundaries, into fields that have not yet been harvested. Better coordination is needed to avoid such problems.

The dates should also be flexible to take into account the rainfall (which affects the amount of pasture outside the irrigated area, and the movement of animals) and water levels in the River Niger (which affects the irrigation of the fields). The rules need to reflect these variables. And it is necessary to keep everyone – farmers and herders – informed about changes.

The Office du Niger (the government body that manages the irrigation scheme in Niono) is planning a workshop to discuss these issues. The CIG will take part, along with local authorities, extension services, NGOs, farmers' groups and lawyers. The CIG proposes adjusting the "contract plan", a broader agreement that governs relationships between the central government, the Office du Niger, and the farmers. This plan is due for revision in 2012.

The CIG will propose several changes to the contract plan:

- Incorporating the agreements on livestock movements into the contract plan.

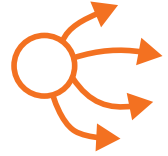


Transporting rice straw to the house to feed cattle during the dry season

Photo: Bara Ouologuem

- Setting (or at least coordinating) the rules at the Cercle (district) level rather than setting them in each commune separately.
- Introducing flexibility: establishing a committee to monitor the rainfall on a yearly basis and adjust the dates of the animal movement accordingly.
- Encouraging farmers to keep a smaller number of cattle intensively rather than a large number in mobile herds.

► *Even if the CIG cannot change an institution immediately, it may be able to find ways to influence it by proposing gradual changes. This emphasizes the need for cumulative learning and creating momentum.*



CHANGING HOW CATTLE ARE KEPT

This third and last intervention needs some explanation. Changing the dates that cattle come in and out of the irrigated area may prevent damage to crops, but will not prevent damage to the irrigation canals and other structures. Thirsty cattle will still wade into the water, eroding the banks and causing the canals to silt up. Hundreds of thousands of hooves will still destroy the bunds and furrows that pond and guide water through the fields. Repairing such damage is time-consuming and labour-intensive.

A more permanent solution is to change how the cattle are kept. Some 70% of the cattle are owned not by the herders but by the farmers: the farmers invest their profits in cattle, and entrust them to herders to look after. That means it is often the farmers' own animals that damage their crops and irrigation structures.

It would be more efficient for each farmer to keep a smaller number of cattle (say, five) permanently at the farm, rather than having a large herd managed by someone else. The farmer would need to grow fodder to feed the cattle, but this would take only a small portion of the farm area. The farm family would have a year-round supply of milk, as well as manure to use as fertilizer on the fields. They could employ a former herder to look after the animals.

The CIG aims to test this system with a series of experiments to find the best way to feed and house the cattle, to measure the economic benefits, and to explore the marketing of milk to a dairy in Niono.

► *Discussions tend to be dominated by the interests of the state, the irrigation authorities and the farmers. There is a danger that the interests of the herders are neglected. The CIG should take the opportunity to ensure that the herders' voices are heard by expanding its membership to include more herders' representatives.*



OVERCOMING INGRAINED ATTITUDES TOWARDS PROJECTS

Before CoS-SIS began, people assumed that the programme would make available large amounts of funding to buy equipment or pay for activities. Disseminating information and working together were not seen as important. Every group of actors complained about this. They wanted funding; they were not inspired by a project in which they could “learn” and “talk”. They were used to something else.

To potential CIG members, the word “project” conjures up images of lots of donor money. So the first reaction to hearing about a new project is to make a wish-list and appeal to the project to fund it. These wish-lists are not generally the result of greed or a hope of getting rich quick, but rather because the agricultural sector faces many basic challenges: a dire lack of equipment, expensive inputs, and inadequate transport, to name just a few.

These ingrained attitudes are the result of many years of development “assistance” and are familiar to all project managers. CoS-SIS was no exception. People expected CoS-SIS to act like other projects. This was a problem for the research associate. During the exploratory study, several socio-professional organizations spoke about their concerns, but without mentioning the support they already received. After much pressing, some actors acknowledged that they had received training and equipment from projects. They also acknowledged that they had used innovative technologies, but had not continued to do so once the project came to an end. When asked why, they admitted it was due to their own lack of perseverance: people tend to quickly fall back into their former habits.

Development assistance – whether national or international – has deadened the sensibilities of producers and taken away any sense of initiative in decision-making, self-promotion and innovation. The CoS-SIS “project” was faced with this tenacious legacy.

Despite repeated explanations as to the nature of this project and its objectives – and with particular emphasis given to the sustainability of the approach, some critics still posed the questions, “what do we get from your project?” or “what has your project done for other people?”

To address the handicap of working in a project-overloaded nation, the research associate and doctoral candidate have, during CIG meetings, consistently explained the lack of sustainability of typical development interventions, as eventually the projects will come to an end. The temporary nature of projects has been explained to the CIG. But past projects are still sharp in people’s minds, so the research associate and doctoral candidate use these as examples of a style of development cooperation that just does not work when institutional change is at stake.

But the process of changing long-held perceptions is a long one. It is one that the research associate and doctoral candidate continue to struggle with in engaging members of the CIG.

Yet, talking and learning was exactly what these actors needed to do. They had not really ever thought about the root causes of their own behaviour and the impact they have on other stakeholder groups. An example is the disagreement between farmers and herders when the animals damage fields and irrigation systems. Each farmer owns both the field and the animals; but the animals are cared for by a herder who is essentially an employee of the animal owner. Yet the farmers block the animals’ routes in order to cultivate rice or other crops, and the animals end up damaging the crops. When that happens, the herder is always to blame – even though he is the responsibility of the farmer-employer. The herder in turn blames the farmer who has blocked the animals’ path.

- *Past development efforts leave traces of experience that can hamper efforts to engage in a new way of working.*



FINDING A BALANCE BETWEEN FORMAL AND INFORMAL

The CIG is intended to be a temporary structure set up to solve a particular institutional constraint. So right from the first meeting, members began asking about the need to keep track of the activities and decision-making process of the CIG. Was it necessary to remember and to trace the history of a temporary platform?

The members of the CIG initially wanted to establish an office with official positions typical of any Malian organization, with a president, vice-president, organizers, secretary, information manager, and so on. This way of organizing the CIG would mirror that of an association. But during subsequent meetings with the research associate, it was clarified that this in fact contradicted the intended temporary character of a CIG.

However, in Malian society no organization can function without certain things in place – not even for a single day! It must convene meetings, organize discussions, etc. So the CIG asked how it could possibly reconcile these two needs: to respect its own temporary nature, and at the same time set up an office that meets Malian norms? After reflection and much discussion, it agreed to establish an office to facilitate its work, but without the usual financial or material assets. The CIG’s “officers” do not receive a salary, and the office exists only to organize the CIG’s work. The office cannot be mentioned in any official documents of the CIG and the CoS-SIS as it functions purely for the Malian context.

- *Sometimes compromises need to be made in order to adapt a CIG to the local, regional or national norms or laws that govern organizations and organizing for change.*



12

Water management in Mali

Soumano Lassine

JUNE 2011 – Sidiky Coulibaly watched the level of water in his field. It was rising slowly but surely, and his rice plants were drowning in the flood. What had looked to be a promising yield would be cut by at least one-third: he knew he would lose at least two tonnes of grain a hectare.

He knew the source of the problem: a layer of silt had built up under a bridge where the water drained out into the main canal. Unable to flow away, the water was backing up into his field. There was so much silt that he could not hope to move it himself.

He alerted the local bureau of the Office du Niger, the government body that manages the secondary canals in the irrigation scheme. They said that the bridge had been built at the request of the villagers of Kouyan Coura, so it was up to them to maintain it. He went to the village chief, who sent him back to the Office du Niger: the villagers were responsible for the smaller canals, not the big infrastructure, he said.

Meanwhile, the water continued to rise...



An irrigation canal clogged with weeds

Photo: Soumano Lassine

Box 12.1. Members of the Mali water management CIG

Value chain actors

- Small-scale farmers (5)
- Farmers' cooperatives (2)



- Local council member (also member of the Haut Conseil des Collectivités, a national body representing regions) (1)
- ROCAM-II (financial organization for women, part of the Office du Niger) (1)

Service providers

- Rural Economy Institute (Institut d'Economie Rurale, IER) (1)
- Nyeta-Conseil (non-government organization) (1)



Service providers/regulators

- Local bureaus of the Office du Niger at Niono and Molodo (irrigation management authorities) (2)



THE MALI WATER MANAGEMENT CIG

The Mali water management CIG currently consists of 13 people who represent small-scale farmers and their cooperatives, various service providers and the local bureaus of the Office du Niger (Box 12.1).

The CIG aims to improve the livelihoods of small-scale farmers in the irrigation scheme. To do this, it chose the “contract plan” as its entry point. This is a bulky document that specifies the division of responsibilities between the central government ministry (which is in charge of maintaining the primary canals), the local bureaus of the Office du Niger (which manages the secondary canals), and the farmers (who handle the tertiary canals that lead to their fields). There are several problems associated with the contract plan: the text is not appropriate, people do not know what it says, and it is not enforced properly.

The contract plan has its shortcomings, but is a lot better than what it replaced. Under the dictatorship that ruled Mali until 1991, farmers were treated as labourers: they were forced to hand over the bulk of their output to the Office du Niger, and were allowed to retain only a certain number of kilograms per family member. After the advent of democracy in 1991, things began to change. The contract plan was drawn up in 1994 and the rice market was liberalized in 1996: the farmers are now free to grow what they want and sell it on the open market. Nevertheless, the Office du Niger is still a powerful organization that tends to act in a paternalistic way.

The CIG identified two major issues to address: the management of the irrigation water, and the conflict between crops and livestock (Table 12.1). This chapter focuses on the first issue. For the second, see Chapter 11.

GETTING SUPPORT FOR THE CIG

The research associate faced two immediate problems in forming the CIG. One was to convince powerful actors in the Office du Niger to take the CIG initiative seriously – and to agree to take part.

The research associate has a PhD in water management and teaches at the Rural Polytechnic Institute at Katibougou. This made him a neutral party in negotiations and gave him a degree of

Table 12.1. Framework for the Mali water management CIG

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Water management: Office du Niger does not allocate water appropriately Farmers waste water	Contract plan (governs relations between farmers, Office du Niger and state)	Monitor technical supervision Maintain canals	Contract plan
Crop/livestock management Managing stray animals Canals damaged due to limited bridges and herding routes for animals Lack of respect for cropping calendar	Contract plan Commune agreements on dates for animals to enter and exit irrigated zone	Create herding routes Encourage conformance with cropping calendar Coordinate timing of cropping and livestock activities	Contract plan, agreements

credibility. In preparing to establish the CIG, he visited several government offices and met senior managers in each one. They gave their enthusiastic support for the CIG initiative. The doors of the Office du Niger were open!

