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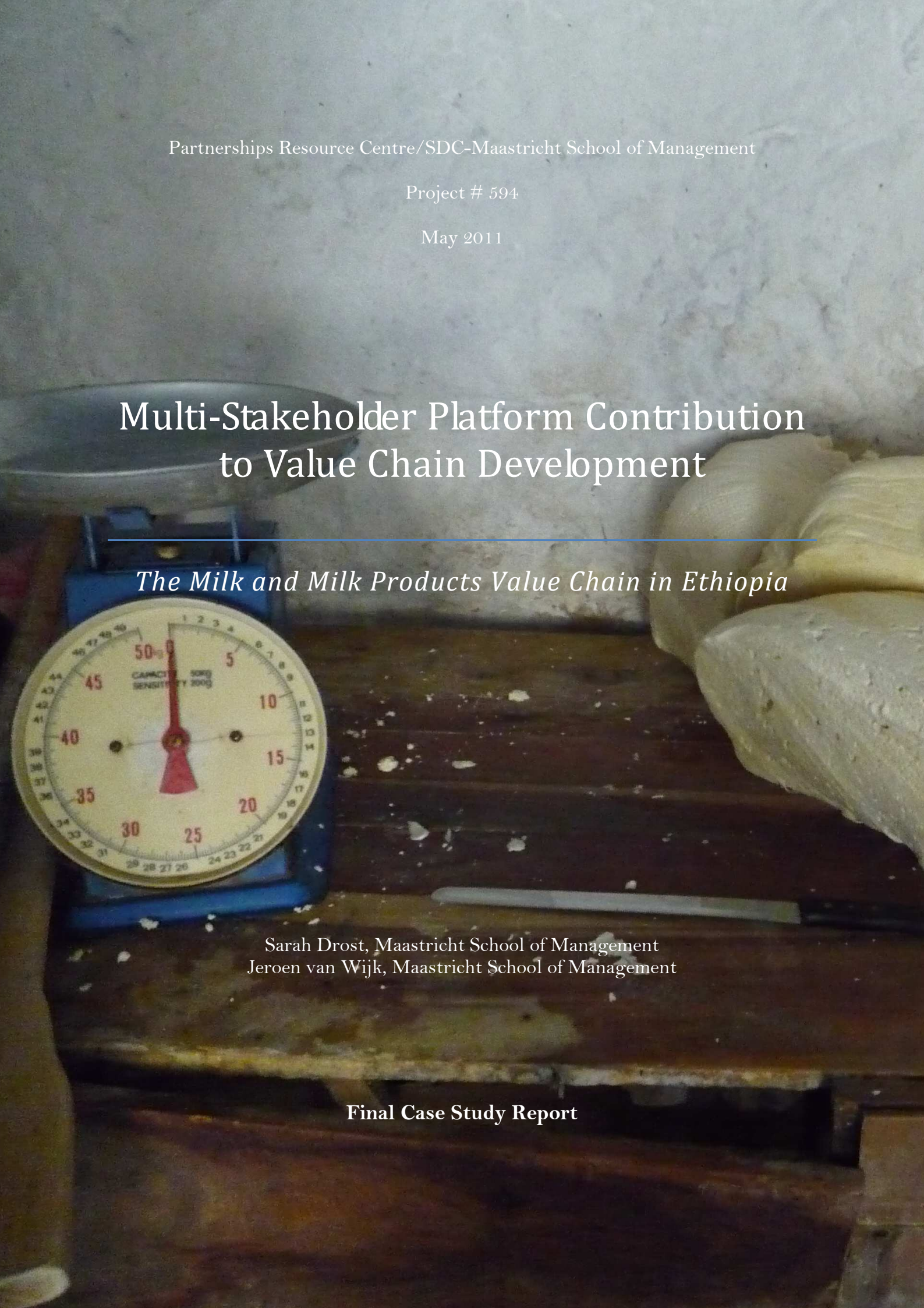
Multi-Stakeholder Platform Contribution to Value Chain Development

The Milk and Milk Products Value Chain in Ethiopia



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Final Case Study Report

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Abstract

This report investigates the dynamics of a multi-stakeholder platform (named: Coordination Group, or CG) for stakeholders of the milk and milk products value chains in Ethiopia. The CG was initiated by the Dutch development organisation SNV in 2005 as part of a broader programme to improve market access for farmers and small- and medium-sized dairy companies. To examine the MSP, both its internal, organisational dynamics and its external dynamics, i.e. the changes brought about in key areas of the institutional business environment, were analysed. A mixed-method design was used for the data collection and -analysis, including in-depth interviews with 18 key representative dairy stakeholders participating in the CG meetings, document analysis, and a social network analysis. Growing domestic market for high-quality dairy products in a country whose economy largely depends on agriculture should be met by a national dairy sector rather than by imports. The dairy CG was therefore a timely and relevant response. But the dominant impression is that the dairy CG had only limited effect in addressing some of the major constraints in the Ethiopian dairy sector. The Ethiopian dairy market is dominated by two private processing firms. The CG tried to enhance competition through its indirect support - funds provided in the dairy CG- for emerging private processors and the establishment of the EMPPA, the dairy producers *and* processor association. Nevertheless, low confidence and distrust between dairy producers and processors has persisted, also in the EMPPA. Neither did the CG manage to get the Ethiopian government proactively involved in raising the competitiveness of the dairy sector. The establishment of an Ethiopian Dairy Board, initiated by SNV BOAM, which is envisaged to have a more significant contribution from processors and the government, may improve the situation. A neglected sector requires time and investments to ensure genuine improvement. Opportunities created in the dairy CG, how small they might appear, can function as a catalyst for further development of the dairy sector.

Picture cover page: private collection first author

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Abbreviations

AACCSA	Addis Ababa Chamber of Commerce Sectoral Association
AI	Artificial Insemination
B2B	Business to Business
BDS	Business Development Services
BOAM	Business Organisations and their Access to Markets (programme)
BoFED	Bureau of Finance and Economic Development
CG	Coordination Group
DSA	Daily Subsistence Allowance
EAFIA	Ethiopian Animal Feed Industry Association
EMDTI	Ethiopian Meat and Dairy Technology Institute
EMPPA	Ethiopian Milk and Milk Products Producers & Processors Association
ETB	Ethiopian Birr (local currency)
FBO	Farmer Based Organisation
FFARM	Facilitating Farmers' Access to Remunerative Markets
ILRI	International Livestock Research Institute
LOL	Land O'Lakes
MFI	Micro Finance Institute
MMP	Milk and Milk Products
MoA	Ministry of Agriculture
MoTI	Ministry of Trade and Industry
MoU	Memorandum of Understanding
MSM	Maastricht School of Management
MSP	Multi-Stakeholder Platform
NGO	Non-Governmental Organisation
OCPC	Oromia Cooperative Promotion Commission
PLC	Private Limited Company
PrC	Partnerships Resource Centre
R&D	Research & Development
RTA	Round Table Africa
SDC	Sustainable Development Center
SFM	School Feed Milk
SIP	Strategic Intervention Plan
SME	Small and Medium Enterprises
SNNPR	Southern Nations, Nationalities, and People's Region
SNV	Netherlands Development Organisation
QSAE	Quality Standard Authority of Ethiopia
TA	Technical Auditor
TLU	250 kg animal
VCD	Value Chain Development
VCF	Value Chain Financing

Exchange Rate
Exchange rate of January 24, 2011:
1 Euro(s) = 22.59 Ethiopian Birr (ETB)

1. Introduction

Multi-stakeholder platforms[1] (MSPs) are increasingly recognized by researchers and practitioners as promising mechanisms for stimulating economies in developing countries. The so-called chain platforms can help to bring actors, operating directly or indirectly in the chain, together and realise common objectives through dialogue and cooperation (Vermeulen et al., 2008). An increasing number of non-governmental organisations (NGOs) and private enterprises are participating in such platforms, however systematic research on their effectiveness and impact is scarce. Therefore, Maastricht School of Management (MSM) / Partnerships Resource Centre (PrC) and SNV BOAM-Ethiopia have embarked on a collaborative effort to evaluate a number of MSPs which SNV BOAM initiated with the aim of developing value chains for the Ethiopian honey and beeswax, dairy, oil seeds and pineapple sector. **SNV**[2] is a non-profit, international development organisation, with extensive hands-on experience in their value chain approach. **MSM's Sustainable Development Center**[3] stands for expertise on sustainable economic development in emerging markets. MSM is partner in the **Partnerships Resource Centre**[4], an open centre where academics, practitioners and students can create, retrieve and share knowledge on cross sector partnerships for sustainable development.

1.1 Research objective and aims

This dairy case study assesses the effects of the multi-stakeholder platform that was established by SNV BOAM to improve access to (quality) markets for stakeholders in the milk and milk products value chain in Ethiopia. The core of SNV BOAM's approach is to bring primary and secondary value chain actors and other stakeholders together to find solutions for identified bottlenecks in the value chain. These actors join forces in the so-called Coordination Groups (CGs), which have a multi-stakeholder nature[5].

The overall objective of the study is to gain insight and generate knowledge on how, and under which conditions multi-stakeholder platforms contribute to the development of value chains, with a focus on SNV BOAM's programme (agriculture, horticulture) value chains in Ethiopia. Critical success factors and main bottlenecks of MSPs for value chain development in Ethiopia are to be identified. In terms of contribution the synthesis report of the overall study has three aims. First, the study should contribute to the learning process of MSP members and other local Ethiopian stakeholders through verification of results and knowledge dissemination. Second, the synthesis report should end with recommendations on how SNV BOAM can improve its multi-stakeholder processes to increase their contribution to value chain development. Finally, the study should contribute to the academic debate on how

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[1] Comprising of dialogues, policy making, and implementation, the term 'multi-stakeholder' is often attached to, platforms, processes, and partnerships (Warner, 2006). In this research we refer to multi-stakeholder *platforms* when discussing MSPs.
[2] SNV BOAM Ethiopia: www.SNV BOAMworld.org/en/countries/ethiopia/Pages/default.aspx
[3] MSM - SDC: www.msm.nl/1/1/uk/research/sustainable_development_center/
[4] PrC: www.erim.eur.nl/ERIM/Research/Centres/SCOPE/Partnerships_Resource_Centre/About
[5] Website SNV BOAM & Annual Report 2008

value chain partnerships can facilitate sustainable competitiveness in developing countries. This dairy case study provides input for all three aims, however, reports only on the first aim.

1.2 Theoretical background

> Multi-stakeholder initiatives are generally characterised as horizontally organised, with a greater degree of flexibility and openness as traditional forms of governance. In policy-related documents, MSPs are often considered as highly promising alternative forms of governance. They are based on the "recognition of the importance of achieving equity and accountability", involving equitable representation of stakeholder views, and are "based on democratic principles of transparency and participation" aiming to develop "partnerships and strengthened networks among stakeholders" (Hemmati, 2002:2).

Institutional theory, social network theory and collaboration literature has been explored to gain insight and generate knowledge on how, and under which conditions partnerships (including MSPs) can contribute to changing institutional business environments to facilitate the inclusion of small and medium agribusiness players into value chains. The effects of the MSPs are examined in terms of their a) internal dynamics (basic collaboration, embeddedness and involvement) including a social network analysis, and b) external dynamics (the changes in key areas of the institutional business environment). The theoretical model is visualized in *appendix 1*.

(a) Internal dynamics
From the collaboration literature, the level of engagement of partners, formalized goal alignment, shared (decision making) processes and activities, and transparency are among the main **basic requirements for successful collaboration** (Kolk et al. 2008). A high level of engagement of stakeholders, proper goal alignment, formalisation, risk- and resource-sharing, trust and transparency, shared learning, and joint decision making are critical factors for successful multi-stakeholder platforms, particularly when these deal with more ambitious and complex issues (Ansell & Gash 2008; Springer-Heinze 2007, Bitzer et al. 2010, Kolk et al. 2008).

Collaboration presents the highest strategic level of engagement and implies that the partners share risks, resources and rewards (Austin 2007). This also entails a formalisation of governance structures, including contractual arrangements to specify objectives, activities and responsibilities. Moreover, the relationship between actors refers to the range of actors actually participating in the partnership. The value of partnerships lies in the potential to create win-win situations if all stakeholders are willing and able to contribute to the achievement of goals (Bitzer et al. 2010a). Trust, risk- and resource-sharing and transparency are indispensable in here, as well as notions on power distributions in the value chain MSPs.

In a four-year study of the collaborative activities of as small NGO in Palestine, Lawrence et al. (2002) found that inter-organisational collaboration leads to the development of new institutions (new practices, technologies and rules). Collaborations that are both highly embedded and have highly involved partners, are the most likely to generate "proto-institutions". New rules, technologies and

practices arise and are diffused beyond the boundaries of the specific MSP contexts, and adopted by other organisations in the field: they become proto-institutions. These proto-institutions "represent important first steps in the process of institution creation, thus potentially forming the basis for broader, field-level change" (Lawrence et al. 2002: 283). They may become new institutions if they diffuse sufficiently. **Embeddedness** describes the degree to which a collaboration is enmeshed in inter-organisational relationships (Dacin et al 1999; Granovetter 1985). Highly embedded collaborations involve (1) interactions with third parties, (2) representation arrangements, and (3) multidirectional information flows (Lawrence et al. 2002). In order to examine whether the dairy CG has brought about changes in institutional fields we investigate not only the relations among collaborating MSP members, but also how the collaboration embeds them in the wider institutional field.

Involvement focuses on the way in which participating organisations relate to each other. According to Lawrence et al. (2002), high levels of involvement entail "deep interactions among participants, partnership arrangements, and bilateral information flows". A high level of involvement among participants is necessary for institution creation. The internal dimension of partnerships is also explored in terms of the intensity of actor involvement. If the involvement of an actor is vital for the functioning of the partnership, from design to monitoring, we speak of a high degree of involvement. A medium degree of involvement occurs when an actor only participates during the implementation stages and fulfils particular tasks. If an actor only participates sporadically or not at all, we can speak of 'no involvement' (Bitzer et al. 2010b).

The internal dynamics are verified and complemented with a **social network analysis**. The network approach "allows researchers to capture the interactions of any individual unit within the larger field of activity to which the unit belongs" (Kilduff & Tsai, 2003: 13). A social network analysis describes network characteristics and concepts such as embeddedness, social capital, and network centrality. Moreover, a social network analysis has the ability to address important aspects of the social structure of a network: the sources and distribution of power (Hanneman & Riddle 2005). In the MSP research, the network analysis enabled the researchers to gain insight on:

- The main (core) organisations, stakeholder groups and sectors participating and brokering in the MSPs (betweenness centrality);
- The proportion and types of organisations in the three societal sectors: public and private sector and civil society;
- Visitor patterns (core visitor, regular visitor, irregular visitor, at random visitor);
- The proportion of visitors that left the MSP series early (exits);

The centrality analysis helps us to understand the overall social structure of the MSP networks. Those organizations having the highest scores on betweenness centralities (the highest number of ties) in the network are the most central players in the MSP networks (Kilduff & Tsai, 2003). Moreover, more connections often mean that individuals are exposed to more diverse information. The more connected actors in

the network are, the higher the likelihood that they are able to mobilize their resources and to bring diverse and multiple perspectives to solve problems. The number and kinds of ties actors have determine the range of opportunities, influence and power they have (Hanneman & Riddle 2005). "Actors who have more ties have greater opportunities because they have choices. This autonomy makes them less dependent on any specific other actor, and hence more powerful" (Hanneman & Riddle 2005: 61).

Apart from a measure to identify the most central actors, betweenness centrality is a measure for the degree that actors connect two other actors that do not have a direct link themselves. In our study it refers to the following illustrative situation: actor A is present at CG meeting 1 and actor B at meeting 2. If attending both meetings, actor C connects A with B. The hypothesis is that C is able to facilitate a flow of information from A to B and vice versa. If actors cannot reach each other, or cannot be reached by another actor, learning, support or influence between the two is restrained (Hanneman & Riddle 2005). Therefore, the higher the number of network players that have a high betweenness centrality, the more horizontal the network. Information can be diffused through multiple paths, through network 'brokers' that are in between other network players. The more network brokers there are, the more likely that actors have alternative ways of connection to other actors and can by-pass a given (dominant) actor (Hanneman & Riddle 2005). With smaller numbers of players with a high centrality, the network becomes more hierarchical as fewer players control intermediary information diffusion.

Finally, it is possible that those players perceive themselves as different from others in the population as "they see themselves as the movers-and-shakers, and the dealmakers that made things happen" (Hanneman & Riddle 2005: 68).

(b) External dynamics

The external dynamics refer to the perceived changes in institutional business environment that facilitate inclusion of small and medium sized agri-business players into the milk and milk products value chains. The fragmented nature of Africa's agricultural sector is one of the limiting factors to its development. The majority of farmers and SMEs face huge barriers to link themselves to national and global markets, while access to these markets is considered critical to growth in developing countries (OECD, 2006; World Bank, 2008). The most important institutional challenges to inclusion in commercial value chains concern those formal rules, inter-organisational arrangements, and informal customs that prevent farmers and SMEs from having access to knowledge & technology, credit, markets, and professional organisations (Bitzer et al 2010b; Van Wijk and Kwakkenbos 2011).

Lack of **access to capital** or credit is a major constraint for many smallholders (Altenburg 2007; Kaplinsky and Morris 2001). Broader access to financial services would expand their opportunities for technology adoption and resource allocation (World Bank 2008). The lack of **access to knowledge** often hampers agri-food enterprises to adopt new practices that build trust and confidence of buyers in the quality and safety assurance mechanisms for their produce (Henson and Jaffee 2006; Garcia Martinez and Poole 2004). Farmers are exposed to highly volatile markets, which hinder investments in the agricultural sector. A more **stable market** for suppliers through buyer commitment and price stability would motivate farmers and SMEs to invest in production capacity and quality improvement (Gibbon and Ponte,

2005). Finally, chain actors, particularly farmers need to be organized to develop capacity in terms of supplying volumes and quality, and guaranteeing regular supply. **Access to organisations** facilitate risk sharing, the pooling of resources, enable collective learning, and developing market power (KIT *et al.* 2006).

