PRO-POOR VALUE CHAIN DEVELOPMENT: PRIVATE SECTOR-LED INNOVATIVE PRACTICES IN ETHIOPIA

Edited by Piet Visser, Marc Steen, Juergen Greiling, Timoteos Hayesso, Rem Neefjes and Heinz Greijn

Business Organisations and their Access to Markets BOAM Programme
Pro-Poor Value Chain Development

Private sector-led innovative practices in Ethiopia
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Mahlet holds a Master of Arts in International Business and Management from Bradford University, UK, and a Bachelor of Arts in Business Management from Addis Ababa University. Mahlet joined SNV Ethiopia in 2007 as lead adviser for the dairy value chain. She is currently coordinating cooperation with public and private stakeholders in the context of upscaling the dairy value chain. She has professional experience in marketing, business development and market linkages.
I have personally followed the BOAM programme since its inception during which time I had frequent meetings with SNV colleagues and market operators working in the respective sector organisations. I am therefore pleased to confirm the many improvements that I witnessed in the processing functions of all the value chains in which the BOAM programme was involved.

I am particularly proud that in 2008 we saw the first foreign currency earnings from honey exports to the European Union, which could potentially boost the share of exports from the agro-processing sector. BOAM, in a multi-stakeholder approach with full public sector backing, laid the foundation for this success. As a representative of the public sector, I would like to express our appreciation of this and other achievements as documented in this publication.

H.E Ato Tadesse Haile, State Minister, Ministry of Industry, Ethiopia

The BOAM programme in Ethiopia has developed an approach to value chain development focused on building the capacities of chain actors while strengthening the enabling environment in which value chains operate, and the business-to-business relationships between actors. Moreover, BOAM facilitated a stakeholder-driven process for upgrading that engaged multiple stakeholders across the market system.

This participatory approach was not only key to upgrading but also contributed to changes in the ‘rules of the game,’ that underly actors’ behaviour and are fundamental to creating sustainable change. BOAM demonstrated that value chain development is not only about providing expert technical solutions but more importantly about catalysing behavioural changes throughout a market system that empowers actors to create and capture value.

Jeanne Downing, Senior Enterprise Development Advisor, US Agency for International Development

From my initial involvement in 2005, as chairman of the BOAM honey value chain coordinating group to my present position as president of the Ethiopian Apicultural Board, I have experienced the rapid development of the honey value chain. The Third Country Listing accreditation process enabled us to export honey to the EU for the first time. With technical, organisational and financial support from BOAM, my company, BezaMar, became accredited and tested the establishment of out-grower relationships.

Between 2008 and 2011, BezaMar’s exports of specialty honey to the EU market increased four-fold, from 30 to 120 tonnes. This would not have been possible without the holistic approach taken by BOAM, in which actors like me were supported to create and make use of business opportunities to kick-start the further development of the sectors.

Hailegeorgis Demissie, General manager BezaMar Agro Industry Plc

This book is an important first-hand account from the front lines in the global effort to reduce poverty and suffering. SNV’s innovative approach to market-based development in Ethiopia reflects a new age of NGO effectiveness where practitioners act not as implementers but as facilitators of broad-based change. What makes the BOAM approach unique is SNV’s acceptance of markets as dynamic, complex and ever-
changing systems that require new skills and tactics to overcome the shortcomings of the narrowly scoped value chain and economic development interventions of the past.

As showcased by its longitudinal work in the apiculture, dairy, oilseeds and fruit value sectors in Ethiopia, SNV broke new ground in BOAM. It demonstrated the powerful and catalytic impact an NGO can have by leveraging its position as an ‘honest broker’ to convene stakeholders from across a value chain to engage in honest, frank and fruitful dialogue.

By applying well-calibrated facilitation skills, SNV’s BOAM showed decisively that market actors can actually solve many of their own problems. They can weave together new configurations of win-win partnerships if given the space and resources they need to do so. It was this potential that drew CARE to approach SNV as a partner for our Productive Safety Net Program Plus (PSNP Plus). We are now expanding this collaboration through the 5-year Graduation with Resilience to Achieve Sustainable Development (GRAD) programme, which will benefit over 50,000 chronically food-insecure households and inform the Government of Ethiopia’s national Agricultural Growth Programme.

By pairing SNV’s expertise in market facilitation with CARE’s deep-seated understanding of local communities and livelihoods strategies, we are finding new roads to alleviating poverty and hunger through market-based approaches. SNV and BOAM’s flexible, iterative and evolutionary approach to addressing bottlenecks and constraints that emerge when working with markets and the very poor make them an ideal CARE partner.

Above all else, SNV’s BOAM represents a clear and emphatic counter-point to those that continue to pursue supply-led economic development initiatives without a ‘markets-first’ mindset. BOAM achieved what it did by looking first to where the private sector was headed and what challenges they faced and allowing that information to drive its strategy. SNV’s ‘start-with-the-market-and-work-backward’ approach has many refreshing and timely lessons to teach the broader development field, which all too often appears to hold an out-dated affinity for supply-led development interventions. It is time to let go - and BOAM shows us the way.

Abby Maxman, Vice President International Programs and Operations, CARE

The BOAM programme offered great opportunities to set a focus on the private sector - and link it in value chain approaches with the public sector – and have these linkages supported by the civil society and bilateral partner organisations. The focus on holistic approaches contributed to the strengthening of agricultural sectors and created opportunities that are already being utilised by value chain partners to promote businesses along the chain. The growth of sectors is also a condition for creating even more employment opportunities for qualified technical and managerial personnel.

This publication presents excellent examples of how the approaches spearheaded by BOAM worked to improve productivity and create income and employment in rural areas, on farms and in inputs businesses, in the transport and processing sectors, and at the export level. Businesses that develop along value chains require business development services and I would like to commend SNV and its partners for going to great lengths to build the capacity of local specialists, which is a prerequisite for sustainability.

Dr. Edmealem Shitaye, Deputy Director Agricultural Extension Directorate Ministry of Agriculture, Ethiopia

This book provides a treasure chest of experiences, ideas, frameworks and reflection on SNVs pro-poor value chain work in Ethiopia. It shows what can be achieved with focus and dedication using agricultural markets as a driver of
development. It highlights how important the intermediary and brokering functions are and the potential of local communities to be highly entrepreneurial when the enabling conditions and support structures are in place.

With global food security now high up on the international agenda and with many leading agri-food companies taking a strong stand on ‘inclusive business’ and ‘shared value’ this book is very timely. It helps to fill what is a big gap in the detailed documentation and sharing of value chain case studies. Written in an accessible and inspiring way this book will be of value to practitioners, businesses, policy makers and investors engaging with pro-poor agricultural development.

As a female dairy farmer, I started collecting milk from neighbouring farmers in 2006 and selling it together with my own milk to consumers in Addis. With further BOAM support I expanded the collection of milk throughout the year and then set up a credit system. In 2009 I started the processing of milk into cheese and butter. Since then my company has grown, processing 300 kg of cheese and butter a day. I now employ 22 staff members and buy milk from 400 farmers. Whatever I learn for myself, I share with the farmers so that we all benefit.

My business has helped to change the lives of many women in my two collection areas. Currently I’m purchasing modern milk processing equipment with an additional capacity of 3,000 litres of milk a day. This will increase my sales of pasteurised milk and new dairy products. The sharing of the experiences in the BOAM coordination group has expanded my knowledge and improved my business results. As a start-up business I have therefore highly benefited from the opportunities created by BOAM to develop the dairy sector. I have become an active member of the dairy value chain coordination group and I’m now leading this group since my election in 2010.

Mrs. Hirut Yohannes, Proprietor, Rut and Hirut Dairy Plc and Chairperson, Dairy Value Chain Coordination Group

Dr. Jim Woodhill, Director, Centre for Development Innovation, Wageningen University and Research Centre
Foreword

The Embassy of the Kingdom of the Netherlands is proud of its fruitful collaboration with SNV’s BOAM programme in support of Agri-Business and Value Chain Development between 2005 and 2011. More than 100 private and public organisations were involved in the BOAM programme, which directly supported over 45,000 smallholder farmers.

The Embassy took a risk with BOAM because it was an experimental programme designed to test a new approach to inclusive development. BOAM started the economic growth in the selected value chains, made them ready for upscaling and demonstrated that household income was increased. This resulted in substantial direct monetary revenues but also produced many non-monetary results helping participating businesses (including smallholder farmers) to pursue their business goals.

A key lesson learnt by entrepreneurs involved in the BOAM programme is: ‘it is the client who decides.’ Irrespective of the market, whether local or international, clients have to be able to rely on you and if you lose them all your efforts will be in vain. Therefore you have to find out what the clients want, including what quantities and qualities they require, and based on this organise and secure reliable sourcing.

Since BOAM’s conclusion this innovative approach has been replicated in various programmes, hence realising one of the programme’s key objectives from the outset. The four value chains established under BOAM will continue to function driven by the private sector and further supported by the public sector and Ethiopia’s development partners. Most importantly, smallholder farmers will further improve the quality of their products, better providing for their markets and getting a better return for their products.

The Embassy has also learnt from, and is continuing to build on, BOAM’s experiences and achievements to enhance its own development support programmes. The first ‘post-BOAM’ initiative is a joint programme to strengthen agri-business and value chain development implemented by eight Ethiopian universities with funding from the Netherlands University Fund for International Cooperation (NUFFIC). Similar initiatives for other sectors are under development.

This publication provides a rich account of the BOAM’s experiences over the past six years. I encourage other implementing organisations as well as funders to take note of the lessons learnt and use these elsewhere in Ethiopia and beyond.

The Agricultural Growth Programme of the government of Ethiopia can be considered as one huge value chain development programme. Examples like BOAM are the seedlings that when multiplied give rise to successful growth and transformation.

Hans Blankenberg
Ambassador of the Kingdom of the Netherlands in Ethiopia

Foreword
Agriculture is firmly back on the development agenda and value chain development has become the overarching approach. Many agricultural programmes are experimenting with this concept. Approaches differ, with some putting the emphasis on the production side by focusing on productivity increases and strengthening of farmers’ organisations. Others stress the need to work on the demand side through safeguarding access to markets by smallholder farmers and developing solid, often contractual, links with processing companies, traders and wholesalers. Another approach underlines the importance of looking at the value chain as a complex system in which many actors interact and hence necessitating a focus on the overall political-economic environment and local context.

The Business Organisations and their Access to Markets (BOAM) Programme - an initiative of SNV Netherlands Development Organisation in Ethiopia – incorporated elements of all these approaches to stimulate value chain development. BOAM sought to facilitate interactions between the different categories of value chain actors, from smallholder farmers, traders and processors to business service providers and government officials. In doing so, BOAM underscored the critical role of the private sector - in particular processing companies and wholesalers – in ‘pulling’ farmers into the chain and connecting them to markets.

The idea for the BOAM programme was borne in 2003, informed by the country’s experience in implementing the Agricultural Development-Led Industrialisation Strategy (ADLI) from 1993 onwards. The premise of ADLI was that agricultural development must be driven by improvements in the productivity of peasant farmers and pastoralists. However, the focus on productivity was shown to be counteractive when two years of good harvests led to a collapse of agricultural prices in 2002, leaving farmers and agri-businesses with huge losses. It was clear that the system was not working. Supply and demand were not linked to each other because the chain from producer to consumer did not function properly. Although they were the intended beneficiaries, smallholder farmers were unable to sell their crops at fair prices.

This was the context in which BOAM was implemented. Driven by the ambition to do things differently, the Embassy of the Kingdom of the Netherlands (EKN) in Addis Ababa and the Netherlands Directorate General for International Cooperation of the Ministry of Foreign Affairs (DGIS) wanted to try out an innovative approach that would do justice to smallholder farmers and at the same time promote economic development. The value chain concept was gaining terrain within economic development thinking and was seen as a possible solution. BOAM’s mission was to experiment with the value chain development concept in a pro-poor setting and to make sure that smallholders would benefit from increased production and, above all, increased income.

Eight years later, we can say that BOAM’s architects were right. The approach worked. This publication provides an account of how it worked and evidence that smallholder farmers did indeed benefit, as did many other actors in the value chain. Moreover, it demonstrates that when approached from a broader perspective value chain development practice can stimulate the strengthening of an entire sector and hence contribute to overall economic development.
It is now time to focus on another key BOAM goal, which was to ensure that the results obtained were shared with a wide group of stakeholders, and replicated and scaled up where possible. The knowledge-sharing infrastructure was put in place right from the start of the programme, not only during the numerous multi-stakeholder coordination group meetings that were at the heart of BOAM’s value chain approach, but also through special presentations at conferences and other events organised by the Ethiopian government and its development partners. The successful BOAM conference in June 2011 was the culmination of these efforts and its proceedings form the basis for this publication.

The conclusion of BOAM does not mean the end of the value chain development activities it spearheaded. Follow up programmes are underway for all sub-sectors that received BOAM support. The BOAM approach has also been expanded to other development programmes in Ethiopia through SNV’s participation in the USAID-funded Productive Safety Net Programme (PSNP Plus) and the Revitalising Agro-Pastoralist Incomes and New Markets (RAIN) project. Farther afield, our colleagues in Eastern and Southern Africa have followed BOAM’s experience over the years and are applying elements of this approach to their own contexts.

We would therefore like to thank the EKN and DGIS for the trust they put in SNV Netherlands Development Organisation. We have learnt a lot from implementing BOAM. For SNV as a whole, it provided an opportunity to develop knowledge and expertise and achieve considerable development results in Ethiopia and elsewhere. We would like to express our appreciation to Hans Raadschilders, Pim de Keizer, Hans Poley, Janny Poley (all EKN), Frits van der Wal (DGIS) and Geert Westenbrink (agricultural counsellor EKN) for their constructive support and numerous discussions, feedback and ideas, which helped us maintain focus and redouble our efforts to ‘go all the way.’

Last but not least, we want to thank the team of dedicated SNV advisers who were highly committed to realising BOAM’s objectives. They proved themselves to be up to the challenge of implementing such an innovative and high profile programme. The driving force behind the achievements of the respective value chains was the coordination group value chain leaders, the local service providers, and all the other stakeholders involved in the four sub-sectors and their value chains. By taking ownership they ensured that BOAM had the necessary energy and momentum to realise its goals. Their commitment has ensured that the results achieved will be sustained long after BOAM has come to an end. This publication tells their story. We wish you a pleasant reading.

Rem Neefjes
Director SNV Ethiopia
2005 - 2011

Marc Steen
BOAM Programme Coordinator
2007 - 2011
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<td>Addis Ababa Chamber of Commerce and Sectoral Associations</td>
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<td>AGP</td>
<td>Agricultural Growth Programme, Ethiopia</td>
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<tr>
<td>AI</td>
<td>Artificial Insemination</td>
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<tr>
<td>B2B</td>
<td>Business-to-Business</td>
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<td>BDS</td>
<td>Business Development Services</td>
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<td>BOAM</td>
<td>Business Organisations and their Access to Markets</td>
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<td>CG</td>
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<td>CIDIN</td>
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<td>CoP</td>
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<td>EDB</td>
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<td>EHBPEA</td>
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<td>EKN</td>
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<tr>
<td>EMDTI</td>
<td>Ethiopian Meat and Dairy Technology Institute</td>
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<td>EMPPA</td>
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<td>EPOSPEA</td>
<td>Ethiopian Pulses, Oilseeds and Spices Processors and Exporters Association</td>
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<td>Graduation with Resilience to Achieve Sustainable Development</td>
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<td>Interchurch Organisation for Development Cooperation</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>Acronym</td>
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<tr>
<td>ILRI</td>
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<td>IOB</td>
<td>Policy and Operations Evaluation Department of the Netherlands Ministry of Foreign Affairs</td>
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<td>IPMS</td>
<td>Improving Productivity and Market Success of Ethiopian Farmers</td>
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<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>Kg</td>
<td>Kilogramme</td>
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<td>LIVES</td>
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<td>Micro Finance Institution</td>
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<td>Synchronized Network Of Value Chain Innovation Actors</td>
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<td>ToT</td>
<td>Training of Trainers</td>
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<td>UHT</td>
<td>Ultra High Temperature</td>
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<td>United States Agency for International Development</td>
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<td>Wetenschappelijke Raad voor het Regeringsbeleid (Netherlands Scientific Council for Government Policy)</td>
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Introduction

Introduction to value chain development and the BOAM Programme

Marc Steen and Woody Maijers

1

In 1985 Harvard Business School Professor M.E. Porter introduced the concept of value chains in his book, “Competitive Advantage: Creating and Sustaining Superior Performance.” In its original formulation the concept was used to explain the chain of activities through which value is added to products. The value chain concept presented a useful new way to analyse the production process within a firm and was subsequently widely adopted by industry as a tool for strategic planning. With time, the concept was also applied to analyses of the chain of activities that occur beyond a single firm, as commodities move from the production line and are marketed to consumers. This analysis also explored the role of each actor involved in adding value along the chain. More recently, value chain analysis has been used to study entire business supply chains and distribution networks.

In the 1990s, academics, policymakers and development practitioners began to apply value chain analysis to help them better understand - and engage with - the complex web of stakeholders involved in poverty reduction and inclusive economic development. The Business Organisations and their Access to Markets (BOAM) programme, financed by the Embassy of the Kingdom of the Netherlands and the Irish Embassy, and implemented by the SNV Netherlands Development Organisation in Ethiopia between 2005 and 2011, emerged from this school of thought. This book explains the innovative approach that BOAM developed during this six-year period. A key element was to identify and create opportunities for value chain development, based on market demand and requirements, with a view to benefitting smallholder farmers in particular. Linked to this was the focus on facilitating relationships between chain actors to make optimal use of these opportunities.

In this introductory chapter we will discuss the significance of value chain thinking for the design of interventions aimed at facilitating pro-poor development. We will also introduce the reader to some of the main concepts in value chain analysis and how they were applied within the BOAM programme.

Introduction to value chain analysis

Value chain analysis is one of the noteworthy innovations in the field of development studies of the past decade. At the core of this growing body of literature is the notion that it is impossible to understand the development implications of the production, commercialisation and consumption of a particular good or service without analysing the configuration of relations that are involved in the different economic

1 With inputs by Roldan Muradian
transactions and production processes that occur before a product is brought to market. Furthermore, there is need to study how these economic agents interact with a variety of stakeholders that might influence such relations (for instance policymakers, researchers and service providers).

The main assumption made in applying value chain thinking within the development sector is that vulnerable actors in developing countries (such as smallholder farmers and small and medium-sized enterprises) can be both constrained and enabled by the broader institutional environment and the interplay of economic relations in which they operate.

The evolution of value chain thinking is not limited to academic circles alone. Its growing influence has induced a paradigmatic shift in the practice of development cooperation, and particularly in the design of interventions targeting poor agricultural producers. Many rural interventions traditionally focused on strengthening the supply capacities of smallholders without paying attention to markets. In the worst-case scenario, the resulting productivity improvements contributed to driving down prices, leaving farmers even worse off. One of the key lessons learnt from decades of often disappointing results is that any intervention that seeks to enhance the productivity of smallholder farmers must ensure that there is demand for the commodities produced.

The adoption of value chain thinking also led to a shift in the general assumption within development practice that the economic advancement of one actor inevitably occurs at the cost of other actors. In a recent article in the Harvard Business Review Porter referred to this as ‘shared value’ or the economic rationale for companies to forge synergies between company performance and societal needs.

The fine tuning of value chain principles to foster pro-poor development is characterised by a number of features:

a. A holistic approach that stresses systemic constraints and opportunities derived from the configuration of market and extra-market relations (networks);
b. The notion that economic development is achieved through joint action by all relevant actors;
c. Recognition of the private sector as a key engine of growth and a willingness to strengthen the action of lead firms, particularly with regard to their linkages with more vulnerable agents in the value chain;
d. A shift in the ‘centre of gravity’ from the creation of supply capacity to the creation of market linkages and the establishment of business relationships.

**Pro-poor value chain development**

The core assumption behind ‘pro-poor’ value chain interventions is that vulnerable upstream agents (such as smallholder farmers) can be ‘pulled’ into specific markets, and therefore successfully integrated into economic dynamics to which they were hitherto excluded, or, at best, only participated under very unfavourable conditions. Practitioners aim to accomplish this through: (i) building and enhancing linkages between the ‘middle’ of the value chain (processors, traders, exporters and farmers’ organisations) and the market; (ii) strengthening the relationship between the same ‘middle’ of the value chain and smallholder farmers and, (iii) strengthening the supply capacity (ability to produce increased volumes of goods or services with particular attributes) to ensure that these goods and services are produced at a lower cost and in line with market requirements, increasing overall competitiveness.

A key feature of value chain interventions is thus the recognition that one of the main causes of poverty traps is inefficient, or missing, linkages between producers.

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2 BOAM recognised that for value chain development to occur, all actors involved needed to become successful. This meant that BOAM did not ‘take sides’ by trying to advance smallholder farmers at the cost of traders and other private sector actors.
Introduction

and their actual or potential markets (Humphrey and Navas-Alemán, 2010). The creation, and effective coordination of, market linkages is therefore at the core of the value chain intervention logic. In practice, this approach implies working with economic agents at the ‘middle’ of the value chain as well as with other stakeholders that have the potential to contribute to a more enabling environment. This willingness to work closely with the private sector - including transnational corporations or large national enterprises (lead firms) - is a particularly significant element in the paradigmatic shift being witnessed in international development policy and practice.

Assisting entrepreneurs to leverage their comparative advantages to compete in globalised markets requires a holistic approach in addressing constraints and opportunities along the supply chain and the broader enabling environment in which value chains operate. In its influential 2010 report on the future of Dutch development cooperation policy, the Netherlands Scientific Council for Development Cooperation (WRR) affirmed the need for a holistic approach by stating that development support only makes sense as a long term, programmatic investment providing an interlinked package of interventions that are implemented jointly with local institutions and economic agents. With its focus on the private sector as an engine for pro-poor growth, BOAM’s value chain development approach thus resonated well with the shift in Dutch development cooperation policy from a focus on ‘social’ to ‘economic’ sectors.

The BOAM Programme

Through its Business Organisations and their Access to Markets (BOAM) programme, SNV has been an active contributor to value chain development in Ethiopia since 2005. The main development objective of BOAM was to introduce innovative approaches aimed at improving business-to-business (B2B) relations in selected value chains, and scaling up where possible. The expectation was that if the programme was successful in demonstrating clear results relating to improved linkages in the selected value chains, it would ultimately benefit poor smallholder farmers in Ethiopia by enabling them to adapt their production in line with demand and to access profitable market outlets for their produce.

The first step was to select the value chains on which BOAM would focus its interventions. A total of 29 agricultural sub-sectors were analysed, with the final selection based on the following criteria:

- **Macro economic**: clear market potential, market accessibility and market stability formed the starting point for any sub-sector or value chain intervention in order to ensure that the investments made were based on real market opportunities;
- **Micro economic**: this set of criteria examined the capacity and readiness of private sector actors to cooperate with the programme and add value to the selected commodities;
- **Alignment to pro-poor development priorities**: as a development programme, BOAM’s ultimate objective was to expand opportunities for poor smallholder farmers to increase their income by linking them to a better functioning - and more market-oriented and competitive - value chain. Key indicators used included the potential of the intervention to contribute to job creation and enhanced linkages with smallholders.