BRIDGING WORLDS: THE POWERFUL AND THE WEAK

The second problem was to build trust between the weaker actors and the powerful government bodies, and to ensure that the farmers had a voice.

One particular meeting illustrates this well. In December 2010, the CIG met to discuss why various actors were breaking the terms of the contract plan. Everyone spoke in turn. But when it was the four farmers' turn, only one decided to speak, and he just made jokes. He did not say what he thought.

After the meeting, the research associate went to see the chief of this man's village. The chief said that this was quite normal: he had made jokes because the Office du Niger staff were just lying. If you tell the truth, he said, the staff would stop your irrigation water. If you go to report that your field is flooded, they charge you for the water even though they are in charge of opening and closing the irrigation gates. "If you put a cat and a mouse together, don't expect the mouse to say anything," he said.

The research associate tried to persuade the chief and the farmer-members of the CIG to express their opinions, but to no avail. So he went to see the mayor of Niono, and they went to see the village chief together. The mayor assured the chief that the farmers could complain to him if they suffered because they had spoken up. That was enough to convince the chief, who instructed the farmers to be open in the future.

As a result, the farmers have begun to express their true opinions, and discussions have become a lot more useful. Mutual understanding has increased, and each party has become aware of why the others fail to respect the terms of the contract plan:

- The farmers think it is the job of the Office du Niger to perform routine maintenance of the tertiary canals, even though the contract plan states this is the farmers' role. But the document is written in French and is not available to farmers, so they have no way of knowing this.
- The Office du Niger complains that the farmers do not pay their water fees on time, and state grants are often late. That makes it impossible for the Office to pay to maintain the larger canals.

The CIG plans to propose revisions in the contract plan to resolve these issues.

- *It is extremely difficult to ensure that the least-powerful have a voice. The research associate had an important role in understanding the problem and in helping to solve it. It was essential to use the traditional system, which is also based on power, to counteract the power of the Office du Niger.*



RAISING THE LEVEL OF THE CIG

Initially, the CIG invited a number of farmer-representatives who knew about the problems facing rice growers. As described above, they were reluctant at first to express their views. As a result, the officials dominated the proceedings.

The CIG has now a better understanding of the problems facing small-scale rice farmers in their dealings with the Office du Niger. But it has learned that the solutions are not to be found at the local level: they concern the contract plan, which is negotiated at a higher level. It is necessary to change the composition of the CIG to enable it to play a role in these negotiations.



Cleaning a canal

Photo: Soumano Lassine

The flexible nature of the CIG makes it easy to identify and invite new members, such as NGOs or irrigation officials at the regional or national level. It will also be necessary to have farmer-members who are more broadly representative of other villages in the irrigation scheme and who can express their views and negotiate with high-ranking officials. The current farmer-members do not have the skills or knowledge to do this.

There already exists an organization of farmers in the irrigation scheme, but it functions in only a few villages. It may be necessary to arrange elections for villagers to choose new people with the right skills to represent them in the CIG.

- ▶ *It is not easy to identify the best level of intervention. Sometimes it is through experience that the right level is discovered. The CIG is flexible enough to adapt easily to such evolving needs, even though it requires some tact to change its level and composition.*



...SYMPTOM OF AN INSTITUTIONAL PROBLEM

Let us return to the story that opened this chapter. By chance, Sidiky Coulibaly lived in the village where the CIG was operating. The village chief asked the CIG to intervene with the Office du Niger. The research associate and a CIG member visited the local bureau and asked to see the contract plan. Surprisingly, the local bureau did not have a copy, so the research associate had to go to the head office in the regional capital of Ségou. And when he did find a copy, the document was vague about who was responsible.

Meanwhile, the water in Sidiky Coulibaly's fields continued to rise...

The CIG met with the village chief and the farmers who were affected. It was their livelihoods that were at stake, the CIG argued, so they had little choice: they would have to take action. Convinced, the farmers organized themselves into a working party to clear the silt. It took six men four days to clear the blockage.



Sluice-gate before cleaning

Photo: Soumano Lassine

Problem solved – for the time being. But such problems are common in many irrigation schemes: fuzzy rules and a lack of information lead to disputes about who is responsible for what. The CIG recognized that a more permanent solution was needed.

The key is to revise the contract plan. The government revises this document every five years: the next revision is due in 2012. The CIG has begun reviewing the document so it can suggest changes to the ministry to take advantage of this window of opportunity. It has already identified several key suggestions:

- Translate the document into Bambara, the local language, simplify it to make it easy for farmers to understand, and make it available in each local bureau.
- Create a commission to monitor the contract plan at the national level.
- Revive moribund farmers' organizations by raising the members' awareness of the need to get organized to solve problems that affect them.

► *Solving a problem quickly motivates people to engage with the CIG, leading to suggestions for longer-term improvements.*



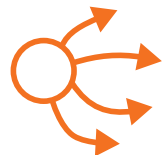
MARKETING RICE

Since the market was liberalized 15 years ago, traders have come to dominate the rice trade. They offer low prices to farmers, then store the grain until the price rises so they can sell it for a big profit. The farmers are left with paltry returns. They have no way of storing their rice themselves.

The CIG is seeking ways to overcome this. One possibility was to find ways for the farmers to get loans to cover the cost of production and marketing. But many farmers are not creditworthy because they are in arrears on previous debts. The CIG looked for an alternative approach.

A promising avenue is in marketing. Farmers currently sell their rice individually to powerful traders who are able to keep prices low. The CIG has suggested that the Office du Niger allocate some unused buildings in two locations in the irrigation area to use as rice warehouses. The farmers could organize themselves to bring their rice there to store it until it can be sold in bulk at a higher price. The CIG is exploring the farmers' interest in such an idea and is negotiating with the Office du Niger for the use of the buildings.

► *There are often several possible solutions to a problem. Some are blocked by obstacles that are too hard to surmount (such as a poor credit history). It is necessary to look for opportunities (such as empty buildings) to find ways around such obstacles.*



13

Shea in Mali

Fadiala Dembele

THE SHEA tree is a big source of income in southern Mali. Farmers – the vast majority of them women – harvest the nuts and either sell them fresh, or roast and pound them to make a type of butter that is used in everything from sauces to cosmetics and chocolate. Fearful of going hungry, farmers are reluctant to sell the maize and sorghum they grow, so shea is often the family's main source of income. It is the women who control the harvesting, processing and sale, so it is they who control the money that comes in. They use it to pay school and medical bills, to buy clothes and food, and to pay for expenses such as wedding ceremonies.

Making shea butter is a skilled and time-consuming business. But many women lack the necessary expertise and equipment. The butter they produce tends to be discoloured and smells of smoke. It fetches a low price. Only about one-fifth of the producers are organized into cooperatives that produce higher-quality butter, which finds eager buyers in the cosmetics and chocolate industries in Asia and the West.



A member of the Zantiébougou cooperative extracting emulsion from shea nuts. Cooking this emulsion results in shea butter.

Photo: Fadiala Dembele

Box 13.1. Members of the Mali shea CIG

Value chain actors

- Zantiébougou Shea Producers' Cooperative (COOPRO-KAZAN) (3 representatives)



Service providers

- Society for International Development Cooperation (SOCODVI) (NGO that supports business development)
- Malian Association for the Advancement of Youth (AMPJ) (NGO that supports the Zantiébougou co-op)



- National Bank for Agricultural Development (BNDA)
- Institut Polytechnique Rural (IPR/IFRA), Katiébougou (training and research institute)
- Rural Economy Institute (Institut d'Economie Rurale, IER), Laboratory of Food Technology
- Chamber of Commerce and Industry of Mali (CCIM)
- Permanent Assembly of Chambers of Agriculture (APCAM)

Regulator

- Ministry of Promotion of Women, Family and Children (MPFFE)



The cooperatives buy nuts from their members as well as from non-members who have been trained to produce high-quality nuts. But they lack the capital to buy large amounts of nuts. That forces producers to sell their nuts to traders, who often offer only half the price set by the co-op.

Boosting the capital of the cooperatives would enable them to increase their capacity, boost the output of export-quality butter, and attract more members. How to do this?

THE MALI SHEA CIG

The Mali shea CIG was established in 2011 to address institutional issues in the shea value chain in Mali. It aims to improve the income and living conditions of women who harvest and process shea. It works mainly at the local level with the Zantiébougou Shea Producers' Cooperative (COOPROKAZAN).

In discussions with the cooperative, the CIG identified four institutional constraints that hampered the shea value chain in Mali (Table 13.1):

- The difficulty in getting credit to buy nuts and invest in equipment.
- Low output and poor quality of butter produced by the majority of women producers.
- A lack of participation by cooperatives in state-organized fairs and commercial events.
- Poor-quality packaging that reduces the competitiveness of Malian shea butter in export markets.

This chapter discusses the first of these issues – the CIG's main focus so far.

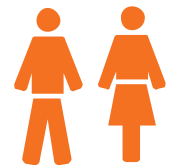
Table 13.1. Framework for the Mali shea CIG

Current undesirable activities	Institutional reasons	Activities to carry out	Institutions to be changed
Difficult to get credit to buy nuts and invest in equipment	Lack of links between co-ops and microfinance institutes and banks (lack of trust, perceived risks)	<p>Improve links between co-ops and financial services</p> <p>Create a framework for consultation between co-ops and financial services</p> <p>Strengthen co-ops' management abilities</p>	<p>Rules of financial services:</p> <ul style="list-style-type: none"> • Loan amounts • Interest rates • Loan periods
Low output and poor quality of butter of most producers	Traditional roasting methods not suited for high-quality butter production	<p>Improve processing methods</p> <p>Improve harvesting and transport equipment</p>	<p>Harvesting, processing and transport methods</p> <p>Relationships between co-op members and non-members</p>
Lack of participation by co-ops in state-organized fairs and trade events	Inadequate state support (low policy priority)	Invite best co-ops to participate in events	<p>Criteria for inviting co-ops to participate</p> <p>Organize a commodity exchange for shea</p>
Poor-quality packaging reduces export competitiveness of Malian shea butter	Lack of linkages between co-ops and packing industry	Create links with packing industry	Create rules for collaboration among actors

BRIDGING THE GENDER GAP

Shea is a woman's world: nearly all the shea producers and processors in Mali are women. But in the CIG, all the service providers are men. It is the task of the (male) research associate to bridge these two worlds. This can be a challenge. He has to listen carefully, be patient, and be available at all times. It is necessary to win the women's trust and sometimes to mediate problems among the women, and explain the women's point of view to the men, and vice-versa.