1.3 Methodology

Several methods were used for the **data collection** process: analysis of existing documents (field documents), in-depth interviews and group discussions with SNV BOAM in Ethiopia. Both qualitative and quantitative data were gathered. All primary data were collected in Ethiopia from August to November 2010, both in the Oromia and SNNPR regions. Research was executed in collaboration with a team of local consultants that was especially responsible for the interviews in the oil seeds value chain CG.

A sample of 18 CG stakeholders was drawn for the **interviews** in the following manner. We selected candidates from participant lists of five Coordination Meetings (begin, end and middle) who played specific roles in the milk and milk products value chains, such as *chain actors*, *chain supporters*, *chain influencers*, and *chain facilitators*[6]. Some critical and reluctant stakeholders were explicitly included. Eventually, interviews were held with all relevant value chain stakeholders (*Table 1*), including the two large scale processors operational in the country. The researchers also made field visits to enterprises engaged in dairy farming and processing. For a complete overview of the interviewees and interview schedule, see *appendix 3*. For confidentiality reasons, they are made anonymous in the report.

Table 1. Interviewees by stakeholder group

Stakeholder Group	Interviewees	Percentage (%)	Type
Chain actors	8	44	Input supplier, dairy farmer, dairy cooperative, dairy processor, milk collection centre, retailer
Chain supporters	5	28	MFI, consultants, training institute, Technical Auditors
Chain influencers	3	17	Ministry, feed and dairy association
Chain facilitators	2	11	NGOs
Total	**18**	**100**	

A **database** was constructed that scores the participation of each organisation (125 in total) in each Coordination Group meeting (18 in total), the type and subtype of the organisation and its role in the value chain[7]. Finally, the Coordination Group

[6] For a complete overview of stakeholder roles in the value chain, see *appendix 2*.

[7] The classification of organisations in type (private sector, public sector, civil society and education), subtype (e.g. processing company, producer, consultant, research institute etc.) and value chain role (chain actor, supporter, influencer and facilitator) has to be regarded as an **analytical tool**. In reality, there is not such strict distinction, as for example many producer cooperatives (now classified as a business representative body in the private sector) are also involved in civil society activities. However, their main aim is to represent an economic active producer group and most of the time, the cooperatives engage in chain actor activities (e.g. collecting milk or processing tasks). This is the

meeting was attended to a) have an idea of the working of the CG in practice, and b) to introduce the researchers to the relevant stakeholders in order to promote interview response. The questionnaire can be found in *appendix 4*.

On the basis of the database, a **social network analysis** was executed with the program UCINET 6.303 which is a comprehensive program for the analysis of social networks and other proximity data. The program contains dozens of network analytic routines (e.g. centrality measures, dyadic cohesion measures, positional analysis algorithms, clique finders, etc.). A social network analysis allows for linking micro and macro levels, and an integration between qualitative, quantitative and graphical data. In this research, the social network analysis is mainly used to verify the qualitative data. In the report, qualitative descriptions are presented, and -if applicable- followed by a quantitative check resulting from the network analysis.

Not all **interview questions** were propounded to all 18 interviewees. Since we were interested in the social mechanisms at work rather than in statistical realities, only those having expertise or being knowledgeable on a certain subject were questioned on that subject. For example, a financial institute might be less knowledgeable on the (technical) varieties that exist in the value chain product, or a research institute that has no expertise on the contractual agreements that exist between suppliers and buyers. In other cases, the respondent had only attended one CG meeting and therefore lacked knowledge of CG internal processes over time. Moreover, time pressure indicated by the respondent was taken into account during the interviews that lasted on average 1.5 hours. Although effort was made to propose as many questions as possible to all stakeholder groups, conclusions are often based on the views of less than the 18 respondents.

The **secondary data** included content analysis of the BOAM programme, with relevant documentation including all CG meeting minutes and impact data on production, income and employment areas provided by SNV BOAM Ethiopia. Furthermore, the secondary data include descriptions of the milk and milk products value chain markets, the dairy sub-sector in Ethiopia, and relevant aspects of collaboration literature and institutional change theory.

All interviews were summarized and **data were analysed** with the qualitative analysis software program MAXQDA. Network analysis has been executed for the two-mode database containing organisations which have attended the dairy CG meetings in Ethiopia.

Finally, all outcomes are cross checked, compared to and extended with information provided by several key informants to ensure triangulation (e.g. SNV BOAM staff, experts, chain Lead Advisors).

1.4 Outline of this report

The report is structured as follows: chapter 2 clarifies the context of this study by providing a short background on the dairy market and sector, its main constraints and SNV BOAM's strategy of establishing the Dairy Coordination Group. In chapter 3, the internal dynamics of the Dairy Coordination Group are presented. Chapter 4 analyses the perceived changes in the institutional business environment of the milk and milk products value chain, as a result of the MSP (external dynamics). Chapter 5

reason to classify them under the private sector. Another example is a university (classified under Education) who acts as a BDS provider as well.

hints at the future outlook of the MSP and the value chain, while chapter 6 concludes with a discussion of results and chapter 7 with the limitations of the study.

2. Context of the case study

2.1 The Dairy Sector

This section describes a) the Ethiopian dairy market, b) the Ethiopian milk and milk products value chain map, c) the main constraints in the dairy sector according to the interviewees and d) SNV BOAM's strategy to tackle these problems.

(a) Ethiopian dairy market

Ethiopia is believed to have the largest livestock population in Africa with an estimated total cattle population of 50.8 million[8], of which 8.5 million are dairy cows[9]. Nonetheless the country is a dairy importer. The Ethiopian diary sector is characterized by small farmers, weak milk cooperatives and very few private small and large-scale processors[10]. Two private processing firms (one formerly state-owned that is recently privatized) dominate the market both as buyer and as seller. The bulk of milk is produced by small-scale milk producers with 2 or 3 cows in the backyard with an average milk yield of about 1.6 litres per cow per day[11]. The country has an annual milk production of 2.6 billion litres of milk, of which only 15 percent is sold on the market. Most of the milk is consumed directly by the producers or given for free to neighbours, while 17 percent is reserved for calves[12]. There are less than five medium to large scale processors mostly located close to the capital. Moreover, the low productivity of local breeds (99 percent of cattle), shortage of feeds, limited veterinary services and a general shortage and high cost of feed and exotic dairy breeds are major constraints of the milk industry[13].

The local production is not enough taking into account the annual milk consumption that is estimated at 24 kg per person[14]. Ethiopian dairy imports are therefore considerable. Dairy imports as a percentage of total consumption increased from 4.1 to 12.8% between 1977 and 1989 (FAO 2009). In the year 2007 a total of 15 million kg of milk and milk products with a value of ETB 52.4 million (Euro 2.3 million) are imported[15]. Between 2005 and 2009 import of milk and cream almost doubled to 84 million Birr (Euro 3.7 million) (FAO 2009).

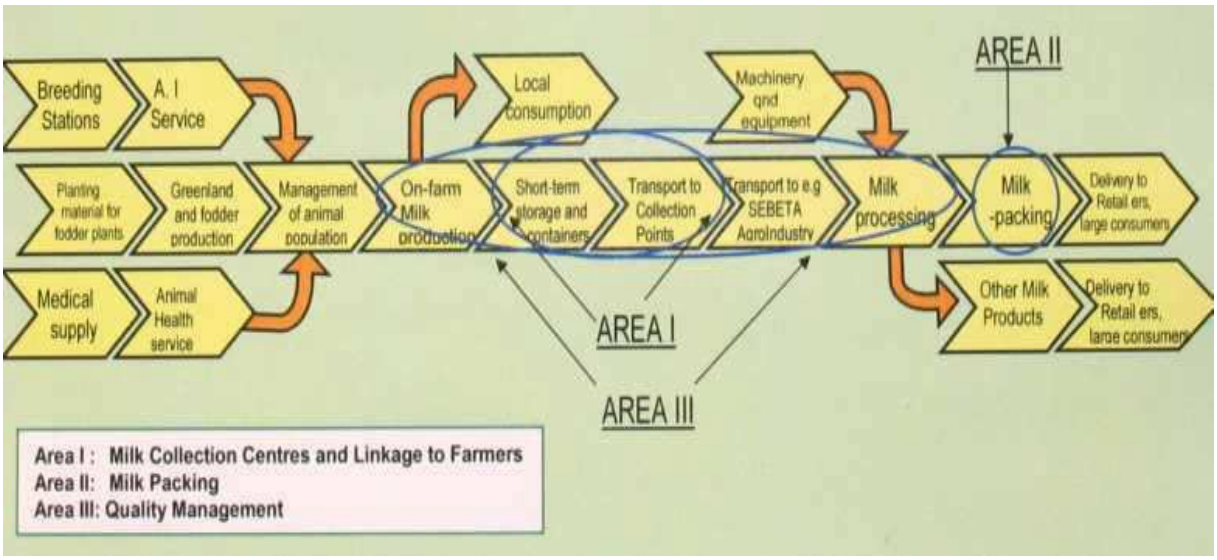
(b) Milk and milk products value chain map

Figure 1 shows the Ethiopian milk and milk products value chain, with indicated intervention areas, as visualized by SNV BOAM. SNV BOAM's interventions mainly address the exporters, processors and farmer organisations with the aim of improving linkages between mid-chain buyers and producers. Chain options where dairy farmers sell their raw milk directly to retailers -without bulking and service

[8] Ethiopian Central Statistical Authority (CSA), Agricultural Sample Survey report for 2009/2010
[9] SNV BOAM Annual Report 2009
[10] SNV BOAM 2 programme proposal. Up-scaling phase extension 2010-2011
[11] Ethiopian Central Statistical Authority (CSA), Agricultural Sample Survey report for 2009/2010
[12] SVN/IFAD SCAPEMA feasibility study 2008
[13] http://www.business-ethiopia.com/milk.html, Assessed November 29, 2010
[14] SNV BOAM Annual Report 2009
[15] SNV BOAM Annual Report 2009

provision of the cooperatives and without further processing by the processing companies- were not taken into account in the upgrading strategies decided by stakeholders in the dairy value chain[16]. Rather, the dairy CG focuses on quality milk production and further milk products processing to assure reliable outlets for producers and quality dairy products to consumers.

Figure 1. Milk and milk products value chain map with indicated intervention areas



(c) Constraints in the dairy sector

There is high potential for milk and milk products and the Ethiopian market is favourable: "consumers want to drink milk" according to all interviewed processors. Still, stakeholders in the milk and milk products value chain perceive a multitude of constraints to dairy sector development. According to the interviewees (*Table 2)* there is lack of government recognition and commitment to the dairy sector resulting in the absence of a Dairy Desk (there is a Livestock Department however their focus is on meat production); lacking dairy policies, such as national breeding policies; restricted opportunities to obtain land for dairy farming, absent mandatory quality standards, absence of a proper regulation body or testing laboratory, high taxation and finally, low investment in research, technology and in the financial system.

In addition, the established institutional body -the Ethiopian Milk and Milk Products Producers & Processors Association (EMPPA) - is still too weak to represent producers and processors and weak linkages, partly as a result of low trust relations, between producers and processors exist. Finally, capacity is generally low in the dairy sector.

Regarding issues related to production, almost all interviewees agree there is an underdeveloped feed subsector resulting in low (access to) quality and quantity animal feed; a major constraint to increase in productivity. If available, feedstuff is expensive and hardly accessible for producers. Due to lack of access to land in Ethiopia, grazing facilities are limited as well. Access to artificial insemination and veterinary services is constraint, causing inbreeding and diseases among the animals.

[16] The upgrading strategies were initiated in a preliminary dairy stakeholder workshop and adjusted in response to the dairy CG participants' suggestions.

Low productivity of Ethiopian animal breeds and absence of cooling systems furthermore contribute to high rejection rates of dairy products. Next to this, the number of processing companies is finite according to the producers, resulting in suppliers not being able to sell their milk and prices being determined by processors offering unfair prices. Finally, access to affordable credit is limited.

Regarding issues related to processing, the irregular demand of consumers - due to several fasting seasons under the Ethiopian Orthodox Tewahido Church (EOTC) [17]- is the main constraint to further development of the dairy sector. Other problems are related to packing materials (high tax on import, leaking- and non-eco-friendly packages) and the absence of good quality milk in the Ethiopian supply market. As processors lack high-tech technology and equipments to produce specialised dairy products (i.e. pasteurised milk) it is difficult for them to compete with imported good quality dairy products (except for pasteurised milk). Finally, prices for dairy products in the shops are too high for Ethiopian consumers.

Table 2. Main constraints in the dairy sector in Ethiopia per stakeholder's group and number of times indicated by the interviewees (frequency)

Constraints in dairy sector	Frequency
General	
Restricting land policies	9
Lack of government recognition and commitment to dairy sector	8
Lack of dairy policies	6
Absent quality standards (regulation body)	6
Absence Dairy Desk	3
Lack of investment financial/technological system	3
No capacitated institutional body representing producers and processors	3
Weak linkages producers-processors	3
Prices Ethiopian dairy products in shop too high	3
Weak capacity in the sector	2
Production related issues	
Lack of (access to) good quality and quantity animal feed	16
No or limited access to artificial insemination/inbreeding problem	7
Lack of sufficient demand/buyers	6
Lack of high-productive animal breeds	6
Animal health problems	5
Processors determine prices (unfair prices)	5
Rejection rate by buyers is high	4
Lack of technology (i.e. to maintain milk)	3
No access to affordable credit	3
Processing related issues	
Irregular demand consumers (fasting season)	6

[17] "Fasting according to the EOTC demands not only abstaining from food and drinks for a defined period per day but also completely abstaining from meat and milk products for the whole fasting season. For example, Lent is one of the longest fasting seasons where people who fast abstain from meat and milk products for eight weeks" (*pers. comm.* Fenta Abate).

Packing material related (high tax, leaks, not eco)	4
Only 5-10 % pasteurized milk	3
Processors lack high-tech technology/equipment	2
Lack of quality raw milk/absence of quality awareness	2

(d) SNV strategy in the BOAM framework

To tackle these problems in the dairy sector, SNV developed the 'Support to Business Organisations and their Access to Markets' (BOAM) programme [18]. Under this programme, a Value Chain Development (VCD) approach was developed. It is "characterized by (i) a combined sector and business to business (B2B) orientation" (IOB Inception Report, 2009: 27), (ii) a focus on 'pull' factors; working from the middle of the value chain at both 'up-stream' and 'down-stream' levels (*pers. comm.* SNV BOAM, February 2011), (iii) "a firm direction towards the private sector (private businesses) as the entry point, (iv) the use of multi stakeholder processes in the form of Coordination Groups as the platform for decision making and anchoring of the local ownership, (v) the use of local consultants or capacity builders to increase outreach, sustainability and ownership and (vi) the use of leverage and innovation funds" (IOB Inception Report, 2009: 27). Therefore, the MSP approach is only one part of the whole 'holistic' SNV BOAM value chain approach.

The BOAM programme is based on the idea that change can only be induced if it builds on knowledge and experience already present in the concerning sectors. 29 agricultural value chains were surveyed on the basis of 'what was already there in the sector'. On the basis of a set of criteria, eventually six priority chains were chosen out of these 29, including the dairy, honey and beeswax, oil seeds, pineapple, mango and apple value chains. Establishing the CG was only a logical step in the process of bringing together all the relevant knowledge and experience of stakeholders in the concerning value chains[19].

SNV BOAM sees the CG as the main organ for governance and coordination of chain activities and stresses the importance of ownership through the formation of stakeholders' own network.

Apart from BOAM, SNV runs 2 other value chain programmes (PSNP plus & RAIN)[20]. Finally, the four case studies under study are only part of the impact areas, (sub) sectors and programs of SNV BOAM Ethiopia.

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[18] SNV BOAM's programme, financed by the Embassy of the Kingdom of the Netherlands in Addis Ababa and until the end of 2009 by the Irish Embassy, contributes to sustainable poverty reduction in rural Ethiopia through value chain development. The overall BOAM programme period is five years, and started from September 2005. The programme aims at improving the access to markets for small and medium agribusiness players along selected value adding chains (SNV BOAM programme proposal 2005-2010). In 2009 a transformation process of the BOAM programme into a centre of excellence for value chain development has started in the form of BOAM2 scaling up phase. Some key chances are the emphasis on Business to Business (B2B) value chain development and the up-scaling of both production as well as a new fund structure. The additional target of the BOAM program up-scaling phase is to develop, test and introduce innovative approaches that aim to improve business to business relations in selected value chains (SNV BOAM annual report 2009). A one-year extension of the BOAM programme was requested and approved, until August 31, 2011, to maximize the results to be obtained from the BOAM programme (BOAM 2 programme proposal 2010-2011).

[19] Clarification meeting SNV BOAM, 8 November 2010.

[20] SNV BOAM Annual Report 2009

2.2 The Milk and Milk Products Coordination Group

The wide gap between national demand and local production capacity and the opportunity to fit in the market-oriented Development Master Plan of the Ministry of Agriculture (MoA)[21], served as fertile ground for SNV BOAM to establish a multi-stakeholder platform (named: Coordination Group) for the milk and milk products value chain in 2005. The CG aims at promoting efficient and equitable linkages for the economically active poor along the agricultural value chain. Establishing the dairy CG was one of SNV's strategies under its BOAM programme.

