

Examining Vertical Coordination Models in Malian Agricultural Value Chains

Out-Briefing on Results from Field Work

Ryan Vroegindewey

July 10, 2014

Outline of Presentation

- Objectives of case studies
- Methodology
- Outputs from field work
- Working definition and typology of models
- Preliminary characterization and evaluation of models
- Next Steps

Goals & Objectives

SRAI 2 Goal: to provide specific, targeted empirical information to policy stakeholders in West Africa to inform the debate about how West African agriculture and agribusinesses can respond to the region's rapidly growing and changing demand in a way that ensures broad-based benefits to farmers, agribusinesses, and consumers.

Area 4 Focus: This component of SRAI 2 will examine, through bibliographic review and selected case studies, experience with these various models, in linking smallholders into these value chains in ways that capture the scale economies, quality and timeliness that these value chains increasingly demand in order to be competitive.

Summer Research in Mali: An examination of vertical coordination models currently being used in Mali to link farmers to markets.

1. **Identify and describe models** currently being used or developed.
2. **Evaluate the models** in terms of their advantages and disadvantages for farmers, buyers, and other primary value chain actors.
3. **Analyze the factors** which lead to the selection and success of a given model.

Methodology:

Focus Crops & Regions

3 agricultural products: maize, millet/sorghum, rice

- Farmer participation in crops
- Commercialization rates
- Importance to food security
- Similarities and overlaps

3 zones yielding the highest commercial surplus:

- Office du Niger (Rice)
- Segou, S. Koulikoro and N. Sikasso (Millet/Sorghum)
- Sikasso and S. Koulikoro (Maize)

Methodology: Interviews & Visits

1 Background & Context – donors, projects, GOM offices

2 Buyers – Mills, Institutional Buyers, SME Processors, Traders

3 Producers Producers Producers – Unions & Coops

4 HH#1 HH#2 HH#3

5 Other Important Value Chain Actors – finance, other traders

Methodology:

Evaluation of Approach

Advantages:

- Vast enough to begin to discern, identify, and characterize models
- Flexible, and starting with private sector actors and following leads

Some difficulties:

- Security – Diabaly and Eastern Mopti
- Onset of agricultural season
- Confirmation of cases and planning of visits beforehand
- Access to certain larger agro-industries
- Interviewing a “comparison group”

Analytical Limitations:

- Establishing the preponderance of each model at national level
- Evaluative analysis will probably be limited to certain performance indicators, and perceptions reported by informants

Outputs from Field Work

- **Over 100 interviews** conducted across and along the three value chains, including site visits to 15 village-level producer cooperatives
- **Database of names & contacts**
- **More than 100 illustrative photographs** of value chain actors and activities
- **Document collection:** contracts, reports, evaluations
- **Establishment of rapport with model promoters/drivers**, aimed at facilitating follow-up questions, data collection, and future research
- **The completion of MSU-IPR internship**, with lessons learned for possible continued collaboration (Fatou's presentation)

« Vertical Coordination Models »

A Proposed Definition

An institutional arrangement of value chain actors which brings farmers to produce marketable surpluses, and which links them to remunerative markets.

Components:

- ***Institutional Arrangement.*** Model is based on some form of agreement, which is usually verbal but sometimes takes the form of a written contract. In either case, a model is usually based on prior experience and trust.
- ***Value chain actors.*** Focus is on private sector actors, even while appreciating that projects, government, and other development partners usually play an important role in initiating, supporting, or developing a model.
- ***Produce marketable surpluses.*** Malian farmers have commercial orientations only in so far as they can first produce enough cereals to satisfy household consumption requirements. Therefore, a model must *at least* facilitate access to fertilizer to boost productivity. It may also often facilitate access to seeds and improved production techniques, and sometimes to farming equipment.
- ***Links them to remunerative markets.*** Our interest is in models which facilitate access to markets which are more empowering and remunerative than the local markets, usually represented by village-level traders (**first handlers [collecteurs] and small wholesalers [regroupeurs]**).

« Vertical Coordination Models » A Working Typology of Models

Organized according to the key actor (“driver”) in each model, who links farmers to both upstream and downstream markets, and without whom the particular commercialization system would cease to exist.

From our field research, current cereals vertical coordination models appear to be driven by one of four value chain actors:

- 1. Producers Unions**
- 2. SME Processors**
- 3. Wholesalers**
- 4. Micro-Financial Institutions**

Model #1: Producer-Driven

Cases studied:

- **Faso Jigi**
 - Segou: millet & sorghum (m;/s), some maize
 - ON: rice
- **Beleko**
 - Koulikoro: m/s focus, some maize
- **COPROCUMA & ONCO SAKWA**
 - Sikasso: maize focus, some m/s
- **Tingoni**
 - Segou: m/s
- **Faranfasiso/Macina**
 - ON: rice

Model #1: Producer-Driven

Characterization: Large producer unions which will negotiate input credit and commercial credit with one or more financial **organization**; facilitate access to fertilizer (and sometimes seeds); and actively market the in-kind reimbursements and any surplus which members wish to market either through a **bonded warehouse [warrantage]** or direct-purchase system.