- *Make sure that women's points of view are well reflected in the discussions and decisions.*



ARRANGING CREDIT

Banks and microfinance institutes in Mali rarely lend to agricultural enterprises: they see them as risky, and farmers lack the organization and credibility to qualify for loans. Most producers are poorly educated and organized, and lack the skills to develop a business plan and the confidence to apply for a loan.

A shea fruit vendor in the city centre of Bamako

Photo: Fadiala Dembele



The Zantiébougou cooperative had previously applied for a loan of FCFA 3 million from a local bank at Bougouni, but the bank agreed to lend only FCFA 2 million. The cooperative used this to buy shea nuts and repaid the amount in full. It then asked for FCFA 5 million, but the bank refused, telling the women from the cooperative to go to its head office in Bamako instead, and to make the request there. This discouraged the cooperative from exploring further loans.

The CIG helped the Zantiébougou cooperative to develop a simple business plan – something that all financial organizations need if they are to consider offering a loan to an enterprise. The CIG also identified a bank and three microfinance institutes as potential sources of credit.

The first attempts to contact these financial organizations were disappointing. The CIG research associate visited each one, but was rebuffed: he lacked the credibility and linkages needed even to get an interview.

The CIG did not give up that easily. It formed a team of five people, including the president of the Zantiébougou cooperative, and asked one of the women members (the representative of the Ministry for Women) to phone each financial organization to request an interview. This took advantage of a feature of Malian culture: it is not polite to reject a request if it comes from a woman. That is to say that even if a male government minister had tried to get a meeting, he too would have failed, unless it was specifically to discuss an official government project.

That opened the doors. The team met with each of the four financial organizations and presented the cooperative's business plan and explored the conditions for a loan. Each of the financiers stated they were ready to offer a loan, and listed their conditions: loan amounts, collateral, down-payments, interest rates, and so on.

After evaluating the loan conditions, the CIG team chose one: Soro Yiriwaso, a microfinance organization based in Bamako with a branch in the town of Bougouni, near Zantiébougou. Two weeks later, staff from Soro Yiriwaso visited the cooperative to check on the cooperative and see if it was a good credit risk.

As a result, Soro Yiriwaso and the cooperative signed a memorandum of understanding, and Soro Yiriwaso agreed to provide a credit line of FCFA 15 million. The cooperative has used this to buy shea nuts, and is in process of repaying the loan.

- ▶ *It is important to understand the requirements and procedures of financial service providers (such as how to prepare a business plan in the correct format). But this may not be enough: it is also important to understand cultural norms (such as the Malian respect for women) that enable you to open doors that might otherwise remain closed. The research associate had a key role in analysing the blockages for accessing credit and finding innovative ways to adapt. This highlights the need for adaptive management.*



IMPROVING FINANCIAL MANAGEMENT

If a cooperative gets a loan, it needs a good financial management system. It has to control its stocks of shea nuts. If the price rises and falls, it has to choose the right time to sell. It needs to find a buyer and negotiate a good price. It needs to be able to repay each loan instalment on time – which means keeping enough cash in hand. One member of the CIG, SOCODVI (an NGO that specializes in business development) trained the cooperative management in these skills.

The cooperative opened a bank account with Soro Yiriwasso to enable it to make repayments regularly. The microfinance organization has offered the prospect of a second, larger loan if the current loan is repaid successfully.

- ▶ *Introducing one change – in this case, a loan – may require a whole lot of other changes in how an organization is managed and how it does business. It may be necessary to build capacity by training staff*



Green shea fruit and brown nuts

Photo: Fadiala Dembele

and ensuring they have new types of equipment. This means that in the short term, more support, not less, may be required. The types of support are also likely to change, so it may be necessary to bring in new actors who are able to provide these services. This points at the need for flexibility in CIGs.

SCALING SUCCESS

The Zantiébougou cooperative is just one of dozens of shea cooperatives in Mali – all of which face similar problems in accessing credit. The CIG regards its work with the co-op as an experiment: if it is successful, it will try to replicate the approach with other co-ops throughout the country.

The mechanism to do this already exists: a national network of shea cooperatives called SIDO Karité (*karité* is French for shea). This network exists but encounters problems because of disputes among the various members. Gaining access to credit could give them a common purpose and strengthen collaboration within the network.

The president of the Zantiébougou cooperative is currently also the president of this network. This is an ideal opportunity to disseminate lessons from Zantiébougou to a much larger group.

The CIG is planning a consultation workshop in early 2012 to describe the Zantiébougou experience and explore ways to help other co-ops get access to credit. Various microfinance institutes have been invited to this event so they can discuss how to do this.

A small-scale experiment like the one with Zantiébougou is by its nature not replicable. It would not be practical to go through the same procedure with every one of dozens of cooperatives in Mali. Rather, it provides a successful example that shows that shea co-ops are bankable. This example can be used to convince the financial organizations to open credit windows for all the other cooperatives.

- ▶ *When introducing an institutional change, it is important to consider how it can be scaled up. In this case, SIDO Karité is the obvious mechanism: it brings together all the shea cooperatives in Mali, and offers a platform for negotiation with various microfinance organizations. If SIDO Karité did not exist, it might be necessary to create it in order to scale up this (and other) innovations.*



14

Opening the doors to powerful actors in Mali

Mamoudou Traore

IN MALI, agricultural research is coordinated by the National Committee on Agricultural Research (CNRA). The Rural Economy Institute (IER), the Central Veterinary Laboratory (LCV), the Rural Polytechnic Institute for Training and Applied Research (IPR/IFRA) and the University of Bamako are the elements of this system.

CNRA works with the National Commission for Users of Research Results (CNU), which includes branches in each of the country's regions. These, together with regional committees covering agricultural extension, training and research, identify farm-level problems that need solution.

In 2008, CNRA organized a group of national-level organizations, including the government, major NGOs, universities and farmers' organizations to identify priority areas for agricultural development in Mali. The six areas identified included three crops (mangoes, potatoes and shea) and three management approaches: the management of surface water, integration of livestock and crops, and flood-recession agriculture (growing crops on land left dry after the annual floods of the River Niger recede).



A member of the Zantiébougou cooperative making shea butter

Photo: Fadiala Dembele

Box 14.1. Programme management team, CoS-SIS Mali

Government development agencies

- National Director of Agriculture (DNA)
- National Director of Animal Production and Industries (DNPIA)



NGOs

- Representative of NGOs active in Mali



Research

- Executive Secretary, National Committee on Agricultural Research (CNRA) (chair)
- Director General, Rural Economy Institute (Institut d'Économie Rurale, IER)
- Director General, Central Veterinary Laboratory (LCV)



Farmers

- President, Permanent Assembly of Mali Chambers of Agriculture (APCAM)
- President of the Regional Committee of Users of Research Results, Koulikoro region and Bamako district



CoS-SIS

- Coordinator, Mali CoS-SIS programme



Training and extension

- Director General, Rural Polytechnic Institute for Training and Applied Research (IPR/IFRA), Katibougou



THE COS-SIS PROGRAMME

Choice of domains

CoS-SIS selected three of these priority areas: shea, crop–livestock integration, and water management. It established CIGs to explore ways to overcome institutional constraints in each of these areas.

Levels of the CIGs

Two of the CIGs (water management and crop–livestock) work with the Office du Niger in Niono, the capital of the prefecture with the largest irrigated area in Mali. Both of these CIGs are composed almost entirely of members at the local and district levels: farmers, livestock keepers, local businesspeople, district officials and Office du Niger staff. The sole exception is a local government official who is also a member of a national organization of elected officials.

The shea CIG covers a broader range of levels. Its members include small-scale shea processors, cooperative board members, as well as representatives of the national ministry for women, the Malian chambers of commerce and agriculture, a research institute and a nationwide bank.

CIG functioning

The research associates initiated the first meetings of the CIGs. For other meetings, CIG members have taken the initiative themselves.

Unlike their counterparts in Benin and Ghana, the Mali CIGs have all appointed members to perform certain roles. The water management and crop–livestock CIGs have appointed a president to chair meetings and a rapporteur to take minutes. The shea CIG prefers to use the less formal term “focal point” to refer to the chair. Making such appointments was a conscious choice as the members felt the CIGs would function better if they followed generally agreed procedures.

All the CIG members receive the minutes of the meetings. They then report the discussions and decisions to their peers.

Value of partnerships

The CIGs have been able to create valuable partnerships with service providers and regulators which would otherwise remain closed to the small-scale producers. These links have facilitated the exchange of information, the avoidance of conflicts, and the provision of services.

- The shea CIG succeeded in creating a relationship between the board of directors of the Zantiébougou cooperative and various microfinance organizations.
- The water management CIG’s contacts with the head of the Office du Niger maintenance unit have made it possible to avert conflicts between farmers and local irrigation officials. The unit head also alerted the CIG to the upcoming revision in the contract plan (the rules governing the irrigation management) in 2012. This gives the CIG a window of opportunity to suggest changes in the rules.
- A judge alerted the two CIGs working in the irrigated area that a common practice (neighbouring communes agreeing to regulate the movement of animals) had no force in law. This is important information for negotiations to rewrite such rules.

Making work possible

The CIGs may enable their members to fulfil their mandates better. The head of the livestock service in Niono said that his organization was not able to provide training and awareness services because of a severe lack of funds. The CIG meetings with livestock keepers were an opportunity for him to contact them directly to give them some of this information.

CIG activities

The CIGs have been involved in a wide range of activities: obtaining credit (and opening up a credit window) for shea cooperatives, enabling an exchange of views among powerful actors (the Office du Niger) and weaker stakeholders (irrigation water users), raising awareness among producers, mitigating conflicts, training, and developing new laws.

ROLE OF THE RESEARCH ASSOCIATES

Position of research associates

None of the research associates are based in the CIG sites. They maintain contact with members by phone. They convened the first few CIG meetings, but refrained from interfering in the decisions made. They have provided additional information where needed so the CIG is in a position to make the right decisions. Where necessary, they have reminded the members of the CoS-SIS approach.