From the network analysis we found that in total 125 different organisations attended the dairy CG meetings 1-18 from 2005-2010[22]. The dairy CG consists of representatives of key actors in the milk and milk products value chain (regional, national and sporadically international), including:

- Private dairy farms such as Rut & Hirut's Dairy Farm and Nardelli Dairy Farm;
- Milk collection centers such as Ayalew Ababew Milk Collection Center;
- Dairy farmer cooperatives (unions), including Selale Dairy Cooperative Union, Awash Dairy Cooperative and Land O'Lakes (LOL);
- Business associations such as the Ethiopian Milk and Milk Products Producers & Processors Association (EMPPA) and the Ethiopian Animal Feed Industry Association (EAFIA);
- Private processing companies including Sebeta Agro Industry PLC, Family Milk PLC and Lame Dairy PLC;
- Government authorities, such as the Ministry of Trade and Industry (MOTI)
- Private researchers and consultants including those affiliated with the International Livestock Research Institute (ILRI) and the Ethiopian Meat and Dairy Technology Institute (EMDTI);
- The Ethiopian Chamber of Commerce;
- Input suppliers, such as Zewde Tefera Importer (Ferafamco);
- Micro finance institutes (MFIs), such as AGGAR MFI.

Under its BOAM programme, a *Value Chain Leader* and a *Value Chain Facilitator* is selected for each value chain CG. The Value Chain Leader is chosen by the CG and acts as the focal person who should guarantee the local ownership of the CG and who is representing the CG. Ideally for SNV BOAM, a Chain Leader represents a key private sector organisation in the chain. In the dairy CG, the first elected CG Chain Leader from CG meeting 3 to 15 was the owner of a private Dairy Farm and ex-chairman of the Adaa Liben Milk Cooperative. From CG meeting 16-19, the manager of both the Tsega Family Dairy Farm and Rut & Hirut's Dairy Farm and owner of two dairy collection centres is Chain Leader. The Chain Leader is supported by *value chain development advisors* or *coaches*, who add distinct expertise to the program (agro-

[21] SNV BOAM report 'Value Chains Identification for Intervention', 2005

[22] By the end of 2010, already 19 meetings took place for the dairy value chain CG. Nevertheless, the social network analysis was based on 18 meetings due to the participation lists in the meeting minutes that were made available to the researchers at start of the research project in June 2010.

processing, organisational strengthening, women entrepreneurship/gender and monitoring and evaluation). In addition, SNV BOAM makes available a Value Chain Facilitator to facilitate and activate communication amongst CG members and to disseminate information. The general manager of the organisation Facilitating Farmers' Access to Remunerative Markets (FFARM) served as Chain Facilitator in the milk and milk products value chain CG.

From September 2005 onward the Dairy CG meetings have taken place every three months (four times a year). In general, the meetings have the following pattern: the CG Facilitator opens the meeting with a recap of the previous meetings, participants introduce themselves, fund utilization reports are discussed, experts present about new researches and technologies related to the dairy sector and Question and Answer Rounds are held in between. The first CG meeting started in English, but currently Amharic is the main language used in the meetings. The Facilitator translates if necessary.

Following the recommendations of the Mid Term Review (Aleme et al. 2008) an Executive Committee for the evaluation of concept notes for the BOAM designated funds was established. Next to this, SNV BOAM has assignment contracts indicating capacity building interventions with all clients (i.e. processors, farmer organisations, business associations, and government). Finally, a new funding structure was introduced.

3. Dairy Coordination Group Dynamics

This chapter is meant to present the main findings regarding the internal dynamics that took place within the dairy CG meetings 1-18 (2005-2010). The dairy CG is assessed on the basis of basic collaboration requirements, and the levels of embeddedness and involvement.

3.1 Basic Collaboration Requirements

The extent to which the dairy CG meets basic collaboration requirements is examined by assessing so-called success factors. An overview of all these factors is provided in *Table 3*.

Characterization CG

The majority of the interviewees characterize the Dairy CG as an 'exchange forum' where members exchange information on market and technologies, i.e. where to find buyers, who pays the best prices, what is the best shop to sell, where can one buy good quality animal feed, on processing and quality testing techniques and on transportation equipments etc. In addition, it is a 'relation platform' that brings different stakeholders and capacities together and stakeholders learn about each others' problems. As such it contributes to relationships improvement, for example, it helped to "improve the relationship between producers and processors which earlier was characterized by contradiction instead of complementary viewpoints" (*interview 8*). Finally, several respondents believe the sector is now better coordinated, as previously all organisations used to operate as separate institutes, whereas currently stakeholders are brought together in the CG.

On the other hand, the interviewees are critical in their characterization as well. Unclear mandates, incomplete representation and boring meeting formats are point of discussion. In *chapter 3* they will be discussed in detail.

Picture: Dairy Coordination Group Meeting, February 4, 2010, Dreamliner Hotel, Addis Ababa

Table 3. Basic collaboration requirements and their success factors

Basis collaboration requirements	Success factors
3.1.1 Level of engagement	(a) Commitment (b) Motivations (c) Roles and contributions (d) Shared resources
3.1.2 Jointness	(a) Decision making (b) Leadership (c) Selection stakeholders (d) Agenda setting (e) Distribution of benefits (f) Risk sharing
3.1.3 Transparency	(a) Accountability (b) Trust building
3.1.4 Goal alignment	(a) Clear objectives (b) Win-win opportunities (c) Compelling case

Source: Compilation based on Kolk et al. (2008), Van Tulder & Pfisterer (2008) and Bitzer et al. (2010).

3.1.1 Level of engagement

Success factors identified in the research for the level of engagement are fourfold: (a) a high level of commitment, (b) intrinsic motivation, (c) clarity of roles and contributions, and (d) resource sharing.

(a) Commitment

Interviewees hold totally different and opposing views on the commitment of CG participants (*Table 4*). The reason is the existence of two groups of participants: an active core-group that is committed, with another, rotating group that is "constantly changing" (*interview 13*) [23].

[23] Discussion group SNV BOAM, August 12, 2010.

Table 4. Level of commitment evaluated

Commitment	Frequency	Percentage (%)
Low	4	31
Modest	5	38
High	4	31
Total	**13**	**100**

Source: interview data

In our interview sample, 2 interviewees (SNV BOAM and Selale Cooperative Union) visited the Dairy CG all 18 meetings. One interviewee was classified 'regular' (participating 15, 16, or 17 meetings), twelve were classified 'irregular' members (present at least at three meetings with a maximum presence of 14 meetings) and three as 'at random visitor' (participating 0, 1, or 2 meetings). A third of the participants –all except one related to SNV BOAM- believe dairy CG members are highly committed. Despite the gradual decrease in SNV BOAM's Daily Subsistence Allowance (DSA) there has been no major drop-out of participants; an indicator for high commitment according to the SNV BOAM Lead Advisor, Chain Leader and Facilitator (*interview 2*, *7* and *17*). The Technical Auditor (contracted by SNV BOAM) is generally positive about the commitment of CG members as they respect date, place and time of the meetings, form separate working groups and work in a disciplined way during the sessions (*interview 18*). Finally, a private collection centre representative believes the commitment of CG members is high, since members are willing to continue with the CG after SNV phases out with their BOAM programme (*interview 11*).

But there is also substantial criticism. Four interviewees –all non-producers- believe the level of commitment of dairy CG members is low. According to an upset interviewee who recently quit the CG, stakeholders' participation in the dairy CG meetings is always disappointing: "in the morning the meeting hall is full, after the first coffee break 20-30 percent has left, and after lunch, the room is empty" (*interview 14*). A processor company admits his and other stakeholders' commitment to the dairy CG meetings is low. "You have to be devoted to have time. I have no time" (*interview 10*).

If members would have been really dedicated, more would have been achieved (e.g. *interviews 4* and *9*). According to the animal feeding association representative "many [he refers to cooperatives/associations] did not even manage to become registered as a legal entity" (*interview 9*). According to the Ministry, achievements were not as promising as what was anticipated, as interests are conflicting. Dairy producers and processors are not working towards common goals (*interview 4*). Especially EMPPA is seen by 12 respondents as a 'weak and passive' association hardly contributing to service provision to their members and support development of the sector (see also *section 3.2.3*). The Chain Facilitator thought that the fact that no single member was willing to take up the CG leader tasks in the first meeting was a symptom of poor commitment in the dairy CG (*interview 7*).

(b) Motivations

Motivations to join the dairy CG are predominately related to three factors according to the interviewees: 1) the financial and business opportunities it provides, such as meeting new investors (e.g. *interviews 4*, *5* and *14*); 2) the incentives provided by SNV

BOAM as it has been inviting participants (at least indicated by 5 of our interviewees) and offers technical and financial assistance, and 3) personal interest (*interview 11*).

What keeps members on board in the dairy CG is "the agenda setting and the capacity of the CG to solve problems" according to the CG Leader (*interview 2*). Other motivations identified are "to share knowledge" (*interview 12*) and to "exchange ideas and experiences, and sometimes even solutions" (*interview 1*).

The largest dairy processing industry in Ethiopia was previously reluctant to join to CG meetings (see also *section 3.2.3* on trust building). The main reason for its present participation in the CG is threefold. First, the processing company learned that SNV BOAM (through the CG) is supporting the establishment of the Dairy Board in which the company has keen interest. They believe this is the missing institution for the development of the dairy sector and an instrument to influence the government. East African Countries such as Kenya and Tanzania are benefiting to great extent from such institutions (*interview 8)*. The second reason is the good communication/relationship the processing company has with the third sitting BOAM coordinator. "He has played an important role for the company to join the CG as personality of portfolio holders matters" (*interview 8*). And third, the trainings provided to the farmers and cooperatives/unions have an important impact on the quality of milk.

Finally, the SNV BOAM's Dairy Lead Advisor was notified of at least one organisation -the Women Business Association of Adama City- retreating from participation in the CG meetings. Reduction in SNV BOAM's DSA and transportation costs coverage are its cause (*interview 17*). In addition, the SNV Lead Advisor received complaints on the reduction in DSA by some cooperatives and small associations (*interview 17*). According to the EMPPA, several participants, particularly those dairy farms outside the capital Addis Ababa, retreated from participating in the CG, since they cannot afford the transportation costs (*interview 6*).

In short, motivations to join the dairy CG are partly intrinsic, however more often related to invitation by SNV BOAM or on the business opportunities it provides. The main triggers for the largest dairy processing company to recently engage in the dairy CG meetings are the formation of the Dairy Board and the personal relationship with SNV. DSA provided by SNV BOAM is a necessary precondition for some organisations to extend their participation in the dairy CG.

(c) Roles and contributions

Operational plans agreed in several CG meetings clarify the roles and contributions of the main dairy chain stakeholders present in the meetings. In the dairy CG, one additional activity was added to the operational plan in meeting 2 and plans were adjusted in meeting 4. However, due to the lack of *formal* accountability mechanisms, they cannot be enforced upon members (see *section 3.1.3*). Besides, due to the high number of participating organisations (125 organisations in total in all dairy CG meetings) and the high rotation of members and organisations, operational plans are not representing all participating parties.

Nevertheless, several forms of informal accountability are present (*pers. comm.* SNV BOAM, February 2011). For example CG members only receive SNV BOAM funds if their proposals are in line with the SIPs identified by stakeholders in the

dairy value chain. In addition, members need to present their fund utilization reports in the CG meetings, in front of all other critical and reflecting stakeholders.

(d) Shared resources
We can conclude that resources are shared in the sense that knowledge and experiences are shared in the CG and each CG member has an equal opportunity to have access to financial and technical support delivered through the SNV BOAM funding programme[24]. Initially there was limited fund use by dairy CG members and the benefits to be obtained from the support were not always equal (see next section).

In the network analyses on course ratio these findings on stakeholder engagement were verified. To analyse the course ratio of the dairy CG participation database four categories of visiting frequency of organisations have been determined (core visitor, regular visitor, irregular visitor, random visitor) as well as four categories of entry and exit behaviour of the organisations (present & stay, present & exit, entry & stay, and entry and exit). The descriptive statistics of both categories are calculated for the dairy CG participation database and displayed in *Appendix 5*. A legend is attached. In *Table 5*, the visitor frequency in the dairy CG is presented. In *Table 6* the total of exits from the dairy CG is demonstrated.

Table 5 Visitor frequency in the dairy CG (%)

Sector	**Core visitors**	**Regular visitors**	**Irregular visitors**	**At random visitors**
Dairy	1,6	0,0	52,0	46,0

Table 6 Total of exits[25]

Sector	**%**
Dairy	56,8

The social network analysis confirms that:

- There is irregular attendance of organisations in the dairy CG meetings (*Table 5*). The proportion of core visitors (present at all meetings) and regular visitors is modest. In the dairy CG SNV BOAM and the Selale Dairy Cooperative Union are core visitors (present at all 18 meetings). There is one regular visitor (present at 15, 16 or 17 meetings) in the dairy CG, the SNV BOAM coordinator(s). Nevertheless, in the social network analysis the BOAM coordinators were ranked under SNV BOAM and therefore the network analysis shows no regular visitors.
- There is high rotation of organisations in the dairy CG meetings (*Table 6*). The total number of exits (present & exit + entry & exit) is 56,8 percent;
- In the dairy CG, the percentage of irregular visitors (present at least at three meetings with a maximum presence of 14 meetings) is highest (52 percent) compared to the three other CGs (*Table 5*) (*synthesis report*).

[24] In the beginning of the SNV BOAM programme (2005) the three types of funds accessible were the leverage fund, the research and study fund, and the financial intermediation fund. In line with the recommendations of the Mid-Term Review in 2008, the three new types of funds are the Sector Development Fund, the Pilot B2B Fund, and the Up-scaling Support Fund.
[25] Total exits = present & exit + entry & exit (see also *Appendix 5*)

This corresponds with the low perceived level of commitment of dairy CG members.

All in all, we can conclude that the level of engagement by CG participants was overall low to modest, as the limited achievements in the perception of the interviewees and high rotation and reluctant participation of the largest processors and key government decision makers (see also *section 3.3* on representation) are symptoms of poor commitment. Motivations to participate are merely related to extrinsic factors (business opportunities and incentives by SNV BOAM).

3.1.2 Jointness

The success factors identified in this case study to measure the level of 'jointness' in the CG meetings are: (a) decision making, (b) leadership, (c) selection of stakeholders, (d) agenda setting, and (e) distribution of benefits and (f) risk sharing

(a) Decision making

The degree to which the decisions are jointly made in the dairy CG was difficult to measure, as formal decisions are rarely made in the dairy CG (see also *section 3.1.3*). Only a few moments of more formal decision making could be identified, and all were related to electing the nominees for certain positions in established committees or boards. Examples are the election of the CG Leader in meeting 3, a Steering Committee to formulate Terms of Reference (ToR) for research topics to be funded in meeting 8, the Executive Committee in meeting 13 and the establishment of the Steering Committee on the formulation of the Dairy Board in meeting 17. No single interviewee indicated this process is unequal.

We addressed the question whether all members have an 'equal say' in the CG or whether some members are 'more equal than others'? Almost all respondents interviewed on this question believed members have an equal opportunity to speak out without discrimination (*Table 7*); however, there are a few gatekeepers who present in length –due to their position or knowledge- and reduce time for others (*interviews 1* and *7*). For example, the manager of the main processing company has great authority and "dominantly talked" in the eighteenth CG meeting, although the Chain Facilitator encouraged other members to speak out (*interview 7*). Other members confirm the Facilitator restraints dominant members if necessary (e.g. *interview 3*). Also researchers' presentations are longer in the opinion of the cooperative union (*interview 1*).

Table 7. Equal say

Equal say	Frequency	Percentage (%)
Yes	11	92
No	1	8
Total	12	100

Source: interview data

SNV has made attempts to share some of its own responsibilities in respect of the milk and milk products value chains to create more 'ownership' of the CG process with stakeholders. Its main initiatives were the establishment of the Executive

Committee for the evaluation of concept notes regarding BOAM designated funds and the assignment of contracts between SNV BOAM and its clients (including CG members) on capacity building interventions. In the meetings, joint Strategic Intervention Plans[26] (SIPs) and operational plans were formulated. According to what was recommended in the MTR the CG Executive Committee should empower the sector in general and the CG in particular by giving stakeholders a say in the allocation of its dairy-industry related funding. Financial ownership was created, to variable degree, in the following ways.

First, the Executive Committee, with five key actors from the dairy sector, could evaluate, approve or reject funding proposals, but it is the SNV BOAM program manager who takes the final decision[27]. After 2009, SNV BOAM only dealt with approved concept notes by the dairy CG Executive Committee, an achievement for an informal institution such as the CG (*pers. comm.* SNV BOAM, February 2011). Second, the SIPs and operational plans were adjusted in response to CG members at least two times, but that was already prepared in a preliminary stakeholder workshop with dairy value chain representatives identified by SNV BOAM. Third, input supply (animal feed, health, breeding etc.) and land policy issues were initially not included in the SIPs despite the stringent problems they cause for many stakeholders in the dairy value chain. CG participants have raised the question why they are not included in the SIPs several times, but according to SNV BOAM, "the input side of the value chain will be handled by other partners (e.g. Land O' Lakes) and the government. The focus of SNV BOAM is on the milk value chain after the milk is produced"[28]. Moreover, "land issues are part of government policy and cannot be discussed with the government" (*pers. comm. SNV BOAM, August 2010*). Still, in the last SIP revision by dairy stakeholders in 2009, input supply issues were included in the SIPs. Fourth, the dairy Executive Committee was effective only for a limited time period (from 2009). SNV BOAM itself remains modest about the financial ownership that was created in this way. "Having the Executive committee decide on fund proposals was only a 'cosmetic measure': a small shift of ownership" (*pers. comm. SNV BOAM, August 2010*).

In sum, although it was always SNV BOAM that decided on the final budget spending, decisions made in the CG or by its Executive Committee were never bypassed by SNV BOAM (*pers. comm.* SNV BOAM, January 2011). After the Mid-Term Review in 2009, SIPs were revised and dairy stakeholders were slowly able to change the SIPs in the direction they preferred.