Based on these criteria, BOAM chose to focus on the following agricultural sub-sectors: honey, oilseeds, dairy and fruits.

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3 WRR (2010) Less pretention more ambition: Development aid that makes a difference
4 Focusbrief Ontwikkelingssamenwerking, Parliamentary briefing note by the Dutch Minister of Foreign Affairs, March 18, 2011
BOAM’s approach to value chain development

Value chain analysis is often focused on addressing two critical questions: why does the market system not function well? and why are the value chain actors themselves not taking any action? The constraints observed may be the result of issues within the chain but they may also arise from the (lack of an) enabling environment for the development of B2B operations in the chain. However, value chains are part of complex systems and the effect of a particular intervention is often difficult to predict. While value chain analysis can be helpful in identifying where the constraints lie, it does not always provide a clear solution.

BOAM's approach to facilitating value chain development was therefore to initiate interventions that sought to test particular assumptions, often on a pilot basis. The effects were subsequently carefully monitored and, if necessary, adjusted.

A typical value chain supported by the BOAM programme consisted of a number of actors involved in producing agricultural commodities and transforming them into consumer products. Figure 0.1 is a simplified representation of such a value chain. The outer circle represents the enabling environment, which consists of value chain support organisations such as financial service providers, transporters and firms offering business development services. Also included are value chain influencers such as government policy institutions and research bodies that are also crucial in building a successful value chain. The two-way arrows depict how the value chain both influences this external environment and vice versa. Elements of the enabling environment include favourable policies, market intelligence, quality control and standardisation, accreditation and sector promotion.

Figure 0.1 A simplified representation of a value chain

The BOAM Programme focused its interventions at the ‘middle’ of the value chain. As shown in the diagram, key actors at this level were processors, traders and exporters and, in some cases, farmers’ organisations. The rationale for this was that these actors were best placed to mediate between demand (downstream on the right) and supply (upstream on the left). As such, this group of actors needed to be well connected to other actors in the chain. In strengthening downstream B2B relationships BOAM sought to ensure that these actors were adequately informed about actual demand for specific products to ensure that the ultimate beneficiaries - smallholder farmers – were enabled to produce what the market demanded.
To service the end market downstream actors need to secure a regular supply of produce from upstream smallholders. This requires processors, traders or exporters to invest in the upstream supply side of the chain in order to secure desired products in the right quantity and quality. Such investments may include sharing market intelligence with farmers or providing them with specific services including technical, financial and organisational services. The provision of such services can be embedded in a contractual arrangement between the two sets of actors, but it can also be outsourced to other private service providers or the public sector.

Figure 0.2 is a graphical representation of BOAM’s value chain approach. It is important for readers to familiarise themselves with this diagram as we will draw on it in subsequent chapters to illustrate the different elements of the BOAM programme.

Organisation of the book

As depicted in the upper section of Figure 0.2, BOAM provided support to four value chains, each of which was characterised by five main categories of stakeholders:

- Inputs suppliers (I)
- Farmers (F)
- Farmers’ organisations (FO)
- Processors/exporters/traders (P/E/T)
- Retail (R)
- Consumers (C)

The lower part of the diagram portrays the four main intervention areas that BOAM was involved in, namely:

- Sector development
• Business development
• Knowledge development and learning
• Service provider development

The first four chapters of this Volume discuss each of the intervention areas in more detail.

Sector development (Chapter 1) is the process of creating better business opportunities within an agricultural (sub) sector by implementing a number of activities and processes that potentially benefit all value chain actors. A key element in BOAM’s approach was the development of win-win relationships between the value chain actors themselves as well as between these actors and their supporters and influencers within the broader enabling environment.

Business development (Chapter 2) is about supporting specific actors within the value chain. This often involves strengthening relationships between chain actors, also referred to as business-to-business (B2B) development. In BOAM’s practice, B2B development ensured that the opportunities created for a value chain were transformed into concrete business deals and that, ultimately, smallholder farmers were able to benefit from the improved market opportunities and enabling environment created through broader sector development interventions.

The knowledge development and learning component is explained in Chapter 3. Since value chain development is an innovative approach, it is important that the learning processes associated with it are conducted in a systematic way and that proven practices and lessons learnt are well documented and disseminated within other BOAM value chains and elsewhere. As shown in Figure 0.2, knowledge development and learning were at the centre of the BOAM approach and were interlinked with the other key interventions areas for sector-wide learning and upscaling.

Chapter 4 elaborates on the fourth component of the BOAM programme: service provider development. This entailed establishing an Ethiopian community of value chain service providers that would contribute to the further upgrading and upscaling of the BOAM value chains without SNV support. This is crucial for overall sustainability and the adoption of the approach within other subsectors or value chains. In line with SNV’s strategic focus on ‘localisation’, BOAM ensured that the capacity strengthening of business development service providers was an integral part of its intervention approach, right from the launch of the Programme in 2005.

Chapter 5 reflects on BOAM’s practice from a more theoretical perspective. In 2010-11 the Policy and Operations Evaluation Department (IOB) of the Netherlands Ministry of Foreign Affairs used the BOAM honey value chain as a case study for an evaluation on capacity development. The theoretical framework used in the evaluation distinguished between five core capabilities (Baser and Morgan, 2008) of organisations, networks and systems to analyse a number of systemic changes that occurred within the honey value chain system as a result of BOAM’s interventions.

Chapter 6 contains the results of a joint study by researchers at the Centre for International Development Issues (CIDIN) of Radboud University in Nijmegen, The Netherlands, and the Department of Development Economics of Hawassa University in Ethiopia. The team analysed the effects of BOAM interventions using two cases from the honey and oilseeds value chains, with a focus on interventions that specifically targeted actors located at the middle of the value chain. The chapter discusses a theoretical framework that was developed by the study team to help understand the mechanisms through which value chain interventions influence
upgrading and inclusion processes across the entire chain, with a focus on the impact on smallholder farmers.

Chapter 7 explains how the BOAM approach was *successfully replicated* in a national programme targeting the most vulnerable farmers in food-insecure areas in Ethiopia. The USAID-funded Productive Safety Net Program Plus (PSNP Plus) was implemented by a consortium of development organisations under the leadership of CARE. Partner organisations included Catholic Relief Services, Relief Society of Tigray, Save the Children, UK and Tufts University, USA. The overall aim was to enhance food production and prevent further asset depletion among food-insecure households. The consortium partners felt that PSNP Plus needed to adopt a more market-oriented approach aimed at strengthening the supply capacities of food-insecure farmers. Given its experience in implementing BOAM, the consortium requested SNV to help introduce a value chain approach.

Chapter 8 takes stock of the main *conclusions and lessons* learnt from six years of implementing the BOAM Programme. By sharing these findings with development practitioners, policymakers and researchers, SNV Ethiopia aims to contribute to the growing body of knowledge on how to facilitate value chain development for the benefit of the poor.

Annexes 1, 2, 3 and 4 describe the BOAM interventions in the honey, oilseeds, dairy and fruit value chains respectively. Annex 5 further elaborates on the theoretical framework presented in Chapter 6. Annex 6 provides a list of BOAM partner organisations.

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SNV Netherlands Development Organisation (2009) *Programme document BOAM2 Upscaling phase extension*


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A sector approach to value chain development recognises that arriving at desired outcomes involves concerted effort by a range of stakeholders. The introduction of improved seeds, for example, can be a crucial intervention in enabling an entire chain of actors – from producers to marketing organisations - to meet market demand. This might include, among other tasks: collaborating with research and development (R&D) bodies; investing in seed multiplication facilities; establishing or identifying channels to disseminate plant material to smallholder farmers; strengthening local extension services for training and follow up, and so on. It is quite unlikely that a single actor will have the resources or organisational capacity to coordinate all of these tasks.

The starting point of SNV’s Business Organisations and their Access to Markets (BOAM) programme in Ethiopia was therefore to ‘get the ball rolling’ by bringing all the key actors around the table to discuss how to improve the performance of the value chain as a whole. Once such consultative mechanisms were in place, SNV gradually handed over responsibility for their coordination to appropriate organisations within the sector.

Introduction: Sector development as multi-actor change
Until quite recently, development practitioners have worked on the assumption that change is a linear process that begins within individuals and organisations and then permeates into society. But the growing influence of complexity theories and systems-based approaches is increasingly being reflected in development thinking and practice. In a recent article, a group of SNV capacity development practitioners working with value chains in Ethiopia, Kenya and Uganda concluded that “....Working with multi-actor systems not only complements and incorporates earlier training and organisational development approaches, it also has the potential to address development challenges more effectively and to create more self-sustaining forms of capacity.” (Acquaye-Baddoo et al, 2010)

The underlying rational, they noted, is that capacity is ‘relational,’ which means that a key goal of capacity development should be to facilitate joint action towards a common goal. Such facilitation might include establishing or reinforcing connections between actors who did not previously relate to one another, or who did so ineffectively or antagonistically despite having interests in common.
A key building block in the facilitation of multi-actor change is the creation of communication channels to encourage regular consultations and interaction among all relevant stakeholders. However, the mere existence of such consultative mechanisms – often referred to as multi-stakeholder platforms - does not equate to effective capacity development. This chapter highlights a range of support instruments that were initiated by the BOAM programme to ensure that growing engagement by value chain actors led to lasting results for the sector as a whole.

This support included:
- Facilitating the establishment of Multi-Stakeholder Platforms (MSPs)
- Strengthening of Sector Associations
- Generating and disseminating Market Intelligence
- Supporting Effective Public Policy Management
- Promoting Appropriate Technology
- Financing Value Chains

**Value chain multi-stakeholder platforms**

One of the very first steps that the BOAM programme took was to identify key actors within each of the four agricultural sub-sectors it was involved in. These ranged from private sector companies, smallholder farmers, producer organisations, government bodies and non-governmental organisations (NGOs) to research institutions and aid agencies. Representatives of each stakeholder group were invited to participate in the establishment of four sub-sector consultative platforms known respectively as the:
- Honey Value Chain Coordination Group
- Oilseeds Value Chain Coordination Group
- Dairy Value Chain Coordination Group, and
- Fruit Value Chain Coordination Groups [sub-divided into three coordinating groups for the apple, mango and pineapple value chains.]

Once constituted, members of each Coordination Group (CG) elected a chairperson who was drawn from one of the participating private sector organisations. The chairperson was assisted by a CG facilitator, a local consultant recruited by BOAM. The role of the facilitator was to organise regular meetings (every three months), ensuring that timely invitations went out to all stakeholders. The CG facilitator was also responsible for providing adequate documentation and making sure that all meetings concluded with clear points of action and agreement on who was responsible for follow up.

At an early stage, each CG was responsible for developing a Strategic Implementation Plan containing an analysis of opportunities and constraints faced by the value chain and proposals for the way forward. The strategic plans drew on the considerable knowledge within the sub-sector and encouraged the participation of all members. The plans subsequently became the main guiding framework in the further development of the chain.

As a catalyst for value chain development, BOAM played a key role in the initial stages by providing or coordinating the organisational, financial and technical resources required. BOAM staff also took care that key developments within each chain were initiated and coordinated by CG members. Over the years a number of adjustments were made to further strengthen ownership and participation, especially of farmers’ organisations. One such change was in BOAM’s funding policy. In the beginning, BOAM staff had sole responsibility for allocating funds for value chain activities, albeit guided by the Strategic Implementation Plan. From 2009 onwards, the CGs established Executive Committees to advise the BOAM programme coordinator on funding allocations.
Another major change was in the language used in CG meetings. Initially, all meetings were held in English, which limited the participation of some members, for instance farmers’ organisations. It was therefore decided to hold meetings in Amharic.

Over the years, the role of the CGs in value chain development continued to grow and evolve. The CGs provided an important forum for value chain actors to exchange important information about new technologies, market opportunities, sources of finance, new legislation and so on. They were also instrumental in cementing business relationships. In some cases, CGs helped paved the way for the emergence of strong sector associations that are contributing to improved governance of the chains.

The CGs however face a number of challenges that could hamper their operations in future. One of this is their uncertain institutional status as CGs are not legal entities. It has been proposed that future CG meetings should be convened and facilitated by established umbrella organisations within each agricultural sub-sector, some of which were set up or strengthened under the BOAM programme. Within the honey chain, for example, the Ethiopian Apiculture Board has assumed responsibility for coordinating value chain activities.

**Strengthening sector associations**

A sector association is an organised body that brings together a smaller group of sector actors to pursue common interests. Sector associations may refer to associations of farmers, processors or exporters or even organisations encompassing all of these.

Strong sector organisations are important in value chain development for various reasons, two of the most important being representation and collaboration.

*Representation*: The number of stakeholders in a value chain varies widely, and for many agricultural sectors, it may include thousands of smallholder farmers, producers and middlemen. Since direct participation of all actors is not feasible, it is important to ensure that they are adequately represented in value chain governance mechanisms. Representatives may include leaders of farmers’ cooperatives, unions or private limited companies. Effective representation is also a prerequisite for encouraging smallholder farmers and other producers to enter into partnerships with private sector companies.

*Collaboration*: Sector associations play an important role as service providers, through, for example, facilitating extension programmes, procuring and distributing inputs, or coordinating public campaigns. Associations of exporters forge joint action to penetrate new markets. Strong sector organisations with legitimate representatives and competent management are therefore vital for achieving well-coordinated value chain development.
Box 1.1 Gender in value chains

BOAM pioneered a number of innovative approaches to promote gender equity in value chain development, as illustrated by the upgrading of the honey value chain. The upgrading process started with participatory mapping and analysis of gender-specific involvement in the honey value chain (Mayoux and Mackie, 2007). The ‘invisible women stakeholders’ mapping confirmed that women were involved in the honey sub-sector but were largely excluded from higher-level activities with greater potential for generating increased income, such as input supply, production and trade.

The analysis highlighted some ways to create win-win opportunities for all chain actors through (1) upgrading of the value chain, (2) creating higher margins in the sub-sector and (3) contributing to gender equity and increased incomes for women. One of the interesting insights from the analyses was the role of female tej (traditional honey wine) brewers in ‘blocking’ quality improvements. By providing technical support to the more profitable business of processing table honey, the BOAM intervention thus helped address a major constraint to the upgrading of the entire chain. Another fundamental driver for change was the adoption of ‘women-friendly’ transitional beehives.

Unlike traditional honey production that relied on forest-based beehives and was dominated by men, the dissemination of beehives that could be installed close to the home, making honey production and processing an attractive enterprise for women. It fitted in well with their other household and farm activities and they had more control over the honey produced. Furthermore a female entrepreneur discovered that the higher management levels and quality requirements provided additional income opportunities for the production of protective clothes.

As a consequence thousands of women became involved in honey production for the first time and established business relationships with processors. The rapid integration of women in the honey value chain is exemplified by the selection of a female processor as chairperson of the regional honey board in Oromiya.
Support for sector association strengthening was an important component of BOAM’s contribution in all four value chains. BOAM support covered two broad types of activities:

**Catalysing the establishment of new sector associations.** When the honey chain coordination group was established in 2005 the Ethiopian Beekeepers Association (EBA) was the only active association in the sector. Honey processors, exporters and other value chain actors did not have a collaborative platform to help them realise their vision of exporting table honey to Europe, the US and the Middle East. The honey value chain CG was instrumental in the establishment of the Ethiopian Honey and Beeswax Producers and Exporters Association (EHBPEA). The coordination group also felt the need for an umbrella organisation covering the entire chain. This led to the establishment of the Ethiopian Apiculture Board (EAB), a public-private partnership forum chaired by a businessman under the patronage of the Federal Minister of Agriculture. At a later stage additional region-based sector associations known as regional boards were established in the four main honey producing regions of Ethiopia, namely Amhara, Oromiya, Southern Nations, Nationalities, and People’s Regional State (SNNPRS) and Tigray. The new associations have taken on increasingly greater responsibility for the sector’s governance. The EAB, for example, has taken over a number of coordination tasks from BOAM. These include facilitating CG meetings at the national level, raising funds for capacity development, developing and distributing training materials, and promoting Ethiopian honey at international trade fairs and other events. As a result of its efforts, the EAB succeeded in bringing a major sector event - the 2012 ApiTrade Africa - to Ethiopia for the first time.

**Strengthening the capacities of existing sector associations.** BOAM helped to strengthen the management capacities of a number of associations. In doing so, BOAM’s experience with establishing the two honey chain sector associations provided some valuable lessons. Inspired by the establishment of the Apiculture Board, the dairy value chain CG is in the process of establishing a new sector association, the Ethiopian Dairy Board. Similarly, the existing Ethiopian Pulses, Oilseeds and Spices Processors and Exporters Association (EPOSPEA) took on a role similar to the Apiculture Board for the oilseeds sector. No sector associations have been established as yet for the fruit value chain, which is still at an early stage of development.

In order to sustain their operations the sector associations have taken initial steps to secure sufficient and predictable funding, including through charging membership fees. An important budget item that is partly met by membership contributions is the cost of acquiring EU Third Country Listing, a precondition for exporting honey to the EU that has to be renewed annually. The costs involved include compiling the required documentation, collecting honey samples from producers and sending them to Kampala, Uganda, for testing. Once the quality certificate has been received, it is then sent to Ireland for verification. Until recently, BOAM covered most of the costs for this certification process, with a 20% contribution from processors. In 2011 the Ethiopian government assumed responsibility for acquiring EU Third Country Listing.

**Acquiring market intelligence**
Market Intelligence refers to the body of information that stakeholders need to identify market opportunities and develop strategies to take advantage of these opportunities. Market intelligence may include data about prices, quality standards and procedures required to adhere to standards, consumer preferences, competitors, and so on. Across the four sub-sectors in which BOAM was active, the lack of market
intelligence was considered to be a major impediment to value chain development and hence the provision of reliable intelligence was included in the strategic implementation plans of all chains. Sector associations within each chain took on the role of tackling this gap and requested assistance from BOAM to establish appropriate structures to coordinate the provision of market intelligence. Within the oil value chain, for instance, three main steps were undertaken:

• First, BOAM provided financial support to the sector association (EPOSPEA) to place agents or ‘informants’ in each of the three major sesame-trading areas in Ethiopia;
• Second, BOAM provided funding to enable EPOSPEA to gain online access to EU market and buyer information;
• Finally, EPOSPEA facilitated linkages between member companies and EU buyers.

Creating a conducive policy environment
Public policy plays a critical role in creating an enabling environment for value chain development. An enabling environment includes the availability of relevant legislation (and its enforcement), clear and transparent information channels, and reducing unnecessary regulation and bureaucracy that might hamper value chain development. The example in Box 1.2 illustrates the role that effective public policy plays in realising the full potential of value chain development efforts.

Box 1.2 Policy advocacy to improve the quality of milk

Research showed that considerable percentages of raw milk did not comply with Ethiopian quality standards and that this presented a risk to public health. For example, pathogenic bacteria with resistance to antibiotics and dangerous toxins produced by these bacteria were found in more than a third of samples collected from a milk shed in the northern part of Addis Ababa. However, there was no legal requirement for producers to comply with the quality standards. The Ministry of Agriculture - one of the institutions represented in the dairy value chain coordination group – called for a sector conference to discuss this issue. Following the workshop, which was co-funded by BOAM, the government decided to develop mandatory and enforceable milk quality assessments to minimise the public health risk.
It should be noted here that as an international programme, BOAM had little scope to influence public policy in Ethiopia. The example described in Box 1.2 was successful because it was not regarded as a foreign initiative. With their broad-based membership that included government bodies, value chain coordination groups were at the heart of such policymaking. Furthermore, BOAM took care to lend its support to awareness raising initiatives that were based on compelling evidence, stood a fair chance of garnering widespread support and that could be translated into clear policy measures.

Promoting appropriate technology

Another component of BOAM’s support for value chain development related to disseminating well-tested technology innovations that showed potential for scaling up within the local context. With a view to bridging the gap between research and practice, BOAM did not undertake research itself, but invested resources in appropriate R&D bodies. Researchers were invited to participate at coordinating group meetings to gain a better understanding of issues faced by value chain stakeholders and to exchange ideas on possible solutions. This approach led to a number of technology innovations across the four value chains, including:

- Promotion of transitional hives (Box 1.3);
- Uptake of new seedling production methods such as pineapple tissue culture;
- Expansion of informal seed multiplication schemes;
- Development of exotic olive plantations;
- Improved oil extraction technologies;
- Diversification of dairy products and promotion of backyard animal feed production.

Box 1.3 Appropriate technology: The transitional hive

The cost of modern top-bar hives is prohibitive for most beekeepers. To address this problem, the Holetta Bee Research Centre (HBRC) developed a transitional hive that was modelled on the top-bar hive using cheap, locally available materials. Following tests at the HBRC demonstration site as well as the farm level, the transitional hive was found to produce 3 times more honey than a traditional hive. A module on the construction of the transitional hives was subsequently integrated in the training package offered to beekeepers so they could construct their own hives.

Transitional beehives produced by local artisans
Value chain financing
In order to kick-start value chain development in the selected value chains, BOAM established a fund to support interventions designed to benefit the sector as a whole. Any stakeholder - public or private - was eligible to submit a proposal for an initiative that would further the priorities defined in the strategic implementation plans. The Executive Committee of each coordinating group was tasked with assessing all proposals received and making recommendations to the BOAM coordinator for the final funding decision.

The financial rules and regulations were laid down in a fund management manual that provided guidance on funding eligibility, ceilings and application and selection procedures. The manual stipulated a number of key steps that were to be taken:

- Applicants submit a concept note to the executive committee of the coordination group in line with the specified application deadlines;
- The executive committee assesses each concept note against 12 predetermined criteria and decides whether the proposed initiative is a “go” or “no go”;
- Approved concept notes are forwarded to the BOAM coordinator for the final decision on which ideas should be developed further;
- BOAM provides funding and advisory support to successful applicants for developing a full proposal that is then implemented according to the criteria laid down in the fund management procedures.

Most of the projects that received support from the fund were either exploratory studies to identify weaknesses at various points in the value chain, or carry out R&D of appropriate technologies. Other projects focused on disseminating the knowledge generated through publications, manuals, extension messages and so on (Box 1.4).