Responding to a changing political and social landscape

CIG activities are dependent on the political context. Frequent changes in the leadership of key organizations make it difficult to implement activities. The Office du Niger, for example, is on its third director in three years. Such appointments often also bring in new faces further down the hierarchy. It may be necessary for the CoS-SIS programme management team to create links with the new leaders and staff. Further changes can be expected after the presidential elections in 2012.

Mali is also undergoing rapid social change, often in an unpredictable direction. For example, people are becoming less respectful of rules such as the requirement to keep canals clean. Traditional social sanctions no longer carry the force they once did. It is necessary to redesign the management system to take this into account.

Champions

Various highly motivated members of the CIGs have emerged. In the shea CIG, one such person is the chair of the Zantiébougou cooperative. She is known for her generosity and willingness to share her experience. She makes sure that decisions are made collegially and puts the interests of the cooperative first. That gives the co-op members confidence in her: she has been re-elected twice.

In the water management CIG, one of the local councillors is also a member of a national body of elected officials. Despite this, he has rarely missed a CIG meeting. He frequently travels from Bamako to Niono at his own expense, and calls other members to make sure they attend meetings. Despite his relatively low educational level, he has a rare ability to understand and analyse issues and to persuade others.

SCALING UP

Programme management team

The composition of the programme management team reflects the main organizations involved in rural development in Mali. But several organizations are not members: the National Directorate of Rural Engineering, the Nature Conservancy, and the national offices for plant protection and for animal husbandry and fisheries are not represented. It is necessary in such a team to balance the need to be inclusive (which leads to a bigger group) with the desire for effectiveness (which requires a smaller number).

Because the programme management team is a high-level body, it is able to meet with senior ministry and university officials to inform them about the CIG activities and to request their support. Meetings are planned with the incoming director of the Office du Niger, and the ministries responsible for irrigation, agriculture and women.

University of Ségou

A new university is being built in Ségou, the capital of the region where the irrigation area is located. The University of Wageningen and the national programme coordinator have been involved in planning training and curriculum development for this new university.

Conclusions



A woman pounding shea nuts to extract the kernels at the Siby cooperative, 50 km west of Bamako, Mali

Photo: Fadiala Dembele

15

Conclusions on facilitating institutional change

Suzanne Nederlof and Rhiannon Pyburn

IN THIS concluding chapter we reflect on issues that are important for facilitating institutional change. We draw lessons from the research associates' experiences that we hope will be relevant for other development professionals. Note that we cannot yet draw conclusions on institutional change and the CIGs' achievements. The CoS-SIS programme is still in progress, so accounts on what CIGs have triggered in terms of institutional change would be premature. They will come later. In any case, presenting such results is not the purpose of this book: it is about the nuts and bolts of the facilitation process.

In this chapter we compare contextual differences and similarities between the CoS-SIS programme domains across the three countries, and draw out conclusions for facilitating CIGs. We come back to our adapted version of Tennyson's (2005) CIG cycle framework, which was introduced in Chapter 2 and adapted to the phases in the CIG process. We now turn again to this framework (Figure 15.1) to analyse the roles played by the CIG research associates and to draw lessons from their experiences. We close with some reflections on the implications of these lessons for future efforts to facilitate institutional change in agricultural and natural resource domains.

THE CONTEXT IN WHICH THE CIGS OPERATE

Although they are geographically close together, and in the case of Benin and Mali, sharing French as a working language, the three West African countries involved in the CoS-SIS programme are quite different in terms of their national context for innovation and their national-level innovation systems. This has an impact on the opportunities and constraints for innovation. It also implies different structures for collaboration, formalities and ways of working.

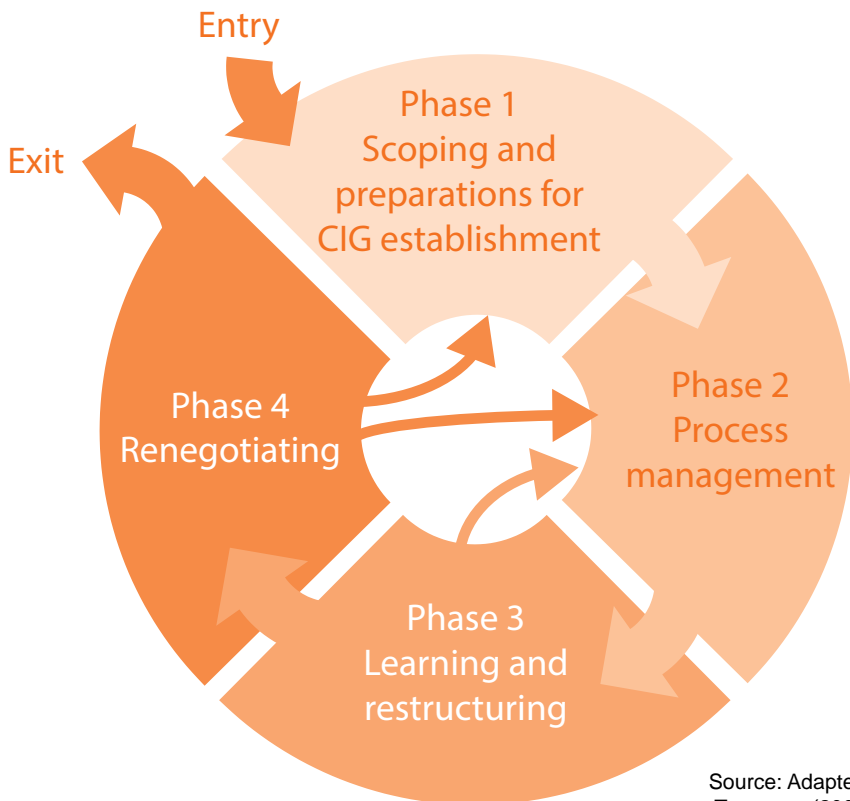
That said, some issues are common across the CoS-SIS experiences in the three countries. For example agriculture is a government priority in all three nations, and CoS-SIS fits snugly into these national policy frameworks. In all cases the domains selected took their government's priorities into account. The steps implemented by CoS-SIS as reported in Chapter 1 have been unified for all countries. Despite this common overall process, we can observe important differences in the CIG design as a result of the context they operated in.

In **Ghana**, the programme embraced current theory on innovation platforms and brokering. CIGs were put in place without a formal structure. A deliberate choice was made not to have a fixed chairperson, president or secretary. These roles are rotated among the members. Membership is also flexible.

In **Mali**, by contrast, the research associates quickly realized that members would not attend the CIG meetings if a formal “office” was not in place. Therefore the positions of president, chair, treasurer and secretary were filled by elected members. The CIG functions as a formal organization, as do most other member organizations in the country.

In **Benin** a hybrid model is followed. On one hand, research associates try to put innovation platforms theory into practice; and on the other hand, they adhere to Beninois cultural norms. This means that “elections” are undertaken for a few critical positions, but otherwise, the CIG functions in a much more flexible way than most other member organizations in Benin.

These differences in how structures for the CIGs were put in place in each country reflect the cultural and working norms of their context. The research associates and CoS-SIS national programme coordinators took these aspects into consideration when setting up the CIGs and in the planning for the CoS-SIS programme in the country.



Source: Adapted from Tennyson (2005): 60

Figure 15.1. CIG cycle framework

Back to the CIG cycle framework

The research associates reported they went through the different phases described in the CIG cycle framework (Figure 15.1) with an emphasis on phases 1 to 3. This section uses the framework to examine the research associates' roles at each phase in the cycle. From there we draw lessons on facilitating innovation platforms.

PHASE 1: SCOPING AND PREPARATIONS TOWARDS ESTABLISHMENT OF THE CIG

The scoping studies made two critical contributions: they allowed the research associates to better understand the issues at stake, and they allowed different stakeholders and potential CIG members to be identified. The processes followed were critical because they motivated people to engage in the CIG.

In each domain, several workshops were held throughout the exploratory phase to initiate stakeholder dialogue. At one of these workshops, potential CIG members agreed as to which issues they would tackle together. In some cases action plans were drawn up (e.g., in the case of water management in Mali); in others a less formal agenda was agreed upon and often renegotiated whenever CIG members convened.

Roles of research associates

An important first step for the research associates was to establish their position as facilitators within the programme, and to clarify expectations for this role. While one might consider this to be specific to the CoS-SIS programme, it can be broadened to other situations. To move forward as an innovation platform of interested stakeholders, someone needs to take on the facilitation responsibility. After some initial uncertainty about who would take this role (see Chapter 1), the research associates did this.

Key roles for the research associates (and equally for other facilitators) in a scoping and building phase include:

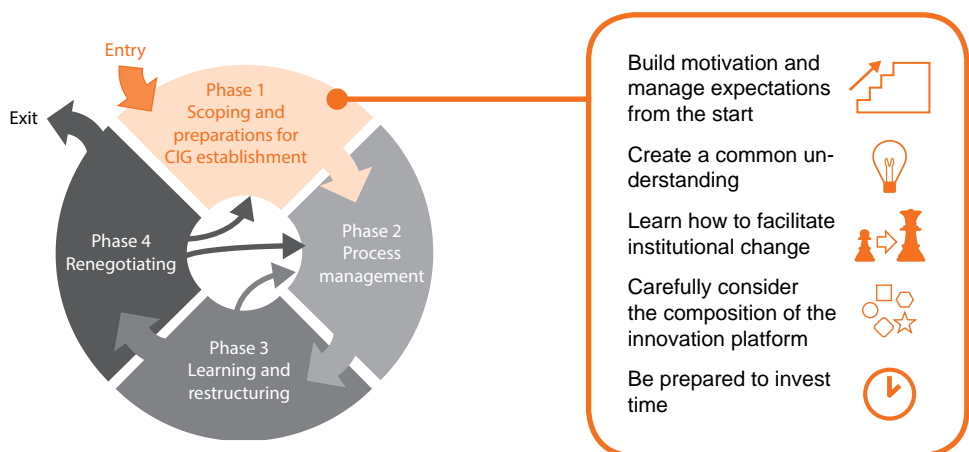


Figure 15.2. Lessons on scoping and preparations for CIG establishment, Phase 1

- Creating awareness among stakeholders in the domain
- Stimulating the various stakeholders to express what they need and expect from the platform
- Deciding who should be invited to participate in the platform
- Motivating members to engage in developing the platform and to participate in its activities
- Working pro-actively on behalf of the members
- Visioning with the group to orient activities and get the platform members to work in a common direction
- Setting ground rules in concert with the members to allow the platform to function optimally
- Following up on actions agreed by platform members.