(b) Leadership

During the interviews it became clear that leadership in the dairy CG is an issue of concern. SNV BOAM prefers a private processing company as a Chain Leader because such a chain actor has strong interests in linkages "both upstream and

[26] The following Strategic Intervention Plans were agreed with the dairy CG members in 2009: 1) processors and cooperatives have quality systems for hygienic milk supply operational, 2) a sector wide increase in demand for quality processed milk and milk products (e.g. pasteurized milk), 3) improved animal feed production in the backyard, 4) strong private sector involvement in animal forage production, 5) sector associations are providing services to members and creating linkages with support institution (SNV BOAM 2 programme proposal).

[27] CG 13 meeting minutes.

[28] CG 2 meeting minutes.

downstream in the chain"[29]. Next to this, decision-making with private companies is considered more convenient as –in comparison to cooperatives- they make decisions with a limited number of members (*interview 17)*. However, the interviewees reported recurrent problems with CG leadership in the dairy value chain. After the retreat of the first CG Leader in the fifteenth meeting (due to his retirement), another manager of a private dairy producing and processing firm was elected as the new CG Leader. She clarifies her leadership is ending because her term has ended after two years (*interview 2*). But there is more. Although representing a blooming business, the Leader's company proved to be too small to fulfil the role of leading an entire industry sector towards modernization. The current trio that leads the CG does not manage to organize the dairy chain actors into a more powerful movement. The CG platform is currently in the process of electing a new CG Leader, but there is not an obvious new candidate that is supported by the far majority of CG members. One candidate, EMPPA, is a producers and processors association and apparently considered not yet strong enough to fill the leadership vacuum by at least nine interviewees. They, including SNV BOAM, have a preference for a more powerful processing company or the Dairy Board that could more forcefully promote the market and quality requirements throughout the sector. Meanwhile, SNV BOAM takes over leadership responsibility if needed, partially related to a problematic decision management within the cooperatives and association (*interview 17*). For example, SNV BOAM planned a dialogue forum with the Ministry of Agriculture on the establishment of collection centers and business hubs (see also *section 3.3*)[30]. "SNV BOAM has always believed on the importance of sector associations in lobbying for the sector with policy makers. In this regard, it has been assisting EMPPA since 2005. However, despite the assistance given to the association very little progress has been achieved. The membership is dominated by producers and the processors have almost no interest in the association"[31].

(c) Selection of stakeholders

The Chain Facilitator invites and selects participants, in collaboration with the SNV BOAM Lead Advisor, CG Leader and sometimes Vice Chain Leader, on the basis of previous meetings. The previous Chain Leader gave recommendations to SNV BOAM on whom to invite, however "it is SNV BOAM who finally decides as the floor is theirs"(*interview 13*). One participant believes SNV BOAM stopped inviting him to the meetings as he was critical on the meeting format. His dissatisfaction grew in every meeting as -in his opinion- benefits for farmers are absent (see also *section d*), stakeholder representation is incomplete, commitment is low, and finally, the meeting format is highly unattractive. The CG should innovate and restructure its format as every meeting is the same. The private collection centre believes SNV BOAM is sometimes inaccurate with the invitation of attendees. He missed invitations twice now as he has experiences problematic Internet access and recommends that SNV BOAM should rather phone its participants (*interview 11*).

SNV BOAM admits it has received some complaints from members stating they are not being invited anymore. Someone can be removed from the participation

[29] Discussion Group SNV BOAM, August 12, 2010.
[30] CG 12 meeting minutes.
[31] SNV BOAM annual report 2009

list if he/she was not active for at least two or three meetings. Participants might feel "personally attacked by this and are too stubborn to participate after that" (*interview 17*). Moreover, SNV BOAM says it does not remove members on the basis of a critical attitude.

Changes in the SNV BOAM programme coordinating staff considerably influenced the new CGs invitation policy. "The first CG was developed from scratch and it was SNV BOAM who gathered all relevant stakeholders together"[32], and the first BOAM coordinator insisted the number of participants should not exceed 30-35. However, from meeting nine (end of 2007/beginning of 2008) the value chain Lead Advisors -headed by the second BOAM coordinator- started inviting many participants (often over 50 participants), aiming at broad based information dissemination. This prompted SNV BOAM to look more critical at the engagement processes within the coordination group[33]. Invitation became more regulated with only one participant from each organisation receiving DSA. New participants are mainly invited on the basis of their relevance for the agenda of the meeting (*interview 7*).

Finally, CG members and SNV BOAM are well aware of the importance of inviting key players to the meetings. They have to be convinced of the growing business opportunities in the dairy sector (e.g. *interview 14*). The Facilitator approaches reluctant members by first sending official invitation letters and then he approaches them personally by call or visit. However, they show inconsistent participation behaviour, even after persuasion and confirmation (*interview 7*). The Cooperative Union is confident that the Facilitator is actively inviting key players, but they are just not willing to participate (*interview 1*).

(d) Agenda setting

The agenda of the meeting builds on the previous CG meeting agenda. It is the Facilitator, the CG Leader and the SNV BOAM Lead Value Chain Advisor who decide on content (*interviews 7, 17, 18*). Also other relevant actors are sometimes consulted on agenda setting, for example SNV BOAM's coordinator (*interview 7*). Participants can bring in agenda points according to SNV BOAM (*interview 17*), but this is not explicitly stated in the invitation letter, "nor has it happened in practice" (*interview 17*). The agenda and a summary of the previous meeting are sent to the participants 10 to 15 days prior to the next meeting.

Although the agenda is sent in advance, the Cooperative Union feels they cannot prioritise the agenda setting for the meetings and the agenda mainly reflects the ideas of the Chain Facilitator. As a result many "burning issues" are therefore not on the agenda (*interview 1*). Finally, one interviewee believed EMPPA members sat together to decide on the agenda for the next meetings. SNV BOAM refutes this.

[32] Discussion group SNV BOAM, August 12, 2010.
[33] SNV BOAM Annual Report 2009

Table 8. Agenda setting and selection of stakeholders evaluated

Satisfaction	Frequency	Percentage (%)
Low	3	25
Modest	7	58
High	2	17
Total	**12**	**100**

Source: interview data

In short, nearly half of the interviewees are only low or modestly satisfied with the agenda setting and selection of stakeholders (*Table 8*). This is related to perceived inaccuracy in invitation, failure to invite key players to the meetings, boring meeting formats, and lack of influence to prioritise the agenda setting. Organisations that lack email addresses to receive the meeting agenda in advance miss the opportunity to anticipate and prepare on the meetings' agenda.

(e) Distribution of benefits

The first dairy CG meeting explicitly identified expected benefits from the joint efforts for the stakeholders. When asked during the interviews for benefits and the way they are distributed among CG members, a narrow majority (54 percent) of the respondents (both producers and processors) believed this is equal (*Table 9)*. One respondent believed there was no benefit at all. The only benefit the dairy farmers get is "coffee, tea and lunch during the meeting" (*interview 14*).

Table 9. Equal benefits

Equal benefit	Frequency	Percentage (%)
Yes	7	54
No	6	46
Total	13	100

Source: interview data

Whether or not interviewees believed distribution of benefits was equal, the dominant view is that those members possessing the capacity (level of organisation and understanding), a proactive attitude and creativity will benefit most.

Remarkable in the dairy CG was the limited usage of funds. SNV BOAM believes the reason is that most members in the dairy CG are cooperatives and they have less capacity to provide the 20 percent necessary contribution in order to access SNV BOAM's funds (*interview 17*). Also SNV BOAM realizes that "participation is dominated by those making the best business out of it"[34]. Other reasons for a limited fund use are 'lack of attention to small dairy producers', 'no access to required collateral', and 'absence of professional linkages'[35]. On the other hand, two respondents, a retailer and a processor, believe that opportunities provided by the CG are more open to producer organisations and they will generally benefit more from these types of meetings (*interviews 10 and 16*).

(f) Risk sharing

[34] Discussion group SNV BOAM, August 12, 2010.
[35] CG 7 meeting minutes.

The last indicator of jointness in the CG, the extent to which risks are shared between CG members *in the meeting*, appeared not very relevant, as resources are mainly brought in by SNV BOAM. CG members risk little in the meetings except their own time. In the dairy value chain, risk uncertainties and transaction costs might have been diminished as a result of trust building in the CG (see also *next section*).

The degree of jointness of the CG members and the mutual independency among them are important measures for the level of 'jointness' in the CG. Overall, the data gave the impression that the CG leadership at least intends to let the CG function in a horizontal manner. After 2009, project proposals needed to pass the CG's Executive Committee to receive funding from SNV BOAM. But interviewees are only modestly satisfied on the governance in the CG; it seems the current CG Leader is not considered to be a natural *primus inter pares*. In the meetings, members have an equal chance to speak out, although there seem to be some members dominating the discussions. Moreover, not all stakeholders (mainly dairy cooperatives and farms) have been able to articulate their needs/demand; only those who push their issues through in previous meetings can influence the CG agenda. On the other hand, an active attitude of producer organisations would benefit them considerably. The CG's centre of gravity in agenda setting and selection of stakeholders remains with the leading trio including the CG Facilitator, the VC Leader and the SNV BOAM Lead value chain Advisor, with the sitting SNV BOAM programme coordinator as a significant influencer at the background.

In the social network analysis, betweenness centrality was among others used to identify the most central actors in the network. As stated before, those organizations having the highest scores on betweenness centralities in the network are the most central players in the MSP networks. In *Appendix 6*, the top-10 central network players of the dairy CG are presented in tables. Their organisational type (private sector, public sector, civil society, or education), subtype (i.e. processor, producer, financial institute, business association, implementing agency etc.) and their stakeholder role (actor, supporter, influencer and facilitator) in the value chains were taken into account. The following regarding jointness was confirmed in the social network analysis:

- SNV BOAM is a central network player in the dairy CG (*Appendix 6).* This corresponds with their leading role as an initiator of the whole program and the dairy CG; their involvement in agenda setting and selection of stakeholders, and their final decision in financial affairs;
- The dairy Chain Leader is *not* visible as a central player in the dairy CG (*Appendix 6).* This corresponds with the fact that there was no constant leadership in the dairy CG;
- The Chain Facilitator is *not* visible as a central player in the dairy CG (*Appendix 6.* This is related to the fact that the dairy Facilitator took over the facilitating role only from meeting 14. The changing Facilitator roles could explain the reserved appreciation of dairy facilitation;

- In the first nine meetings (till January 2008), about 25-35 participants can be observed in each meeting (*participation databases*), corresponding with the invitation policy of the first BOAM coordinator. After meeting nine, often over 50 participants -including several members of the same organisation- can be observed (*participation databases*). This corresponds with the invitation policy of the value chain Lead Advisor headed by the second BOAM coordinator.

To identify and compare the genuine 'information brokers' –who are in between other network players and control information diffusion- in the dairy network, only those organisations with a normalized betweenness centrality higher than 2 or 3 were taken into account in this part of the analysis[36]. In *Appendix 6* the central players with a betweenness centrality higher than 2 and 3 are presented.

Regarding 'information brokerage', the network analysis confirms and complements that:

- SNV BOAM plays the role of information broker in the dairy CG, confirming its dominant position as MSPs initiator (*Appendix 6*);
- Measuring a betweenness centrality higher than 2 and 3, the dairy CG is most hierarchal compared to the other CG's; respectively 4 and 1.6 percent of all participants control information (and possibly resource) diffusion (*synthesis report).*

3.1.3 Transparency

Judging from the comments of interviewees, the overall transparency of CG activities can be rated as medium. The meetings are open to public (although more restricted towards the 18th meeting), and meeting minutes, agendas and other documents are shared with stakeholders. CG documents can be downloaded from the former SNV BOAM website, although several links appear to be dead and not all documents are available. The process of Dairy CG succession has been confusing. Members have different ideas on who will take over CG leadership. EMPPA believes it will fulfil this mandate (*interview 6*), whereas some other members believe it will be the Dairy Board.

Success factors assessed under transparency were (a) accountability, and (b) trust building.

(a) Accountability

Formal accountability mechanisms are absent in the dairy CG. Except for the Chain Leader, Chain Facilitator and other contractors with SNV BOAM (i.e. Technical Auditors) none of the stakeholders participating in the CG have been assigned *formal* duties and responsibilities. Still, as stated before, informal forms of accountability are present (*section 3.1.1 c*).

(b) Trust building

[36] The cut-points 2 and 3 are arbitrary

Trust is a major issue in the dairy CG. Particularly the problematic relationship between dairy producers and processors was discussed in several meetings[37]. Nine interviewees believe there is limited or no mutual trust and cooperation and the "vertical relations between processors and producers are not based on a partnership" (CG 17 meeting minutes: 15). According to one interviewee, the Dairy CG did not succeed in strengthening the EMPPA since producers and processors are "two enemies who would like to kill each other in order to grab each other's money". Also the competition among processors is reportedly "unhealthy", while a common body to address the grievances and coordination of the chain actors is lacking.

Next to this mistrust in the value chain, at least two of the interviewees were suspicious towards SNV BOAM. An interviewee explained he was highly unsatisfied with the SNV BOAM programme and failed to see any benefit of the CG meetings (*interview 14*). A processing company refused to join the CG meetings since the manager had the conviction that SNV BOAM has engaged in activities that it should not such as organizing and assisting (technical, material and financial) producers and particularly competing processors. Such interventions would distort the playing field for the development of a competitive dairy market in the country. The general manager states that SNV BOAM was "creating unfair competition as for example their competitor processor company was financially supported" (*interview 8*).

Processing companies are reluctant to become a member of the EMPPA as they mistrust and do not acknowledge the association. In their views, the association has no influence on government policies, and serves only a symbolic function. Therefore, it cannot represent the processors' concerns with quality standards and package equipment, two problems that can be particularly addressed through the government (*interviews 8 and 10*).

According to SNV BOAM, the frictions are caused due to the nature of the dairy products. The conservation period is limited, cooling mechanisms are expensive, and the products are under the influence of the dairy fasting seasons in Ethiopia. Processing companies are all concentrated around Addis Ababa and as soon as milk transports arrive from the regions the milk is already spoilt (*interview 13*). Moreover, export incentives are lacking in the dairy sector (*interview 17*).

SNV BOAM and the Dairy CG try to address these issues. SNV BOAM aims at developing and enforcing quality standards, establishing the Dairy Board, strong capacity building and it organised a series of consulting meetings between processors and producers to ameliorate their relationship[38]. This is completed with information dissemination and supports on dairy product diversification and the establishment and assistance of new processing companies. However, much still needs to be done here. For example, the number of processors and producers participating in the series of consultancy meetings is so far out of proportion. Eleven producer organisations were present at the first meeting compared to two processing companies. Even more critical, processors were not present in the second meeting of the consultation process (*interview 18*).

Several interviewees believe the Dairy CG has contributed to smoothened communication between the processors and producers (e.g. *interviews 1, 3, 5 11*), a form of communication that was completely absent before the start of the meetings.

[37] CG meeting minutes 3, 4, 17, and 18.
[38] CG 17 meeting minutes.

Stakeholders start to recognise the problems the other parties face. In addition, the approach of the new programme coordinator contributed to increased trust between SNV BOAM and the main processing company (*see section 3.1.1*).

3.1.4 Goal Alignment

Goal alignment by stakeholders is considered to contribute to the effectiveness of collective goal-setting processes, which, in turn, positively influences the success of the MSP. Strong goal alignment and goal visibility allows for more effective execution of the SIPs identified in the process. Goal alignment is measured by assessing the success factors (a) 'clear objectives', (b) 'win-win opportunities', and (c) a 'compelling case' as driver of the MSP.

(a) Clear objectives

The formal aim of the CG –as formulated by SNV BOAM- is to promote efficient and equitable linkages for the economically active poor along the agricultural value chain[39]. No common MSP objectives where specified ex ante by the Dairy CG members, although the milk and milk products value chain common objective[40] that was already prepared in the preliminary stakeholder workshop was adjusted twice in response to CG members.

Since linkages and collaborations are still weak among producers and processors, and stakeholders do not operate in common interests and goals (*interview 4 and 10*), the execution of the SIPs identified in the process is severely limited[41]. Moreover, the mandate of the CG was not clear to the main processing company and the retailer (*interviews 8 and 16*).

(b) Win-win opportunities

Do the members feel the CG facilitates a win-win situation for all? As we have seen in the section on risk sharing, CG members risk little except their time. This suggests that opportunities are equal for every CG member, although not every member has the same capacity to access these opportunities.

(c) Compelling case

Is the milk and milk products CG driven by a 'compelling case', i.e. an important need that can be best fulfilled through an MSP and that is recognized and accepted by all members? There was a compelling case to initiate a multi-stakeholder platform where actors from the three different societal sectors (private sector, government, and civil society) meet and work together to better link smallholder dairy producers and dairy processors to markets. However, the effects of the Dairy CG have been limited. The critical input supplier believes the dairy CG is "not what farmers need. They are in need of basic equipments and not in talk, talk and talk" (*interview 14).* Farmers expect from SNV BOAM to mediate between them and key decision makers

[39] An observation out of the secondary data is that the aim has gradually been shifting from 'creating linkages' towards 'creating ownership in the sector'. The third BOAM programme coordinator endorses this strategy towards a long term vision for the CG.

[40] Meeting 1: Fresh milk supplied to final consumers increased in volume and quality. New objective from meeting 14: Up-take of good practices and diversification of milk products lead to sustainable development of the value chain.

[41] CG 18 meeting minutes.

in the dairy sector and to provide them with basic dairy equipments and financial resources. Finally, it should be the government's role to organise multi-stakeholder platforms and not SNV BOAM's (*interview 14).*

On the other hand, all the other respondents to the question do recognise the CG as an important mechanism supporting the development of the Ethiopian dairy sector. But predominantly in relation to the establishment of the Dairy Board. The CG raised issues on problems related to feed, quality etc. however, no solutions were implemented. According to SNV BOAM, there have been sufficient opportunities (funds, capacity development support) provided in the CG to address these issues (*pers. comm.* SNV BOAM, February 2011). The Board, together with the government bodies will be mandated to work on answers (*interviews 9, 17, 18*).