Box 1.4: List of projects commissioned by the coordinating groups with support from the BOAM sector development fund

**Sector studies**
- Enhancing the quality of animal feed, animal fertility, dairy product development and milk quality
- Identifying suitable and undisputed land for pineapple investments (Southern Region Agricultural Research Institute)
- Diverse market studies
- Mapping of milk collection centres
- Soil testing to monitor the response of sesame varieties to fertiliser application (Mekelle University)
- Physical-chemical and bacteriological testing of raw milk (Ethiopian Meat and Dairy Technology Institute)
- Apiculture Resource Mapping (EHBPEA and HBRC)
- Pollen atlas (HBRC)
- Development of pineapple tissue culture practices (Jimma Agricultural Research Centre)
- Characterisation of apple varieties (HBRC)
- Mango harvesting (Areca Agricultural Research Centre)
Box 1.4 continued

**Other projects funded from the sector development fund or other sources**

- Promotion of refined oil and pasteurised milk consumption (Ethiopian Consumers Protection Association)
- The extension of fruit husbandry practices (Ministry of Agriculture)
- Establishing a standardised beekeeping trainers’ manuals at three levels in Amharic, Oromifa, Tigrigna, and English (EBA)
- Publication of a new book on bee forage in Ethiopia, laboratory upgradation, establishing an apiculture resource centre, and bee forage seed and seedling multiplication (HBRC)

**Conclusion**

Having made the choice to support the development of value chains within selected agricultural sub-sectors in Ethiopia, SNV’s BOAM Programme entered the as yet largely unexplored field of facilitating multi-actor change. Unlike single organisations, which usually have a physical address, staff, an organisational chart, financial resources, annual reports and so on, a value chain is a more elusive entity. Identifying which stakeholders to include in a consultative process - and when – can be tricky. Furthermore, relationships between stakeholders can sometimes be antagonistic. Despite these difficulties, BOAM succeeded in building a range of instruments to support sector development that have stood the test of time. While it was an important step, particularly in the early stages, the creation of multi-stakeholder platforms for each value chain was only one of the instruments used. Once actors had become aware of the market opportunities out there and the importance of working together to seize these opportunities, they still required support to fully realise their ambitions. Such support focused on strengthening representation and collaboration through sector associations, sharing market intelligence, influencing the policy environment, promoting appropriate technologies, and financing.

The facilitation of multi-actor engagement was a key entry point for BOAM’s support. However, the programme did not limit itself to the sector level alone. In the chapters that follow we will show that support to individual businesses and local providers of services were also key elements in the BOAM approach. In this, the selection of actors and initiatives to receive support was guided by the insights and strategies developed through the sector-level value chain coordination groups.

**References**


In the previous chapter we described how SNV’s BOAM programme organised its support for joint action by stakeholders in four agricultural sub-sectors, with a view to improving market opportunities within the selected value chains.

This chapter turns attention to BOAM’s business development interventions in support of a limited number of strategically positioned private sector actors within the value chains. BOAM’s goal was to boost the capacity of individual actors to seize market opportunities in ways that would also benefit poor farmers and other actors in the chain. Examples of business development interventions in BOAM’s portfolio included; supporting businesses to access new markets, linking processors and exporters to farmer’s organisations, and promoting business arrangements between processors and exporters on one hand and farmers on the other. The specific types of support provided ranged from capacity development services such as organisational support and training, and facilitating access to diverse agricultural inputs and finance.

Introduction
The term business development support refers to interventions focused on individual businesses that aim to achieve a number of specific objectives such as exploring new types of products or services for which there is market demand, attracting new customers, or penetrating existing markets.

Figure 2.1 illustrates the four types of business development services that BOAM supported:
- Private Sector Actor Strengthening (PSS)
- Business-to-Business (B2B) Development support
- Producer Group Strengthening (PGS)
- Value Chain Financing (VCF)
Strengthening private sector actors

BOAM’s Private-Sector Actor Strengthening initiative provided financial and technical support to private entrepreneurs and companies. Such capacity strengthening interventions typically targeted the middle section of the value chain, for example, medium-sized processors and traders with innovative business ideas. Private-sector actor strengthening initiatives sought out visionary entrepreneurs or business leaders that were willing to engage in relatively ‘high risk’ ventures – such as expanding into new markets - for which it was difficult to obtain funding through banks or other regular financial channels. BOAM’s rationale for investing its own funds was the potential that this created for replicating and scaling up successful ventures.

A good example of a private-sector actor strengthening initiative was the support provided to the honey processor BezaMar Plc. After a visit to the Apimondia apiculture trade fair in Dublin, BezaMar’s owner, Hailegiorgis Demissie, was inspired to explore the possibility of exporting table honey to the EU. BOAM decided to support the company to acquire more knowledge about the export market through participating in various trade fairs. Demissie subsequently spearheaded the process of acquiring EU Third Country Listing, a precondition for exporting to the EU. Once EU approval had been secured BOAM assisted BezaMar with the certification process, enabling the company to become the first Ethiopian processor to export honey to the EU, with an initial shipment of 30 tonnes in 2008. BOAM also encouraged and facilitated the participation of five other honey processors at international trade fairs where they could explore export opportunities and follow the example of BezaMar. To enable this emerging group to enter and compete in international markets, BOAM facilitated additional certification processes, including HACCP\(^1\), ISO\(^2\) and more recently FLO\(^3\), and supported their business plan development. By the end of 2011, the six processors had exported a total of 400 tonnes of table honey to the EU, USA and Middle-East markets.

BOAM’s support to the Samrawit Mullat oil factory in Addis Ababa - one of the many small and medium-sized food oil processors in Ethiopia - provides another good example of a business development intervention. With a production capacity of up to 5,200 litres a day, Samrawit Mullat was operating at only 40% capacity due to a combination of substandard processing methods in use and a low and unreliable supply of high quality oilseeds. To address these bottlenecks, BOAM partnered with

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1. Hazard Analysis and Critical Control Points, a food safety standard
2. International Organization for Standardization
3. Fairtrade Labelling Organization
a private vocational training college to train staff members on good manufacturing practices. BOAM also linked Samrawit Mullat to a farmers’ cooperative union in the Finfine zone of Oromia region that was producing quality oilseeds. As a result, the company is close to reaching full capacity and is upgrading its operations. By improving their performance, private companies like Samrawit Mullat are in a better position to pass on the benefits to other actors in the chain, including smallholder farmers.

It must be noted, however, that interventions aimed at strengthening private sector actors are not always well received by other stakeholders. Until quite recently Ethiopia was a state controlled economy and it is still adjusting to the effects of free-market reforms. The competitive environment is far from perfect. A few large firms that have traditionally been shielded from competitive pressure still control the domestic market. The fruit marketing sector, for example, is dominated by several Addis Ababa-based wholesalers, who block new entrants through their tight business networks. As a result there is no drive to innovate or become more productive. In such an environment, providing support for new businesses to enter the market can result in positive changes.

Box 2.1 Strengthening private sector actors in the dairy chain

For over 50 years the processing of milk was monopolised by the government-owned Shola Dairy processing company (recently privatised and renamed LAME Dairy Plc) and Sebeta Agro-Industries Plc. As part of its initiative to strengthen private sector actors BOAM provided support to eight new processors that were interested in entering the growing market for dairy products. One such beneficiary was the Rut & Hirut processing firm, which received technical support to improve its cheese production. Following the training, Rut & Hirut opened a second sales outlet and secured supply contracts with a number of larger up-market supermarkets. As a result the company’s production of cheese and butter increased from 30 kg per day in 2009 to 300 kg per day in 2011. This had a positive effect on the value chain as Rut & Hirut was able to hire more staff and expand the number of suppliers of milk from 109 to 400. Across the sector, BOAM support has similarly contributed to raising the market share of medium-sized dairy processors. The new processors now account for roughly 50% of the total processed dairy market supply in Ethiopia and the growing competition has contributed to increased supply as well as diversification of dairy products such as yoghurt, cheese and butter.
Business-to-Business (B2B) development support

Business-to-Business (B2B) is a term used to refer to collaborative arrangements made between two business organisations to enhance their delivery of products and/or services. Until now, most B2B practices in Ethiopia have focused on optimising market opportunities and downstream relationships between traders and processors. Relatively little attention has been paid to maintaining and developing upstream ‘win-win’ business relationships with producers in order to improve the quality and reliability of raw materials. BOAM’s B2B support programme therefore sought to broker collaborative arrangements with producer organisations, not only to improve the balance between supply and demand but to make producer organisations more market-oriented.

A key intervention area in B2B development support involves facilitating the transition from transaction based relationships - whereby the seller and buyer of a product make a deal on the spot - towards a business relationship that is based on a contract. One advantage of contract-based relationships is that they are more durable. Buyers benefit from the assurance of a more reliable supply of products that meet acceptable quality standards. Farmers benefit because they have a more secure outlet for their produce.

Box 2.2 B2B relationships in the fruit value chains

An example of how BOAM brokered contract-based business relationships was the establishment of marketing arrangements between a fruit trading company, Etfruit and Lante fruit marketing cooperative in the Arbaminch area of southern region of Ethiopia. The collaboration resulted in improved fruit sales for producers in the region, amounting to 66 tonnes of mango and 580 tonnes of banana in 2008/2009. Inspired by this positive experience Lante entered into similar arrangements with members of the Gamogofa farmer cooperative union, this time with the involvement of a large fruit processor, africaJUICE. Mango sales rose further, to 731 tonnes, during the 2010 harvest season. All the parties involved benefitted from these contracts. Etfruit and africaJUICE were assured of a guaranteed supply of fruit. The local marketing cooperatives benefitted from the availability of technical support for improving quality control, storage and transport, as well as increased financial security due to advance payments received from africaJUICE.

In addition to B2B support BOAM provided management support and contributed to the development of a business plan.
A contractual relationship may include agreements on the supply of services, referred to as ‘embedded services’. These may be provided by the buyer but also by the public sector or other private sector service providers. Embedded services include agreements about how to monitor product quality, or the provision of market information. Contracts can also contain agreements about services provided by the buyer or a third party to the seller, for instance extension services, access to credit and inputs, or organisational services.

The facilitation of contract-based relationships also created a more conducive environment for business innovation. The introduction of new products and quality standards is often accompanied by the need for a significant improvement of production processes at the farm and market level (such as enhanced access to inputs and technical support services). The availability of a contract helps to reduce the risks for investors who are ready to bring about the needed changes. However, entering into a contractual relationship on the promise of future earnings is a high-risk manoeuvre. The reverse scenario - when a production innovation does not work, or the anticipated market for an end product turns out to be inaccessible – is also quite likely. BOAM support for pilot B2B arrangements sought to temper innovation risk through, *inter alia*:

- Developing innovative interventions with lead actors in the selected sectors;
- Integrating such market actors in value-chain learning and upscaling;
- Playing the role of external broker, catalyst and coach for B2B partnerships;
- Ensuring that B2B arrangements were based on the initiative and capacities of the actors involved;
- Sourcing and facilitating access to funds for business innovations;
- Providing the B2B partners with professional services;
- Providing mediation support to help B2B partners anticipate potential conflicts and facilitating dispute resolution and trust building.

**Box 2.3: Supporting innovation in B2B development**

A business hub is a one-stop facility where farmers can procure a range of services. In the dairy sector, a business hub is usually centred around cooling facilities – milk collection points located as close as possible to local producers to maximise quality. Related services available at the hubs may include access to inputs such as dairy feed, Artificial Insemination (AI) and veterinary services, and finance. A well-functioning hub requires considerable investments, managerial capacity and efficient coordination of a network of producers, service providers and market actors, which makes it a risky intervention for any business.

The Selalle Dairy Cooperative Union in the Oromia region of Ethiopia decided to establish a business hub after an exchange visit to Kenya in August 2008. BOAM supported the cooperative union to carry out a feasibility study that identified the Selalle milk shed as a feasible location. An accompanying business plan explored the optimal combination of services that should be integrated to the hub to ensure its viability.
Box 2.3 continued

Subsequently, BOAM worked with the cooperative to develop a full-fledged proposal and provided funding from its innovative business fund to cover 80% of the costs for testing the business hub model at the identified location, including construction of the cooling facility.

Modern chilling facilities at a processing plant owned by Ada’a Liben Dairy Cooperative

Building the capacity of producer organisations

Smallholder farmers can derive more benefits from value chains if they are better organised, for instance through producer organisations, marketing cooperatives or farmer group private limited companies (PLCs) (see Muradian et al in Chapter 6). Through their producer organisations smallholders gain better access to market information, benefit from reduced transaction costs, boost their bargaining power and are better able to influence policy and lawmaking.

A legally constituted farmers’ group or producer organisation can bring many benefits to its members through (Heinemann, 2002):

- Enabling farmers to pool their resources and skills to enhance efficiency and allow them to collectively address common problems;
- Providing farmers with access to goods and services;
- Improving farmers’ bargaining position, thus enabling them to obtain a fair or competitive price;
- Achieving economies of scale to reduce costs and increase income;
- Allowing farmers to pool risks;
- Increasing market access;
- Facilitating information sharing;
- Improving the quality of products and services.

In the past, capacity-building efforts in this area focused primarily on organisational development and amplifying the ‘voice’ of producer organisations. Current approaches recognise that to achieve economic empowerment, actors at the upstream end of a value chain need strong analytical capacities to help them position themselves more favourably vis-à-vis other actors in the chain.

However, similar to many developing countries, producer organisations in Ethiopia lack the range of skills and capacities needed to fully realise the benefits of joint action. BOAM’s Producer Group Strengthening component provided several types of capacity development support, including brokering business relationships or market linkages, and coaching and training to foster a range of business skills including entrepreneurship, marketing, leadership, and human resource, financial and organisational management.
**Case 1: Improving productivity**
Located close to Addis Ababa in one of the top milk-producing regions of Ethiopia, Ada’a Liben Dairy Cooperative enjoys vast potential for scaling up milk collection and marketing. Ada’a has around 800 members who produce six to eight thousand litres of milk a day. However, Ada’a also faces competition from at least three other active marketing cooperatives in the same area. With technical support from BOAM, the cooperative undertook a number of improvements to boost its market position, including investing in modern processing machinery, constructing a cold room and enhancing distribution and transportation logistics. These measures resulted in improved marketability and a longer shelf life for milk products, which helped to reduce losses and realise optimum prices. With follow up advice on how to address market demands for more diversified products, the cooperative was also able to upgrade its butter-making facilities and introduced a new line of yoghurt products. Other improvements have tackled the need for detailed specification of the products and better packaging. As a result of these changes the cooperative’s milk collection levels recovered from a low of 2,000 litres to at least 6,000 litres a day. The cooperative’s daily production now stands at 1,000 litres of yoghurt, 200 kilogrammes of butter and 5,000 litres of pasteurised milk. This success has boosted the cooperative’s confidence and it plans to open up five additional sales outlets in Addis Ababa.

**Case 2: Enhancing access to inputs, technology and knowledge**
Within the oilseeds value chain, BOAM provided support to 10 farmers’ cooperative unions (FCUs) with a total membership of 230,000 smallholder farmers. Of these, more than 23,500 farmers received training on good agricultural practices and seed multiplication from local service providers. In the case of Didaa FCU, for example, farmers who utilised the training and planted the improved seeds provided managed to increase yields by up to 58%, resulting in a better income. Moreover, two cooperatives attained self-sufficiency in improved planting material for the first time, further enhancing the income of their members.

**Case 3: Improved marketing techniques**
Over the years, BOAM provided coaching support to the Chencha Highland Fruit Marketing Cooperative in order to boost apple sales. As a result of the improved marketing strategies employed, which included the distribution of printed brochures and television advertisements, retail sales volumes increased from five tonnes in 2007 to 26.4 tonnes in 2010. Due to related quality improvements by smallholder farmers, the average price of Chencha apples went up from 1.5 US$ per kg to over 2 US$ per kg. This success also led to a number of spin offs. The cooperative’s membership base doubled to 600 farmers and eight more producer organisations involved in marketing highland fruits and seedlings received similar support from the BOAM programme.

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5 This successful informal seed multiplication was a result of a coordinated and joint effort of the Ministry of Agriculture, the Ethiopian Institute of Agricultural Research (EIAR), SNV advisers and service providers. Additional support was provided by Agriterra with general management and staff support to improve the management capacity.
Value chain financing
A key bottleneck to business development is the lack of appropriate financing mechanisms. Each actor in a value chain, whether large or small, has different financing needs. Smallholder farmers need funding to purchase inputs and improve production. Traders and processors need support to scale up and diversify production, improve quality and adapt to market demands. These divergent needs require the availability of a range of innovative financial services. Value chain financing therefore seeks to analyse the needs of different actors, and develop solutions that are tailored to meet their specific needs. It is important to note that financial solutions in this case go beyond providing grants or loans. Financial institutions can also provide other valuable services such as advice and knowledge.

As part of its support for value chain financing, BOAM developed three types of approaches:
- Identifying existing sources of value chain finance;
- Developing new financing mechanisms;
- Providing investment funds for innovations and upscaling.

Identifying existing sources of value chain finance: BOAM supported close to 30 private sector organisations to access equity or debt financing from diverse sources, including banks and micro-finance institutions, other non-bank financial institutions, or a combination of these. BOAM support consisted of, among other activities, prospecting, screening, and business diagnostics and planning. In addition, some value chain actors provided financing to others as a means to offset potential risk. A fruit buyer, for example, might provide working capital loans or advances to farmers to ensure timely delivery of the final product. Their incentive to lend was not the profitability of the loan itself but securing the delivery of a promised product. In the same way, traders sometimes provided in-kind loans (in the form of inputs) as a normal business service to smallholder farmers with limited liquidity. This was not only aimed at building trust and a stable client market but recognised the fact that providing access to credit was one of the best ways to encourage cash-strapped farmers to purchase inputs.

Developing new financing mechanisms: BOAM supported the development of innovative financial services in collaboration with private sector actors within the dairy and honey chains. Rut & Hirut, a milk-processing firm, received support to develop and implement a financing scheme for milk suppliers to secure access to quality animal feed. Operating as a revolving fund, the new mechanism was jointly owned by the milk suppliers who deducted the advances made from the fortnightly milk payments.

Similarly, BOAM assisted the honey processor BezaMar to obtain a bank loan and establish a credit line for out-growers to invest in quality beehives. Ultimately, the investments in improving accessibility to improved beehives will benefit more actors along the value chain as the quantity and quality of honey supplies continues to improve.

Providing investment funds for innovations and upscaling of the tested innovations: The BOAM programme also set aside funds to kick-start innovative financing within selected value chains. This led to the development of two specialised funds, namely:
- A pilot business innovation fund to help value chain actors test new ways of doing business. Due to the risky nature of investments in this area, the BOAM programme typically financed 80% of the total investment cost, whereby the beneficiary agreed to share lessons learnt as well as any innovation with other value chain actors. In this way BOAM’s investment could be leveraged through sharing the resulting innovations across an entire sector.
• An upscaling fund to help replicate proven interventions from pilot innovation projects undertaken by other actors. Since such projects would already have demonstrated a high degree of success (and could hence be classified as low-risk investments) BOAM’s contribution was capped at 20% of the total cost.

Conclusion
In a well-established value chain with a buoyant outlook, entrepreneurs can easily find access to the capacity development tools and financial support that they need. Growth markets attract resources. For a value chain that is still in its embryonic or early infant stage, however, resources tend to be scarce and the attendant transaction risks are high. It is difficult even for visionary and talented entrepreneurs to find support to turn their ideas into reality. In such a climate, business-focused interventions that combine the capacity development of specific actors, facilitation of market and B2B relations and the funding of innovative ideas make a major difference.

Through its business development component, BOAM was able to reach out to entrepreneurial actors within selected value chains. By encouraging win-win relationships – for instance between processors and traders on one hand and producer organisations on the other - transaction risks were reduced, new knowledge emerged and innovative ideas were shared with other chain actors. In a word, BOAM made use of the opportunities created by the sector interventions explained in Chapter 1 to help foster a more conducive business environment that encouraged private investments and led to the replication and upscaling of proven innovations. By choosing to invest in carefully selected private-sector initiatives, the BOAM programme has helped to trigger multiplier effects that have benefitted a much broader segment of chain actors.

References


Chapter 3

Knowledge development, innovation and learning in value chains

Piet Visser, Melat Getahun and Mogessie Fikrie

Innovation in value chains is about more than improving upon, or creating new products, services and business arrangements. It also encompasses new or different ways of ‘doing business’ within a particular organisation, business network, or by a broader coalition of actors. BOAM invested significant resources to develop and scale up proven good practices and foster broader organisational learning within the sub-sectors and value chains it was involved in. This included support for specific studies, market research, and developing and disseminating new technologies, products, services, business arrangements and management systems.

BOAM’s approach to strengthening capacity for learning and innovation marked a point of departure from the still widely-held assumption that innovation capacity is mainly found in research organisations and is closely linked to technological artefacts and expertise (Hall et al, 2009). This chapter provides a brief introduction to the concepts of knowledge and innovation and how BOAM applied these concepts to facilitate the active participation of all value chain actors. We further reflect on how BOAM’s knowledge development and learning component evolved over the years.

Introduction

The past decade has witnessed a paradigm shift in the way that knowledge development and innovation are conceptualised. From a relatively rigid view of knowledge creation as a linear production process – with clear inputs and outputs – there is a growing recognition that there are multiple ways of ‘knowing’ and that learning and innovation are complex and iterative processes that involve interactions between many actors (Woodhill, 2011).

Influenced by innovation systems thinking, this perspective spans the entire breadth of knowledge development, dissemination and practice, and corresponds to six major trends in agricultural development today:

1. Markets, not production, increasingly drive agricultural development;
2. The production, trade, and consumption environment for agriculture and agricultural products is growing more dynamic and evolving in unpredictable ways;
3. Knowledge, information, and technology are increasingly generated, diffused, and applied through the private sector;

Woodhill (2011) referring to Berdigue 2005
Exponential growth in information and communications technology has transformed the ability to take advantage of knowledge developed in other places or for other purposes;

The knowledge structure of the agricultural sector in many countries is changing markedly;

Agricultural development is increasingly taking place in a globalised setting.

Figure 3.1: The traditional knowledge management model (adapted from Boekhoff et al, 1998)

An innovation system can be defined as: “...a network of organizations, enterprises, and individuals focused on bringing new products, new processes, and new forms of organization into economic use, together with the institutions and policies that affect their behaviour and performance. The innovation systems concept embraces not only the science suppliers but the totality and interaction of actors involved in innovation. It extends beyond the creation of knowledge to encompass the factors affecting demand for and use of knowledge in novel and useful ways” (The World Bank, 2006).

Value chains are complex systems (Camps and Batterink et al, 2004) characterised by the presence of many actors and other interactive elements that influence the dynamics of the entire system. The number and variety of linkages between these different elements is so diverse that it is very difficult - some would argue impossible - to predict the outcome of any intervention. Right from the outset, therefore, BOAM adopted the concept of innovation systems as the organising principle for its approach to facilitating knowledge development and learning in value chains. When applied to this complex multi-actor environment, a systems perspective enables practitioners to move away from top-down linear planning to interventions that are more interactive, learning oriented and adaptive.
BOAM’s approach to knowledge development and learning in the different agricultural sub-sectors consisted of three main components:

- Developing an agenda for knowledge development and learning;
- Establishing knowledge development mechanisms, and;
- Creating a fund for knowledge development and learning initiatives.