Lessons

Build motivation and manage expectations from the start. A key first task for the research associates was to generate a sense of momentum within the CIG. They did this in a variety of ways. In the rice CIG in Benin, the research associate started by addressing a relatively easy problem, in the hope that an early success would motivate the CIG members to get involved. The intention was to move towards more complex problems in the glow of that initial success.



We saw a similar approach in the water management CIG in Mali. The research associate there made quick gains by organizing a labour party to deal with an immediate problem, even though the problem was not at the level of intervention intended for the CIG. This decision motivated members to engage in the CIG and support its mandate as well as generating suggestions for addressing the immediate problem in the longer term.

A third key lesson regarding motivation came from the Malian crop-livestock CIG. Here, it was vital for the CIG and local people to be clear about expectations right from the start.

- ▶ *Building motivation among innovation platform members is not an easy task for a facilitator, and often takes much longer than foreseen.*

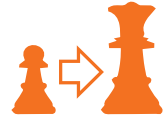
Create a common understanding. Sometimes experience leads people to be wary about participation in an innovation platform (such as a CIG). This was what the research associate in the crop-livestock integration CIG in Mali faced. Before starting the CIG, he was obliged to deal with negative relics of past initiatives. Innovation platforms do not occur in a vacuum; the facilitator must address the situation he or she faces, and address negative attitudes early on.



In the food-security CIG in Ghana, a first step was to manage the responsibilities of different stakeholders: government, community leaders and community representatives alike. They all had a role to play in managing budget expenditures and to improving drinking water supplies for animals. The Mali crop-livestock research associate came to a similar conclusion: all stakeholders needed to be aware of each other's rights and responsibilities in order for the system to function. The research associate had to ensure that this common understanding was in place.

- ▶ *Different stakeholders have different views. That is the strength of an innovation platform, but also one of its biggest challenges.*

Learn how to facilitate institutional change. Coming to grips with the principles behind facilitating institutional change through a CIG was difficult. Some research associates had experience in the predecessor CoS programme, but none had much experience in facilitating groups above the local level. Therefore, some research associates began constructing CIGs at too low a level (e.g., in a village), or had problems ensuring that the institutional issues at the heart of the programme were addressed. Shared understanding must be developed over time, and the CIG composition adapted to reflect this.



- ▶ *Few facilitators start off with the skills and understanding they need to facilitate innovation platforms. They need guidance and will have to learn on the job.*

Carefully consider the composition of the innovation platform. This lesson cuts across phases one, two and three in the CIG cycle. Having the right members is critical both at the start when an innovation platform is put in place, and throughout its life cycle. The CoS-SIS research associates intended for membership in the CIG to be flexible and changeable, depending on the problem or challenge they faced and the responsiveness and effectiveness of current membership. Indeed, members entered and exited in most cases.



The understanding was that CIG members would be selected based on their ability to make interdependent and complementary contributions to improving the conditions of smallholders. In the oil palm CIG in Benin, it was vital for the small-scale farmers that the authorized nurseries – the weak link in the system – were also involved. In fact, these nurseries had to convince the farmers of their sincerity after many years of distrustful interaction.

We deal with the re-composition of the CIG when we discuss Phase 3 below.

- ▶ *The members make the innovation platform. Get the right organizations and people involved, and half the battle is won.*

Be prepared to invest time. Facilitation requires a significant investment of time. Especially in the initial phase, the facilitator has to have enough time to do the task. Identifying and inviting the right people to join a CIG was often complicated. Keeping the CIG informed is a major task: the research associate had to talk to and learn from many different contacts. How much time the research associate has influences what is possible.



- ▶ *Facilitation takes a lot of time behind the scenes. Make sure the facilitator has time to devote to such tasks.*

PHASE 2: PROCESS MANAGEMENT

CoS-SIS aims to achieve institutional change (see also Adjei Nsiah et al. in press). But the various CIGs approach this in different ways. Some focus on strong demand from empowered farmers as the trigger for institutional change; in others, national-level actors are the driving force.

Activities may be undertaken by one, several or all members of the platform. Figure 15.3 shows how different CIG members come in at different points to engage in specific activities. Activity 1 (inputs) requires the expertise of three CIG members; activity 2 (pricing) demands the knowledge of a different three members; activity 3 appears to take place outside the membership of the CIG altogether, but one of the members who is informed reports back to the CIG about it. This simple figure illustrates the flexible and dynamic nature of the CIGs.

Research associates' roles

Once activities were agreed upon, the CIGs became operational. Some activities were (and are) undertaken by one or just a few members of the platform, while others are shared tasks done by all. In all cases the results and outcomes of these activities are reported back to the CIG at an agreed moment. For example, the doctoral candidate's experiments are reported to the CIG on a regular basis. The CIG's activities all contribute to addressing institutional constraints.

It is essential that the research associate makes sure every member can contribute his or her ideas. In some cases this is done outside of the CIG meetings, as for example in the case of cocoa in Ghana where the research associate frequently consults the members individually.

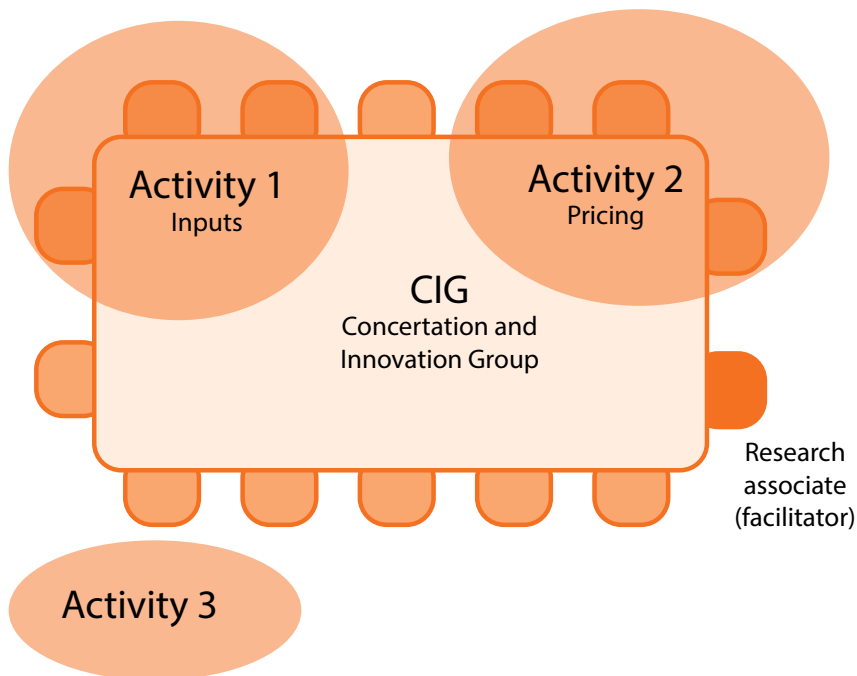


Figure 15.3. Different CIG members engage in specific activities

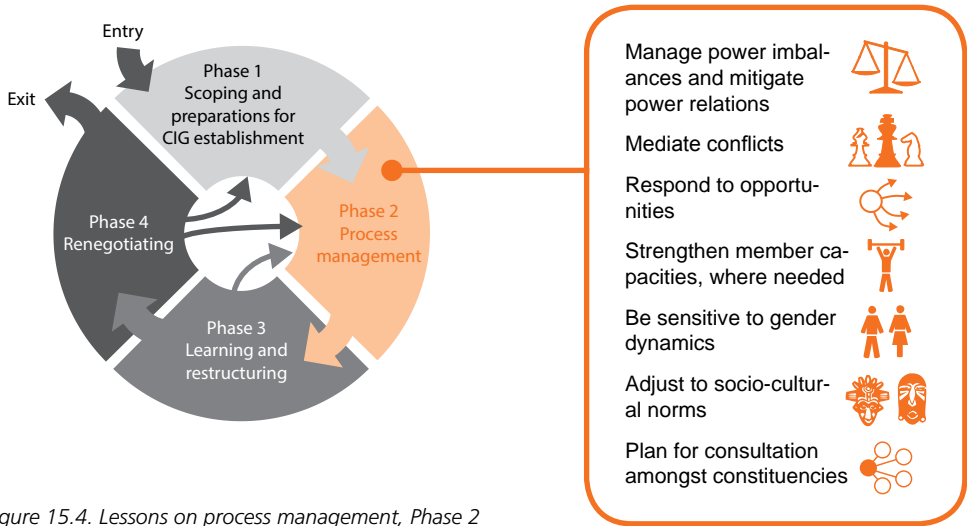


Figure 15.4. Lessons on process management, Phase 2

The research associate often requests different CIG members to do certain tasks. For example:

- Each country deals with **minute-taking** for CIG meetings in a different way. In Ghana, it is either the research associate or the doctoral candidate who takes the minutes. This is the country with the least formal CIG structure, so CIG members do not have set roles and may feel less ownership of such tasks. In the Benin CIGs, the minutes are taken on a rotational basis. This country has a hybrid formal/informal CIG organization. In the Mali CIGs, one member – always the same person – is tasked with taking minutes. Mali has the most formal CIG structure, with fixed roles. When a formal structure is followed and tasks have been allocated, it is clear for all who is responsible for minute-taking.
- In one of the CIGs, the person who **chairs meetings** is the research associate. In another case, the research associate does this together with the doctoral candidate; in four more cases the members do this on a rotational basis. The three Mali CIGs, with the most formal structure, have a fixed chairperson (in one case the research associate supports this person).
- In most cases, the **meetings are facilitated** (at least for part of the time) by the CoS-SIS research associate. In one case (in Mali) an NGO performs this task, while in one Benin CIG, the research associate is supported by the extension service. In Ghana, other CIG members also facilitate occasionally. In the Benin cotton CIG, the research associate has gradually handed this task to other CIG members. This may have to do with the more general approach of this CIG: the research associate resides far from the venue where the CIG members meet. If the research associate deliberately chooses to be absent as a strategy to enhance independence of the CIG it can be referred to as “creative absence” (Tennyson 2005).