In this way, it can be concluded that there is a compelling case for the Dairy Board as a vital first step to organize the dairy sector. The Dairy CG is instrumental in establishing the Dairy Board. But the Board is only one element. According to the interviewees, the problems in the dairy sector should also be tackled by strengthening sub-sector associations, creating accessible land for the grazing of the cattle, working hand-in-hand, improving government services, facilitating feed, health and AI services, and, commercialization of the dairy sector.

3.2 Embeddedness

To assess the degree to which the dairy CG is enmeshed in third organisations, we assessed its inter-organisational relationships through (a) the origin of the participants' link with the CG (was the motivation to join brought about by another organisation?), (b) the extent to which the MSP contributed to new professional organisations' memberships, (c) the involvement of participants in multiple MSPs, (d) relations with the government, and (e) SNV BOAM's inter-organisational embeddedness as a result of its MSP activities.

(a) The original link to the dairy CG

For two interviewees inter-organisational relationships have been supportive in linking and motivating stakeholders in the dairy value chain to become a member of the CG. They concern the Chain Facilitator and input supplier who respectively got involved in the Dairy CG through their activities for the Dutch organisation Share People (*interview 7*) and through a friend working at the International Livestock Research Institute (ILRI). Apparently EMPPA did not succeed in attracting new members to the dairy CG.

(b) Access to new professional organisations' memberships

The CG has supported some of the participants interviewed to access new professional organisations, mainly actors in the upstream part of the dairy value chain such as the private dairy farm, Cooperative Union, and the collection centre interviewed (*interviews 1, 2, 3, 11*). They became members of the EMPPA as a result of the CG, which is connected to the gradual strengthening of the association (*interview 6*). Processing companies did not see any improvements in their access to new professional organisations.

Access to organisation increased positively for EMPPA. Related to the dairy CG, the association now is member of the Ethiopian Animal Feed Industry

Association (EAFIA). EMPPA also established contacts with Land O'Lakes who is promoting and advertising on dairy products in Addis.

(c) Involvement in multiple MSPs
Several organisations are active in multiple MSPs. Next to their membership of the dairy CG, they visit CG meetings of the honey, oilseeds or pineapple chains. Among these organisations are: the Ministry of Agriculture and Rural Development; the Ministry of Trade and Industry; the Chamber of Commerce; several financial institutes and banks; several governmental implementing agencies including the Oromia Cooperative Promotion Commission (OCPC) and the Quality Standard Authority of Ethiopia (QSAE); ILRI, as well as a women association. Most of the government agencies focus on the honey CG however. The actors involved in multiple MSPs transfer information and contacts from one MSP to the other to the benefit of the members, and enhance the general networking opportunities for them. In this way they contribute to the effects of the each MSP.

(d) Relations with the government
The dairy sector has been a neglected sector, however, during the CG process the government developed a slight interest in the milk and milk products chains. According to SNV BOAM, the sector is recently receiving more attention from the government and there are persistent rumours that the Oromia government will choose dairy as one of the four agricultural products in its five years Agricultural Growth Program of 250 million dollar (*interview 15*). In addition, both the previous and current Chain Leader –as representatives of EMPPA- were able to meet with the Prime Minister to voice their concerns for the dairy sector (*interviews 2*, *6*, and *13*). The current Chain Leader was promised land in the meeting, a promise later materialized as she received 5.4 hectare of land (*interview 2*).

But in general, links between dairy chain actors and government key decision makers were not established in the Dairy CG (*interview 14*, *section 3.3* on representation). The governments' interest was mainly limited to the honey and beeswax products value chains. In the Dairy CG, the commitment of the Ministries is limited to their participating in the CG meetings[42]. The representative of the MOTI admits the Ministry's interest is mainly on export products (i.e. honey) (*interview 4*).

(e) SNV BOAMs' network
SNV BOAM is not the sole donor involved in the VCD approach, but is embedded in a broader international development network. The most prominent organisations with value chain development programmes are the German GTZ, Oxfam GB, and the Royal Netherlands Embassy (RNE), which supports the dissemination of best practices among donors, government institutions and practitioners. Specifically for the dairy value chains, Land O'Lakes' dairy program is comparable to SNV BOAM as the project has the objective to create horizontal and vertical linkages among dairy cooperatives within the dairy value chain[43]. Also, USAID runs a dairy program in Ethiopia[44]. Finally, SNV BOAM partnered with Agriterra to build the overall

[42] SNV BOAM 2 proposal.
[43] CG3 meeting minutes.
[44] CG2 meeting minutes.

business management of cooperatives for the Dairy Business Hub Model[45] (*section 3.3*). The government of Ethiopia has adopted the sectoral and value chain approach. These links of SNV BOAM also embed the CG members in the wider institutional field.

The Dairy CG is sparsely embedded in inter-organisational relationships. Interactions with third parties are non-evident, and multidirectional information flows are limited as information has to pass through the small number of two identified information brokers of the network. The MSP has been limited supportive in creating linkages between public- and private sector and civil society, reflecting absent representations arrangements. Mainly the linkages of SNV BOAM embed the CG members in the wider institutional field.

3.3 Involvement

In this case study, the intensity of actor involvement was assessed through (a) individual/sector representation in the CG and (b) participation in CG-related committees. The findings were verified in the social network analysis.

(a) Representation

In total, 73 percent of the interviewees believe the Dairy CG has incomplete representation, with rotating and unstable participation (*Table 10*). Especially the absence of a) key-decision making government delegates; b) processors; c) financial institutions (banks) and d) regional organisations is regarded problematic.

The lack of government involvement is a specific issue that SNV BOAM considered from the outset. The Mid Term Review (Aleme et al. 2008) states: "involvement and commitment from the public sector is crucial in order to achieve the strategic objectives of the BOAM programme. The public sector is already involved (mainly in the honey CG) and experienced the positive effects of the BOAM approach and is interested to continue with the practical relation. The rejection of the public development program[46] however hinders the development of better and more structural relationships. More importantly, the connection with the higher forums and senior management of relevant public agencies and departments needs to be structured for which new arrangements are necessary".

Some interviewees explicitly deplored the absence of processing companies and key decision makers of government and financial agencies because they could significantly help solving the problems in the dairy sector (*interviews 1, 2, 6, 7, 9, 12, 14*). Only recently, SNV BOAM witnesses a gradual improvement in the representation of stakeholders in the dairy CG (*interviews 17, 18*). The last CG meeting was best in stakeholder representation so far a processing company agrees (*interview 10*). Policy makers and processors are getting involved. Moreover, participants from different regions are now joining. SNV BOAM believes the improvement can be attributed to the identification of missing participants and personal invitation methods (*section 3.1.2*). In addition, the purpose and advantages of the meetings are better recognized.

[45] CG16 meeting minutes.

[46] The public component of the BOAM program (to be implemented by the Bureaus of Finance and Economic Development (BoFEDs) never took off (source: Mid Term Review, 2008)

Table 10. Representation dairy CG

Representation	Frequency	Percentage (%)
Complete	4	27
Not complete	11	73
Total	**15**	**100**

Source: interview data

(b) Participation in CG related committees

The establishment, membership and participation in (steering, ad hoc) committees, Boards and working groups are indicators of actor involvement as well. In the Dairy CG meetings several (spontaneous) committees, Boards and groups were formed, such as tasks force teams to formulate TORs on the School Feeding Milk (SFM) initiative and research study topics as well as the Executive Committee for the approval of concept notes[47]. However, the latter "already finished before it properly started as funds were finished" (*pers. comm.* SNV BOAM, August 20, 2010). In meeting 16, SNV BOAM presented an action plan for the creation of a Dairy Business Hub model. A Business Hub concept is a model of business in which different necessary services are coordinated under one institution and effectively provided to clients. The concept has been drawn from experience sharing visit in Kenya. To apply this model in Ethiopia, a feasibility study has been undertaken at several dairy cooperatives, but policy makers did not participate in the study of Dairy Business Hub. Finally, in meeting 17, a Steering Committee was elected for the establishment of the Dairy Board.

The social network analyses on sector representation and central network players generally support these findings (derived from *Appendices 5 and 6*). In *Table 11* and *12* respectively the sector representation in the dairy value chain CG and the number of dairy central network players from each sector are represented. Finally, in *Table 13*, the central network players per stakeholder role in the dairy value chain are displayed.

Table 11. Sector representation in the dairy CG in percentages (%)

Sector	**Private sector**	**Public sector**	**Education**	**Civil society**	**Unknown**
Dairy	57,6	18,4	8,0	5,6	10,4

Table 12. Top-10 central network players in the dairy CG per societal sector

	Dairy
Private	6
Public	2
Civil Society	1
Education	1
Total	10

Table 13 Top-10 central network players per stakeholder role in the dairy value chain

[47] Respectively CG3, 8 and 13 meeting minutes.

	Dairy
Actor	3
Supporter	1
Influencer	5
Facilitator	1
Total	10

From the network analysis, the following was confirmed:

- SNV BOAM's private sector approach is evident; the majority of the participants in the dairy value chain CG represent private sector organisations (*Table 11*). Moreover, more than half of the central network players are representatives of the private sector (*Table 12*);
- All stakeholders' roles in the value chains are represented in the lists of central network players of the dairy CG (*Table 13*). This indicates that value chain roles (chain actors, -supporters, -influencers and -facilitators) of the whole chain approach are represented in the networks;
- Financial organisations (i.e. banks, MFIs) are absent as central network players in the dairy CG (*Appendix 6*);
- The two main dairy processing companies are absent as central network players in the dairy network, confirming their initial reluctance to involve in the dairy CG (*Appendix 6*);

Apart from representation of the three societal sectors of main importance is *who* is representing the key sectors. For example, governmental agencies may be participating in the CG, however, if they do not sent key governmental decision representatives, the effects will be imperfect. Moreover, a strong private sector is necessary for value chain development. In the network analysis, the private sector approach was confirmed. But the capacity and quality of the central private sector players shows great variety; for example the key private sector players in the dairy CG (e.g. Selale Dairy Cooperative and the Adama Woman Entrepreneurs Association) are less capacitated.

Altogether, the dairy value chain CG generated a medium rate of sub-organisations, however, their successes are so far not crystallised as the Dairy Board is not established yet and the Dairy Business Hub is in the process of set up (quality lab equipments and -manager and identification of services) (*pers. comm.* SNV, January 2011).

Table 14. Dairy CG Ethiopia: internal and external dynamics

Internal dynamics	
I. Collaboration	
1.1 Engagement	
Commitment	Low-medium. Processors reluctant to join. Government's commitment limited to participation. Limited achievements symptom of non-dedication.
Motivation	Threefold: 1) non-SNV BOAM related financial and business opportunities (extrinsic), SNV BOAM related financial and technical incentives (extrinsic) and 3) personal interest (intrinsic). DSA relevant for regional cooperatives and small associations.

Roles & Contrib.	No, formal duties and responsibilities not specified.
Shared resources	No, but equal access to third (SNV BOAM) funds.
1.2 Jointness	
Decision making	Joint, to variable degrees. Stakeholders can adapt SIPs. For a limited period, stakeholders had a say in dairy allocated funding. Equal opportunity to speak out for all, although few gatekeepers present in length and reduce time for others.
Leadership	Weak Chain Leader and Leading association. SNV BOAM occasionally fills leadership vacuum. Producers versus processors.
Selection stakeholders	Leading Trio of CG Leader, Chain Facilitator, & SNV BOAM (centre of gravity). Members low-modestly satisfied with selection.
Agenda setting	Leading Trio of CG Leader, Chain Facilitator, & SNV BOAM. Influencing agenda by others cumbersome. Members low-modestly satisfied with agenda.
Benefits distribution	Benefits depend on stakeholders' pro-active attitude and capability to articulate interests, and capabilities not equally distributed among members.
Risk sharing	No risk members – not relevant
1.3 Transparency	
Accountability	Formal accountability mechanisms absent. Nevertheless, several forms of informal accountability are present.
Trust-building	Problematic. Trust improves among actors in and along the chain, related to the CG as a meeting and communication forum, the future establishment of the Dairy Board and the approach of the 3rd BOAM coordinator. However, mistrust processors-producers still evident.
1.4 Goal alignment	
Objectives clear	Semi-clear. But stakeholders do no operate in common interests and goals.
Win-win	In principle. Win-win opportunities are equal but members need capabilities to gain from MSP, and some more capable then others.
Compelling case	Semi-clear. Government is not active and private sector could not organize the dairy chain. With establishment Dairy Board by NGO, tri-sector approach will be facilitated.
II. Embeddedness	
Link to CG	No. Hardly any pre-existing links with other organisations.
Member new org	Partly. CG helped some upstream organisations to get linked to new (professional) organisations. Not for processing companies.
Multiple MSPs	Partly. Several members involved in other (BOAM) MSPs. This improves network opportunities for CG members. But mainly involved in honey CG.
Relations with government	Limited. Government agencies participating, but absent links between dairy chain actors and government key decision makers. Government mainly interested in export products.
SNV BOAM embeddedness	Yes. Links SNV also embed CG members in wider institutional field
III. Involvement	
Representation	Incomplete. Absence of a) key-decision making government delegates; b) two largest private processors; c) financial institutions (banks) and d) regional organisations
Participation CG sub committees	Partly. CG generated a medium rate of sub-organisations but successes so far not crystallised.
External dynamics	
IV. Institutions	
Access to knowledge	Yes in respect of training, awareness quality issues, and information. No in respect of durability.
Access to capital	Limited. Financial organisations rarely offer accessible loans. A finite group of Chain Leading organisations received loans. Major limitation effects CG.
Access to markets	Limited in respect of increasing buyers' competition, introducing quality based pricing schemes, and B2B relations. No in respect of access to international market, contractual agreements, alternative markets, fair prices and compulsory quality standards.
Access to (third) organisations	Partially. CG helped several upstream dairy value chain actors to get linked to new professional organisations, but others not.

4. Institutional change

This chapter elaborates on the CG's external dynamics, the institutional changes in the value chain's business environment brought about by the CG. We address the question to what extent the CG has been effective in improving the conditions for upgrading for farmers and SMEs in the milk and milk products value chain, in the perception of the interviewees. The focus is on opportunities for value chain actors to acquire knowledge and technology, capital or credit, opportunities to stabilize markets, and to become part of professional associations. *Table 15* presents an overview of perceptions by knowledgeable interviewees.

Table 15. Perceived changes in the institutional environment, in percentage and number of interviewees

	-	%	+/-	%	+	%	Total
4.1 Access to knowledge and technology							
Availability of new animal breeds	5	63	3	37	0	0	8
Farmer awareness on quality	1	12	2	25	5	63	8
Availability of quality animal feed	1	12	3	38	4	50	8
Training in dairy management	1	12	2	25	5	63	8
Reduction in animal diseases and death	6	76	1	12	1	12	8
Artificial insemination	7	88	0	0	1	12	8
Diversification of dairy products	1	12	5	63	2	25	8
4.2 Access to capital							
Willingness banks/MFI's to finance	3	38	3	38	2	25	8
4.3 Access to markets							
Increased prices paid by buyers	6	86	1	14	0	0	7
Advance payments	7	88	1	12	0	0	8
4.3 Access to organisation							
Access to organisation	4	37	0	0	7	63	11

- No effect of CG -/+ Limited positive effect of CG + Considerable positive effect of CG

4.1 Access to knowledge

Access to knowledge refers to market, technical, or organisational information that value chain actors can acquire either by themselves or by hiring affordable service suppliers. To what extent have the CG meetings facilitated dairy chain actors in their access to such knowledge? Has the CG been indispensible in this respect?

The dairy chain stakeholders pointed to information sharing during the CG meetings. In this way stakeholders received information on, for example, dairy product diversification, quality based pricing schemes, and locations to buy seeds for

cattle feeding (*interviews 6, 9, 17, 18*). This contributed to a modest shift in the diversification of dairy products (*interviews 2, 6, 17, 18*) and improved access to cattle feed for one interviewee (*interview 2*). A limited number of interviewees confirmed their access to technical knowledge had been improved through trainings, for example on general dairy management (quality aspects, productivity increase, and product diversification) provided to them (*interviews 1, 2, 13*). This is to be considered an indirect effect of the CG, since it is the general SNV BOAM programme that delivered the funding for the trainings. Nevertheless, it is through the CG that stakeholders meet with their Business Development Services (BDS) providers, such as Land O'Lakes (equipment supply) and the Technical Auditors (TA's) contracted by SNV BOAM. For example, the role of the TA's is highlighted in meeting 15. Several clients took the 'golden opportunity' to receive service assistance by the TA's, including private dairy farms, dairy cooperative(s) unions and a processing company. However, clients "do not use the golden opportunity to the max", except for the private farm of the current CG Leader (*interview 18)*. The TA's trained her on quality aspects with the use of the lactometer (fat content) and alcohol meter (sour degree). With the financial and technical supports she received from the SNV BOAM program she trained her suppliers on productivity and quality issues. She has introduced a quality based pricing system in her collection center to ensure supply of quality milk. Although formerly a raw milk producer, her firm is currently engaged in several chain activities, such as producing, collecting, and processing. She sells a variety of dairy products including cheese (neutral cheese, mozzarella, cotton cheese, ricotta, and smoked cheese), butter (cream butter, table butter, for cosmetic purposes), yoghurt, cream and processed milk (see *pictures*) to several Ethiopian supermarkets. Finally, her firm managed to have access to a piece of land to produce cattle fodder (*interview 2*).