The agenda for knowledge development and learning
In the early days of the BOAM programme knowledge development and learning mainly occurred through ‘trial and error.’ An intervention was conducted and evaluated, following which the lessons learnt were incorporated when planning new interventions. Although BOAM initiated a number of studies on sector development early on in its pilot phase, it is only from 2009 onwards that a more systematic approach to knowledge development was adopted. Building on an analysis of commonly experienced constraints within the value chains that it was involved in, BOAM established a ‘knowledge development and learning agenda’ to guide its support activities. This consisted of 13 specific knowledge needs that were considered to be relevant for value chain development. BOAM also appointed a learning coordinator to stimulate knowledge development and learning by staff, external experts, researchers and local service providers.
<table>
<thead>
<tr>
<th>Description of types of knowledge needs</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> A characteristic feature of value chain development is the shift from transaction-based to contract-based business relations. A contract, whether formal or informal, contains basic information such as the agreed price per unit and specifications of the particular product(s) or service(s) to be supplied. However, a contract can also spell out a number of related or embedded services to be provided as part of the business arrangement including, inter alia: logistical arrangements such as delivery schedules and collection points; required technical support and training and who should provide it; financial services provisions for investments in input material and production material; quality control and measurement; how market information will be generated and disseminated; and the institutional arrangements needed to deliver critical financial and technical services to producers. <strong>Knowledge need:</strong> BOAM and the value chain actors wanted to know what impact contracts had on the development of business relationships.</td>
<td>Business issue in the honey, dairy, fruits value chains</td>
</tr>
<tr>
<td><strong>2</strong> One of the activities undertaken as part of value chain upgrading is exploring ways to access new or existing markets. In addition, new products and/or product upgrading occurs. An example is the introduction of improved processing techniques to enhance the quality and durability of food products and appeal to a larger market segment. <strong>Knowledge need:</strong> BOAM and the value chain actors wanted to know what types of business arrangements could facilitate access to new markets (such as the use of joint ventures between processors and producers, setting up new trade relations or the development of a specific brand or label).</td>
<td>Business issue in the honey, fruits and dairy value chains</td>
</tr>
<tr>
<td><strong>3</strong> Upgrading existing products or introducing new ones often requires access to new types of inputs, such as improved seedlings or even new crop or animal varieties. Commercial availability at the right moment of better planting materials, seed(ling) supply systems and animal feeds is crucial in keeping up with increasing demand. As development of new input material can take years, it is essential to ensure that strategies are in place to match demand and supply within the value chain. <strong>Knowledge need:</strong> BOAM and the value chain actors needed to develop knowledge on how to design input supply strategies to meet increasing demand in the upgraded value chains.</td>
<td>Business issue in oilseeds, fruits, dairy and honey value chains</td>
</tr>
<tr>
<td>Description of types of knowledge needs</td>
<td>Source</td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td>4 The creation of a strong pool of local service providers is a prerequisite for sustainable value chain development. In order to create incentives for providers to invest in capacity and quality improvements, a service market is needed. At the beginning of the BOAM intervention demand was limited hence there were only a few providers offering technical and business development services.</td>
<td>Business issue in honey, fruits and dairy value chains</td>
</tr>
<tr>
<td><strong>Knowledge need:</strong> BOAM and value chain actors needed to develop possible strategies and best practices for market-oriented development of the services sector.</td>
<td></td>
</tr>
<tr>
<td>5 Value chain upgrading often requires a quality assurance system combining standards for food safety and food quality.</td>
<td>Business issue in all value chains</td>
</tr>
</tbody>
</table>
| **Knowledge need:** BOAM and the value chain actors needed to develop knowledge on how to establish such systems, bearing in mind that they had to include:  
  • Payment systems to ensure price incentives for producing higher quality products, and  
  • Quality standards and systems for verifying quality in a transparent way. |
| 6 Value chain upgrading is never finished. Consumer demands are constantly evolving, which requires continuous product innovation and value chain upgrading in order to remain competitive. | Business issue in all value chains |
| **Knowledge need:** BOAM and the value chain actors needed to develop knowledge on how to establish a product innovation framework whereby consumer intelligence could be used in developing new products (including processing and packaging). |
| 7 Due to their close links to smallholder farmers, downstream actors are often best placed to coordinate capacity-building support such as training and extension services. In turn, these organisations receive support from commercial providers or government agencies. BOAM’s experience demonstrated the difficulty of developing successful business models for delivering services to smallholder farmers and other actors upstream of the value chain. | ‘Enabling sector’ issue in the honey, fruits and oilseeds value chains |
| **Knowledge need:** BOAM needed to demonstrate ‘win-win’ extension practices to convince public agencies to become more responsive to the needs of all value chain actors. |
| 8 Multi-Stakeholder Platforms (MSPs) are a commonly used mechanism in value chain development interventions. | ‘Enabling sector’ issue in honey, dairy and oilseeds value chains |
| **Knowledge need:** BOAM needed to find out  
  • whether MSPs were an effective instrument to steer sector development, and  
  • what role sector organisations could play to steer overall sector development while taking into account the developmental stage of the value chain. |
<table>
<thead>
<tr>
<th>Description of types of knowledge needs</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Market intelligence has to be gathered and presented in such a way that it becomes meaningful for individual businesses.</td>
<td>'Enabling sector’ issue in all value chains</td>
</tr>
</tbody>
</table>
| **Knowledge need:** BOAM needed to develop ways to:  
• Help individual businesses to articulate their demand for market intelligence;  
• Gather, disseminate market intelligence and present it in a meaningful and actionable form for individual businesses;  
• Help business actors to engage in networks of business contacts. | |
| 10 Private-sector strengthening initiatives entail balancing between sometimes divergent factors and interests: market ‘pull’ and supply ‘push’; value chain leaders and the needs of smallholder farmers; business-to-business (B2B) priorities and requirements for sector development; private and public sectors, and; quick win solutions and long-term development strategies. | General BOAM approach |
| **Knowledge need:** BOAM needed to develop knowledge on how to operate as a facilitator in balancing these factors in value chain development. | |
| 11 Input suppliers, smallholder farmers, cooperatives and processors needed access to financing to scale up new value chain concepts. | General BOAM approach |
| **Knowledge need:** BOAM needed to facilitate the right sources of financing for value chain actors to achieve this objective. | |
| 12 The BOAM strategy anticipated the need to establish an Ethiopian community of value chain service providers that would increasingly provide services in the upgrading and upscaling of diverse value chains without the support of SNV. | General BOAM approach |
| **Knowledge need:** BOAM needed to develop knowledge on how to support the emergence of a resilient services sector with a critical mass of capable service providers who could deliver high quality services to address the ever-increasing demand. | |
| 13 One of the specific objectives of the BOAM programme was to encourage broader recognition, replication and upscaling of this innovative approach to pro-poor value chain development. One of the intended outcomes of BOAM’s knowledge development and learning agenda was therefore to develop a value chain development ‘toolbox’ that could be adapted and implemented in different contexts. | General BOAM approach |
| **Knowledge need:** Defining the content of a BOAM Toolbox for value chain development. | |
Establishing knowledge development mechanisms

BOAM established a number of mechanisms to facilitate collaborative knowledge development by networks of actors from various ‘walks of life’. These mechanisms included:

- Communities of practice (CoP)
- Collaborative research
- Pilot innovation projects
- Exchanges by actors at different levels of the value chain
- Lessons learnt (case studies)

Communities of practice

In order to contribute to the knowledge base on value chain development, BOAM staff members - as well as the broader network of knowledge institutions and practitioners that they regularly collaborated with - were invited to participate in a systematic reflection process organised around the knowledge needs summarised in Table 3.1. Once a subject area had attracted substantial interest the learning coordinator would identify an adviser or local consultant to take the lead in establishing and facilitating a Community of Practice (CoP) to further explore the issue. Each CoP comprised a mix of BOAM advisers, service providers, partner development projects and organisations, researchers and members of the value chain coordinating groups. Discussions within the CoP drew on a wide variety of materials, including projects outputs, commissioned research, and external subject specialists. Members of a CoP made use of available opportunities to exchange ideas, including value chain events and coordinating group meetings, SNV staff meetings, workshops, academic conferences and other external events. Examples of communities of practice that were established in this way include groups working on business arrangements, service development, value chain finance and multi-stakeholder platforms.

Collaborative research

In the early stages of the BOAM programme, research was the primary instrument used in knowledge development. BOAM regularly commissioned studies to fill in specific knowledge gaps and inform the further development of the sectors it was involved in. Such applied research was undertaken in collaboration with experts from a range of local and international research and policy institutes such as the Centre for International Development Issues Nijmegen (CIDIN), the Maastricht School of Management (MSM), the International Livestock Research Institute (ILRI) and various Ethiopian agricultural research centres and universities.

With time, however, it became clear that research alone could not address all the knowledge needs of value chain actors. A number of complementary mechanisms, including pilot innovation projects, exchanges and case studies were added to the knowledge repertoire.
Pilot innovation projects
The purpose of a BOAM pilot innovation project (or pilot) was to test an intervention with a view to upscaling proven practices. The point of departure for any pilot innovation project was the relevant Strategic Intervention Plan developed by each value chain coordinating group with a view to identifying constraints and opportunities for the further development of the chain. Any value chain actor with an innovative idea to solve a specific constraint or leverage a potential opportunity could submit a concept note to the executive committee of the coordinating group. For each concept that received a positive appraisal by the BOAM Executive Committee, a pilot innovation project development team was established to develop a proposal and to monitor the implementation of the project if it received a final go-ahead from the BOAM coordinator. The pilot innovation project development team was made up of the project proposer, a BOAM-appointed coach and possibly a service provider or researcher. The value chain lead adviser coordinated the implementation of the pilots and ensured that the learning objectives of each pilot were well understood by all involved. Table 3.2 provides an overview of pilot innovation projects as a proportion of all projects carried out within the different value chains.

Table 3.2 Overview of BOAM-facilitated pilot innovation projects and their upscaling

<table>
<thead>
<tr>
<th></th>
<th>Apiculture</th>
<th>Dairy</th>
<th>Oilseeds</th>
<th>Fruits</th>
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<tbody>
<tr>
<td>Sectors projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>13</td>
<td>19</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Business projects (&lt;2009)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>30</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Pilot business innovation projects (&gt;2009)</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Upscaling business innovations</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Knowledge exchanges
The knowledge development processes supported by the BOAM programme, varied from one value chain to another. Nevertheless, the process followed as well as the outputs of each process might well be relevant for the other value chains as well. In order to prevent the emergence of knowledge 'silos' the BOAM learning coordinator organised regular joint meetings for actors involved in the different pilot innovation projects to address emerging lessons on issues that concerned all value chains.

BOAM used a number of tools to encourage systematic knowledge exchange, one of which was to organise regular thematic exchanges. At one exchange a group of BOAM advisers involved in implementing pilot innovation projects explored different types of contract arrangements between value chain actors. The experiences of each value chain as well as relevant reference literature were shared and documented. Critical issues identified at the conference were taken up at a follow-up meeting and further elaborated by individual members. These issues included: the role of the government in contract arrangements between value chain actors; the importance of embedding inputs, technologies and other services in contract arrangements; the role of BOAM advisors in establishing and coaching contract arrangements; and the importance and options for producer groups in contract arrangements.
In June 2011, BOAM organised a major learning event known as the BOAM Conference. The conference attracted 250 practitioners from development partners, the public sector and other institutions.

Case studies
It is important for practitioners involved in any development intervention to step back once in a while and reflect on the bigger picture. With the pressures of day-to-day practice, however, there is little time to focus on what has worked and what hasn’t, whether interventions started in the past still makes sense against the backdrop of new developments, and if (or when) it is necessary to adjust one’s approach. All too often, today’s priorities take precedence over what is important for achieving results in the long run. In order to prevent a form of ‘professional myopia’ from creeping in, BOAM encouraged its advisers to write regular case studies on their experiences - individually or preferably in teams – that would contribute insights on the specific knowledge needs highlighted in Table 3.1. Between 2008 and 2010 BOAM advisers wrote close to 50 case descriptions about specific processes or intervention approaches and shared the lessons learnt in diverse platforms. The act of writing a case study therefore proved to be a valuable tool for knowledge development and for documenting experiences and new insights gained.

Catalysing sector level knowledge development and learning initiatives
BOAM administered a fund to support various knowledge development and learning initiatives. The funding structure ensured that promising - but often risky - innovations to address sector or value chain constraints were developed and shared. Support for private sector actors was however strictly regulated to ensure that firms receiving support did not gain an unfair market advantage.

Three types of BOAM-funded learning and development initiatives can be distinguished:
- Knowledge initiatives for enabling sector development;
- Knowledge initiatives for business development;
- Knowledge initiatives to scale up good practices and innovation.

Knowledge initiatives for enabling sector development
Initiatives concerning knowledge development that would benefit the sector as a whole and that were included in value chain strategic intervention plans were fully funded by BOAM. Three of the BOAM knowledge needs listed in Table 3.1 (7, 8 and 9) were covered by knowledge initiatives in this area.
Knowledge initiatives for business development

Pilot innovation projects undertaken by an individual business and its business partners that had potential for upscaling to other businesses could receive BOAM funding of up to 80% of the total project cost. The main reason for this relatively high subsidy was the risky nature of most innovations. In return for BOAM investment, innovators were required to share the results with other businesses in the sector. An additional condition for funding such initiatives was that the innovation should be tested at the lowest scale possible. Six of the BOAM knowledge needs listed in Table 3.1 (1 to 6) touched on this knowledge area.

Scaling up of good practices and innovation

Promising knowledge initiatives in enabling sector and business development were eligible for upscaling support, which might cover:

- Replicating innovations from one business to another;
- Replicating successful interventions from one sector to another;
- Replicating successful approaches to value chain development by BOAM and similar programmes.

In addition to the above-mentioned fund for innovative business initiatives (up to 80% funding) BOAM established an upscaling support fund to support the dissemination of successful pilot innovation projects. Upscaling initiatives could receive funding for up to 20% of the total cost.

Figure 3.3: Levels of BOAM upscaling support
Four of the knowledge needs listed in Table 1 (10, 11, 12 and 13) related to the approach were specifically addressed by knowledge initiatives in this area.

A BOAM initiative to build the capacity of a group of honey processors so they could promote the use of improved beehives among beekeepers is a good example of how B2B innovations were disseminated in the value chains. The first step was to facilitate sharing of processors’ experiences with introducing imported hives. Such exchanges took place during meetings of the value chain coordination group and the umbrella group for processors, the Ethiopian Honey and Beeswax Producers and Exporters Association (EHBPEA). With the knowledge gained, several processors successfully replicated the technology upgrading approach with their own producer networks. There were also examples of upscaling at higher levels. At the sector level, the establishment of the Apiculture Board within the honey value chain similarly inspired the coordinating group of the dairy value chain to initiate a process towards the creation of an Ethiopian Dairy Board.

The adoption of elements of the BOAM approach by the USAID-funded Productive Safety Net Program (PSNP Plus) is an example of successful replication across development programmes. The collaboration between SNV and other PSNP Plus actors is described in more detail in Chapter 7.

Institutionalising knowledge development and learning
As the various value chains established under the BOAM programme continued to evolve and mature it became increasingly clear there was need for a capable Ethiopian institution to support knowledge development and learning within and across the value chains. In close collaboration with the value chain coordinating groups, BOAM facilitated the establishment of a local network, Synovia, to foster knowledge development and learning for value chain development in Ethiopia. Synovia is the acronym for ‘Synchronized Network Of Value Chain Innovation Actors.’ Its objective is to bring together local providers and users of knowledge and business services. The founding members are three well-established Ethiopian consultancy firms, in collaboration with the Addis Ababa Chamber of Commerce and Sectoral Associations (AACCSA), the Ethiopian consultants association and SNV Ethiopia.

Conclusion
BOAM’s approach to facilitating innovation with the active participation of all actors of the value chain has been proven to work. The collective involvement of many stakeholders - especially in identifying key bottlenecks in the value chain - ensured that innovations were responsive to their needs and circumstances. The adoption of these innovations in daily practice helped to foster further exchange and learning within the value chains.

There was, however, a second element that contributed to the development and replication of innovations. BOAM took a pragmatic approach that recognised the challenges and opportunities set out in the strategic intervention plans as representing the core concerns of value chain stakeholders. As a result, BOAM refrained from over-analysing the problem or conducting elaborate needs assessments and feasibility studies to try and eliminate as many risks as possible, or to try and convince sceptical stakeholders about the value of certain innovative ideas. Anyone with a good idea could submit a proposal for a pilot innovation project designed to explore some of the challenges or opportunities prioritised in the strategic plans and to test promising innovations in real-life settings. The resulting experiences and findings were widely shared, making it possible for other actors in the chain to decide for themselves whether or not to adopt a certain innovation.

2 Precise Consult International Plc, BCaD-Consulting Management Plc, TREG Consult Plc
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World Bank (2006) *Enhancing agricultural innovation: How to go beyond the strengthening of research systems*. Washington DC

Strengthening providers of business development services

Meskerem Shiferaw and Marc Steen

Business Development Services (BDS) are the wide range of services used by entrepreneurs to help them operate and grow their businesses. Providers of BDS include extension workers, accountants, quality controllers, development advisers, food safety agencies, consultants and researchers. They may be self-employed or staff of government agencies, NGOs, private sector companies or producer and/or sector organisations. In Ethiopia most business development services are provided by government institutions and NGOs and tend to be narrowly focused on technical extension to producers and facilitating their capacity strengthening (Amha and Ageba, 2006). Other studies show that the BDS sector in Ethiopia is weak and needs strengthening in order to generate employment and economic growth.

The presence of an adequate number of BDS service providers who can deliver increasing volumes of good quality services across all areas of value chain upgrading is a prerequisite for sustainable value chain development. It is for this reason that SNV included strengthening of BDS providers as a core element in its value chain development approach.

Introduction
In a study for the German development agency GIZ, P. Wolterstorff (2006) concluded that the Ethiopian BDS sector has a number of weaknesses notably:

• Most private sector BDS providers operate at the national or regional level making it difficult for smallholder farmers, farmers’ organisations and rural service providers to access their services;
• Organisations that hire BDS providers have themselves only a limited understanding of market dynamics. As a result, BDS providers are often assigned to firms with limited feasibility from a business perspective;
• Many BDS providers are staff members of donor-supported development agencies and offer their services for free. This may undermine the emergence of market-led private BDS providers;
• Self-employed BDS providers often lack client acquisition skills;
• The majority of BDS providers do not specialise in a specific area of expertise. They offer a wide range of services, even in areas they may not be well-qualified for, resulting in poor results and disappointed clients;
• Self-employed BDS providers take on more assignments than they can handle at the expense of the quality of the services they can deliver.

2 Paul Wolterstorff M.A., Studying and evaluating the BDS provider landscape in Ethiopia by Engineering Capacity Building Program in Ethiopia (2006)
Opportunities

There are opportunities for the BDS sector in Ethiopia to grow and improve. The Ethiopian government has embarked on an ambitious Agricultural Growth Programme (AGP) in the framework of the Growth and Transformation Plan that is supported by a broad range of donor agencies including the World Bank, USAID, CIDA, the Dutch Ministry of Foreign Affairs and UNDP. With a budget of US$ 253 million, the AGP aims to contribute to economic growth through developing private agri-businesses and the existing smallholder system. In the past, the limited implementation capacity of BDS providers has been identified as a key factor in curtailing the successful implementation of business development programmes.\(^3\) The AGP therefore aims to strengthen the ability of public and private BDS providers to respond to the increasing demand for new technologies and provide advice on improved practices and investments in infrastructure.

Other development programmes that offer opportunities for strengthening Ethiopian BDS providers are the Food Security Programmes, with the related Household Assets Building Programme, and the USAID-funded Productive Safety Net Program (PSNP Plus). Both types of programmes have adopted value chain development as an element of their strategy and an example is discussed in more detail in Chapter 7.

A third factor that has helped to open up opportunities for BDS providers is the rise in private investors (national and international) who are increasingly responsive to a more favourable policy environment and have started to invest in new agro-food industries and value chains.

The convergence of government, private sector and donor interests has helped to broaden demand in such areas as human resource training; extension, consultancy and coaching; marketing and strategy development; technology development and diffusion; and improving business linkages through sub-contracting, franchising, and business clusters (Amha and Ageba, 2006)\(^4\). However the weakness of the BDS sector prevents it from taking full advantage of these expanding opportunities.

BOAM’s approach to strengthening BDS providers

The main objective in seeking to strengthen BDS providers was to increase the supply of effective and efficient private and public services, as well as create more demand for these services. As depicted in Figure 4.1, BOAM distinguished between three types of business support providers:

- BDS providers who provide direct support in the day-to-day operations or strategic planning of a single business unit, such as a private company, cooperative or farm. The services provided could cover technical training, accountancy and/or auditing, logistics, food safety and quality control;
- BDS providers who develop and introduce value chain innovations such as new strategic approaches for business to business (B2B) development, quality-based pricing systems, new technologies, product development or new ways of organising market-wide arrangements or logistics;
- BDS providers who provide services to improve the overall governance system, including the institutional environment of a value chain. This could include facilitating multi-stakeholder projects for value chain upgrading, the development and strengthening of sector associations or chambers of commerce, and policy and programme development for donors, government bodies and other stakeholders.

\(^3\) The World Bank Agricultural Growth Program (AGP) Program Information Document (PID) of March 08, 2010.

Based on the foregoing analysis, BOAM developed a support strategy that included the following measures:

1. Expanding the pool of BDS providers;
2. Supporting BDS providers to improve the quality of their services;
3. Creating demand for BDS services;
4. Supporting BDS providers in knowledge development and learning.

1. Expanding the pool of BDS providers
Right from the outset SNV included BDS providers in the implementation of the BOAM programme. In early 2007 it had become clear that a broader base of BDS providers would be needed to support the scaling up phase of the BOAM programme (2009–2011) without resorting to employing more full time value chain advisers within BOAM. To this end, BOAM in collaboration with GIZ’s Engineering Capacity Building Programme (ECBP) initiated the Young Professionals Programme in September 2007.

The Young Professionals Programme recruited university graduates and placed them with selected BDS providers for a one-year internship. During this period, the young professionals were provided with additional training to strengthen their capacities in writing, personal effectiveness, business plan development and value chain analysis and development. Each of the partner organisations contributed towards the cost of the project. BOAM and ECBP financed the training programme and 50% of the salary of the trainees, while the beneficiary BDS providers financed the other half of the salary costs and ensured that the trainees were exposed to as many challenging assignments as possible. Overall implementation of the programme was outsourced.
to First Consult, a capacity development firm, while the monitoring component was delegated to the Ethiopian Consultants Association (ECA).

In total 44 young professionals - two-thirds of whom were women - were trained in two batches in the period 2007-2010. 42 of the trainees subsequently gained employment in Ethiopia while five opened their own consultancy firm. The alumni have also established an association, the Toast Masters Club, where they meet and discuss current events and issues related to their profession and other areas of common interest. The meetings have enabled members to further their professional development in such areas as presenting ideas, facilitating conferences and so on.

Besides the above-mentioned results, the BDS providers and young professionals involved in the programme reported a number of benefits, as highlighted in Box 4.1.

One BDS provider reported that "....As a result of the additional capacity we were able to receive 50% more assignments resulting in 20% additional income for the organisation."

According to one trainee, "....The programme has assisted us in building self-confidence and the potential to become competitive in the BDS market and elsewhere."