The research associate needs to balance between delegating tasks to members (which generates a stronger sense of ownership over the process and a greater likelihood for sustainability) and maintaining a strong influence over the agenda. The facilitator’s influence is lessened if the roles are rotated or shared among the members. Therefore timing of delegating tasks is critical. If they are handed over too early, the members may not be sufficiently prepared or may move the platform in a direction that is different from that intended – for example, not towards institutional change.

But if the facilitator does not hand over tasks, or does so too late, the members may not come to feel that they own the activities. That lessens the likelihood that the platform will be sustainable.

Lessons

Manage power imbalances and mitigate power relations. Power management is an issue to consider throughout the life of an innovation platform. It applies to all four phases of the CIG cycle.



Stakeholder analysis is an important step in identifying power differences among actors. Power differences between actors in a value chain may be a source of lack of trust (as in the rice and oil palm cases in Benin). As the CIG process continues and new issues arise, new people may need to be brought in. This leads to a shift in power relations. In some cases existing members may want to withdraw, whilst their continued involvement may be still needed to counterbalance new power dynamics. In such cases the CIG needs to be managed strategically to avoid such withdrawals. We saw this challenge in the Benin cotton case, where members were disappointed when they did not get the tractor they had hoped for, and where new members were brought in as the focus shifted to neem-based pesticides.

In the Mali crop-livestock CIG, the concern was that the voices of herders would not be heard because more powerful interests – the state, the irrigation authorities and farmers – were at play. The research associate dealt with this by inviting herders to become members of the CIG so that their perspectives would be included.

When the balance of power among stakeholders shifts, resistance is inevitable. In the rice CIG in Benin, proposed changes would benefit growers and transform the relationship between them and traders. Similarly, in the Benin cotton CIG, pesticide companies might object to the CIG exploring neem as an alternative pesticide. Such “losing” stakeholders might block initiatives or withdraw from the CIG. This may reduce the chances that the CIG’s future activities will succeed. Or the CIG may actually benefit if members who are blocking progress leave.

One approach is to find solutions that benefit both parties: so-called “win-win” solutions. Another is to find other topics for the CIG to address that favour the “losing” party, so tweaking their interest in continuing with the CIG. Or, as we saw in the Benin cotton CIG, it may be possible to actively involve the person or organization who may oppose the initiative to get them on-side.

Power dynamics can also play out in CIG meetings. Sometimes one stakeholder dominates a discussion or puts down the opinions and perspectives of others. The research associate of the Benin oil palm CIG faced these kinds of challenges. He dealt with them by skilfully managing the meeting process, and ensuring that all members agreed to an agenda and ground rules beforehand. When conflict arose despite these efforts, he focused on action planning and follow-up to the meeting, which involved all members and aimed to strengthen weak alliances. Sometimes conflict is necessary to trigger change. Outside the CIG meeting space, managing power continues to be a challenge. In the Mali water-management case, the research associate brought in traditional authorities to counter the power held by the Office du Niger.

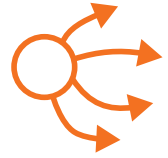
- ▶ *Power inequalities are inevitable. Weaker members may need help: the challenge is to make sure their voices are heard. Stronger members need no such help; the challenge is to keep them on board.*

Mediate conflicts. If conflicts occur, the research associate takes on the role of mediator. In the case of cocoa in Ghana, for example, the research associate needed to show humility and sensitivity to calm down a dispute. This requires specific facilitation skills. The aim is not to avoid conflict, as conflict often triggers change. But an ill-managed conflict can also result in bigger problems that prevent the CIG from making progress.



- ▶ *Conflict can be creative. But manage it to channel the energy in a productive direction.*

Respond to opportunities. The Ghanaian oil palm CIG provides a nice example of how lobbying by CIG members led to an opportunity: the research associate was asked to give a presentation to the District Assembly. His response at short notice gave the CIG's proposals exposure to an important, high-level audience. Flexibility and responsiveness to this sudden opportunity was critical to the CIG's success.



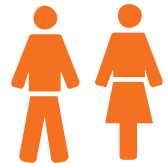
- ▶ *Create opportunities, and seize them when they arise.*

Strengthen member capacities where needed. Sometimes a platform member needs to change how it is organized in order to benefit from the platform and achieve institutional change. For example in the case of shea nut in Mali, the cooperative that received a loan needed to change the way it was managed and did business. Only if it improved its financial management system could the credit benefit its members. That in turn meant strengthening the capacity of some of its members.



- ▶ *Institutional change may mean changes within the members of the innovation platform, as well as changes in the relationships among them. This may require capacity building.*

Be sensitive to gender dynamics. The research associates have the task of involving different groups, including less-advantaged or vulnerable ones. Ensuring that women are represented on the CIG and have a strong voice can be a challenge. In the oil palm CIG in Ghana and the shea nut CIG in Mali, the local enterprises are dominated by women, but the CIG members representing higher-level organizations are men. The research associate's job is then to make sure women are included and have a voice during meetings.



- ▶ *Be aware of the gender aspects within the innovation platform, as well as the gender implications of the platform's initiatives.*

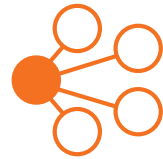
Adjust to socio-cultural norms. The cultural context determines how members collaborate and achieve things together. The facilitator has to adjust to this. For



example, in the case of shea nut in Mali, the research associate carefully analysed the blockages for accessing credit, and considered cultural norms in an innovative way. In Mali it is not done to refuse to meet a woman. So the research associate deliberately involved women in negotiations with the banks, and this opened doors for the cooperative to discuss credit. The Ghana food security CIG used traditional ways to prevent theft: it was easier for local people to accept the traditional authorities rather than formal government system. In the crop-livestock CIG in Mali, too, the research associate had to balance between formal and informal norms.

- ▶ *It is important to adjust facilitation to the cultural context in such a way that it can be useful in promoting change.*

Plan for consultation with constituencies. It is essential to have members who have the authority and credibility from their own organizations to take decisions on behalf of their constituencies. As the Benin rice and Ghana cocoa cases show, it is cumbersome if CIG members are obliged to consult with their colleagues before approving the CIG's actions. But such consultation may ensure legitimacy and transparency. Delays of this nature must be taken into account when planning. Finding the right person to become a CIG member, in this respect, is a delicate and sensitive process.



- ▶ *Only when platform members represent their constituencies can they act on behalf of them and engage in change. Check periodically to make sure they still do so.*

PHASE 3: LEARNING AND RESTRUCTURING

The research associates document the CIG process in various ways: through minutes of meetings, project descriptions, and tables reporting institutional change (some of these changes are reported in Chapters 3 to 14). In addition, they keep diaries or logbooks to record details of what happens in the CIGs. These documents comprise the raw data for a scientific analysis of the process of institutional change that is led and supported by the CIGs.

Research associates' roles

At the start, research associates were heavily involved in the day-to-day management of the CIG: facilitating, organizing and chairing meetings. In time, most made it clear that they wanted to do research and publish the results in scientific journals. Accordingly, their role gradually shifted towards process monitoring.

At the beginning it was foreseen that someone else – the doctoral candidate in collaboration with a post-doctoral researcher – would study the CIG, but this role has gradually shifted to the research associates themselves. All research associates have research backgrounds, so have the necessary skills for monitoring the process and writing about it. They had hoped to produce scientific publications important for their academic careers through participation in the programme. Their role in this phase focuses on collecting data, analysing the process and documenting it. Tasks related to the day-to-day management are increasingly taken over by the members themselves. As

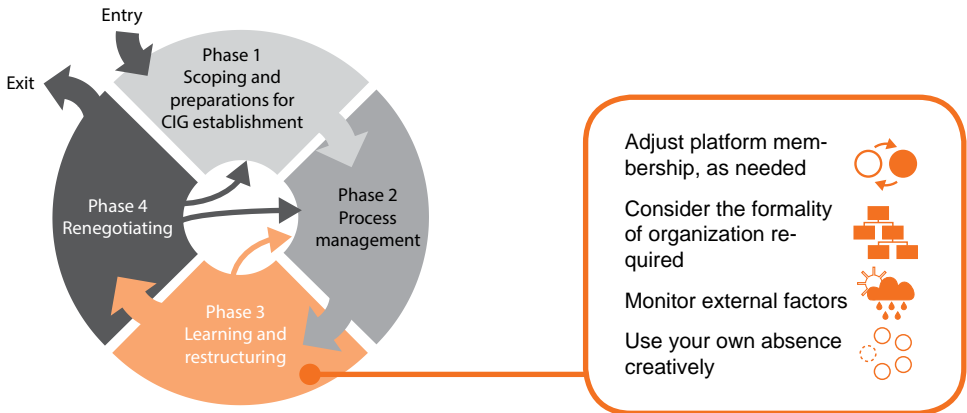


Figure 15.5. Lessons on learning and restructuring, Phase 3 discussed above, this has both disadvantages (in terms of influence on the process) as advantages (in terms of ownership and sustainability).

Lessons

Adjust platform membership as needed. Together with platform members, the research associates are responsible for learning what goes well and what can be improved. With this knowledge, the research associate must then adjust the membership or functioning of the CIG. A flexible structure and membership can be useful when new topics arise. Flexibility also allows the CIG to adapt if unexpected problems arise. This was the experience of the cotton CIG in Benin, when a misunderstanding arose over the role of the CIG itself. Flexibility is also important in regards to the issues that the CIG addresses. As we saw in the Ghana cocoa case, priorities change during the life of the CIG. Sometimes it is only after starting the process that the real issues emerge.



As the CIG's activities progress, it may be advantageous to involve new stakeholders as members (as in the rice CIG in Benin). Further, it may take some time to determine the best level for the platform to operate in support of institutional change. For the Mali water management CIG, this was certainly the case. Tact was required to re-create the CIG at a higher level of intervention. A successful CIG engages the right people at the right time, and the research associate's role in orchestrating this is critical, as we saw with Ghana's cocoa CIG.

One issue which has been difficult for the research associates is when a person representing an organization leaves and is replaced by someone else. The new person has to start over again. If the departing person was a champion, this is a big loss for the platform. In the cocoa CIG in Ghana, the special advisor to the minister was such a champion. Luckily the new advisor also strongly engaged with the CIG.