Other perceived CG effects are increased farmer awareness on quality and increased pressure on the Quality Standard Authority of Ethiopia (QSEA) to draft quality standards. Less positively evaluated is the contribution of the CG in making available new animal breeds and accessible animal feed (too expensive), in reducing animal diseases and deaths, and improving access to Artificial Insemination (AI) services. Disease is a major problem in Ethiopia with about 40 million animals afflicted by different types of diseases and only 8.7 million of them treated (CSA, 2009/2010, reference date November 10, 2009).

Several interviewees placed critical notes concerning the durability of CG interventions. Did the Dairy CG only contribute to a durable change for a few individual dairy entrepreneurs, such as the success story of the Chain Leader's private farm that was put forward as an example? The problems of her private farm (no land, no quality, and no feed) are illustrative for other dairy farmers in Ethiopia; however, solutions seem not realisable for other farmers without external (technical and financial) support. Interviewees believe that trainings were "only provided irregularly" and local government research institutes fail to provide regular trainings (*interview 1*). The effect of the technical support is marginal due to the fact that trainings were "not well organized" (*interview 9*) and failed to address all relevant stakeholders in the chain. Especially, processing companies did not receive sufficient support (*interviews 8, 9, 10*). Moreover, support is limited to certain regions (*interview 13*), and finally, there are no means to access the expansive cattle feed although CG members receive information on proper quality animal feed (*interviews 6, 18)*. The

TA's are disappointed that members' interest is mainly on financial support, and not on technological (*interview 18*).

Pictures: Dairy value chain in Ethiopia

The cows are indispensible in the dairy sector

Milk Quality Testing: fat content & sourness and a collection centre in Sululta

Dairy products (cream, cheese, ricotta) produced by private dairy farm of Chain Leader


Source pictures: own compilation first author

4.2 Access to capital

Access to capital involves the possibilities for dairy value chain actors to acquire a credit, loan or budget for their commercial activities. Access to capital was assessed through interest rates, duration, collateral requirements, pay-back conditions, and characteristics of the funding organisation. It was also verified whether the CG was indispensable in influencing the stakeholders' opportunities to access capital/credit.

In Ethiopia, Banks rarely lend money to small scale suppliers, and farmers have only access to MFI's and informal lenders that charge huge interest rates. The MFI interviewed (*interview 5)* provides micro loan services, small loans, expenditure loans, and loans for agricultural activities. According to the Loan Officer they provide loans on a two years basis, with 16 percent interest rate based on monthly repayment.

Access to capital/credit was therefore a point of discussion in the dairy CG. SNV BOAM actively invites financial organisations to the meetings[48] and two of them, a MFI and a Bank respectively, financed the Chain Leader and the Cooperative Union (*interviews 5, 17, 18*). However, it did not lead to changes in their collateral policy; the reason for the limited funding opportunities (*interviews 5*). Their reason for ongoing participation is the network opportunities the CG provides for viable financing of the interviewed MFI itself. Unfortunately, other invited Banks and MFIs abstain from participation in the meetings (*interview 7*).

In the beginning of BOAM there were discussions on whether or not to include loan guarantees in the programme; however donors of SNV BOAM were not willing to finance that (as they are not effective presently due to financial incapacity). Main problems are that currently only already existing and established clients receive loans unlike new starters. Also, the Ethiopian financial sector is heavily state regulated, even for the private farms, and agriculture is seen as a high risk investment.

The CG has been able to improve access to credit/capital in the dairy sector to small extent. A narrow majority out of eight interviewees with whom the issue was discussed –including SNV BOAM- said the CG did (limited) positively affect the willingness of Banks and MFIs in Ethiopia to lend any money to stakeholders in the dairy value chain (*Table 15*), although perception is biased towards a finite group of 'lucky members receiving temporary access to finance, not necessarily through the CG' (Cooperative Union, and the companies of the Chain Leader and ex-Chain

[48] Discussion Group August 12, 2010.

Leader). Except for these three members and funding received through the SNV BOAM programme[49] and LOL no access to external credit facilities was achieved for the majority of the stakeholders in the Dairy CG (e.g. *interviews 1, 6, 9, 11, 12, 14*). Access to credit from banks and MFIs for the farmers "did not improve at all as a result of the CG" according to the interviewed Cooperative Union and input supplier (*interviews 1* and *14*). The previous CG Leader's Cooperative was able to obtain loans for the establishment of a processing plant[50]; however, others will not succeed in his eyes as they are "not profitable and progressive enough" (*interview 13*). SNV BOAM confirms the lack of results in this respect and also the implications for the durability of the CG activities. "This is probably a limitation of the program: how will the finance continue if there is no access to credit facilities?" (*pers. comm. SNV BOAM, August 20, 2010*).

Recapitulating, little progress was booked on dairy value chain stakeholders' access to affordable credit/capital. The interviewed MFI came up with three solution scenarios: "option 1 is to have 'good salary' CG members providing collateral for the other CG members; option 2 is that the CG itself serves as 'institutional collateral' as soon as it is legally registered and takes its responsibility. However, first the Dairy Board, a formal stakeholder platform, needs to be legally recognized by the government. Finally, option 3 is that processors and producers serve as collateral for each other as soon as their trust relationship has improved" (*interview 5*).

Prices in the dairy sector are dependent on region (closer to Addis is less transportation costs), but to give some indication on the prices the researchers found that raw milk is generally bought from dairy farmers for about 4-5.5 Birr/litres and sold by collectors and processing companies for 8-12 Birr/litre (*interviews 2, 3, 8, 10, 11*). Processors are the price makers and accused of paying unfair prices (e.g. *interviews 1, 3, 12*).
Prices on dairy feed (mixed) are escalating, with 79 Birr/quintal in 2004 whereas it was 302 Birr/quintal in 2008. For hay it was 8-12 Birr/bale in 2004 and 18-30 Birr/bale in 2008 (*interview 9*). AI services are 110 Birr/per cow and semen costs 200 Birr per cow (*interview 13*).

4.3 Access to markets

Access to markets was examined by gathering information on prices, and buyer and farmer commitments (advance payments, contractual arrangements, quality standards, and alternative market opportunities).

The Dairy CG has been limited successful so far in improving markets access for small farmers and SMEs. First, prices paid by buyers did not increase in the dairy value chain (*Table 15*), while prices for feed are escalating (*see also textbox*). Processing companies are believed to be the price determiners at unfair prices (*Table 2*); price negotiation is impossible (e.g. *interviews 1, 3, 12*). Perceived positive development is the introduction of quality based pricing schemes, an idea raised in the Dairy CG (*interviews 2, 11, 17, 18).* It was the CG that inspired the manager of the collection center to introduce such a scheme. It helped him "to think differently" (*interview 11*). Moreover, processing companies are willing to pay better prices for quality dairy products since the number

[49] For example to the processing company Family Milk.
[50] Adaa Liben Cooperative was able to obtain a loan of 3,5 million Birr from three Banks (a.o. Awash and International Bank). This was not related to the Dairy CG according to SNV BOAM (*pers. comm.* SNV BOAM, January, 2011).

of processing companies enhanced and competition between buyers is increasing (*interviews 11, 17*).

Second, hardly any formal contractual agreements exist between buyers and suppliers (*interviews 1-3, 6, 8-10, 13, 16*). Especially the processing companies interviewed oppose to the idea of contracts. "Contracts do not work in the milk sector, as farmers are not loyal" (*interview 10*). "Farmers always break the contract (*interview 8*). "Both farmers and Coops/Unions are not loyal to one company" (*interview 3*). According to the Chain Leader, "everything is based on trust, and there are no formal contractual agreements and advanced payments" (*interview 2*). The CG is promoting the idea of contractual agreements, however, so far no change at the ground level was perceived. Members begin to see contracts as a powerful mechanism to ensure continuous supply and purchase, although it has not been implemented yet (*interview 11*). Currently, several processors and cooperatives are participating in such contractual negotiations (no concrete results yet) facilitated by SNV BOAM (*interview 1, 6, 17, 18*), however the interviewed processing companies did not confirm.

SNV BOAM aims at delivering B2B support to guarantee that a reliable supply and market outlet is assured. In their opinion, facilitating the development of business relationships and arrangements between downstream traders, processors and farmer organizations on one side and small farmers and their organizations on the other side is essential for business development.
Source: SNV BOAM's value chain approach.

Third, there is no guarantee that the produced milk can be sold and selling alternatives are limited. For example, the Cooperative Union had to dispose 3000 litres of milk in August 2010 (*interview 1*). "Farmers have scarce alternatives for selling their products, related to "the limited number of processing companies" (*interview 3*) and the "unreliable character of buyers" (*interview 6*). The scant alternatives are to sell directly to the retailers, or to make butter for own purposes/households.

Fourth, none of the respondents believed the willingness of buyers to provide credit in advance increased considerably as a result of the CG (*Table 15*); although there are examples of farmers receiving feed on credit base (*interviews 10, 11*, and *18*).

Fifth, standardization is still voluntary and QSAE did not certify a single dairy producer in Ethiopia[51]. However, quality standards were drafted under the QSAE. Under Dairy Board pressure, it is expected to be pushed through as formal policy (*interviews 13, 17*, and *18*).

Sixth, the CG has hardly been successful in changing a number of important market policy issues. Little has changed in the governmental policy in respect of mandatory quality standards and import substitution. The import of dairy products "will remain extremely high if the government does not relax its land policy and allow tax exemption on animal feed sales" (*interview 9*). Discouraging land restricting policies and financial systems also remained largely unaddressed. Several interviewees are confident the Dairy Board will have an impact on this (*interviews 1-3, 9, 17, 18*).

Contrary to these limitations, the main step forward is that the dairy CG served the function of contact platform and enabled the establishment of new **business to**

[51] CG 2 meeting minutes.

business (B2B) relations (see also *textbox*). A number of interesting examples emerged from the interviews. The Chain Leader received equipments from both the input supplier (who met almost all his clients through the CG) and LOL, and all of them met in the Dairy CG (*interviews 2, 3, 14*). The TA's technically assisted at least nine organisations' they had met in the Dairy CG (*interview 18*). The Chain Leader and Cooperative Union received credit from a Bank and MFI they had met in the CG. In addition, the TA states that Awash Cooperative is now supplying its milk to the Family Milk processing company whom they met in the CG (*interview 18*). EMDTI trained the Chain Leader and Jimma Cooperative (*interview 12*); EAFIA currently provides trainings, information and seed supply to contacts established in the meetings (*interview 9*). Also, the CG contributed on established relations between the interviewed MFI and an aluminium jar producing company, however, the project failed (*interview 5*). Finally, SNV BOAM facilitated exchange visits to Kenya, to the Africa Dairy Farmers' Exchange Forum[52].

In addition, SNV BOAM managed to break the monopoly of the few dairy processing companies operational in Ethiopia with their support to private processors and the establishment of the EMPPA (*interview 17, fact sheet SNV BOAM*).

4.4 Access to organisation

As already discussed in *section 3.2*, the MSP has facilitated the access to new professional organisations' memberships for some of the stakeholders interviewed, mainly for private dairy farms and cooperative(s) unions. 63 percent of the respondents to this question believed the CG did contribute to linking to new professional organisations; 37 percent is negative in this regard (*Table 15*). Mainly the formation of EAFIA (by LOL) and EMPPA (by SNV BOAM) opened doors for new members.

5. The future of the dairy CG

With the interviewees we discussed the future outlook of the MSP. The common feeling was that the CG has been an effective meeting place that played an important role in identifying policy gaps and major problems in the dairy value chain. This function in its current format is however not likely to be sustained. In August 2011, the last CG meeting will be organised by SNV BOAM. SNV BOAM has "its fingers crossed" about the continuation of the Dairy CG after the phase out (*interview 17, 18*). Apart from SNV BOAM, almost all interviewees expressed their worries on the continuation of the dairy CG (e.g. *interviews 1, 3, 4, 6, 7, 13, 17, 18*). One processing company is convinced the CG will stop as soon as the NGO phases out. "It is always like that and there will be no one to organise the meetings" (*interview 10*). Hope is directed towards the establishment of the Dairy Board. Although interest in EMPPA is gradually improving, membership is growing, and contributions are paid (*interviews 2, 11, 13, 17* and *18*), the Dairy Board will probably take over the Dairy CG as EMPPA is not recognised as a leading organisation. SNV BOAM struggled whether it was useful to have producers and processors organised in one association or whether to focus on strengthening the different groups[53].

[52] CG 12 meeting minutes.
[53] Annual report 2009.

The Board is necessary to fill the institutional gap the Ministry is not fulfilling. It will provide "a proper home" for issues to be addressed (*interview 7*). Continuation of SNV BOAM support remains necessary (*interviews 4, 6,* and *8*).

6. Conclusions

This case study assesses the effects of the dairy multi-stakeholder platform, the Dairy Coordination Group (CG) that was established by the NGO SNV in 2005 to improve the access to (quality) markets for stakeholders in the Ethiopian value chain for milk and milk products. Up to 125 organizations participated in at least one of the 18 CG meetings that were held in the period 2005-2010. To examine the CG we analysed both its internal, organisational dynamics and its external dynamics, i.e. the changes brought about in key areas of the institutional business environment.

The CG was supposed to address a series of constraints in the Ethiopian dairy sector that can be summarized around four issues. First, the domestic demand for high quality dairy products is increasing - reflected in the doubling of dairy imports between 2005-2009 - but the largely traditional domestic dairy sector lacks the competitiveness to meet this urban demand. Second, the dairy market is dominated by two private processing firms (one formerly state-owned that is recently privatized) who have a key position both as buyer towards producers and as seller towards the retail. Third, the linkages between producers and processors can be characterized by low confidence and distrust. Producers, for example, feel rejection rates by processors are too high and prices paid by them are too low, while the processors complain about the sub-standard quality of farmers' milk and the low quality awareness among farmers. Fourth, the required significant restructuring of the Ethiopian dairy sector cannot take place without supportive governmental policies, but the government did not prioritize the dairy sector after the liberalization of the economy. In this situation it is appropriate to initiate a multi-stakeholder platform where actors from the three different societal sectors (private sector, government, and civil society) meet and work together to better link smallholder dairy producers and dairy processors to markets. However, the effects of the Dairy CG have been limited.

The analysis of the CG's internal dynamics shows how SNV BOAM and the local industry representatives have struggled to bridge the divides that exist among the dairy industry actors, particularly between milk producers on the one hand and processors on the other.

The level of engagement by CG participants was overall low to modest. Motivations to participate are merely related to extrinsic factors (business opportunities and incentives by SNV BOAM). Interviewed dairy processors explained their reluctance to join because they saw few concrete achievements and little change in government's commitment to the sector.

The data give the impression that the CG leadership intends to let the MSP function in a horizontal manner. For a limited period, stakeholders had a say in dairy allocated funding; project proposals needed to pass the CG's Executive Committee to receive funding from SNV BOAM. Moreover, stakeholders can adapt the Strategic Intervention Plans identified in a preliminary dairy stakeholder workshop. But interviewees are only modestly satisfied on the governance in the CG. In the meetings, members have an equal chance to speak out, although there seem to be some members dominating the discussions, while some stakeholders (mainly dairy cooperatives and farms) have not been able to articulate their needs. On the other hand, producer organisations would have benefitted from a more proactive attitude.

Those who have the capacity to push their issues through in previous meetings can influence the CG agenda. The CG's centre of gravity in selection of participants and agenda setting remains with the leading trio including the CG Facilitator, the VC Leader, and the SNV BOAM Lead value chain Advisor, with the sitting SNV BOAM programme coordinator as a significant influencer in the background.

Particularly the issue of creating local ownership through assistance in the formation of a producer and processor association and the election of a local CG Leader has remained problematic throughout all 18 CG meetings. It has been difficult to find chain actors willing to take up the role of CG Leader. Milk producer representatives and associations were not supported by dairy processors and vice versa. Until now, none has emerged as a *primus inter pares* capable of organizing the dairy chain actors into a more powerful sector. The CG could, in principle, provide a win-win scenario for all stakeholders, but in reality it was not felt this way. Goal alignment has remained a weak element in the Dairy CG. Stakeholders do not operate on shared goals, and distrust has persisted. An attempt, supported by SNV BOAM, to ameliorate the relationship between producers and processors through a series of consultancy meetings in 2009-10, rendered little. The establishment of an Ethiopian Dairy Board, which is envisaged to have a more significant contribution from processors and the government, may improve the situation and steer the dairy sector in the near future. Several interviewees had more faith in such a Board - initiated in the CG- because it can set mandatory quality standards.

In the social network analysis the high rotation in the dairy CG (56,8 % exits), the irregular CG leadership, and SNV BOAM's private sector approach was confirmed. Although the private sector is represented in the network, the top-10 central private players in the network often lack capacity and the two main private processing companies are absent as central players in the network. Moreover, the dairy CG is the most hierarchal configured network (information is diffused through a limited number of network brokers) compared to the SNV BOAMs' other CGs.

In respect of the external dynamics, so far, the Dairy CG achievements have been limited. Interviewees appreciated the information they received during the meetings on issues of dairy management and quality. They also were positive on the efforts to establish the Dairy Board which was initiated in parallel with the CG process. But they were rather critical on the access to dairy-related knowledge and technology through the CG. A few individual farms/companies have benefitted from a combination of additional support programmes from donor organizations and could in this way become role models. However, since a similar combination of additional resources was not available to all stakeholders, other companies could not follow. The role models therefore failed to initiate sector-wide changes.

Neither did the CG manage to significantly improve access to credit and loans that both producers and processors badly require to modernize the dairy sector. SNV BOAM has proactively invited banks and MFIs to the meetings, with little result. Most Banks and MFIs abstained from participation in the meetings, and those who were present have not adjusted their collateral policy.