Participants at the closing ceremony of the Young Professionals Programme

Box 4.1: Benefits of the Young Professionals Programme

<table>
<thead>
<tr>
<th>As told by: An intern attached to BCaD-Consulting Management Plc</th>
<th>As told by: A manager at BCaD-Consulting Management Plc</th>
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<tbody>
<tr>
<td>I had always wanted to be part of the growing team of experts working on development. My internship at BCaD has helped me to realise this dream. Thanks to this programme, I now have a good level of experience and skills in the following areas: • Providing consultancy services to enterprises on business diagnosis and business strategy formulation • Preparing training materials and conducting trainings • Evaluating proposals seeking financial or technical assistance • Writing reports and proceedings on conducted trainings, workshops, etc.</td>
<td>Following the placement of Young Professionals in our organisation, the following major benefits have been achieved by my company • We sourced 50% more assignments from client organisations, which raised our income by 20% • Our organisation became more structured in the following areas: o Creation of a formalised financial and administrative system to handle the increased number of staff members o Better planning and organisation of our activities o We have learnt more about our strengths and weaknesses during</td>
</tr>
</tbody>
</table>
• Continuous on the job training and class room training related to assignments given to me

What does it mean for our career development?
This programme has allowed me to learn a lot in a limited time frame. I am very grateful for all the opportunities that were presented to me during the year, including my exposure to major assignments and organisations such as ITC. This has created a good exposure for my future career development. And, I am very flattered that my employer decided to retain me for another year. Because of the skills and experiences I got from this job, I now feel confident to take on complex projects and deliver the expected results.

In conclusion, the Young Professional expressed thanks to the SNV-ECBP internship programme for “building my confidence to discharge the responsibilities entrusted to me.”

the regular follow up discussions with SNV and ECA, held as part of the quarterly monitoring and evaluation process
• We have expanded our business network, which has helped broaden our consultancy activities
• Other improvements as a result of participating in the programme include:
  • Improved office facilities (for example additional computers) to cater for the increase in the number of staff
  • We hired an IT consultant which helped to strengthen network management
  • Better division of work between managers and staff members
  • The organisation’s reputation was enhanced due to the increased number of staff members and the improvement in the quality of work
  • Overall quality of work increased due to continuous training given to the interns
  • A vibrant professional team was created at the end of the internship period as the young professionals were retained as full staff members

In conclusion, the manager indicated that the growth of the company between July 2007 and September 2008 was because of the mutual effort exerted by the young professionals and his company and he expressed his appreciation for the support provided by the BOAM/ECBP-supported programme.

2. Supporting BDS providers in developing the quality of their services
From its earliest phase (2005 onwards) the BOAM programme supported the capacity strengthening of BDS providers by engaging them as (co)facilitators of multi-stakeholder platforms and service providers to processors and farmer organisations. These services were jointly provided with SNV’s value chain advisers, who also provided on-the-job coaching of the BDS providers when required. The BDS providers were not only drawn from private consultancy companies, but included a substantial number of public service providers from relevant government ministries (agriculture, cooperative promotion and enterprise development) as well as research institutions and, in some cases, NGOs.
In 2008 and 2009 BOAM, in partnership with ECBP and the Interchurch Organisation for Development Co operation (ICCO) established a joint Competency Pool, in which 40 BDS providers from government, NGOs and the private sector were trained in value chain analysis and development using a mix of theory and practice. The practice element consisted of a value chain analysis assignment at the end of the one-year training programme. During the programme trainees worked in small groups designed to maximise peer learning and stimulate them to develop networks of professional relationships.

Box 4.2 Benefits of the Competency Pool

Fulfi lling different assignments for BOAM within the honey value chain and the support given to me through professional coaching and regular feedback has helped me to strengthen and further build my career.

I was trained in value chain development and facilitation for one year under the joint SNV, ICCO and ECBP Competency Pool. As a result, I have acquired additional practical skills through conducting a value chain analysis in the oilseed value chain. I have also developed my skills related to meeting facilitation, discussion and communication as a result of frequent interaction and communication with clients. In addition to the skills gained, these engagements have given me an extended network for additional assignments from other (senior) consultants. I used to work as freelancer, but by working with BOAM, I have obtained my own consulting license, which has been my dream for a long time.

Consultant, Rahel Business Training and Consultancy Services

“Participating in the Competency Pool helped me to gain new knowledge and skills. This has allowed me to enter a new market on value chain development. At the moment, I am getting additional assignments, which has enabled me to earn more income. I am grateful to the programme organisers and funding organisations.”

Consultant, Diligence Consultancy Service Plc

3. Creating greater demand for business development services
One of the fi ndings of the GIZ study mentioned earlier in this chapter was that many private sector BDS providers, who need to charge for their services, face competition from donor-supported development agencies that offer free support. One of the approaches taken by BOAM to increase demand for local BDS providers was to outsource SNV’s services as much as possible, hence limiting the direct involvement of SNV advisers in providing such services. Following the completion of the Young
Professionals and Competency Pool programmes, efforts were made to outsource BDS contracts to alumni and firms that had participated in the programmes. Similar practices were applied to other programmes in which SNV was involved, for example PSNP Plus (see Chapter 7) and Revitalizing Agro-Pastoralist Incomes and New Markets (RAIN)\(^5\). SNV also shared its experiences with other development partners with the aim of encouraging them to outsource more work to local BDS providers.

In order to keep growing the pool of local experts, other private sector actors that were in need for technical support were linked to the BOAM pool of BDS providers. Over time, the BDS pool has built up a track record that has helped to increase clients’ confidence and consequently extended the BDS providers’ clientele base. Particularly noteworthy in this is the performance of a group of BOAM-supported technical auditors working with milk processors and farmer organisations. Their services are now so much in demand that they have established a successful business and count among their clients a number of private sector firms who can afford to pay a market rate for the services.

4. **Supporting BDS providers in knowledge development and learning**

The BDS providers involved in BOAM activities fully participated in the knowledge development and learning agenda explained in Chapter 3. They were involved in the development and introduction of innovations such as the business hub in the dairy chain, new out-grower arrangements and the development of new products. Through the Synovia initiative BOAM aimed to establish a mechanism through which BDS providers can continue to contribute to sector-wide knowledge development and learning.

**The changing role of SNV BOAM advisers**

One of the immediate impacts of the increased outsourcing of capacity development support to BDS providers can be seen in the changing role of SNV advisers over the course of the BOAM programme. Over time SNV advisers moved away from direct involvement in training and other value chain development activities and focused instead on contracting, monitoring and coaching of BDS providers. Furthermore, the competencies of BDS providers became increasingly complementary to SNV advisers’ expertise, which meant that SNV staff were no longer in direct competition with local service providers. With enhanced local capacity, the demand for external expertise - for instance training on operational technical issues or facilitating access to finance - has substantially decreased.

As the BOAM programme drew to a close, local BDS providers were providing expertise on a wide range of value chain activities including:

- Facilitating meetings of the value chain coordination groups;
- Monitoring and evaluation of BOAM-supported projects;
- Facilitating the preparation of concept papers and joint development of project proposals for value chain activities;
- Value chain analysis, studies and other research;
- Facilitating workshops and conferences;
- Recording proceedings of the value chain coordination group meetings;
- Supporting private companies and farmers’ organisations to develop business plans and access funding;
- Knowledge sharing with investors;
- Facilitating market access for value chain actors;
- Training producers and processors on product quality, diversification and the introduction of new technologies;
- Strengthening the capacities of companies and cooperatives involved in marketing and financial management.

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\(^5\) RAIN is a three-year project implemented by Mercy Corps and Save the Children UK in 19 districts of Oromiya Region and Somali Region funded by USAID/OFDA
In total, BOAM contracted 48 BDS providers on a regular basis for value chain work, of which 18 had received training from the Young Professionals and Competency Pool programmes. Figure 4.2 shows the steady increase of the pool of BDS providers to whom SNV (BOAM and other projects of SNV) outsourced their work.

**Figure 4.2: Growth of local BDS providers**

![Growth of local BDS providers](image)

**Box 4.3: Examples of outsourcing**

In the honey value chain, 17 BDS providers benefitted from various forms of support including coaching, outsourcing and integration in value chain activities. The service providers were involved in a broad range of assignments, including training of trainers, manual development, baseline surveys (before and after training), strategic planning preparation for partners and clients, market studies, market brokering, and facilitation of multi-stakeholder platforms.

In the fruits value chain, the BOAM programme outsourced services to nine BDS providers, while simultaneously providing them with backstopping support and coaching. The service providers were involved in market studies, trainings, manual development and organisational development. One of the key achievements has been to align such technical support with the services provided by government departments, including the cooperative, marketing and enterprise development agencies. This has enhanced linkages between public and private sector activities.

In the oilseeds value chain, 17 BDS providers were involved in business plan development, studies, technical auditors and the moderation of multi-stakeholder platforms.

In the dairy value chain, two technical auditors were contracted to build knowledge and skills of the actors on all dairy related technical issues from input provision, production up to processing. In addition, three non-technical service providers were called upon to provide client support whenever the need arose.
Conclusion
With its BDS strengthening component, BOAM has demonstrated that within a relatively short period of time it is possible to develop a pool of consultants who collectively have the knowledge and skills to perform many of the tasks that are required to facilitate value chain development and upgrading. Some of these consultants have already been able to establish themselves as reputable small firms providing services to private sector companies. Others are regularly hired by development agencies that have private sector development programmes in place. Considering the strategic orientation of the Ethiopian government and the main development agencies with regard to private sector development, the future of these BDS providers certainly looks bright.

The consultancy pool of 48 BDS providers is an achievement that needs to be put in perspective. The pool is still very small and vulnerable against the backdrop of the huge investments that are expected to be made in the agricultural sector in Ethiopia. In order to expand this pool, SNV is seeking like-minded partners to join initiatives such as the Consultancy Pool and Synovia and who commit themselves to support an emerging sector of local BDS providers who are establishing themselves as resilient independent providers of high quality services to their clients.

References
The approach taken by SNV’s BOAM programme has been subjected to several studies, one being an evaluation of the honey value chain by the Policy and Operations Evaluation Department (IOB) of the Netherlands Directorate-General for International Development Cooperation (DGIS). A key purpose of the IOB evaluation, which was conducted in 2009-10 and focused on 26 cases in 17 countries, was to better understand how capacity develops ‘from within’, rather than looking only at what outsiders have done to support and promote it. A second objective was to identify the factors that have influenced the effectiveness of the support provided by DGIS and six Dutch non-governmental organisations (NGOs).

The IOB evaluation emphasised the need for support organisations to have an underlying theory of change to help explain how they intend to meet their development objectives. In this chapter we will elaborate on the theoretical underpinnings of BOAM’s value chain development approach bringing in some elements of systems thinking. Subsequently we will discuss how the IOB evaluation applied the Five Core Capabilities (5Cs) model (Baser and Morgan, 2008) to analyse systemic aspects of the value chain approach promoted by BOAM. We will conclude by using the same 5Cs model to reflect on some of the change processes that have and will continue to occur within the BOAM-supported value chains and the roles played by the practitioners who facilitate these processes.

Introduction
The bulk of the literature on value chain development does not make explicit reference to systems thinking. Likewise, development practitioners and value chain actors - along with their supporters and influencers - seldom use the term ‘system’ to explain what they do. In reality, the value chain approach practiced by the BOAM programme offers a good case of the systems perspective in practice.

The systems approach views the development process as a complex web of interactions between individuals, organisations, sectors and societies. Although there are many schools of thought about how these interactions take place, most approaches frame systems in terms of one or more of the following three elements (Williams, 2009):

- Understanding the interdependent relationships and cause–effect interlinkages that influence the outcome of an intervention;
• Mapping the positioning of different actors within a larger system and analysing how this influences their perspective on the system, and thus the way they act;
• Delineating the boundaries of a system in order to determine which actors (and their interrelationships) can be considered as part of the system, or not.

BOAM applied elements of these three perspectives in the value chains it was involved in:

**Boundary thinking** was applied when BOAM helped to establish multi-stakeholder platforms and address the question of which stakeholders should participate in these platforms. As a subsystem that is embedded in a larger sector or societal system, a value chain typically consists of value chain actors such as input suppliers, producers, traders, processors and exporters, and related support structures and enabling institutions that might include service providers, government ministries and research institutions.

**Cause-and-effect thinking** was used to try and gauge the possible outcomes of planned interventions. Promising ideas were subsequently tested in pilot innovation projects (or pilots), with a view to upscaling successful initiatives. In reality, however, conducting a pilot is a risky venture that often requires substantial investments in terms of funds, guidance and technical support. Making choices about which pilot innovation projects to support is a decision that is not to be taken lightly. By analysing each value chain in terms of its cause and effect relationships, value chain actors identified and prioritised the most critical or promising innovation projects as part of a strategic intervention plan for the chain. These plans were regularly reviewed by the entire value chain coordinating group in order to assess the impact of systemic changes such as market conditions, policy environments, market behaviour and/or actor relationships.

**Systemic analysis** of actor relationships was used in a variety of settings, such as when brokering business relationships or facilitating arrangements between various actors in the chain. In order to ensure that all actors who were party to these business relationships would benefit, BOAM facilitators had to understand the system from the perspective of these parties. In this regard the honey case study report of the 2010 IOB evaluation made the interesting observation that the BOAM approach appeared to have helped the (value chain) system ‘to see and understand itself’ and the way it is positioned in the wider societal context. In other words, the actors in the system were able to develop a perspective on the system that went far beyond their own position within the value chain. As a result they became much more aware of their individual and joint responsibility for bringing about the necessary systemic changes for the value chain as a whole. This empowered value chain actors to improve their own performance and business relations, while also starting to gradually address and reshape certain collective ‘rules of the game.’

This observation corroborates an important hypothesis recently posed by a group of SNV practitioners regarding interventions at multi-actor level (Acquaye-Baddoo et al, 2010). They suggest that whereas most capacity development interventions focus on individuals (training) or organisational strengthening, the multi-actor level is largely ignored despite being a much more suitable entry point for capacity development interventions in many cases. The BOAM approach reaffirmed this view and showed that working with multiple actors can be an effective form of capacity development in its own right. Multi-actor engagement builds the combined as well as the individual and organisational capacities of actors within a value chain system, and helps to embed their interrelationships more strongly in the wider institutional
Value chain development

context. This results in a more effective and more sustainable upgrading of the value chain.

The Five Core Capabilities (5Cs) framework
During its recent evaluation of the BOAM programme, the IOB utilised a strand of systems thinking – the Five Core Capabilities (5Cs)\(^1\) model. The study team applied the analytical framework to assess whether capacity development had occurred in individual organisations and networks that were part of the value chains examined. The team sought evidence of strengthened capabilities to: act and engage, relate, adapt and self-renew, achieve coherence, and deliver on development objectives.

Box 5.1 describes how the IOB evaluation applied the 5Cs model to the honey value chain case.

\[\text{Box 5.1: Application of the 5Cs model to the honey value chain}\]

The IOB study revealed that the 5Cs capabilities model facilitates a focus on aspects of organisational functioning that are critical for developing the capacity of complex open systems like the honey value chain. The context for the development of each capability is assessed below.

In 2004 the capability to act and engage by actors within the chain was at a low level. Signs that this capability had improved included: evidence of stronger leadership of the value chain; more collective initiatives undertaken by value chain actors, indicating a greater sense of ‘ownership’; and the ability of stakeholders to identify ‘win-win’ development opportunities. The establishment of value chain Coordination Groups (CGs) helped to nurture this collective vision, which should be further enhanced once the multi-stakeholder platform is formally institutionalised under the coordination of the Ethiopian Apiculture Board (EAB). The evaluation team concluded that over time, value chain actors had succeeded in developing their own latent capabilities and combining them with favourable external factors such as market opportunities, hence creating the right conditions for enhancing a range of related capabilities.

One of these related capabilities is the capability to relate both internally within the value chain as well as with external actors, which the study team found to have been strongly enhanced. The BOAM programme was shown to have played a critical role in facilitating processes between (potential) actors and brokering relationships among them aimed at (re-)establishing connections at the value chain and sub-sector levels. All actors involved got to know each other better and learnt to work together towards a common goal as evidenced by some of the B2B partnerships that subsequently emerged. Overall, the study team found that by facilitating value chain actors to develop internal systems and common strategic plans - including agreeing a common approach for dealing with external actors - the BOAM programme had helped value chain actors to enhance their own capability to relate.

The capability to adapt and self-renew was also strengthened over the duration of the BOAM programme. Learning was structured into processes and institutions that were designed by the value chain actors with facilitation from BOAM. The stakeholders were shown to be well aware of important changes and opportunities for the honey value chain in future. Their enhanced confidence in their businesses was evidenced by their commitment to invest resources in new technologies and other innovations. This would help to further improve the quality and productivity of honey and lead to increased sales and income for actors at all levels of the value chain.

\(^{1}\) The 5Cs model was developed by researchers at the European Centre for Development Policy Management (ECDPM) as part of a study covering 17 practical case studies of capacity development ranging from individual organisations to overall sectors (Baser and Morgan, 2008)
Box 5.1: Continued
Likewise, the capability to achieve coherence was found to have improved considerably. Due to the role played by the honey value chain CG in setting a clear strategic vision and operational framework, the key value chain actors were able to follow similar approaches. Furthermore, the level of understanding among stakeholders - as well as between managers and their operation staff at the individual business level – was found to be quite high in most of the businesses examined by the study. By achieving coherence, value chain actors had enhanced the efficiency of their operations and thus helped to achieve a better balance between costs and benefits. The presence of this core capability can be seen as an emergent strength that helps to leverage other capabilities that have been developed over time, in particular the capabilities to deliver and to relate.

From the evidence provided by the IOB evaluation it can be concluded that the capability of the value chain to deliver development results improved significantly as a result of the BOAM programme. The strengthening of planning and strategising skills and related basic competencies provided the basis for enhancing this core capability.

Source: Debela (2010)

Towards a theory of change: Three stages of value chain development
The 5Cs framework can also be used to analyse the various phases of value chain development. BOAM characterised these change processes as the embryonic, infancy and mature phases (Figure 5.1). The BOAM mid-term review in 2008 concluded that at that time the dairy, pineapple and mango chains were in an embryonic phase while the oilseeds, honey and highland fruits value chains had started to enter the infancy phase. By the end of the programme in 2011, all six value chains had entered the infancy stage.

Figure 5.1: The three stages of value chain development
**From conception to embryo**
During the embryonic phase the foundation is laid upon which actual value chain upgrading or development can take off. This enabling environment consists of a basic level of three core capabilities: ‘the capability to relate,’ ‘the capability to act and commit,’ and ‘the capability to deliver on development objectives.’ In the BOAM approach this is achieved by facilitating the establishment of an institutional network of multi-stakeholder platforms (MSPs) while simultaneously supporting the development of business networks, sector associations and producer associations (referred to as sector development within BOAM). Once this foundation has been built, value chain actors are able to embark on developing strategic and operational intervention plans for the sub-sector as a whole. However, all these efforts can only achieve results if there is a clear perspective on broader market opportunities from which value chain actors can ultimately benefit. At this stage it is still a challenge for all stakeholders to identify market opportunities and understand how the value chain as a system is embedded within a wider context.

**From embryo to infant**
During the infancy phase capabilities ‘to relate’ are consolidated and the focus shifts to establishing a basic level of the capability ‘to adapt and self-renew.’ In BOAM’s approach, as shown in Figure 5.2, this meant that when the institutional network of MSPs and sector associations are more established and continuing to develop, attention turns to facilitating the development of B2B relationships, which in their turn trigger innovation and growth of the value chain.

*Figure 5.2: The link between B2B development and innovation*

Once a value chain has entered the infancy phase, value chain actors are invited to come up with innovative and sustainable solutions (innovation leap). These ideas are tested in pilot innovation projects and the results are shared and further adapted within the MSPs (referred to as knowledge development and learning in the BOAM approach). For BOAM the strategic intervention plan provides the guiding framework for determining what initiatives to support. Inevitably, circumstances change and new insights are gained on the opportunities as well as constraints for further sector development, necessitating further adjustments to the intervention strategies. The consultations that occur within the MSPs to discuss these contextual changes and the incremental insights that create stronger links and enhanced trust between
stakeholders. One of the benefits of the trust-building process is the gradual reduction of the transaction risks/costs of B2B relationships as well as investment risks.

From infancy to maturity
The mature phase is characterised by enhanced capabilities ‘to achieve coherence’ and ‘to adapt and self-renew.’ Within the BOAM approach, enhanced capability to achieve coherence can be seen in:

- The emergence of an institutional environment of sector or branch associations to lead the further development of the value chains;
- The creation or strengthening of an enabling regulatory framework for sector development. This occurs, for instance, when bottlenecks of a systemic nature - as identified in each intervention plan - are addressed, enhancing the opportunities for all actors to realise their goals;
- The emergence of capable professional public and private business developments services providers that are able to offer support to value chain actors in a sustainable and demand driven manner (referred to as service provider development within BOAM);
- The availability of investors linked to a professional network of service providers and financial services, which opens up access to investment and working capital for value chain actors;
- The development of close links with research institutes that are able to undertake applied research in support of value chain development.

The capability to adapt and self-renew consists of innovations that are conceived by creative entrepreneurs that are subsequently tested in a systematic way and scaled up. Since at this stage of value chain development learning is principally driven by the stakeholders themselves, in the BOAM approach this is referred to as a second layer of knowledge and business development.

Role of practitioners who support value chain development
During the transition from the embryonic phase towards maturity, value chain facilitators take on various roles, including as:

- Provider of advisory services focused on strengthening the capacities of individual organisations and networks of organisations
- Coach
- Information and knowledge broker
- Facilitator of innovation development processes
- Mediator in conflicts
- Networker
- Contributor to knowledge development on value chain analysis and development
- Advocate
- Manager of funds (for example for conducting pilot innovation projects and research)

Within BOAM the specific mix of these roles changed significantly over the course of the transition process. As the value chains became more established and the number and capacities of BDS providers increased, the role of BOAM advisers changed. BOAM’s strategy guided staff to move from more operational functions such as training, technical support and moderation of meetings to more strategic roles such as coaching, and knowledge development and brokering. However for a smooth transition between these different roles it is crucial that individual facilitators develop the skill to reflect on their own role in the process and determine the opportune moments to phase out certain roles and adopt new ones.
The honey value chain case study carried out for the IOB evaluation (Debela, 2010) stated that:

_**SNV has recognised that for facilitation ... to translate into effective capacity development of complex open organisational systems like value chains a demanding approach to practice is required. An organisational quality observed during this evaluation is that SNV is innovating, trying out ideas in a flexible way, taking risks, being open for emergent opportunities and ready to make mistakes and learn from it. The organisation has adopted a very conscious and intentional commitment to articulating, documenting and constantly evolving and improving its practice.**_

The study team further noted that this requires a clear impact orientation and the ability to keep an open eye for and be responsive to opportunities that arise. Last but not least it requires the ability to sense and stimulate the energy and aspirations of the value chain actors that are responsible for driving these processes.

**Conclusion**

The various schools of thought on systems thinking and value chain development have evolved in isolation from each other. This is regrettable given the similarities of the two domains and the scope for cross-fertilisation of ideas between them.

Systems thinking has a lot to offer to value chain development. In addition to analysing chains in terms of cause and effect relationships, thinking in terms of system boundaries and perspectives could help to enrich the theory and practice of value chain development. However, systems concepts are often debated at a very ‘abstract’ level, making it difficult for practitioners to gauge their applicability in practice. The value chain development approach followed by BOAM helps to demonstrate how this gap can be bridged.