► *Personnel changes within the innovation platform can be a problem, but they can also be an opportunity. Take time to make sure new members are brought on board and can contribute.*

Consider the formality of organization required. To involve particular stakeholders, it is sometimes necessary to change the degree of formality of an innovation platform. Benin's water management CIG is considering registering as a formal body to make it possible to negotiate with a government-owned processing company. But such formalization has implications: it would limit the flexibility of membership. In Mali, more formal CIG structures were also necessary in order to entice members to join (see the discussion on Context above). In the rice CIG in Benin, by contrast, the research associate was concerned that formalizing the CIG would leave less-powerful actors out of negotiations on land tenure. A more formal CIG would not strengthen small farmers' interests. Many issues are at play when considering formalization of the CIG.



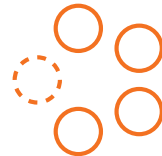
- ▶ *Formal or informal? It depends on the context of the country... but generally, try to keep it as informal as possible for maximum flexibility.*

Monitor external factors. Conditions outside the CIG change continuously and can have a big influence on whether a CIG can attain its objectives. In the case of cotton in Benin, many external factors changed – such as the strengthening of the extension services, a fall in the price of fertilizers, and a rise in the price paid to farmers for their cotton. This underscores the need for constant reflection and adaptation.



- ▶ *Anticipate changes in external factors, and be prepared to act on the opportunities they provide.*

Use your own absence creatively. Some research associates live far away from the CIG, so cannot be on site all the time. As a result, the CIG members are more or less obliged to find their own solutions to problems that arise, so encouraging the platform's sustainability. Tennyson (2005) has called the facilitator's technique of deliberately distancing him- or herself from the platform, "creative absence". In CoS-SIS, the absence has not always been creative: it can lead to inaction and drift. The research associate can try to ensure that activities continue by phoning members to encourage them to meet and to find solutions.



- ▶ *An absent facilitator cannot stimulate, coordinate, inform or monitor directly. It is necessary to find other ways to do these things. Be sure the platform can and will act on its own before using the tactic of absenting yourself.*

PHASE 4: RENEGOTIATING

The CoS-SIS CIGs are at a midway point. The programme management teams in each country have been concerned with institutionalization. Yet, since the CIGs are only midway, closing, renegotiating and sustaining are not yet the major concern. We can thus say little about Phase 4 at this stage.

Research associates' roles

Nevertheless, some reflections and activities have already begun as to how to sustain the outcomes of the CIG after the programme comes to a close, how to end the CIG, and how the CIG can tackle new challenges beyond its initial mandate. In this phase, the role of the research associate will focus on helping the platform members consider long-term options, design an exit strategy for the research associate, and communicate with the outside. In some cases, the research associate may play a role in registering a new organization for follow-up activities (as is being considered in the rice CIG in Benin).

Lessons

Embed critical platform functions in local structures. In many cases champions take an active role. For example in the case of rice in Benin, the extension service has embedded some of the CIG's roles in its work. This has led to some of the CIG's functions being sustained. In the shea nut case in Mali, making sure that cooperatives can access credit more easily was essential. An existing network, SIDO Karité, was identified to take on this role.



► *Whenever possible, tasks should become part of a permanent organization's mandate.*

Consider sustainability. Should a platform continue beyond its envisaged lifespan? Perhaps – if (for example) the original issue has not been resolved, exchange still benefits the stakeholders, or if other issues have emerged. It is not known yet whether the CIGs will have a lasting impact on institutional change.

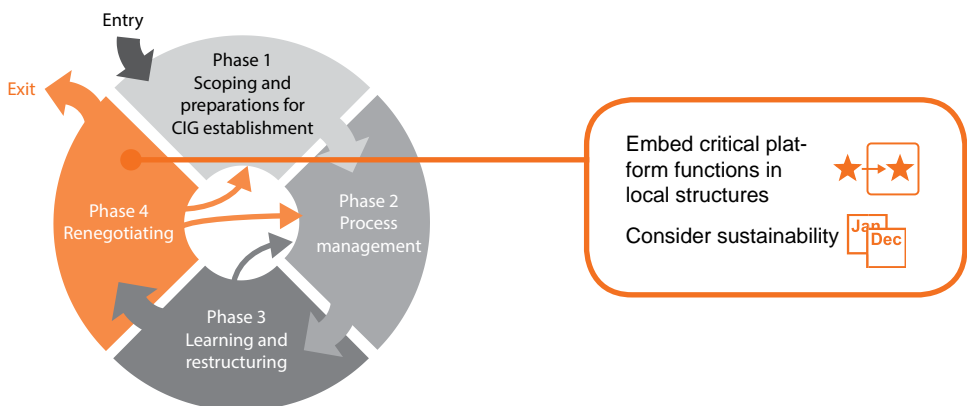


Figure 15.6. Lessons on renegotiating, Phase 4

If the original issue has not been resolved, it is necessary to create the right conditions for the CIG to continue after the external support withdraws. The oil palm case in Ghana demonstrates that including representatives of local organizations in the platform enables them to build the capacities they will need to continue their involvement.

- ▶ *Institutional problems are unlikely to be solved overnight. The innovation platform should have a long enough life to have a good chance of overcoming the type of problems it aims to tackle.*

WHAT HAVE WE LEARNED ABOUT FACILITATING INSTITUTIONAL CHANGE?

The CoS-SIS programme demonstrates that interaction and concerted action do not just happen. They have to be facilitated. The CIGs created space in which stakeholders are able to interact. Deliberate interventions by the research associates at different phases have attempted just that.

The cases demonstrate the role of the facilitator in achieving institutional change. A relative outsider was brought in to bring the different stakeholders together, to catalyse interactions, and to ease the process of negotiating joint actions.

The objectives of the programme were critical in defining the role the research associate-cum-facilitator played. The fact that CoS-SIS is an action research programme, and therefore has both research and developmental objectives, informed the criteria for selecting the research associates. Their background and current interest in research stimulated their shift in roles from day-to-day facilitator to add that of a monitor – focusing on collecting data, analysing, and documenting.

For a facilitator, enthusiasm is not enough. Both individual characteristics (such as openness, enthusiasm, patience and mediation skills) and a background in facilitation or social sciences help, alongside more specific tailor-made training on facilitation of multi-stakeholders processes and innovation platforms. As one of the research associates put it, the facilitator needs to be prepared for this new approach and the new way of working and interacting.

One conclusion that may sound obvious, but is critical in facilitating institutional change, concerns the time investment required. The facilitator must have time for both formal and informal contacts with all those involved at all stages of the partnership. It is also vital that other members devote the time needed to the platform. Lack of time was an issue for all research associates involved in the CoS-SIS programme.

It is remarkable that operating the CIG – the vehicle for facilitating institutional changes – has so far been a low-cost affair. Here we need to distinguish between two types of budgets. All nine CIGs have had budgets available through the national programme coordinators to support CIG activities and for facilitating interactions. The costs for facilitating interactions and for the functioning of the research associates were more or less as planned. This is also a major lesson as it highlights the need to invest in interactions and meetings.

But very little has been spent in supporting the CIG activities. This is rather unexpected. The programme planners anticipated that such funds would be needed, and indeed it makes sense that this be the case. But the facilitators have managed to engage stakeholders, hold meetings, get input, do studies and so on, with very limited additional costs. In some cases other partners have contributed additional funds, namely through the Office du Niger in the Mali water management

case, through Soro Yiriwa for the Mali shea butter case, and via the national research institute for Benin's cotton case. This is inspiring: it suggests that much can be done for institutional change with relatively few financial inputs. At the other hand, of course, we do not know what would have happened if those resources were spent on side-activities, for example.

From research associate and CIGs to facilitators of innovation platforms

This chapter has recounted some key conclusions from the CoS-SIS research associates' experiences in facilitating CIGs. While specific to the programme in some respects, we have endeavoured to draw out generic lessons for would-be facilitators of innovation platforms.

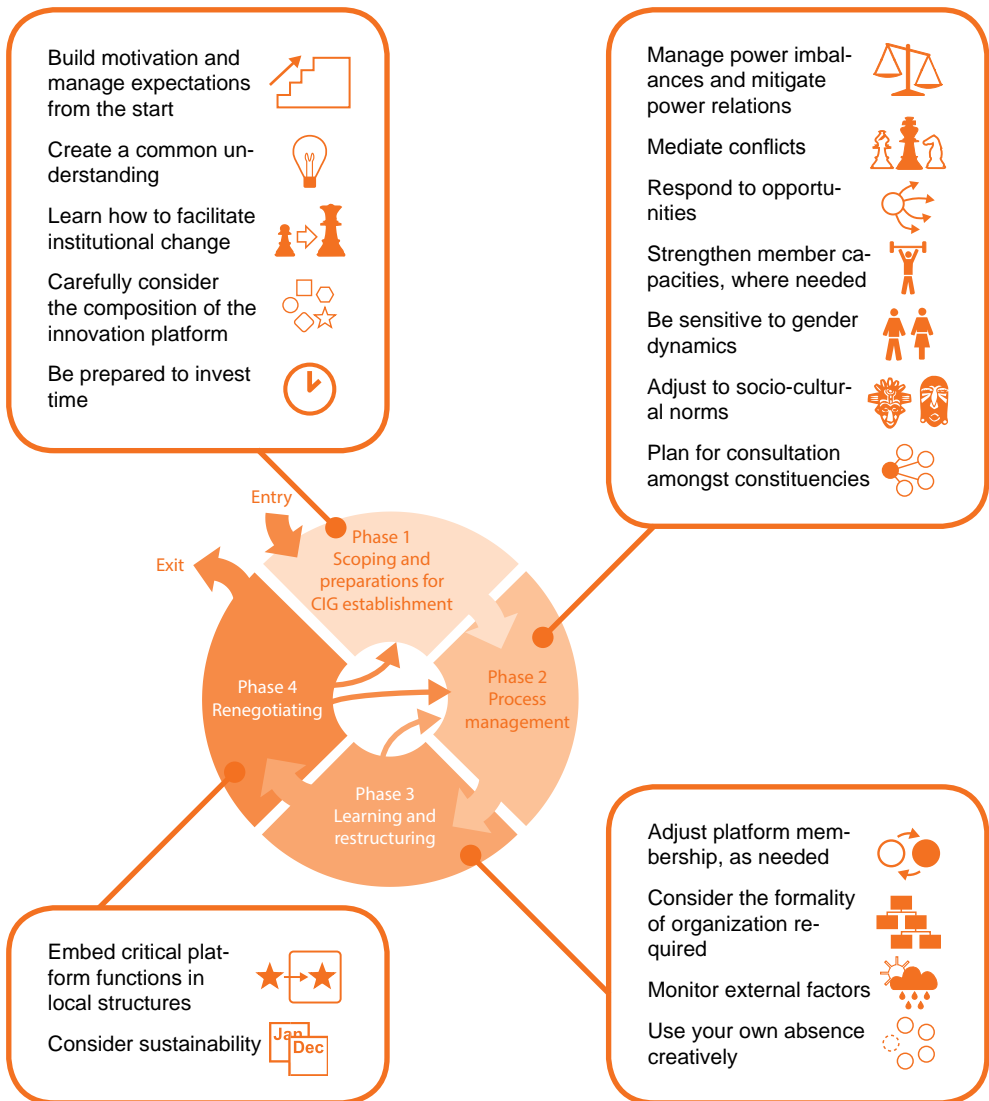


Figure 15.7. Summary of lessons from all four phases in the CIG cycle

Epilogue



CIGs involve different stakeholders in intensive discussions to find solutions to institutional problems

Photo: Suzanne Nederlof

16

Action research and institutional change

*Sietze Vellema*¹

THE PREVIOUS pages can teach us a lot. It is fascinating to read how a team is coming to grips with one of the most challenging issues for development practice, policy and research: how to combine technical and institutional change. In this Epilogue I share with you an appreciative commentary on this learning process. I aim to push a bit further towards research and institutional change. My main audience is researchers in the field of innovation and institutional change.