In respect of market access, the CG, in combination with additional support programmes, has facilitated the founding of more dairy processors that mitigates the market dominance of a few bigger dairy processors. Nevertheless, interviewees are of the opinion that the CG has rendered very little for producers and processors. The

use of formal contracts between the two groups has hardly increased; only few processors and cooperatives are participating in contractual negotiations initiated by SNV BOAM. Nevertheless, there are indications that business to business relations were established in the CG and there is at least one case known of a producer cooperative now supplying raw milk to a processing company. But in general, the market predictability has not improved for milk producers. Milk processing interviewees said to oppose contracts since producers would behave opportunistically. The lack of trust and confidence among the two actor groups seems to be the key hindrance.

When we relate the achievements of the CG to the constraints in the dairy sector in the past decade as outlined above, we can conclude the CG was a timely and relevant response. A growing domestic market for high-quality dairy products in a country whose economy largely depends on agriculture should be met by a national dairy sector rather than by imports. A multi-stakeholder platform could be very helpful in organizing and modernizing this sector. Establishing a Dairy CG is also a proper way to address the divides that existed between producers and processors, as well as between the private sector actors and the government. Nevertheless, five years and 18 meetings later, there is still ample work in progress.

The CG has not managed to resolve the major bottlenecks, such as building genuine trust between dairy producers and processors. Except for some individual successes, the divide between both has persisted, also in the EMPPA, the producers *and* processor association that was created at start of the CG with the assistance of SNV BOAM. In this way the CG internal dynamics have directly negatively influenced the external dynamics. The lack of trust and agreement among chain actors in the CG could not lead to higher levels of cooperation between producers and processors in changing the value chain's business institutions. The CG could not convince the two larger dominant domestic dairy processors that deep collaboration with producers is a condition *sine qua non* for modernization of the sector. Large processing firms could use their market dominance for the promotion and enforcement of higher quality standards among producers. They could win their trust by offering producers a long-term market prospect and by investing in their upgrading efforts. However, due to their apparent unassailable market position they have few incentives to act in this manner. The CG tried to generate those incentives by enhancing competition through its indirect support - funds provided in the dairy CG- for emerging private processors and the establishment of the EMPPA, which had some effect.

The CG did not manage to get the Ethiopian government proactively involved in raising the international competitiveness of the dairy sector. Strong government backing, for example by setting higher mandatory quality standards for the dairy industry, could have supported dairy processors who lack the market power to set such standards privately. Perhaps the establishment of the Dairy Board, initiated by SNV BOAM and the Dairy CG, in which the government participates, may help speed up change in the sector. Nonetheless, a neglected sector requires time and investments to ensure genuine improvement. Opportunities created in the Dairy CG, how small they might appear, can function as a catalyst for further development of the dairy sector.

7. Limitations

As is the inherent problem with any investigation of short duration into a complex subject, choices had to be made regarding **what to take on board and what not**. We experienced a challenge to separate the impact of the multi-stakeholder platform on any changes in the institutional business environment, apart from the SNV BOAM programme as a whole or from any other (policy) interventions. Especially when organisations already have established long term relationships with SNV BOAM, the clear cut distinction between services provided by SNV BOAM or through the CG is not easy. This **'attribution problem**' is a limitation. It was crucial that we remained consciousness on this challenge during all the interviews by probing and making assumptions explicit; however –as expected- some interviewees remained having troubles in making this distinction. In addition, it was questioned whether, for example, the acquired technology services or credit services were being made available from 'inside the chain' (by chain actors) or 'outside the chain' (e.g. chain supporters).

Second, during the field work the researchers operated in close collaboration with SNV BOAM and were partly dependent on SNV BOAM for their selection of interviewees. Though this substantially facilitated logistics and minimized non-response, such embeddedness holds the risk of **losing independency** in the eyes of interviewees. Organisations might shy away from reflecting critically on the dairy CG as they fear the continuity of their good relationship with SNV BOAM. To avoid bias, a stakeholder exiting the CG as a result of a conflict was explicitly incorporated in the interview sample. Furthermore, the researchers constructed a list of relevant stakeholders in advance to ensure independent sampling. Finally, in the beginning of each interview the independent status of the researchers was emphasized.

Finally, the **political context** of Ethiopia was not explicitly taken into account in the primary (interviews) and secondary data collection (desk review), despite its importance in understanding how MSPs are organised and functioning. There is no genuine multi-party democracy and tensions and pressures in Ethiopia's polities are growing according to the International Crisis Group report (2009). Furthermore, Human Rights Watch research (2010: 4) reports that "development aid flows through, and directly supports, a virtual one-party state with a deplorable human rights record" and that "the government has used donor-supported programs, salaries, and training opportunities as political weapons to control the population, punish dissent, and undermine political opponents—both real and perceived. Local officials deny these people's access to seeds and fertilizer, agricultural land, credit, food aid, and other resources for development". The researchers have not researched the impact of this political situation on the data found.

8. References

Aleme, T.K., Maijers, W. & Posthumus, H. (2008). Mid Term Review SNV BOAM 2005-2010.

Ansell, A. & Gash, C. (2008) 'Collaborative governance in theory and practice', *Journal of Public Administration Research and Theory* 18: 543-71.

Austin, J.E. (2007) 'Sustainability through partnering: conceptualizing partnerships between businesses and NGOs' in P. Glasbergen, F. Biermann and A.P.J. Mol (eds) *Partnerships, Governance and Sustainable Development. Reflections on Theory and Practice*, Cheltenham, UK/Northampton, USA: Edward Elgar, pp. 49-67.

Bäckstrand, K. (2006) 'Multi-Stakeholder Partnerships for Sustainable Development: Rethinking Legitimacy, Accountability and Effectiveness', *European Environment* 16: 290-306.

Biénabe, E., Coronel, C., Le Coq, J. & Liagre, L. (2004) '*Linking smallholder farmers to markets: Lessons learned from literature review and analytical review of selected projects*', final report, The World Bank: Washington, DC.

Bitzer, V., & Glasbergen, P. (2010a) 'Partnerships for sustainable cotton production: an institutional analysis of African cases'. *Paper prepared for the 9th Wageningen International Conference on Chain and Network Management in May 2010.*

Bitzer, V., Van Wijk, J. C., Helmsing, B., & Van der Linden, V. (2010b) 'Partnering to facilitate smallholder inclusion in value chains. An exploration of relationships between partnership types and institutional change'. *Paper prepared in the context of the Development Policy Review Network (DPRN), 6 January 2010.*

Dacin, M.T., Ventresca, M.J. & Beal, B.D. (1999) 'The embeddedness of organisations: Dialogue and directions', *Journal of Management* 25: 317-356.

Dorward, A., Poole, N., Morrison, J., Kydd, J. & Urey, I. (2003) 'Markets, Institutions and Technology: Missing Links in Livelihoods Analysis', *Development Policy Review* 21(3): 319-32.

Ethiopian Central Statistical Authority (CSA), Agricultural Sample Survey report for 2009/2010.

FAO (2009) 'Impact of the Global Economic Crisis on LCDs's Productive Capacity and Trade Prospects: Threats and Opportunities. A Case Study: the Dairy Sector in Ethiopia, United Nations Industrial Development Organisation.

Glasbergen, P., Biermann, F. & Mol, A.P.J. (eds.)(2007) '*Partnerships, Governance and Sustainable Development: Reflections on Theory and Practice*', Cheltemham, UK; Northampton, USA, Edward Elgar.

Granovetter, M. (1985) 'Economic action and social structure: The problem of embeddedness', *American Journal of Sociology* 91: 481-510.

Gulati, A., Minot, N., Delgado, C. & Bora, S. (2007) 'Growth in high-value agriculture in Asia and the emergence of vertical links with farmers' in J.F.M. Swinnen (ed.) *Global Supply Chains, Standards and the Poor*, Oxford, UK: CABI Publishing, pp. 91-108.

Hanneman, Robert A. and Mark Riddle (2005) 'Introduction to social network methods'. Riverside, CA: University of California, Riverside (published in digital form at http://faculty.ucr.edu/~hanneman/)

Hans Posthumus Consultancy (2008) '*Roles*'. In Reader.

Hubert (ed.) '*Local Enterprises in the Global Economy. Issues of Governance and Upgrading*', Edward Elgar, Cheltenham UK and Northampton, MA, USA, pp. 349-381.
Human Rights Watch (2010). '*Development Without Freedom. How Aid Underwrites Repression in Ethiopia*'. Ethiopia report, USA, October 2010.
Humphrey, John & Schmitz, Hubert (2004) 'Chain governance and upgrading: tacking stock'. In: Schmitz, Hubert (ed.) *Local Enterprises in the Global Economy. Issues of Governance and Upgrading*. Edward Elgar, Cheltenham UK and Northampton, MA, USA, pp. 349-381.
International Crisis Group (2009) *'Ethiopia: ethnic federalism and its discontents'*, Africa Report N°153 - 4 September 2009.
Kilduff, M & Tsai, W. (2003) 'Social Networks and Organisations', Sage Publications Ltd, London.
Kolk, A., Van Tulder, R. & Kostwinder, E. (2008) 'Business and partnerships for development', *European Management Journal* 26: 262-73.
Lawrence, T.B., Hardy, C. & Phillips, N. (2002) 'Institutional effects of inter-organisational collaboration: the emergence of proto-institutions', *Academy of Management Journal* 45: 281-290.
Markelova, H., Meinzen-Dick, R.S., Hellin, J. & Dohrn, S. (2009) 'Collective action for smallholder market access', *Food Policy* 34(1): 1-7.
OECD (2006) '*Promoting Pro-Poor Growth – Agriculture*' [online]. Available from: www.oecd.org/dac/poverty.
O'Rourke, D. (2006) 'Multi-Stakeholder Regulation: Privatizing Or Socializing Global Labor
Standards?', *World Development* 34(5), 899-918.
SNV BOAM Annual reports 2005-2009
SNV BOAM programme proposal 2005-2010
SNV BOAM 2 programme proposal. Up-scaling phase extension 2010-2011
SNV BOAM Coordination Group minutes 1-18 of dairy
SNV BOAM Invitation letter 18th CG meeting dairy VC
SNV BOAM/IFAD SCAPEMA feasibility study 2008
SNV BOAM report 'Value Chains Identification for Intervention' 2005
Springer-Heinze, A. (2007) '*ValueLinks Manual – The methodology of value chain promotion*', Eschborn: German Technical Cooperation Agency (GTZ). Available at www.value-links.de/manual.
Van Huijstee, M.M. & Francken, M. (2007) 'Partnerships for Sustainable Development: A Review of Current Literature', *Journal of Integrative Environmental Sciences* 4(2): 75-89.
Van Huis, A., Jiggins, J., Kossou, D., Leeuwis, C., Röling, N., Sakyi-Dawson, O., Struik, P.C. & Tossou, R.C. (2007) 'Can convergence of agricultural sciences support innovation by resource-poor farmers in Africa? The cases of Benin and Ghana', *International Journal of Agricultural Sustainability* 5(2&3): 91-108.
Van Tulder, R. & Pfisterer, S. (2008) 'From Idea to Partnership: Reviewing the Effectiveness of Development Partnerships in Zambia, Colombia and Ghana'. Findings from a Review of six Partnerships from a 'Call for Ideas' by DGIS.
Warner, J. F. (2006) 'More Sustainable Participation? Multi-Stakeholder Platforms for Integrated Catchment Management'. *International Journal of Water Resources Development* 22(1): 15-35.

Van Wijk, J., van der Linden, V. & De Boer, D. (2009) 'Economic Impact of NGO-Private Sector Partnerships for Value Chain Development in West Africa. Case studies of organic fair trade mango in Burkina Faso and Mali organic fair trade cotton-garment in Burkina Faso, and sorghum-beer in Ghana', The Hague: *Expert Centre for Sustainable Business and Development Cooperation* (ECSAD).

Van Wijk, J.C. & Kwakkenbos, H., (2011) 'Beer multinationals supporting Africa's development? How partnerships include smallholders into sorghum-beer supply chains'. In: M.P. van Dijk en J. Trienekens (eds), *Promoting Sustainable Global Value Chains: The Role of Governance*. Forthcoming.

Vermeulen, S., Woodhill, J., Proctor, F., Delnoy, R. (2008) 'Chain-Wide Learning for Inclusive Agrifood Market Development. A guide to multi-stakeholder processes for linking small-scale producers to modern markets'. International Institute for Environment and Development (IIED), UK and the Capacity Development and Institutional Change Program (CD&IC), Wageningen University and Research Centre, the Netherlands.

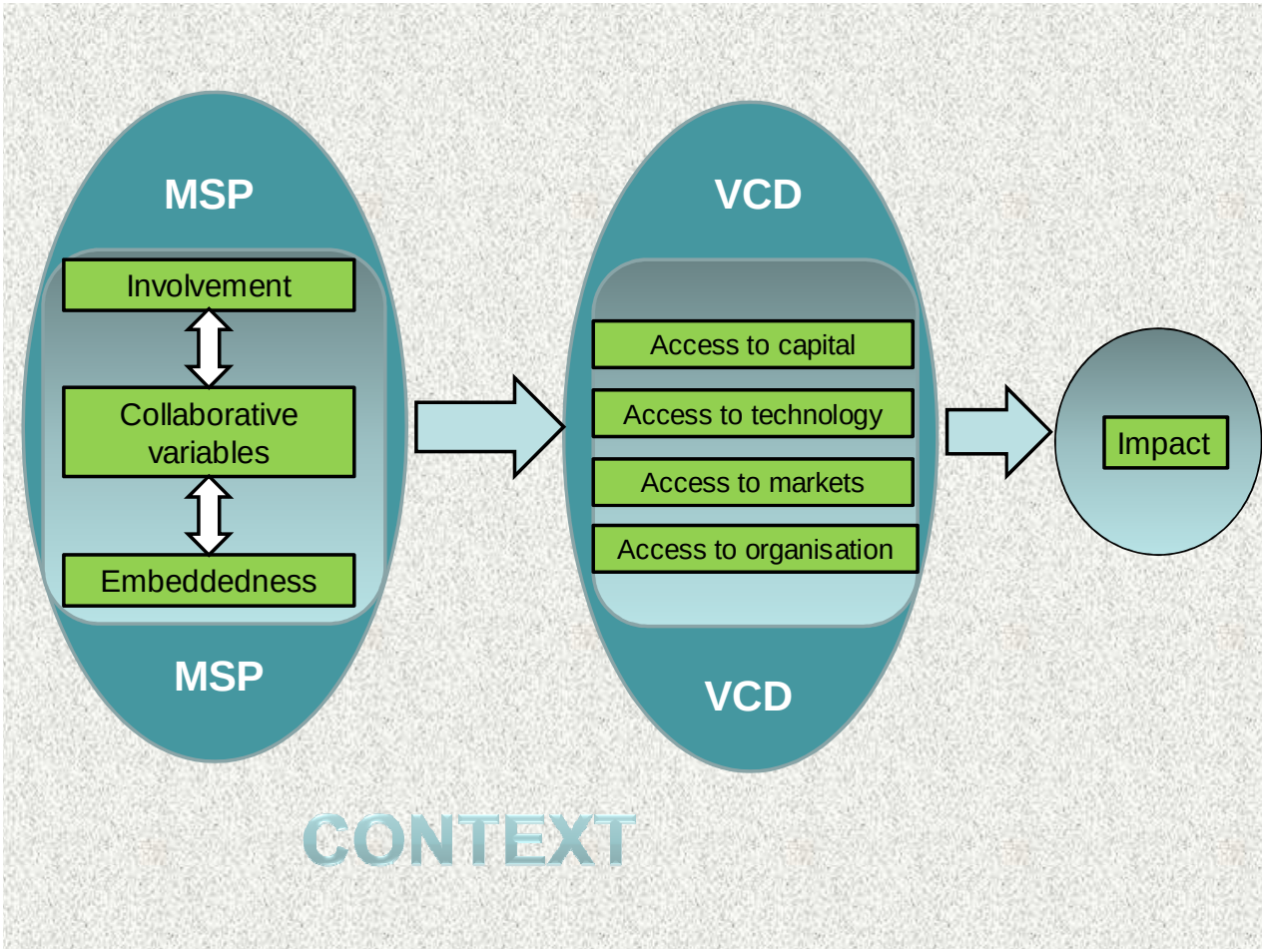
Website SNV BOAM, http://www.business-ethiopia.com/milk.html, Assessed July 2010.

Website SNV BOAM, http://www.SNV BOAMworld.org/en/Pages/default.aspx, Assessed July 2010.

World Bank (2008) '*Agriculture for Development*'. World Development Report 2008. The World Bank, Washington, D.C.

9. Appendices

Appendix 1: Theoretical model



Appendix 2: Roles of various stakeholders

Source: (based on) Hans Posthumus Consultancy, 2008

In general we distinguish four types of stakeholders:

1) Chain actors

Chain actors are the prime stakeholders who, at some point in the chain, own the product that is being created. They commonly buy a semi-finished product from chain actors upstream, add a certain value to it, and sell the enhanced product to buyers downstream. In the research farmers, producer firms, cooperatives, processing firms, collectors, traders, exporters etc. are included.

2) Chain supporters

Chain supporters are those that are outside the chain. They supply goods or services to the chain actors, often they are distinguished as either financial providers (e.g. banks providing loans) or non-financial service providers (e.g. accountants or transporters). In the research consultants, BDS providers, quality and standard institutes, microfinance, banks, funds (IMF), and agricultural research centers (not only temporary, but years of input, extension services, seed inputs etc.) are included.

3) Chain influencers

Chain influencers are those that influence the performance of the sub sector, its actors and their supporters. They influence the entire sub sector (and beyond) without performing an actor or supporters role: influencers (such as the ministry of commerce) determine (partly) the factors (such as investment climate). In the research business representative associations, Ministries, Chamber of Commerce, media, government implementing agencies (e.g. Cooperative Bureau, BoFED etc.) are included.