The IOB evaluation, which was one of the rare attempts to study value chain development from a systems perspective, has yielded an analytical framework for describing the various stages of value chain development. This opens up a promising avenue for further reflection on the contribution of value chain development to systems theories, and vice versa.

**References**


Study on BOAM outcomes

Roldan Muradian, Claire Chagwiza and Worku Tessema

In the first half of 2011 a research team from Hawassa University and the Centre for International Development Issues Nijmegen (CIDIN) at Radboud University, The Netherlands, carried out an external study of two value chain interventions that received BOAM support. The overall goal of the study was to understand the mechanisms through which value chain interventions can contribute to rural economic development by integrating smallholder farmers into the market. More specifically, the researchers examined how such interventions (a) affect the upgrading capacities and economic performance of different actors along the value chain system and (b) under what conditions smallholder farmers can be successfully integrated into agricultural markets.

In this chapter the researchers elaborate on these conceptual contributions based on empirical evidence and lessons drawn during the execution of BOAM’s pro-poor value chain development approach in the period 2006-2010. The chapter will specifically deal with the changes induced in the economic performance of stakeholders through four mechanisms; value chain governance, social structure (networks and social capital), the development of entrepreneurial and managerial capacities, and value chain finance. The chapter will conclude with insights derived from a comparison of the two cases.

Introduction

The two selected cases are considered to be SNV ‘best practices.’ The first case explores how BOAM facilitated inclusive business models in the honey sector. BezaMar Agro-Industry Plc is one of the pioneer honey processing companies in Ethiopia and the first to export honey to the European Union. The firm relies on a supplier network of hundreds of smallholder farmers. Through a combination of high-quality training and technology transfer to the smallholder farmers on the one hand and the provision of business development services to BezaMar on the other, BOAM helped to foster a mutually beneficial relationship between a lead firm and its suppliers.

The second case similarly involved a combination of training support for members of the Didaa Farmers’ Cooperative Union, and the setting up of an oilseeds multiplication system. The project was undertaken with the support of several value chain actors and support organisations including local extension workers, private service providers and the Ethiopian Institute of Agricultural Research. BOAM’s role as a knowledge broker and network facilitator led to the establishment of the first informal linseed multiplication system at the smallholder farmer level in Ethiopia.
The next paragraphs summarise the interventions carried out by the BOAM programme in the two cases. Thereafter, a brief description of the methods followed is given. The presentation of results that follows includes an elaboration of a theoretical framework drawing on insights derived from the empirical work. The chapter ends with some concluding remarks and recommendations.

**Inclusive business models in the honey value chain**

Through a multi-stakeholder and participatory process carried out in 2005, honey was identified as a commodity with high potential for market expansion. Despite this, the honey sub-sector faced a number of problems including low quality of honey (high levels of adulteration and high moisture content), low prices for producers, and a minimal market share. From 2007 onwards, BOAM played an active role in stimulating the honey market by facilitating, among other actions: the participation of Ethiopian traders and exporters at international trade fairs; the formation or strengthening of professional associations of beekeepers and traders/exporters; the creation of a honey multi-stakeholder platform (the Ethiopian Apiculture Board); and securing European Union accreditation for Ethiopia (a formal requirement to export honey to the EU).

At the producer level, the value chain intervention approach adopted by the BOAM programme emphasised training for improved productivity and quality management, as well as the transfer of more productive technologies. BezaMar, a honey processing, trading and exporting company, played a pivotal role in the implementation of these interventions, at different levels. The owner of BezaMar is one of the key entrepreneurs and leaders that have facilitated the transformation of the honey sector. From focusing exclusively on the local market before the intervention, BezaMar was able to export about 70 tonnes of honey in 2010. Through the grants provided by BOAM the firm provided quality-control training to its pool of suppliers.

Other quality issues that were addressed through BezaMar’s intervention were the reduction of the high moisture content and impurities in local honey. In Masha district, where the fieldwork for this study was conducted, the main honey suppliers were comprised of groups of beekeepers organised in primary cooperatives or private limited companies (PLCs). The main difference between the two types of groups is the size of the organisation. While a primary cooperative might have
several hundred members, PLCs are confined to a maximum of 50 members. Five primary cooperatives and three PLCs located in Masha district became long-term suppliers to BezaMar and benefited from the training and technological transfer programmes. BezaMar enhanced the productivity of the smallholder farmers in its supply network by promoting the use of transitional beehives, an appropriate technology that improves on traditional hives but is not as expensive as the most modern versions. Furthermore, these beehives can be kept in farmers’ backyards and can be managed more efficiently than traditional bee hives that are installed high up in the forest. The training provided covered the management of transitional beehives and techniques for reducing water content and impurities in honey through better planning of harvest times and improved post-harvest practices and quality control.

Processing company staff explains about improved post-harvest practices to a group of smallholder honey producers

Strengthening producer organisations in the oilseeds value chain
SNV’s BOAM programme played an instrumental role in the strengthening of the oilseeds sector from 2006 onwards. BOAM supported the creation of a multi-stakeholder platform for actors in the oilseed value chain, the Ethiopian Pulses, Oilseeds and Spices Producers and Exporters Association (EPOSPEA). Other initiatives facilitated by BOAM included the promotion of Ethiopian oilseeds in European fairs and raising awareness on the need for improved oil quality among key stakeholders (including consumers).

The initial problems identified in the oilseeds sector had to do with low productivity, a lack of technical skills at the producer and processing levels, and market imperfections along the value chain related to weak linkages and information asymmetries. Following the initial selection of the oil value chain as a priority sector in 2005 (through a multi-stakeholder process that involve associations of growers, traders, millers, exporters and government bodies), BOAM identified the multi-purpose cooperative union, Didaa, as a potential strategic partner. The cooperative union is located in Arsi Robe, Oromia region, and has about 19,000 members distributed in 15 primary cooperatives. The main objective of the intervention was to contribute to the market integration of smallholder farmers through improved oilseeds productivity and commercialisation.

In collaboration with Didaa, BOAM tested out a strategy aimed at boosting local production of linseeds by linking training on good agricultural practices with the setting up of a system for multiplication and dissemination of improved seeds, led and implemented by local smallholder farmers. The training methodology was based
on the training-of-trainers (ToT) approach and targeted local extension agents who in turn replicated the training and provided follow up technical support to farmers. The training was conducted in 2007 and covered agricultural techniques, land preparation, quality management, post-harvest storage and marketing. In this way the intervention made use of locally available human resources since there were not enough agronomic technicians to provide backstopping support (the Ethiopian Ministry of Agriculture assigns one extension agent to every kebele, or lower political division). In total, about 2,500 farmers from several primary cooperatives were trained.

In a second phase that started in 2009, 29 smallholder farmers were selected to participate in the seed multiplication scheme. These farmers, jointly with 10 extension agents, received additional training on seed multiplication and quality control. Didaa provided the farmers with improved seeds that were acquired from the Ethiopia Seed Enterprise. The cooperative also undertook to purchase all the output from the 20 hectares that were allocated to seed multiplication and set a purchase price at 35% above the market price at the time of harvesting. The cooperative subsequently sold about 50 quintals (5000 kilogrammes - kg) of improved seeds that were produced through this process to its members. Moreover, the union distributed 150 quintals of improved linseeds that it bought from the Ethiopian Seed Enterprise. According to the cooperative, an estimated 3,500 hectares were planted with improved seeds in two years.

In addition to enhancing its supplies, Didaa cooperative also benefited from an expansion of its customer base. By participating in the multi-stakeholder platform for the oilseeds sub-sector, the cooperative was able to expand its business network as a result of which it changed its marketing strategy. The cooperative no longer waited passively for local traders to come and buy oilseeds, it started to receive orders from large buyers, without intermediation, which increased its profits from oilseed commercialisation. The new buyers included oil processors, exporters and traders at the national level who were part of the value chain.

**Methodology**

In order to generate the data analysed in this chapter, we conducted a rapid appraisal of BOAM’s value chain interventions in April and May 2011, taking as case studies two commodities: oilseeds and honey. The information was derived from secondary sources (BOAM reports) as well as fieldwork in three localities: Addis Ababa, Arsi Robe (oilseeds) and Masha district (honey). In Arsi Robe, we selected a
random sample of 100 smallholder farmers from two primary cooperatives (Bulala and Chaffe) that are part of the umbrella Didaa Farmers’ Cooperative Union. The farmers participated in the training provided by the cooperative as part of the BOAM value chain intervention. In addition, we randomly selected 50 neighbouring member farmers that had not participated in the training.

In Masha district, we administered a survey to 59 randomly selected members of three honey marketing primary cooperatives (Akach, Debele and Genobay) and 43 members of three honey marketing PLCs: Gada, Chiefdale and Shatto. Key informants included practitioners from BOAM at the programme and sector levels, board members of primary cooperatives, government officials, managers of lead firms and cooperative unions, and farmers involved in key tasks during the interventions. Given the theoretical focus of this chapter we mainly report the results of the qualitative analysis and provide only descriptive quantitative results.

**Theoretical framework**

Figure 6.1 depicts the main components of the theoretical framework that we developed. A key assumption is that changes in the economic performance are to a large extent determined by two processes: capacity upgrading and inclusion. The latter comprises participation (being engaged in commercial transactions) and the conditions of participation. We consider these as proximate causes of economic performance. Furthermore, we identify four main mechanisms through which value chain interventions induce changes in the upgrading capacity and the processes of inclusion, namely coordination, social structure, entrepreneurial/technical capacities and finance.

For a more detailed explanation of the theoretical framework and related references, please refer to Annex 5.

**Figure 6.1 Capacity upgrading and inclusion**
Understanding the mechanisms of inclusion and upgrading

In this section we analyse how the value chain development interventions in the two selected cases have contributed to an improvement of the upgrading capacity and the conditions under which smallholder farmers are included. In the following paragraphs we discuss the changes that the interventions have induced along the four mechanisms previously described (value chain governance, social structure, entrepreneurial and technical capacities and value chain finance) and the consequences for the upgrading capacity and inclusion of the stakeholders involved.

1. The honey sector

1.1 Value chain governance

One of the major changes induced by the different types of value chain interventions in the honey sector was the shift in the governance of transactions between the lead firm (BezaMar) and its suppliers: from a spot market to long-term (oral) contracts with a high degree of coordination. This shift was the result of an increase in the degree of asset specificity in the transaction. BezaMar developed a specific brand for the honey coming from Masha district, called ‘tropical forest.’ This fact, jointly with the reported improvement in quality (lower moisture and impurity levels) enabled product differentiation and increased substantially the level of site specificity (this specific kind of honey can only be supplied by a limited number of beekeepers). Related interventions at the sector level, such as the creation of international linkages, accreditation and so on, made possible the development of an international market for BezaMar. This was a significant outcome of the interventions since it enabled the lead firm to ‘pull’ beekeepers into higher levels of market integration by creating a reliable and expanding demand for honey from Masha district.

The results reported in Figures 6.2 and 6.3 support the proposition that smallholder farmers have enhanced their level of market integration. Figures 6.4 and 6.5 also show a general trend towards increasing sales by farmers’ groups, which suggests an effective ‘pulling’ effect (farmers’ organisations facilitating the market integration of smallholders). However, this effect was found to vary considerably between cooperatives and PLCs. Figure 6.6 reveals that PLC members consistently marketed a much higher proportion of their honey production through the group. Therefore, the ‘pulling’ effects were stronger among PLCs.

Figure 6.2 Honey sales in Ethiopian Birr (ETB) as reported by farmers and sorted by Primary Cooperative

1 Exchange rates for 1 US$ were: 9 ETB in 2007; 10 ETB in 2008, 13 ETB in 2009 and 16 ETB in 2010
Figure 6.3 Honey sales (in ETB) as reported by farmers and sorted by PLC

Figure 6.4 Reported honey sales (in ETB x 1000) sorted by PLC

Figure 6.5 Reported honey sales (in ETB x 1000) sorted by Primary Cooperative
Although the frequency of interactions is not high (BezaMar makes only one or two purchases a year from honey suppliers) a number of factors come into play that necessitate a high level of coordination of these transactions. These include the high degree of asset specificity (forest and high quality honey can only be obtained only from few locations), and a relatively high degree of uncertainty (variations in quality and availability) and complexity (quality management). In addition, the low technical and managerial capacity of the primarily smallholder honey suppliers - who did not have appropriate beekeeping technologies or quality management systems for the requirements of international markets - created the conditions for mutual dependency, inducing the emergence of incentives for concerted upgrading.

At the moment, farmers’ cooperatives are the largest suppliers of honey to the lead firm. In the long run however, cooperatives could engage in functional upgrading and start to process and export honey directly. For that reason, the owner of BezaMar stated that the firm aims to set up a supply system based on its own pool of outgrowers (independent beekeepers), which will allow a higher level of coordination. Such prospects are very compatible with the predictions of the theoretical framework drawn above. When the possibilities of functional upgrading are high, there are fewer incentives for concerted upgrading and the creation of a situation of mutual dependency. In addition, an outgrowers scheme based on bilateral relations between the lead firm and beekeepers would allow the lead firm to reduce the bargaining power of beekeepers and therefore gain some rent.

1.2 Social structure
The transfer of technical skills by the lead firm was reported to work not only as a mechanism for concerted upgrading, but also as a way to build inter-firm trust. Two observed facts indicate that a relative high level of trust had been built between suppliers and the lead firm following the intervention. First, the transactions were based on oral contracts and secondly, value chain financing was taking place as explained below.

The lead firm was not only able to build trust with its pool of suppliers, but also with customers abroad. A higher degree of bridging social capital along the chain (referring in this case to trust levels between different chain actors) enabled the lead firm to engage in concerted upgrading with suppliers, as well as relational upgrading with customers to expand its international network. Similarly, the increased capacity of the farmers’ cooperatives and PLCs to commercialise honey and to deliver training
services enhanced their reputation among members and made possible the process of collective upgrading. This case therefore constitutes a good example of the combination of horizontal and vertical coordination for value chain upgrading. As stated above, this process relies very much on bridging and bonding social capital. In the case of the honey value chain, higher levels of social capital reduced the cost of opportunistic behaviour in the transactions, both within the groups of beekeepers and between the suppliers and the lead firm.

1.3 Entrepreneurial and technical capacities
Technological transfer and the strengthening of technical and quality management capacities among beekeepers were at the core of this value chain intervention. Through the acquisition of transitional beehives and the improvement of beekeeping practices, smallholder farmers benefitted from enhanced efficiencies and therefore engaged in ‘process upgrading.’ By means of buying higher quality honey (lower moisture and impurity levels) the lead firm reported that it incurred lower processing costs, thus also gaining efficiency. Concerted upgrading across the value chain was made possible due to this win-win situation. The improvement of quality through training and the creation of a specific export brand for forest honey also led to quality and regional product differentiation. The resulting product upgrading generated considerable rent gains to the lead firm and a higher bargaining power for suppliers. Overall, the opening up of the export market coupled with productivity improvements led to a rise in the commercialisation of honey through this channel.

While the transfer of technology and skills seems to have led to considerable efficiency gains, no major transformation in the managerial and entrepreneurial capacities of the farmers’ cooperatives seems to have occurred. The primary cooperatives continue to suffer from the lack of an appropriate incentive scheme for managers. The board members interviewed reported that the economic gains from their participation were minimal and basically amounted to sporadic per diems for attending meetings.

By contrast, PLCs have a much clearer incentive structure, since a share of the net benefits is distributed among the members of the management board commensurate with their contribution to the business. Due to their smaller size (Table 6.1) and clearer incentive structure, it can be expected that PLCs will be better equipped to achieve higher levels of coordination with the lead firm and to engage in concerted upgrading. In fact, members of PLCs consistently reported higher sales of honey per household compared to members of cooperatives (Figures 6.2 and 6.3), which suggests higher productivity. In addition, despite having a much smaller membership base, PLCs were reported to deliver similar sales of honey to the lead firm as farmers’ cooperatives (Figures 6.4 and 6.5). The latter can be attributed both to a higher level of ‘loyalty’ among members of PLCs (Figure 6.6) and their higher productivity. We can conclude that PLCs are more efficient in the use of resources, able to transfer know-how and to engage in collective and relational upgrading. In summary, they are able to achieve a higher level of ‘collective entrepreneurship.’

As mentioned in the theoretical section above, this could be explained by a series of factors: more homogenous and smaller groups tend to have lower coordination costs; the incentive scheme for board members among PLCs is clearer and more market-oriented; and there might be also a selection bias effect (more entrepreneurial farmers are more likely to join a PLC rather than a cooperative, if possible).

Attitudinal differences were also reflected in the interviews we conducted. While board members of PLCs stated that their motivation to engage in managerial activities was the expectation of economic profits, board members of farmers’ cooperatives justified their managerial tasks rather as a contribution to the common
good and a social duty. Board members of PLCs considered cooperatives to be inefficient organisations and mentioned this as one of the reasons for establishing PLCs in the first place. They also pointed out that whereas cooperatives reportedly cannot make sales decisions without the approval of the local cooperative office, PLCs are able to operate more independently. An additional advantage of the relatively small size of PLCs is that it facilitates communication between members.

Table 6.1: Size of PLCs and farmers’ cooperatives that participated in the study

<table>
<thead>
<tr>
<th></th>
<th>No. of Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gada Plc</td>
<td>14</td>
</tr>
<tr>
<td>Chiefdale Plc</td>
<td>17</td>
</tr>
<tr>
<td>Shatto Plc</td>
<td>19</td>
</tr>
<tr>
<td>Akach primary cooperative</td>
<td>445</td>
</tr>
<tr>
<td>Degele primary cooperative</td>
<td>270</td>
</tr>
<tr>
<td>Genoby primary cooperative</td>
<td>451</td>
</tr>
<tr>
<td>Didaa cooperative union</td>
<td>21,000 approx.</td>
</tr>
<tr>
<td>Chaffe primary cooperative</td>
<td>1948</td>
</tr>
<tr>
<td>Bulala primary cooperative</td>
<td>1665</td>
</tr>
</tbody>
</table>

Based on the theoretical framework elaborated above, we can argue that relations between the lead firm and PLCs should be more stable than relations between the lead firm and cooperatives. This hypothesis could be tested empirically.

1.4 Value chain finance

Interestingly, two types of value chain finance emerged in the BezaMar case. First, the firm provided advance payments to its supplier PLCs to enable them to finance the purchase of honey from their members. This was in marked contrast to the financing arrangements that it made with farmers’ cooperatives. Cooperatives sold honey to the lead firm on a credit basis, on the understanding that the BezaMar would pay back the cooperative (with interest) once the honey had been sold in international markets. According to the cooperatives, this arrangement led to delays in receiving payments from the lead firm that left them unable to repay their finance providers - Tepi cooperative union and the government’s credit line for rural development – on time and affected their reputation. In addition, cooperative sources argued that these types of finance were unpredictable and might not be available in future.

The lack of access to finance in the middle of the value chain makes the supply system highly vulnerable to changes in access to finance in the upstream nodes (by groups of beekeepers). The particular value chain arrangements that emerged in this case enabled concerted upgrading and a distribution of financial risk that favoured the lead firm and PLCs at the expense of the reputation of cooperatives with their financiers.

A summary of the value chain finance mechanisms discussed above can be found in Table 6.2.
<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Value chain governance</th>
<th>Social structure</th>
<th>Entrepreneurial and technical capacities</th>
<th>Value chain finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes induced</td>
<td>From spot-market interactions to long-term contracts (from market to hybrid governance): higher level of coordination</td>
<td>Higher level of bridging and bonding trust</td>
<td>Productivity increases and quality improvements</td>
<td>Lead firm filled the gap of working capital among PLCs The cooperatives filled the trader’s shortage of working capital</td>
</tr>
<tr>
<td>Effects on upgrading</td>
<td>Higher degree of asset specificity created incentives for concerted upgrading</td>
<td>Concerted upgrading realised Relational upgrading (vertical) for buyer and suppliers Collective upgrading (horizontal)</td>
<td>Product upgrading for the lead firm as a result of quality and regional differentiation Process upgrading: higher productivity among smallholder farmers, lower processing costs by the processor Higher bargaining power for suppliers (more reliable and higher quality supply)</td>
<td>Value chain finance enabled different types of upgrading However, lack of long-term source of finance in the middle of the VC increased the vulnerability of the supply chain</td>
</tr>
<tr>
<td>Effects on inclusion</td>
<td>Expansion in the number of beekeepers involved in long-term relations with the lead firm</td>
<td>Lower risk for buyer and suppliers</td>
<td>Expansion in the amount of honey traded</td>
<td>Higher risk for cooperatives Lower risks for PLCs due to more secure finance, which contributed to their inclusion</td>
</tr>
</tbody>
</table>
2 The oilseeds sector

2.1 Value chain governance
Unlike the honey sector, BOAM’s intervention in the oilseeds sector did not lead to significant changes in the governance of transactions. The participation of Didaa Farmers’ Cooperative Union in the oilseeds multi-stakeholder platform helped to expand its network of buyers, but the cooperative did not enter into a long-term relationship with a buyer, or pool of buyers. The main reason for this outcome was that support activities were focused on enhancing productivity among smallholder linseed growers, which did not create enough asset specificity to promote a higher level of coordination or concerted upgrading among upstream and downstream value chain players. The consequence was that the ‘pulling’ effect in this case was considerably less strong than in the honey value chain. Furthermore, two additional factors contributed to a weaker pulling effect.

First, the manager of the cooperative reported that the lack of access to finance prevented the cooperative from buying a higher amount of linseeds from members, despite the existence of a market. This situation was exacerbated by the generally high levels of inflation in the price of agricultural products, which increased the amount of finance needed to buy supplies from smallholder farmers. Indeed, as shown by the data reported in Table 6.3, the cooperative bought less linseed from members in 2009 (when the effects of the training on productivity were expected to be realised).

Second, unlike the specialised honey producer groups discussed in the previous case, Didaa is a multipurpose farmers’ cooperative and the commercialisation of linseed was not its core business. The cooperative thus lacked the commensurate marketing expertise and time investment needed to fully leverage the growing niche market for linseed. These factors, coupled with the lack of an assured market for linseed farmers might explain why the intervention did not result in a noticeable increase in productivity (Table 6.3). It seems likely that smallholder farmers did not receive sufficient market incentives to increase their productivity or allocate more land to linseed production.