Potential Advantages:

- Often a platform for other services: training and monitoring, access to crop insurance, access to equipment and infrastructure, food security/social development
- Potentially the most empowering of producers in terms of farmer voice, negotiating.

Potential Disadvantages:

- Requires long-term support from development partners
- Financial sustainability – difficulty of covering overhead costs in the face of relatively undiversified commodity markets.
- Various tensions between social/development and commercialization objectives

Model #2: Trader-Driven

Cases Studied:

- **Kalilou Diallo**
 - Sikasso: maize focus
- **Eli Diarra**
 - ON: rice,
 - But also runs small rice mill

Others Examples Encountered:

- **Salif Bagayogo**
 - Sikasso: maize

Model #2: Trader-Driven

Characterization: Wholesaler will purchase inputs for one or multiple cooperatives (with own funds or commercial credit from a bank) in order to expand his supply base, and sometimes also due to personal ties. Producers are expected to reimburse in kind at harvest at interest and at a market-based price which usually includes some quality premium. Usually no monitoring or technical support provided.

Advantages:

- A way for traders to expand supply base
- Potential way for coops to access financing for inputs when no other option exists

Disadvantages:

- Traders do not usually have the knowledge or resources to provide production support, or to monitor credit
- Limited financial means of most traders
- Limited to coops within personal networks or prior working relationships
- Producers could potentially be exploited in price-setting
- If financial markets improve for producers, not clear that this model will endure

Model #3: Processor-Driven

Cases Studied:

- **Bah**
 - Sikasso maize buyer & poultry feed producer
- **Kinberi Minirizerie**
 - ON paddy buyer and processor
- **Faranfasiso/Macina**
 - ON paddy buyer & processor

Model #3: Processor-Driven

Characterization: A small/medium but growing processor will actively develop its own supply chain in order to help secure a regular supply of quality inputs for its processing operations. This is accomplished by providing fertilizer and other required inputs, usually accompanied by some technical direction and support. The marketed amount and price formula is usually agreed on at the beginning of the agricultural season.

Advantages:

- Possibly the most sustainable of all models due to the fact that its initiation and expansion is based on real output market opportunities, and sustained with private investments and funds.

Apparent disadvantages:

- In examples encountered, supply chains based on personal networks, even though **currently** input supply did not fully meet processors' needs.

Model #4: Financial Institution-Driven

Cases Studied:

- **CVECA**
 - ON caisse villageoise that works with rice producers
- **myAgro**
 - Micro-savings NGO that works with Koulikoro maize producers

Other Examples Encountered:

- ***Sotubadjo***
 - MFI that works with Sikasso maize producers

Model #4:

Financial Institution-Driven

Characterization: Financial institution plays active role in the funding and procurement of inputs, and will facilitate access to markets using varying strategies and to varying degree (mise en contact, commercial foires, facilitating aggregation and transport, assisting with the negotiation of purchase price).

Potential advantages:

- Financial institutions sometimes possess vast market networks due to the nature of the activities.
- A way for financial institutions to help assure repayments, and/or to expand their client base.
- Potentially helpful to atomized producers without strong output market linkages.

Potential disadvantages:

- Questions about the legality, potential conflicts of interest?
- Beyond the technical scope and competencies of financial institutions to provide production and marketing services?

Other Dynamic Actors Interviewed

Buyers which are actively building supply chains, but currently do not facilitate access to inputs:

- **Danaya Cereals**
 - SME dry cereals processor
- **Mam Cereals**
 - SME dry cereals processor
- **WFP**
 - institutional buyer of rice, m/s
- **Malo Traders**
 - nutritionally-fortified rice processor
- **Grand Moulin - ?**
 - industrial mill (maize into animal feed)
- **Moulins de Sahel - ?**
 - industrial mill (planned maize/ms into fortified flour)

Next Steps

<u>Timeframe</u>	<u>Deliverable</u>	<u>Focus</u>
Ongoing	Blog Posts	<ul style="list-style-type: none"> • Selection of photos from field • Impressions from field on household-level livelihoods & food security issues
September	Trip Report (Syngenta) English & French translation ?	<ul style="list-style-type: none"> • Explanation, evaluation of methodology • Factual reporting of actors encountered, and synthesis of data/information gathered • Further development of model definition, typology, and characterizations • Preliminary analysis of model advantages, disadvantages, and conditions for model selection/success
September	Report (Buffet/TAMU)	<ul style="list-style-type: none"> • Delivery of photos • Narrative will probably be similar to Syngenta report, but focused on household-level analysis, and on the explanation and analysis of photographs
September - October	Photo Exhibit at TAMU, TX	<ul style="list-style-type: none"> • Selection and exhibition of photographs
Fall, 2014	Completion of literature review	<ul style="list-style-type: none"> • Review of case studies, policy papers, and theoretical work focused on vertical coordination between smallholder farmers and markets in Africa.
Summer, 2015	Planned completion of thesis	<ul style="list-style-type: none"> • Economic analysis of case study field work. • Linking case studies to the wider African experience of better linking farmers to markets.