4) Chain facilitators

A temporary (catalyst) role by an organisation (often a donor funded project) to "grease" the chain machinery, either between the actors at the various levels or between the actors and their supporters, with objective to improve the performance of the entire chain and its actors (also commercially). Often NGOs with donor funding that finance a diversity of capacity building activities. In the research SNV BOAM, NGOs, University, and multilateral agencies (UN, WB) are included.

CODING FOR EXCEL

1=chain actor, 2 = chain supporter, 3 = chain influencer, 4 = chain facilitator

Appendix 3: Interview schedule/ List of Interviewees

General

June 9 & 10, 2010	**Orientation visit**[54]: Mr. Marc Steen, National Portfolio Coordinator and Head Value Chain Development, Mr. Piet Visser, learning coordinator for VCD and Mr. Mugessie Fikri, Monitoring & Evaluation and Documentation, SNV BOAM Ethiopia, Addis Ababa
August 12, 2010	**Discussion Group**[55]: SNV BOAM Ethiopia staff: presentation research and discussion with Mr. Piet Visser, learning coordinator for VCD and Lead Advisor pineapple chain, Mr. Carlo Kuepers, Lead Advisor honey chain & Senior Advisor Market Linkages & Value Chain Development, Mr. Mugessie Fikri, Monitoring and Evaluation, Mr. Yohannes Agonafir, Lead Advisor oil seeds chain, Mrs. Mahlet Yohannes, Lead Advisor dairy chain, Nicholas Nyathi, program coordinator PSNP Plus program, Meskerem Shifera, BDS Development and Elenie Abraham, junior advisor, oil seeds and VCF
September 9, 2010	**Short progress discussion** with SNV BOAM staff: Mr. Piet Visser, learning coordinator for VCD, Mr. Juergen Greiling, Senior Advisor Agroprocessing, Mr. Mugessie Fikri, Monitoring and Evaluation, Mr. Yohannes Agonafir, Lead Advisor oil seeds chain, and Meskerem Shifera, BDS Development
November 8, 2010	**Clarification** meeting and feedback from Mr. Piet Visser, learning coordinator for VCD and Lead Advisor pineapple chain
August 24, 2010	**19th Coordination Group Meeting** MMP Value Chain

Milk and Milk Products Value Chain

Mr. Ayalew Abebaw, Manager, Ayalew Abebaw Milk Collection Centre, September 3, 2010

Mr. Dagnachew Admassu, Head Production Division, Lame Dairy PLC (Shola enterprise) (field visit), September 2, 2010

[54] By Mr. Jeroen van Wijk (MSM) at SNV BOAM head office (Addis Ababa).
[55] By Ms. Sarah Drost (MSM) & Mr. Fenta Mandefro Abate (Addis Ababa University) at SNV BOAM's head office (Addis Ababa) (continuing for all interviews).

Mr. Shimelis Admassu, Assistant Professor Food Process Engineering and Biotechnology, Addis Ababa University & Mr. Abebe Tessema, Dairy Technologist, Technical Auditors contracted by SNV BOAM Ethiopia, September 8, 2010

Mr. Wassihun Asfaw, Loan Officer, AGGAR Microfinance Institute, August 31, 2010

Mr. Colonel Kassahun Bekele, owner private Dairy Farm, ex-chairman of Adaa Liben Milk Cooperative and Coordination Group Leader in the dairy value chain Coordination Group meetings 3-15, September 6, 2010

Mr. Dendena Chemeda, Head of the Agro-Processing Industry Development Department and Mr. Zergaw Zeleke, team coordinator of that same Department of the Ministry of Industry and Trade (MOTI), August 30, 2010

Mr. Desalegn Gebremedhin, Coordinator Dairy Technology Training and Consultancy Service, Ethiopian Meat and Dairy Technology Institute (EMDTI), September 3, 2010

Mr. Sorsa Debela Gelalcha, General Manager, Facilitating Farmers' Access to Remunerative Markets (FFARM) PLC and Coordination Group Chain Facilitator in the MMP Coordination Group, September 1, 2010

Mr. Melaku Berihun, General Manager, Sebeta Agro Industry PLC (Mama), September 1, 2010

Mr. Yirdaw W/Semayat, Executive Director, Ethiopian Animal Feed Industry Association (EAFIA), September 2, 2010

Mr. Marc Steen, National Portfolio Coordinator and Head Value Chain Development, SNV BOAM Ethiopia, Addis Ababa, September 7, 2010

Mr. Fekadesilasie Tadesse, chairman, Secretary of Hebret Dairy Cooperative and owner of his own Dairy Farm, August 31, 2010

Mr. Hailu Tadesse, Manager, and Mr. Tadesse Katema, accountant of the Selale Dairy Cooperative Union, August 24, 2010

Mr. Zewde Tefera, Owner, Zewde Tefera Importer (Ferafamco), September 6, 2010

Mr. Beral Berhane Tewelde, Owner, Beral Milk , September 7, 2010

Mr. Asfaw Tolessa, Business Resource Development Manager, Land O'Lakes, August 30, 2010

Mrs. Hirut Yohannes, Manager, Tsega Family Dairy Farm and Rut & Hirut's Dairy Farm, owner of two dairy collection centres and Coordination Group Leader in the dairy value chain Coordination Group meetings 16-19 (field visit), August 27, 2010

Mrs. Mahlet Yohannes, Medior Advisor Value Chain Development and Market Linkages & Lead Advisor Milk and Milk Products Value Chain, SNV BOAM Ethiopia, Addis Ababa, September 8, 2010

Additional insights from Mrs. Meskerem Shifera, BDS Development, SNV BOAM Ethiopia, Addis Ababa

Appendix 4: Questionnaire

Context

Multi-stakeholder platforms (MSPs) are increasingly recognized by researchers and practitioners as promising mechanisms for stimulating economies in developing countries. The so-called chain platforms can help to bring actors, operating directly or indirectly in the chain, together and realise common objectives through dialogue and cooperation. However, systematic research on their effectiveness and impact is scarce. Therefore, SNV BOAM Ethiopia and the Maastricht School of Management (MSM) / Partnerships Resource Centre (PRC) have embarked on a collaborative effort to evaluate a number of MSPs in which SNV BOAM Ethiopia is involved. MSM carries the responsibility for the research and final report.

SNV[56] is a non-profit, international development organisation, with extensive hands-on experience in their value chain approach. MSM's Sustainable Development Center[57] stands for expertise on sustainable economic development in emerging markets. MSM is partner in the Partnerships Resource Centre[58], an open centre where academics, practitioners and students can create, retrieve and share knowledge on cross sector partnerships for sustainable development.

Interview objectives

This questionnaire serves to structure a series of interviews that will be conducted with actors in a selection of value chain Coordination Groups (CGs) in Ethiopa. Selected are CGs in four chains: honey & beeswax, dairy, oil seeds, and pineapple. The interview results will serve as the main input for an evaluation report that is due for 1st of February 2011. The results will be presented and discussed during a workshop in spring 2011.

About the questionnaire

The interview consists of three parts. Section A focuses on the (meetings of the) Coordination Group itself. Section B concentrates on the institutional changes brought about by the CG, whereas the last section C asks about your overall opinion of the CG.

Contact:
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Ms. Sarah Drost, MSc.
Sustainable Development Center

[56] SNV BOAM Ethiopia: www.SNV BOAMworld.org/en/countries/ethiopia/Pages/default.aspx

[57] MSM - SDC: www.msm.nl/1/1/uk/research/sustainable_development_center/

[58] PRC: www.erim.eur.nl/ERIM/Research/Centres/SCOPE/Partnerships_Resource_Centre/About

Maastricht School of Management
Email: drost@msm.nl

Identification

Name interviewee(s):
Organisation:
Position:
Location:

Interviewer:
Date of interview:
Place of interview:

What are the main activities of your organisation in this value chain?

A Coordination Group (CG)

A1. General introduction
1. What is the main problem in the apiculture/dairy/fruit/oil seeds sector, according to you?

A2. Engagement
2. In what way are you/is your organisation engaged in the CG? (describe activities and roles: e.g., Facilitator, Leader, advisor, member of committee/working group)

3. Since when are you involved in the CG meetings? (reasons for prolonged stay or exit)

4. What motivated your organisation to join the CG? (e.g. daily allowance, influence, networking opportunities?)

5. Do you feel all relevant stakeholders are represented in the CG? Why?

6. How would you evaluate the level of commitment of CG members?
A. Low
B. Modest
C. High
Please explain

A3. CG Governance
7. Do you feel all CG members have an equal say during the CG meetings?
A. Yes
B. No. Who are the dominant members?)

8. Do you feel that all members benefit equally of the CG interventions? (win-win situation or not?
A. Yes
B. No. Who gains most?).

9. Are you generally satisfied with the way the CG meetings are being governed?
A. No
B. Yes, but only modestly
C. Yes, significantly
Please explain. What should change?

[Honey]
H.1 What is your opinion about the Ethiopian Apiculture Board (EAB) and its regional chapters?

[Dairy]
D.1 What is your opinion about the Ethiopian Milk and Milk Products Association (EMPPA)?
D.2 What is your opinion about the Dairy Business Hub Model established in meeting 16?

[Oil seeds]
O.1 What is your opinion about the Ethiopian Pulses, Oil seeds, and Spices Processors Exporters Association (EPOSPEA)?

B Issues addressed by the CG

10. Did you exchange contact information with other CG members? Has this lead to concrete actions/funding/other opportunities in your field of activities?

B1. Access to services
11. Do you require specific information, technology or organisational services, for example to meet quality standards, to increase productivity, or to improve your management skills?
A. No
B. Yes, but only modestly
C. Yes, significantly
Please explain what type of services.

12. Have you been able to acquire sufficient service support?
A. No
B. Yes, but only modestly
C. Yes, significantly
Please explain by whom and in what form?

13. Did the CG improve the availability of these services to you?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

B2. Access to capital/credit
14. How difficult is it for you to acquire a loan/credit/budget for making investments in your organisation (e.g. through financial institute or through B2B relations).
A. Not difficult
B. Sometimes difficult
C. Very difficult
Please explain.

15. Did the CG influence your opportunities to obtain a loan, credit, or additional budget?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly

Please explain.

B3. Access to markets

(a) Prices

15. How would you evaluate prices paid to the producers in the last 3 years (stability, highness, pre-harvest price set)?

16. Did the CG influence prices (stability and level) paid to farmers?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

(b) Buyer / producer commitment

17. Do buyers commit themselves to producers to buy their produce in advance of the production cycle (provided that quality conditions are met)?
A. No
B. Yes
Please explain.

18. In case of a contractual arrangement, do you think producers perform well in responding to buyer's requirements in terms of: delivery, punctuality of delivery, quality, and flexibility?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

19. Do producers have alternative market opportunities? Which ones?
If yes, what are the benefits of these alternatives for producers?

20. Did the CG contribute to improvement of contractual arrangements between producers and buyers?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

B4. Access to organisation

21. Are you a member of a professional organisation/platform? If yes, which?

22. Did the CG contribute to the formation of this professional organisation?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

23. Did the CG contribute to your access to your professional organisation?
A. No or almost not

B. Yes but only modestly
C. Yes, significantly
Please explain.

B5. Institutional environment (legal, government policy)

24. Which are the (three) main legal/policy constraints that you have to cope with in the supply chain?

25. Did the CG contribute to solve these constraints?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain.

C. Future and overall opinion of the CG

26. In your opinion, has the CG, overall, been a success?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain (which are the main successes, failures, weaknesses, strengths)?

27. How could the CG play a bigger role for you? (i.e. really addressing their issue?/partnerships possibilities).

28. Do you feel that CG is recognized as an important governance mechanism by the stakeholders in this value chain?
A. No or almost not
B. Yes but only modestly
C. Yes, significantly
Please explain

29. Future scenario: What are, in your opinion, the future prospects of the CG after the BOAM programme has finished?

30. What would be necessary, apart from the CG, to tackle the problems in your sector?

Thank you for your time and collaboration.

Appendix Questionnaire: Conditions for upgrading (scored by the respondent)

- No effect of CG
-/+ Limited positive effect of CG
+ Considerable positive effect of CG

Access to knowledge & technology

Availability of new animal breeds
Availability of quality animal feed
Training on dairy management/quality/post-harvest (cooling)/sanitation
Farmer awareness on quality
Reduction in animal diseases and death
Artificial insemination
Diversification of milk products

Access to affordable credit

Banks/MFI's are more willing to lend
Buyer firms (B2B) are more willing to lend
Other institutes more willing to lend
Other (please fill in)

Access to markets

Increase production costs of prices paid by the buyer
Annual purchasing commitments
Annual pre- price guarantees
Other (please fill in)

Access to organisation

Access to organisation (e.g. FBO, forum, representative agency)
Other (please fill in)

Access to institutional (legal, policy) environment

Legal constraints addressed
Other (please fill in)

Appendix 5: Course ratio dairy CG

category frequence of meeting visits	type of organisation			present & stay		present & exit		entry & stay		entry & exit	
	type	number	%	number	%	number	%	number	%	number	%
core visitor	Private sector	1	0,8	1	0,8	0	0,0	0	0,0	0	0,0
	Government	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Education	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Civil Society	1	0,8	1	0,8	0	0,0	0	0,0	0	0,0
	Unknown	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
total core visitors		2	1,6	2	1,6	0	0	0	0	0	0
regular visitors	Private sector	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Government	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Education	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Civil Society	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
	Unknown	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
total regular visitors		0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
irregular visitors	Private sector	45	36,0	6	4,8	9	7,2	15	12,0	15	12,0
	Government	10	8,0	4	3,2	2	1,6	2	1,6	2	1,6
	Education	5	4,0	1	0,8	0	0,0	2	1,6	2	1,6
	Civil Society	4	3,2	0	0,0	0	0,0	4	3,2	0	0,0
	Unknown	1	0,8	0	0,0	0	0,0	0	0,0	1	0,8
total irregular visitors		65	52,0	11	8,8	11	8,8	23	18,4	20	16,0
at random visitors	Private sector	26	20,8	0	0,0	2	1,6	9	7,2	15	12,0
	Government	13	10,4	0	0,0	3	2,4	3	2,4	7	5,6
	Education	5	4,0	0	0,0	0	0,0	1	0,8	4	3,2
	Civil Society	2	1,6	0	0,0	0	0,0	2	1,6	0	0,0
	Unknown	12	9,6	0	0,0	0	0,0	3	2,4	9	7,2
total at random visitors		58	46,4	0	0,0	5	4,0	18	14,4	35	28,0
total private sector		72	57,6	7	5,6	11	8,8	24	19,2	30	24,0
total government		23	18,4	4	3,2	5	4,0	5	4,0	9	7,2
total education		10	8,0	1	0,8	0	0,0	3	2,4	6	4,8
total civil society		7	5,6	1	0,8	0	0,0	6	4,8	0	0,0
total unknown		13	10,4	0	0,0	0	0,0	3	2,4	10	8,0
total all categories		125	100,0	13	10,4	16	13	41	32,8	55	44,0

Dairy: category timing of visits
present & stay = present at CG1 and/or CG2 AND CG17 and/or CG18
present & exit = present at CG1 and/or CG2; last visit at CG16 or earlier
entry & stay = first visit CG3 or later; present at CG17 and/or CG18
entry & exit = first visit at CG3 or later; last visit at CG16 or earlier
Dairy: category frequency of meeting visits
core visitor = present at all meetings (18)
regular visitor = present at 15, 16 or 17 meetings
irregular visitor = present at least at 3 meetings with maximum presence of 14 meetings
at random visitor = present at 0, 1 or 2 meetings

Appendix 6: Betweenness centrality dairy CG

Table 1 Top-10 central players in the dairy CG

Name	Normalised Betweenness Centrality	Type of Organisation	Subtype	Stakeholder role within VC
(105) Selale Dairy Farmers' Cooperative Union	3.113	Private sector	Business representative body / Cooperative	Actor
(111) SNV BOAM	3.113	Civil society	NGO / NGO network	Facilitator
(79) International Livestock Research Institute (ILRI)	2.394	Education	Research institute	Supporter
(12) Adama (Town) Woman Entrepreneurs Association (AWEA)	2.197	Private sector	Business representative body / Association	Influencer
(62) Family Milk	2.031	Private sector	Processor / Processing firm	Actor
(88) Ministry of Trade and Industry (MOTI)	1.747	Government	National government / Ministry	Influencer
(3) Addis Ababa Chamber of Commerce and Sectoral Association (AACCSA)	1.733	Private sector	Business representative body / Association	Influencer
(35) Bureau of Finance and Economic Development (BoFED) (Oromia)	1.630	Government	Regional / Local government	Influencer
(47) Debre Zeit Dairy Enterprise/Farm	1.534	Private sector	Producer / Producing firm	Actor
(110) Silenat Milk Association	1.472	Private sector	Business representative body /association	Influencer

Table 2 Central players in dairy CG with betweenness centrality > 2

Name	Normalised Betweenness Centrality	Type of Organisation	Subtype	Stakeholder role within VC
(105) Selale Dairy Farmers' Cooperative Union	3.113	Private sector	Business representative body / Cooperative	Actor
(111) SNV BOAM	3.113	Civil society	NGO / NGO network	Facilitator
(79) International Livestock Research Institute (ILRI)	2.394	Education	Research institute	Supporter
(12) Adama (Town) Woman Entrepreuneurs Association (AWEA)	2.197	Private sector	Business representative body / Association	Influencer
(62) Family Milk	2.031	Private sector	Processor / Processing firm	Actor

Table 3 Central players in dairy CG with betweenness centrality > 3

Name	Normalised Betweenness Centrality	Type of Organisation	Subtype	Stakeholder role within VC
(105) Selale Dairy Farmers' Cooperative Union	3.113	Private sector	Business representative body / Cooperative	Actor
(111) SNV BOAM	3.113	Civil society	NGO / NGO network	Facilitator