Table 6.3 Linseed trade at Didaa cooperative union

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (quintals)</th>
<th>Buying price (ETB/quintal)</th>
<th>Selling price (ETB/quintal)</th>
<th>Net income (ETB/quintal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>5063</td>
<td>750</td>
<td>800</td>
<td>50</td>
</tr>
<tr>
<td>2009</td>
<td>4500</td>
<td>980</td>
<td>1000</td>
<td>20</td>
</tr>
<tr>
<td>2010</td>
<td>8110</td>
<td>640</td>
<td>710</td>
<td>70</td>
</tr>
</tbody>
</table>

*ETB = Ethiopian Birr

2.2 Social structure
One of the important changes induced by the intervention was in the domain of ‘structural’ social capital. Didaa’s manager reported that due to the participation of the cooperative in the oilseeds multi-stakeholder platform, the number of linkages and potential trading partners expanded considerably, which is probably reflected in higher sales of linseed in 2010 (Table 6.3). Furthermore, due to the delivery of training services the reputation of the cooperative among members was reported to have improved. It could be argued that this constitutes an enhancement of bonding social capital (among members), which is expected to facilitate collective upgrading and future entrepreneurial endeavours by the cooperative. This could therefore be an important contribution of the intervention.
2.3 Entrepreneurial and technical capacities
The transfer of technical capacities to farmers and extension workers was at the core of this intervention. Training was thus assumed to constitute a major transformative power. Since the cooperative was responsible for facilitating technological transfer and the enhancement of members’ skills, this can be considered as a form of ‘collective upgrading.’ Through their own collective action, farmers aimed to set up ‘horizontal’ coordination mechanisms in order to achieve higher levels of productivity. The results presented in Figures 6.7, 6.8 and 6.9 do not, however, support the claim that the intervention produced an increase in productivity, or even production. Figures 6.7 and 6.8 report the average productivity of the households that actually harvested linseed, while Figure 6.10 presents the proportion of farmers who reported not to have harvested this crop. According to these results, the effects of training were not reflected in higher productivity across time.

Figure 6.7 Linseed productivity (kg per hectare) as reported by farmers (Bulala Primary Cooperative)

Figure 6.8 Linseed productivity (kg per hectare) as reported by farmers (Chaffe Primary Cooperative)
The gap in productivity between farmers that participated in the training and those who did not may be the result of selection bias (if more productive farmers were more likely to participate in the training). It could also be due to efficiency gains (process upgrading) due to the skills acquired. However, the data suggest that local conditions were not generating enough incentives for productivity increases. In fact, to the contrary, farmers in both primary cooperatives, irrespective of whether they had been trained or not, reported a steady decline in productivity of linseed over time.

During the interviews, farmers mentioned the risks associated with oilseeds production, one of which was its sensitivity to weather variations. In 2010 for example, some of the farmers reported incurring losses following excessive rainfall. Figure 6.10 shows that a relatively high proportion of farmers did not harvest any linseed throughout the entire period, either because they did not plant the crop, or lost it. Risk considerations might impose constraints on the amount of land that
farmers are willing to allocate to linseed as well as the time they assign to linseed production vis-à-vis less risky staple crops, such as tef. This is an issue that requires further investigation when designing value chain interventions. The long term sustainability of the intervention might be jeopardised if expanding production of cash crops implies a significantly higher exposure to risk by smallholder farmers.

2.4 Value chain finance
Since no long-term relationship was established between Didaa cooperative and buyers, there was less access to value chain finance than in the honey value chain. As stated above, the manager of the cooperative identified the lack of working capital as a key reason for Didaa’s inability to offer guarantees to members that it would buy additional linseed produced as a result of the intervention. Due to the uncertainty related to marketing their produce it followed that smallholder farmers were less motivated to engage in productivity gains.

Lack of access to finance thus prevented the cooperative and its members from maximising the economic benefits that it could have derived from the intervention. While the honey case confirms that a shortage of finance in the middle of the value chain might increase the risks and costs for farmers, the oilseeds case further reveals how this funding gap may lead to lost opportunities for farmers’ organisations, a less intense ‘pulling’ effect of value chain interventions and the lack of incentives at the local level to engage the farmers in higher levels of production. Both cases therefore point to the critical importance of finance in value chain interventions.

A summary of the mechanisms discussed above for the oilseeds value chain can be found in Table 6.4.

Table 6.4 Effects of value chain interventions in the oilseeds sector (Arsi Robe)

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Value chain governance</th>
<th>Social structure</th>
<th>Entrepreneurial and technical capacities</th>
<th>Value chain finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes induced</td>
<td>No change: remained as spot market transactions</td>
<td>More linkages between potential buyers and the cooperative union Reputation of the cooperative improved (higher level of trust about the capacity of the cooperative to deliver services)</td>
<td>Reduction in the rate of productivity decline</td>
<td>Lack of value chain finance</td>
</tr>
<tr>
<td>Effects on upgrading</td>
<td>Absence of incentives for concerted upgrading</td>
<td>Relational upgrading: new linkages. Higher bargaining power of the cooperative vis-à-vis buyers Facilitates collective upgrading</td>
<td>No sizeable effect</td>
<td>No sizeable effect</td>
</tr>
</tbody>
</table>
Conclusion
In this chapter we have elaborated a theoretical framework to help explain the mechanisms through which value chain interventions influence upgrading and inclusion processes all along the chain, but more particularly among smallholder farmers. The framework builds on insights from transaction cost economics and global value chain analysis. The proposed four main mechanisms for achieving upgrading and inclusion of farmers (value chain governance, social structure, entrepreneurial and technical capacity and value chain finance) can be used as analytical tools to assess the performance of value chain interventions and their contribution to rural poverty alleviation. Moreover, the four mechanisms can also serve as instruments for facilitating the design of these types of interventions and the identification of indicators for monitoring and impact assessment. Designing integrated interventions such as the value chain initiatives analysed in this chapter is particularly challenging, as the different components have to be consistently articulated in order to render the intended results.

We have applied the theoretical framework to analyse two value chain interventions in different agricultural sub-sectors. The case studies targeted different types of firms in the middle of the value chains. We argue that the observed differences in the level of effectiveness can be explained by the lack of concerted upgrading in the oilseeds value chain, which was reflected in much weaker ‘pulling effect’ of the intervention. In other words, the intervention did not provide sufficient incentives for smallholder farmers to increase their production. This was linked to the inability to achieve a higher level of asset specificity in oilseeds transactions. Therefore, one of the main recommendations of this study is that when designing value chain interventions practitioners need to be particularly attentive to ensure that such ‘pulling effects’ are realised at the middle of the value chain. Investments to enhance productivity at the farm level are not sufficient in themselves – they need to be accompanied by clear market incentives to farmers.

The theoretical framework elaborated above predicts that value chain interventions tend to be more effective when they lead to a higher level of coordination between agents. This is expected to occur when asset specificity is high; there is a relative small number of potential trading partners; trading interactions take place at a high frequency; and the relative degree of uncertainty and complexity is high. The impacts on poverty alleviation are expected to be greater when agents upstream and downstream in the value chain engage in concerted upgrading. In addition to a high degree of vertical coordination, we argue that three other factors are associated with concerted upgrading: (i) a relatively low capacity of suppliers (in relation to the complexity of the transaction); (ii) a high degree of bridging social capital (to reduce the chances of opportunistic behaviour by suppliers) and; (iii) low possibilities of functional upgrading by suppliers.

Some of the important practical corollaries of the conceptual insights we have elaborated are that:

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Value chain governance</th>
<th>Social structure</th>
<th>Entrepreneurial and technical capacities</th>
<th>Value chain finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects on inclusion</td>
<td>No sizeable ‘pulling’ effect</td>
<td>Dynamic effects: higher possibilities of collective action in the future</td>
<td>Probably higher production risks</td>
<td>No sizeable effect</td>
</tr>
</tbody>
</table>
• Practitioners should pay attention not only to the creation of new linkages (structural dimension of social capital) but also to trust and other relationship-enabling social features (cognitive dimension of social capital), including its vertical (bridging) and horizontal (bonding) components;
• Due attention needs to be paid to the role of finance as an enabling element for establishment of viable long-term value chain relations;
• The interaction between complementary types of upgrading processes is an issue that deserves special consideration by practitioners;
• Value chain interventions should increase the level of asset specificity of the transaction between upstream and downstream value chain players among other conditions for concerted upgrading;

It is very important to consider local perceptions about risk related to the production of the promoted cash crop. Risk perceptions may considerably influence the effectiveness of ‘pulling’ mechanisms, and therefore the conditions of inclusion; The expected impacts of interventions cannot be taken for granted. Development organisations have the obligation to demonstrate results, using reliable methods. It is extremely important to set up information management systems that allow practitioners to provide evidence of such results. The results we have presented in this chapter may be distorted by methodological constraints (for instance, farmers do not record their production or transactions data across time, which might certainly lead to biases in reporting). However, more reliable information could have been gathered if BOAM had put in place a low cost monitoring system to - at the very least - assess productivity and market transactions among farmers.

More generally, we think that development practitioners can enhance their effectiveness by paying more attention to the conceptual insights we have discussed above as well as to an overall theory of change in value chain interventions. Such an approach also creates opportunities for cross-fertilisation of ideas between theory and development practice.
Chapter 7

Adapting the value chain approach to reach the poorest rural households

Nicholas Nyathi and Genzeb Akele

BOAM’s work on value chain development has inspired other organisations to apply similar approaches. In 2008 SNV was invited to participate in designing a new USAID-funded project, Productive Safety Net Programme Plus (PSNP Plus) in Ethiopia. PSNP Plus, which started in October 2008 and came to a conclusion in 2011, was implemented by a consortium of development organisations including CARE Ethiopia, Catholic Relief Services, the Relief Society of Tigray and Save the Children-UK. The aim of the programme was to complement the government-run Productive Safety Net Programme (PSNP) which aims to enhance food security and ensure that food-insecure households are able to maintain valuable assets such as tools, equipment and livestock on which their livelihoods depend, for instance after a drought.

PSNP Plus provided support to 47,414 households to gain access to financial services and functioning markets with a view to enabling them to generate a regular income and become more resilient. In this way, such households could subsequently ‘graduate’ out of the Government’s safety net programme. The main funder, USAID, contributed close to 16US$ million for the project, with the other consortium partners contributing 516,900 US$.

Attempting to upscale BOAM’s value chain approach within the context of the PSNP Plus programme presented a new challenge for SNV. As described in the previous chapters, BOAM typically focused on smallholder farmers producing enough to meet their subsistence needs and earn a cash income. The PSNP and PSNP Plus programmes, on the other hand, were explicitly targeted at ‘the poorest of the poor.’ For the most part, this target group consists of food-insecure households that operate at the most basic subsistence level. This chapter discusses a number of adjustments that were made to tailor the BOAM approach to address the needs of this group.

Introduction
The PSNP Plus strategy sought to support the development of four value chains; honey, livestock (small ruminants), haricot beans and cereals (Ethiopia’s staple food tef as well as sorghum, wheat and maize). The value chain approach was implemented in 12 woredas (the Ethiopian equivalent of a district) in the four regions of the country, Tigray, Oromia, Amhara and Southern Nations, Nationalities, and People’s Regional State (SNNPRS).

PSNP Plus was based on a two-pronged, ‘Pull and Push’ approach. The ‘Pull’ (demand) component - largely modelled on the BOAM programme - referred to the
level of market demand, which determines the quantity and quality of products to be generated by the value chain. The ‘Push’ component included the range of supply-side instruments applied in order to build or ‘push up’ the capacity of targeted subsistence farmers. This included helping farmers to get access to financial services and helping them to invest in the assets, knowledge and skills to enable them to start producing for the market. A consortium of implementing partners, including Care Ethiopia, Catholic Relief Services, the Relief Society of Tigray and Save the Children-UK were responsible for the push interventions.

Figure 7.1: ‘Push and Pull’ in PSNP Plus

The Pull Component
The point of departure for PSNP Plus was that ‘push needs to be informed by pull,’ meaning that in order for PSNP households to generate a reliable income and increase their assets they needed to produce what the market demanded. If this basic principle was not met, then any increases in production, productivity or quality achieved by the push component were unlikely to produce the intended benefit of securing additional and sustained income for the target group.

To ensure that the farmers were well informed of the ‘pull signals’ of market demand, it was important for PSNP Plus to facilitate links with downstream processors, traders and cooperatives who could help expand market opportunities for the target households. These connections are important because the downstream actors’ proximity to the market, putting them in a better position to identify new opportunities.

In order to adequately service the market, downstream actors need guaranteed access to the right quantity and quality of supply. They can do this by ‘rewarding’ smallholder farmers with a decent price for their produce and providing them with
Adapting the value chain approach

farm inputs such as fertiliser, seeds and technologies. Downstream actors are also well placed to deliver services such as training on quality improvements, market information, post-harvest handling procedures, and so on. As described in Chapter 2 such services can be contractually embedded in the business relationship.

The PSNP Plus project facilitated the establishment of such linkages by supporting the establishment of contractual relationships between farmers and downstream actors.

The Push Component

Food-insecure households have a low resource base and operate in a risky environment that provides limited opportunities to access markets and the required inputs, technologies and other services. This situation not only makes it difficult for poor households to meet their basic needs, they often have no resources to invest in increased production or respond to existing or new market opportunities. In order to start participating in the value chain their capacities need a ‘push.’ PSNP Plus developed a number of instruments to provide this push. These included:

- Strengthening the individual capacities of smallholder farmers through technical support and training in business skills, including financial literacy, business planning and market orientation;
- Supporting smallholder farmers to organise themselves in producer groups;
- Facilitating the producer groups’ access to business services such as agricultural inputs (improved seeds, beehives and other appropriate technologies, fertilisers, animal feed, and so on);
- Facilitating access to financial services. The PSNP Plus project supported the formation of village savings and credit associations to help inculcate a savings culture among members and provide them with access to financing for income generating activities that would help diversify their livelihoods. To this end the project signed agreements with micro finance institutions (MFIs) such as the Dedebit, Amhara, Oromia savings and credit institutions and Sidama MFI to provide credit to the PSNP Plus households. This enabled the households to participate in different value chains.

Equipped with technical and business skills, and access to business and financial services and a reliable market, the smallholder farmers were now able to invest in their farms. They used the credit to buy small ruminants for fattening (livestock
value chain), beehives and colonies for honey production and improved cereal and haricot bean seeds. The investments in assets and product diversification helped the smallholder farmers to improve their resilience towards drought and other shocks.

In the next sections, we will focus primarily on the ‘pull’ component of the programme, which was modelled on BOAM’s value chain approach as described in the first four chapters of this volume and consisted of the following main elements:

- Sector development (Chapter 1)
- Business development (Chapter 2)
- Knowledge development and learning (Chapter 3)
- Service provider development (Chapter 4)

**Sector development**

Similar to the approach taken by the BOAM programme, PSNP Plus started by initiating Multi-Stakeholder Platforms (MSPs) to encourage dialogue among chain actors to identify constraints in the value chains and develop strategies to address them. Rather than taking place at the national level, the PSNP Plus dialogue processes were organised at the regional level in order to bring them closer to the target communities and enhance coordination among support institutions active at the sub-national level. A total of 13 regional MSPs were established to coordinate value chain development for the four selected commodities from 2009 onwards. The MSPs met on a quarterly basis and between 2009 and 2011, 85 meetings took place in the four regions covered by PSNP Plus.

Similar to the role of the value chain coordination groups set up under the BOAM programme, the regional MSPs were tasked with validating the value chain analyses that were conducted for the PSNP Plus commodity chains. This included verifying the findings and identifying actors who could implement the study recommendations, for instance the adoption of the transitional beehives and promoting improved livestock feed and post-harvest technologies. The actors involved in the regional consultations ranged from farmers’ organisations, processors and input suppliers to relevant government departments, NGOs, research centres and sector associations. Any emerging issues that needed attention at higher levels were fed back into national platforms such as the coordination groups initiated under the BOAM programme.

By enhancing linkages between a broad range of value chain actors, the MSPs laid a firm foundation for coordinated action to meet the identified challenges. The linkages created between producer organisations and input suppliers, for example, led to supply agreements for improved seeds for the haricot and cereals value chains. Likewise, research centres participating in the regional MSPs shared knowledge on improved seed varieties as well multiplication techniques. Furthermore, representatives of smallholder farmers learnt a lot from the private sector presentations on market requirements for quality standards and improved technologies.

![A training of trainers session on improved livestock feed](image)
With time, the MSPs have become an important venue for discussing government policies that have an impact on the communities supported by the PSNP Plus programme. Within the honey chain, for example, senior government officials were invited to present and explain the apiculture proclamation, which helped farmers understand the implications of honey adulteration and use of chemical spraying. The new policy on trading on the Ethiopian Commodity Exchange has also been tabled and discussed by MSPs. This has helped the actors to understand how the new quality-based payments system works, with follow up training for producers of white pea beans to help them meet the new quality standards.

**Business development**
With support from PSNP Plus smallholder farmers established producer marketing groups to facilitate the provision of training and other support. The producer groups also enhanced farmers’ bargaining power when entering into business relationships with downstream private sector companies. With facilitation from PSNP Plus the business arrangements made did not only specify the volume and quality of the produce to be supplied but ensured that smallholder farmers would benefit from technical training and other embedded services. In Sekota woreda (a local administrative unit equivalent to a district), PSNP Plus provided support to the BezaMar honey processing company to enable it to train beekeepers on post-harvest handling practices and hence improve the quality of honey supplies. ACOS Plc, a haricot export company similarly provided training on post-harvest handling of beans. In the livestock value chain, Arbegelle Plc, a slaughter house covering Amhara and Tigray regions, trained smallholders on livestock fattening techniques while Luna Plc, a livestock processing and exporting company raised awareness about market requirements in Oromia and SNNPRS regions.

**Knowledge development**
The PSNP Plus project developed a learning component to gain insights on a number of aspects of the programme including:

- How effective it had been in ‘graduating’ households out of the safety net programme;
- The extent to which women had benefitted from value chain interventions, for instance in terms of increased income;
- The effect of the programme on the position of women within households and the community at large.

Among activities that were organised as part of the knowledge development component were; facilitating joint learning for value chain stakeholders on such issues as how to organise contract farming, training on post-harvest technologies and dissemination of market information. A good example of a knowledge sharing initiative aimed at smallholder farmers was a decision by districts involved in the PSNP Plus programme to publicly display prices for different qualities of produce as listed on the Ethiopian Commodity Exchange. This information inspired smallholder farmers to make quality improvements and to negotiate better prices for their produce.

The programme also launched a newsletter, The Plus, to encourage information exchange and enhance synergies among PSNP Plus partners. The publication highlighted success stories as well as challenges encountered, and provided technical updates and general project information.
Service provider development
As was the case with BOAM, PSNP Plus sought to engage local business development services (BDS) providers wherever possible in value chain development activities. BDS providers were contracted to facilitate value chain analyses or to provide technical training for smallholder farmers, for example on bee colony multiplication, improving the quality of livestock feed or post-harvest handling of crops. The BDS providers were not only familiar with the local context, they were also more likely to continue to deliver services to chain actors once the programme had been phased out.

PSNP Plus results
As part of the project design, one of the PSNP Plus partners, Tufts University, conducted a number of longitudinal impact studies in Doba, Raya Azebo, Sekota and Sire. The project also commissioned consultants to carry out a study on intermediate results as well as the final evaluation of the project. In addition to gauging the project’s performance, the cumulative results provide useful insights on how to the ‘push and pull’ approach works in practice.

According to the Tufts University studies:
The results from the assessment in Doba indicate that there have been some significant changes in household income since the PSNP Plus started and these can be attributed to both programme interventions and external factors. The results show that there have been some significant changes in total expenditure and actual expenditure on certain items since the project started. For example, there has been a significant increase in investments in agricultural inputs and loan repayments. This might partly be explained by an increase in investments in value chain inputs and improved access to microfinance as a result of the project.

Besides finding a direct impact on household production, sales and income, the Tufts studies (Table 7.1) also found evidence that smallholder farmer households improved their resilience to drought and other livelihood shocks. This finding is particularly encouraging given that improved resilience along with asset accumulation was a core part of the overall project goal.

Table 7.1 Honey produced and sold (in kilogrammes - kg) and income (in ETB) of PSNP Plus-supported beekeepers in Sekota

<table>
<thead>
<tr>
<th>Year</th>
<th>Produced (kg)</th>
<th>Sold (kg)</th>
<th>Income (ETB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.4 (0.4, 2.3)</td>
<td>1.5 (0.5, 2.4)</td>
<td>43.6 (14.3, 72.9)</td>
</tr>
<tr>
<td>2009</td>
<td>2.5 (1.4, 3.7)</td>
<td>2.1 (1.3, 2.9)</td>
<td>67.6 (35.2, 100.0)</td>
</tr>
<tr>
<td>2010</td>
<td>5.6 (3.2, 8.1)</td>
<td>3.0 (1.0, 4.9)</td>
<td>115.5 (38.7, 184.2)</td>
</tr>
<tr>
<td>2011</td>
<td>9.9 (6.9, 12.8)</td>
<td>8.7 (6.3, 11.2)</td>
<td>360 (237, 483)</td>
</tr>
</tbody>
</table>

Source: Burns and Bogale, 2011
Box 7.1 Graduating from PSNP Plus

Ato Alebachew Abate is 41 years old and lives in Kobo Woreda. Using a 1,500 ETB (about 100 US$) loan from the Amhara Credit and Saving Institution, facilitated by Save the Children - UK, he purchased 10 goats in 2010. After fattening them, he sold them for 2,800 ETB, from which he repaid half the original loan. He re-invested the remaining 2,050 birr in 9 more goats, which he later sold for 2,700 ETB. He has since paid off his debts and increased his household assets by purchasing an ox, three female goats for reproduction and six male goats for fattening and sale. With a current working capital of around 7,000 ETB, Abate meets the criteria for ‘graduating’ from the PSNP Plus programme, freeing up resources to be invested in other poor families.

Paulos is a 43-year-old subsistence farmer from Urji Kebele. Like other members of the community, he struggled to provide for his wife and children due to the fragmentation of family land over the years, coupled with low productivity. After receiving technical training and support from PSNP Plus, Paulos established a small business to manufacture transitional beehives and supply other households with bee colonies. This has increased his yearly expected income to around 30,000 ETB (1,700 US$).

The PSNP Plus programme has shown that if carefully implemented, the BOAM value chain development approach can contribute to poverty alleviation. The use of multi-stakeholder platforms proved to be an innovative and effective means of encouraging direct participation by a diverse range of interests including private processors and traders, micro-finance institutions, NGO representatives, government officials, research institutions, and project beneficiaries. By facilitating stronger institutional relationships and clarifying financial and social incentives for participation, the MSP approach also created a conducive environment for the replication and upscaling of best practices. Moreover, PSNP Plus has demonstrated to private and parastatal micro-finance institutions that they can profitably and sustainably extend credit to poor subsistence farmers.

PSNP Plus made concerted efforts to encourage business relationships between actors at the middle of the value chain (processors and traders) with poor subsistence farmers. This ‘pull’ effect, modelled on the BOAM approach, was accompanied by ‘push’ measures such as the facilitation of productive asset transfer and access to finance for targeted poor households but strongly informed by the business relationship. The reason for this two-pronged approach was that market-oriented solutions alone would not have succeeded in integrating vulnerable households into the value chains. By helping smallholders to enhance their resilience at the same time, they were now in a better position to invest in increased production and meet the requirements of the market. At this point ‘win-win’ supply agreements could be established between farmers’ organisations and processors or traders. Ultimately, as the impact assessments show, this will not only help graduate poor households from the productive safety net but, perhaps even more importantly, it will ensure that the households do not fall back in the face of drought and other livelihood shocks.