I read the text from the vantage point of my own experience with a 5-year action research programme entitled Value Chains for Pro-poor Development (VC4PD), implemented under a partnership programme between the Netherlands Directorate-General for International Cooperation and Wageningen University and Research Centre. This programme conducted action research in a situation similar to the cases reported here. During the design and implementation, policymakers and practitioners often referred to the **value chain approach**. This book also refers to the **innovation systems approach**. The term “approach” suggests a coherent intervention theory.

As a scholar in the fields of value chains and technology studies, I find this an awkward position. Why? I see value chains and innovation systems as realities in which you can intervene. Research tries to detect the processes underlying what happens in value chains and innovation systems, and to explain why certain interventions lead to observed outcomes.

As an engineer, I share the concern of some of the chapter authors: namely, what buttons are we pushing, and how do we know if pushing them does what we want? However, labelling value chains or innovation systems as an “approach” may drive research towards finding fixes within the boundaries of an interventionist framework. I consider the task of research to engage with practice by discovering “what makes an intervention work, for whom and under what conditions?”

The idea of an “approach” may make it difficult to be precise in detecting the mechanisms that the intervention activates. In development efforts, there is always the danger of hopping from one fashionable best practice, or “approach”, to the next, without considering what the real processes are that generate or obstruct development outcomes. Instead, I suggest we consider value chains and innovation systems as **contexts** for interventions. We should then look for mechanisms that induce institutional change within these contexts.

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That is what we did in the VC4PD action programme mentioned above. We did not view it as our task to initiate and control the interventions or change processes. Instead, we looked for changes that were already under way in existing agri-food chains. As researchers, we thought of these as natural experiments. We then did action research on these open-ended change processes. We wanted to find out what types of interventions produced what types of changes. We looked at whether the actors were pushing the right buttons, and what happened when they pushed them. The selected pilots were approached as experimental institutional practices that provided a model for future development. By documenting the processes and events, we learned what it was about the intervention that made it work.

In CoS-SIS, the use of the CIGs initially placed researchers in the driver's seat. The programme was development-oriented, so tried to work towards tangible results on the ground. I consider this to be a tricky position, but the joint learning within CoS-SIS made it less so. Why? Because the researchers critically reflected on their own interventions, and because a programme-wide methodology is used to document and systematize the experiences. Aligning researchers with practitioners makes it possible to translate the practitioners' skilful performance into a testable intervention theory. This resonates with the methodological position to consider evaluation as a continuing process of theory testing and refining.

Yet, there remains a possible tension between an interventionist approach and research grounded in an empirically rich change process. From the interventionist perspective, key words attached to the CoS-SIS programme are "brokering", "facilitating", and "multi-level processes of change", which are reflected in how the work of CIGs is described here. This shifts attention to an innovation system "approach". I propose to use the analytical value of the concept of innovation systems in order to explore how institutional change is brought about. What are the dynamics in and histories of the innovation systems in Benin, Ghana and Mali? What is systemic about them? What about these real innovation systems constrains or directs how different actors make choices? And how do these innovation systems, as contexts for interventions, enable or constrain the processes of institutional change the CoS-SIS programme is engaged with?

The book clearly shows that there is no standard formula for a CIG. If a CIG is not a generic, organizational fix, can it then be conceptualized as a process of institutional change? The emphasis in the case studies is quite strongly on more formal organizational matters, which may distract from detecting the underlying mechanisms of institutional change. When reading the case studies I noted a variety of practices that may shift attention to observable traces of institutional changes (Figure 16.1).

When listing these practices I intuitively clustered these practices as shown in the figure. A next step would be to theorize about the workings of different types of practices that make up possible processes of institutional change. Researchers can triangulate the theory of change of practitioners with other possible theories that build on analyses of institutional change. I also consider this necessary because the case studies do not necessarily report on processes of institutional change. My observation is that instead, the group of people involved in CIGs cleverly navigated or articulated with the institutions within their contexts. Hence, the work of a CIG may even sustain institutions because they are conducive to what they do and how they operate. Or, the process of institutional change is so subtle that there is no evidence yet to attribute this to practices documented in this volume.



Figure 16.1. Clusters of practices in the CIGs

Clustering practices can be a first step in hypothesizing about the mechanisms that underlie an institutional change. When CIGs are experimental processes, what are these about? This needs more precise empirical documentation of the events and choices in the respective cases, and it needs articulation with case studies of similar practices. Reading the case studies re-emphasized for me that action research often is about developing theory, rather than testing it. It also enables us to identify indicators to tell us whether the assumed causal pathways are indeed set in motion.

The term CIG is, in my view, insufficient to conceptualize institutional change. After reading the individual chapters I got the impression that every CIG represents a distinct theory of institutional change. The task of research is to explicate this theory of institutional change and to relate this to, for example, literature on governance, e.g., in relation to value chains, or collective action, particularly at the meso level. I also noticed an interest in relations between the state and private initiatives, driven either by business or social organization, which suggest a possible link to theories of the state. A link to theoretical thinking about institutional change is necessary to avoid the pitfall of using CIGs as instruments in addressing institutional constraints or non-technical barriers for pre-fixed technical recipes. Then, the interaction between the technical and institutional realms will not be unravelled, and research will continue to treat them as exclusive.

Writing this epilogue helped me to further clarify my view on action research. I consider the task of action researchers not to be fixers, but to engage with teams of problem solvers that are learning by doing in the practice of development: governmental and non-governmental organizations, private-sector companies, donor agencies and producer organizations. The reflections in this volume also suggest that the research associates are finding their way in this, and, tend towards the task of documenting and analysing change processes that are mainly controlled and managed by others.

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Glossary

Actor. A person or organization involved in a value chain or sector, with influence or interest in that chain or sector.

Champion. A highly motivated stakeholder who creates enthusiasm about a topic, takes action to promote an initiative, and encourages others to do the same.

CIG, Concertation and Innovation Group. A type of innovation platform where a group of stakeholders comes together to address a common concern. While the members often have divergent interests, there is a common objective or problem that binds them together. A CIG is not a fixed entity; its membership can change over time as different challenges emerge or are addressed. Its mandate is also flexible.

Concerted action. Activity taken by a group of people who decide together to act in a united way.

Domain. A product (such as rice), value chain (such as palm oil) or subject area (such as food security) that is the topic of study and interventions.

Facilitator. The person who manages the process of bringing people together as a group and communicating within the group. In the CoS-SIS programme, this person is called a “research associate”.

Innovation. Change within a sector, value chain or other domain. It includes a mix of technical, institutional and organizational elements.

Innovation platform. A group of stakeholders that comes together to address a common concern. Referred to as a CIG in the CoS-SIS programme.

Institution. Rules and regulations, behaviour, formal and informal.

Institutional change. Changes in the rules and regulations governing a sector, and changes in the behaviours, culture and informal habits of the people living and working in a particular area.

Institutional constraints. Many factors can hamper the functioning of a sector or value chain. Those of an institutional nature are related to formal rules and regulations as well as less formal, but equally important cultural, behavioural, and habitual factors. Together these are referred to as institutional constraints.

Livelihood. The means by which people earn a living.

Members. People who actively participate in a CIG.

Research associate. In the CoS-SIS programme, a person hired part-time to facilitate and monitor the CIG.

Stakeholders. People who are interested in a particular subject and have a stake in the process and outcome of activities related to that subject.

Value chain. The system of production, processing and marketing of a particular product, from the producer (the farmer) to the consumer. It consists of a series of chain actors (farmers, traders, processors, wholesalers, retailers, consumers), linked together by flows of products, finance, information and services.

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One finger cannot lift a rock

Facilitating innovation platforms to trigger institutional change in West Africa

Innovation and institutional change are often the result of stakeholder interaction and concerted action. But interaction and concerted action do not just happen. They require stimulation and facilitation. Innovation platforms bring stakeholders together with that aim, and a facilitator guides the process. This book looks at the experiences of nine such facilitators.

The research programme Convergence of Sciences – Strengthening Agricultural Innovation Systems in Ghana, Mali and Benin (CoS-SIS) explores and experiments with new pathways for agricultural innovation. It has put in place innovation platforms – referred to as “Concertation and Innovation Groups” (CIGs) – for a variety of sectors: water management and rice, oil palm and cotton in Benin; oil palm, cocoa and food security in Ghana; and crops and livestock, water management and shea in Mali. The programme aims to enhance institutional change through these CIGs.

In this book, West African research associates from the CoS-SIS programme describe how they initiated innovation platforms and facilitated the different steps in a CIG cycle. The stories show that the facilitation of innovation platforms is not easy: it requires specific skills and a lot of time, and is very much determined by the context. But they also illustrate that there are creative ways of dealing with the challenges and unpredictable situations that facilitators face.

The book is written for development professionals who are in a similar position to the CoS-SIS research associates, individuals and organizations involved in facilitating multi-stakeholder processes and building partnerships, and students and professionals in the field of innovation, institutional change and agricultural services. Readers will recognize their own challenges in facilitating innovation and can draw lessons from the experiences reflected here.

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