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References


Chapter 8

Conclusions

Rem Neefjes, Marc Steen and Piet Visser

BOAM provided development actors in Ethiopia with a unique opportunity to experiment with the value chain approach in a pro-poor context. Thousands of people participated in and benefitted from the programme and valuable lessons were learnt at all levels, including by smallholder farmers and farmers’ organisations, traders and processors, exporters, research institutes, government institutions and the donor community. BOAM’s open-ended character not only made it possible for those involved to learn from the incremental insights gained, it also encouraged value chain actors to further adapt the approach ‘on the go.’ This has left a legacy of innovative practice that offers valuable insights for the further evolution of value chain theory and practice.

In this chapter we will conclude by recapping some of the key lessons learnt, each of which highlights specific elements introduced by the BOAM programme. The interrelated nature of these elements underscores the need for a holistic approach and serves as a timely reminder that piecemeal application of the lessons learnt is unlikely to be effective.

A multi-stakeholder approach

One of the distinguishing features of the BOAM programme was the space that it provided for value chain actors in the four sub-sectors (oilseeds, honey, dairy and fruits) to determine the course of action and respond to emerging market opportunities. BOAM achieved this by facilitating the formation of multi-stakeholder value chain coordination groups right from the outset. The coordination groups contributed to value chain development in five main areas:

- **Building relationships**: The coordination groups helped to forge relations between diverse value chain actors, including with the most influential stakeholder in the context of Ethiopia, the government.
- **Collective thinking**: The vibrant discussions at coordination group meetings resulted in concrete and innovative ideas on how to upgrade the respective value chains and improve their performance.
- **Leadership**: Through the active engagement of business and public sector leaders, the coordination groups provided clear guidance for the development of strategic plans and their implementation.
- **Inclusive decision making**: The coordination groups established dynamic consultative processes in which the key stakeholders – notably processors, traders, farmers’ organisations, service providers and government officials – were able to influence the direction of value chain upgrading.
- **Focus**: By facilitating the development of Strategic Intervention Plans value chain coordination groups provided the necessary focus to BOAM-supported interventions. It is important to note here that stakeholder views on the role of the strategic plans changed significantly over the course of the programme.
Initially viewed as a rather rigid set of predetermined solutions, the Strategic Intervention Plans would become a key tool for setting a common agenda and keeping value chain stakeholders on the right course. With this recognition, the planning process became more flexible, enabling value chain actors and support organisations to act on the basis of new insights and take advantage of new opportunities.

The BOAM Post-Implementation Review (van der Krabben et al, 2012) found that the coordination groups had substantially contributed to network building, personal relationships and trust, and facilitated the interchange of knowledge.

Lesson 1:
Value chain development is not a linear process. Adopting an inclusive multi-stakeholder approach helps to foster an environment in which complex issues and actor relationships can be explored in an interactive, learning-oriented and adaptive way. Such an approach encourages stakeholders to play a steering role and actively engages key private and public sector leaders who can ensure that decisive actions are taken.

Focus on the middle of the value chain
Across all the value chains BOAM focused its support on processors, exporters, traders - and in some cases farmers’ organisations - situated in the middle section of the chain. In the beginning many observers questioned the rationale of this approach, especially when they realised that relatively well-off processors and traders would receive grants to invest in pilot innovation projects.

Implicit in this criticism was the question of whether development assistance should be used to help private sector companies to scale up their business operations.

Based on our experience, there are four key reasons why the answer to this question is a resounding ‘yes!’

• First, private sector actors provided the crucial link between market demand and supply, ensuring that smallholder farmers produced what the market wanted.
• Second, BOAM’s resources were always invested in initiatives that sought to address market or supply barriers or to maximise opportunities for the value chain as a whole, including smallholder farmers.
• Third, the targeted companies were highly motivated, which they demonstrated by investing their own resources in what were quite risky business ventures. Without BOAM support, private sector actors would not have been able to make these investments.
• Fourth, BOAM support enabled business actors to contribute to the upgrading of the value chains, which in turn leveraged private investments in upscaling, for which little or no BOAM support was needed.

With time BOAM’s development partners came to appreciate this innovative approach. As business activities expanded across entire value chains, smallholder farmers began to enjoy greater access to reliable markets for their produce. With proof of reduced risks, they were able to invest in increased production and quality improvements and hence respond to growing consumer demand for better quality products. The BOAM Post-Implementation Review found clear evidence that the focus on the middle of the chain had benefited actors across the entire value chain.

Lesson 2:
With its focus on strengthening the capacities of private sector actors at the middle of the value chain through targeted technical, organisational and financial support, BOAM succeeded in connecting smallholder farmers more effectively to
markets. As a result farmers were able to invest in increased production and quality improvements.

Aligning sector and business development approaches
The BOAM approach was based on a combination of sector development and business development interventions. Sector development support was organised around the creation and facilitation of multi-stakeholder platforms. However, sector-level interventions would not have been sufficient in themselves to trigger a process of value chain development. In a well established value chain with a buoyant outlook, value chain actors know how to connect to each other and individual entrepreneurs can easily find access to business development services, including financial services, and other capacity development facilities. In other words, growth markets attract resources. At the start of the BOAM programme, the value chains were still at an embryonic stage characterised by scarce resources, high transaction risks and costs, weak linkages between value chain actors and limited awareness of the benefits of business collaboration. Under these conditions, sector interventions needed to be complemented with targeted business development support. This included capacity development of key entrepreneurs, facilitation of business-to-business relationships and seed funding for pilot innovation projects. The BOAM Post-Implementation Review commended this integrated approach.

Lesson 3:
Value chain development interventions need to balance between sector-level support and the strengthening of individual businesses within the chain, and how they relate to each other. Sector development opens up business opportunities in the value chain. Business development turns these opportunities into economic results.

Knowledge development through learning-by-doing
BOAM’s approach to strengthening capacity for learning and innovation marked a point of departure from the widely-held assumption that such capacities are mainly found in research organisations. BOAM encouraged the active participation of all stakeholders in identifying key bottlenecks, opportunities and win-win solutions in the value chain in order to ensure that the resulting innovations were tailored to their needs and could be quickly adopted.

When making decisions on what innovative solutions to support, BOAM refrained from ‘over-analysing’ the problem or conducting elaborate needs assessments and feasibility studies. Any value chain actor with a good idea could submit a proposal to test promising innovations in a real-life setting. It is important to note, however, that the value chain coordinating groups played a key role in the selection process by ensuring that such proposals were in line with the Strategic Intervention Plans. Moreover, the applicant had to agree to contribute part of the investment costs and to make the results publicly available. This ensured that the benefits enjoyed by early adopters were widely shared for replication by other actors in the chain.

Lesson 4:
Knowledge development in value chains is best promoted by testing innovative ideas in real-life settings. Value chain practitioners have an important role in the joint development and monitoring of innovations and catalysing the sharing of innovations to encourage upscaling.

Service provider development
Right from the outset BOAM recognised the importance of strengthening the capacity of business development services (BDS) providers to meet the growing demand for specialised services resulting from value chain upgrading and upscaling. Crucially, BOAM’s vision fitted in well with the government’s ambition to commercialise the
agricultural sector, which required increased access to a broader range of business development services. BOAM’s support led to:

• Expansion of the pool of local BDS providers
• Professionalisation of BDS providers to offer better quality services
• Increased demand for BDS within value chains
• A greater role for BDS providers in sector-based knowledge development and learning processes

BOAM demonstrated that it is possible to develop a pool of capable local service providers within a relatively short period of time. Key in this was convincing BDS providers that there was a concrete and sustained demand for their services, which gave them the confidence to invest in developing specific products and services. Collectively, these professionals have the knowledge, skills and drive to meet the needs of diverse value chain actors, including private companies and smallholder farmers. A growing number of service providers have established themselves as reputable consultancy firms that are regularly recruited by private companies. Others are hired by development agencies involved in private sector strengthening initiatives. BOAM support has also strengthened the capacity of agricultural extension officers and other public service providers, especially with regard to market and other value chain requirements.

Lesson 5:
The process of value chain upgrading and upscaling brings with it an increased demand for business development services. It is therefore important to strengthen the capacities of BDS providers through a combination of training support and integrating them in value chain development activities.

Preparing for sustainability
Facilitating value chain development is a complex undertaking that requires a broad mix of competencies. To ensure continuity after the phasing out of the programme, BOAM – in collaboration with the German development agency, GIZ and the Interchurch Organisation for Development Cooperation (ICCO) - established a pool of local consultants and provided them with training in value chain facilitation skills. The training programme included intensive coaching and mentoring in the early stages, followed by the gradual handing over of complex facilitation tasks to the local consultants.

In addition a local network known as the Synchronized Network of Value Chain Innovation Actors (Synovia) was established. Its goal was to promote effective linkages between value chain development facilitators, other providers of business development services and the users of these services. Synovia’s six founding members1 were drawn from several established private consulting firms and business associations, and SNV Ethiopia.

Lesson 6:
Any programme that seeks to contribute to sustainable business and market development must strengthen local capacities for facilitating value chain development. This requires addressing both the need for specialised technical services as well as more generic value chain facilitation services.

Gender equity in value chain development
The design phase of the BOAM programme included a gender analysis of the targeted sub-sectors that resulted in a number of interventions to promote women

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1 The founding members are: Precise Consult International PLC, BCaD-Consulting Management PLC, TREG Consult PLC, the Addis Ababa Chamber of Commerce and Sectoral Associations (AACCSA), the Ethiopian Consultants Association (ECA) and SNV Ethiopia.
as participants and beneficiaries of value chains. Within the honey value chain, for example, valuable insights were gained about the distinct roles played by men and women in beekeeping and honey production. Similarly, during monitoring of training activities in the dairy sector it emerged that it was mostly male farmers that were benefitting as women were too busy with household and farm tasks. Such insights enabled facilitators to develop specific strategies to expand women’s access to and benefits from value chain development. An example of a gender-sensitive intervention in this regard was the introduction of intermediate beehive technology that could be installed in the backyard and hence easily integrated with women’s responsibilities.

BOAM actively worked to achieve gender equity in all the value chains that it supported. This included encouraging farmers’ organisations to recruit more female members and promoting women business owners who could serve as role models for upcoming female entrepreneurs. At the level of sector governance, BOAM’s encouragement enabled women to take up leadership positions in the dairy and fruit value chain coordination groups. BOAM also actively promoted women’s participation in the Young Professionals Programme where more than 50% of the beneficiaries were women. Furthermore, SNV implemented gender equality in its own staff development programme as a result of which half of all BOAM advisory positions, including at the lead value chain adviser level, were taken up by women.

Lesson 7:
In order to enhance women’s inclusion it is crucial to develop a comprehensive gender strategy to guide value chain upgrading activities. By incorporating a gender component within the knowledge development and learning agenda, the effectiveness of this strategy can be carefully monitored and adapted over time.

Facilitating the system ‘to see and understand itself’
BOAM used elements of systems thinking to better understand the functioning of value chains, for instance with regard to cause and effect relationships, system boundaries and the related perspectives and behaviours of stakeholders. A case study in the BOAM honey value chain conducted as part of a major evaluation of Dutch support to capacity development (Debela, 2010 and IOB/DGIS, 2011) noted that BOAM had not only arrived at a better understanding, it added an interesting dimension by helping the (value chain) system “to see and understand itself.” As a result of BOAM’s intervention, value chain actors were able to develop a perspective on the system that went far beyond their own position within the chain. This made them much more aware of their individual and joint responsibility for bringing about the necessary systemic changes for the sector as a whole. Ultimately, value chain actors were empowered to improve their own performance and business relations, while simultaneously starting to address and reshape certain collective ‘rules of the game.’

Lesson 8:
A multi-actor approach to value chain development must include helping actors to understand the system in which they operate in order to appreciate the opportunities that can be derived from an upgraded value chain. Armed with these insights, value chain actors become motivated to engage in strategic alliances with a view to changing the entire system for the benefit of themselves and their partners.

\[2\] In 2008, the Policy and Operations Evaluation Department (IOB) of the Netherlands Ministry of Foreign Affairs decided to evaluate the effectiveness of Dutch support to Southern capacity development (CD). This was one of the 26 case studies conducted by the IOB in the framework of this evaluation.
The changing role of value chain facilitators
The ability to identify and apply the right mix of skills at the right time is an essential component of the art of value chain development practice. As the value chains became more established and the number and capacities of BDS providers increased, the role of BOAM advisers changed. BOAM’s strategy guided staff to move from more operational functions such as training, technical support and moderation of meetings to more strategic roles such as coaching, and knowledge development and brokering.

Lesson 9:
As the value chain evolves from an embryonic to a more mature phase the role of the value chain facilitator also needs to change. Facilitators must develop the skill to reflect on their own role in the process and determine the opportune moments to phase out certain roles and adopt new ones.

Evidence-based programme monitoring and evaluation
It is quite normal for practitioners to make biased assessments of the performance of ‘their’ programme. They are inclined to see all interventions made as positive, to use anecdotes in place of objective evidence and to label failures as ‘lessons learnt.’
In order to facilitate an objective review of the impact of the programme and foster broader learning, BOAM invited external research teams to undertake independent studies of key elements of the approach. Illustrative of this is the research conducted by the Centre for International Development Issues Nijmegen (CIDIN) Radboud University, The Netherlands. The study confirmed that BOAM’s focus on the middle sections of the value chain had contributed to the development of market linkages between downstream processors and traders and upstream smallholder farmers. As BOAM expected, this step is an essential building block for ‘pulling’ farmers into the market as it creates incentives to ‘produce what the market demands’ and hence raise household incomes. However, the research also revealed that not all value chains facilitated by BOAM were equally successful in establishing these linkages and generating ‘market-pull.’

Lesson 10:
Independent evidence-based research executed during the implementation of the project will provide development practitioners with valuable knowledge and insights that can be used to further adjust the approach taken.

Adapting the BOAM approach
The BOAM approach was successfully applied and further developed by the USAID-funded Productive Safety Net Program Plus (PSNP Plus), which explicitly targeted the poorest rural households. PSNP Plus developed a context-based variance of the BOAM approach that utilised a two-pronged, ‘Pull and Push.’ The ‘Pull’ (demand) component, based largely on the BOAM programme, focused on expanding market demand in order to create incentives for higher quantities and quality of products generated by the value chain. The ‘Push’ component entailed a range of supply-side instruments to build or ‘push up’ the capacity of the targeted subsistence farmers. These included providing smallholder farmers with access to financial services and helping them to invest in the right assets, knowledge and skills to start producing for the market. As one of the PSNP Plus partners, BOAM brought in the expertise for the ‘pull’ interventions while the other implementing partners3 facilitated the specific ‘push’ interventions.

The BOAM Post-Implementation Review concluded that BOAM “proved that [value chain development] works in practice in a pro-poor context.”

3 Including Care Ethiopia, Catholic Relief Services, the Relief Society of Tigray, Save the Children-UK and Tufts University
Lesson 11:
The PSNP Plus experience demonstrated that BOAM’s approach to facilitating economic development could be successfully adapted and scaled up. It goes without saying that the approach needs to be adjusted to context-specific factors. This requires a thorough context analysis, careful monitoring and continuous learning by value chain development facilitators.

Sustaining innovative practices
The BOAM conference in June 2011 marked the formal end of the programme, but not of its ideas, concepts and ambition. The conference attracted more than 200 value chain practitioners drawn from development agencies, the government and the private sector and provided an important forum for reviewing the lessons learnt. Since then, projects to further scale up the fruit, honey, dairy and oilseeds value chains have been initiated. Furthermore the BOAM approach has been adapted by a number of recent initiatives. One such project, Graduation with Resilience to Achieve sustainable Development (GRAD) (2012-2016) will expand the PSNP Plus approach to a larger number of Safety Net beneficiaries. Another key programme that has incorporated lessons from BOAM is the Ethiopian Agricultural Growth Programme (AGP), in particular the elements focused on market and agribusiness development strengthening for selected commodities and value chains.

The BOAM Post-Implementation Review observed that “BOAM has put the Value Chain Development Approach on the map in Ethiopia.” The upscaling of BOAM’s innovative approach to value chain development has already started.

References


Annex 1

The honey value chain

Meskerem Shiferaw and Eyerusalem Regassa

In 2005, Ethiopian beekeepers were producing relatively small quantities of high-quality table honey. The bulk of honey produced was destined for the local market to be used in tej, the traditional Ethiopian honey wine. Five years later, there were more than 8,000 high-quality honey producers supported by the BOAM programme, raising their household revenues by up to 83%. Thousands more beekeepers benefitted indirectly, albeit to a limited extent, by copying innovative production techniques from trained farmers, or by replicating and expanding the innovative contractual relationships between farmers and processors pioneered by the BOAM programme. Between 2008 and 2011, six BOAM-supported honey processors exported 400 tonnes of Ethiopian honey, mainly to the EU. This annex describes how BOAM contributed to these achievements through its programme activities in the period 2005-2011.

Introduction
Beekeeping or apiculture in Ethiopia can be traced back to the reign of King Lalibela in the 12th century. It is an important non-agriculture activity that is highly complementary to agricultural and horticultural production. Apiculture is practiced by a large numbers of people across the country except in areas with extreme climatic conditions. It also plays a major role in the cultural and religious life of the people and has long been valued for its medicinal uses. The largest share of honey produced in the country comes from forest beekeeping: the practice of honey collection from wild colonies in forests. Forest beekeeping is common to honey hunters mainly in the south, south-west, west and south-east parts of Ethiopia. Backyard beekeeping, on the other hand, is practiced mainly in the central, northern and eastern parts of the country.

According to the Central Statistical Agency (Government of Ethiopia, 2011) the annual total production of honey accounts for 53,000 tonnes. This amounts to only 8.6% of the total potential national production. In addition, there is an annual beeswax (honey comb) production of 3,800 tonnes. Out of the total honey produced, roughly 70% is utilised for brewing “tej” (honey wine) with the balance being sold either as table honey or in other forms. For a long time, beekeepers targeted the “tej” market only, and accordingly little or no effort was made to separate the honey from the beeswax.

Tej production does not require the same level of quality as table honey. Table honey requires post-harvest handling, which is the separation of honey from wax, comb and others, and moisture reduction if applicable. Wax is a by-product of the tej production process and is sold to those who make the traditional candle (twafe) – mainly used in religious ceremonies - and floor wax (sem).
BOAM’s engagement in the honey value chain

At the start of the BOAM programme in 2005, the productivity of technologies used by most beekeepers was quite low, with poor pre- and post-harvest management. There was little capacity to boost productivity as extension services were not well developed and beekeepers lacked access to inputs and to finance to invest in improved production methods. Moreover, beekeepers had insufficient access to information about market opportunities, while the market infrastructure was poorly developed.

Although there were only a handful of industrial honey processors at the time, they were active and interested in developing the honey chain. A few donors were prepared to support them in this endeavour. At the same time, the government had enacted policies to promote household and commercial beekeeper development in areas of high apiculture potential. The honey sub-sector was therefore widely seen as offering some of the best potential to contribute to rapid economic development, food security and poverty reduction. Furthermore, development of apiculture was considered to be in line with policies focused on the conservation of biodiversity.

Within the framework of the BOAM programme, honey was selected as one of four value chains to receive support because of the large unmet demand, both locally and internationally, and large number of potential beneficiaries. It was estimated that there were up to 1.4 million traditional beekeepers ready to continue working in the honey sector.

The main objective of BOAM’s interventions in the honey value chain was to improve access to markets for honey and bee products and to better exploit the vast and largely untapped potential in the honey sector. In order to achieve this, the quality of the product had to be improved. The low quality was also the main reason why Ethiopian honey could not be exported. Achieving quality improvements required changes not only along the whole chain but the institutional environment as well.

Four broad categories of BOAM interventions can be distinguished:
1. Sector development
2. Business development
3. Knowledge development and learning
4. Service provider development

Sector development

BOAM’s sector development component aimed to strengthen the sector as a whole and included interventions that served the interests of all actors involved in the value chain. In the case of the honey chain the following sector development instruments were most relevant.

- Facilitating the establishment of Multi-Stakeholder Platforms
- Strengthening of Sector Associations
- Generating and disseminating Market Intelligence
- Supporting Effective Public Policy Management
- Promoting Appropriate Technology

Facilitating the establishment of Multi-Stakeholder Platforms

In September 2005, SNV in collaboration with business development services (BDS) providers, facilitated a meeting of key players in the apiculture sector including, processors and other business organisations, researchers, capacity builders, policy makers and donor agencies. The stakeholders formed a Coordination Group (CG), a platform where value chain actors could share their visions, information and knowledge. Over time, representatives of other stakeholders joined the Coordination Group, including more processors/exporters, the newly established producer associations, apex organisations, certification and auditing service providers, financial institutions, government ministries, and research and educational institutions.
One of the first activities carried out by the Coordination Group was a value chain analysis, which helped to identify the main constraints facing the honey sector. The next step was the formulation of a Strategic Intervention Plan (SIP) focused on three main areas: developing export contacts, boosting processing capacity and qualifying for certification. As this required increasing the production of specific grades of honey, forging stronger business links between processors and producers was vital. Establishing stronger links was in the interest of all parties as it ensured a consistent supply of honey for the processors, and reliable market outlets for the beekeepers.

**Strengthening of Sector Associations**

When the honey chain Coordination Group was established in 2005 the Ethiopian Beekeepers Association (EBA) was the only association involved in organising beekeepers and apiculture experts. BOAM financed the development of a training manual to enhance EBA’s support to both members and non-members. The BOAM programme also helped to mobilise local service providers to strengthen the organisational capacity of the association.

The next step was to bring together processors/exporters to develop a collective strategy for realising their vision of exporting table honey to Europe, the US and the Middle East. Towards this end, the Coordination Group facilitated the establishment of the Ethiopian Honey and Beeswax Producers and Exporters Association (EHBPEA) whose core objectives were to coordinate the supply quality honey, link Ethiopian processors to international markets and promote the development of the honey sector. With BOAM support, the EHBPEA realised two key accomplishments during this period:

- Acquiring EU Third Country Listing in 2008, which was a precondition for exporting to the EU.
- Organising the International Honey Conference in Ethiopia in 2007 which contributed to the establishment of networks of producers and processors and put Ethiopian honey on the map internationally.

*Figure A1.1: A graphical illustration of the honey sub-sector in Ethiopia*
In addition to the EHBPEA the honey coordination group felt the need for an umbrella organisation covering the whole chain, which resulted in the establishment of the Ethiopian Apiculture Board (EAB). The EAB is a public-private partnership that links the sector with the relevant government institutions, with a mandate to ensure that the needs of the private sector are taken into account in policymaking. In this regard, the offer by the Ministry of Agriculture to serve as patron of the EAB was a major achievement. The EAB gradually took over BOAM’s responsibilities in: facilitating CG meetings and accessing funds for capacity development; developing and distributing training materials and; promoting Ethiopian honey abroad by inviting business partners and attending foreign trade fairs and sector events such as the Apimondia. The EAB successfully hosted the 2012 APITrade Africa expo – a major industry event - for the first time.

BOAM also provided support for the organisational strengthening of the EAB as a representative institution, including the establishment of regional apex offices close to the beekeepers.

At a later stage, in the framework of SNV’s involvement in the PSNP Plus programme (see Chapter 7) and with a view to extending BOAM’s outreach to the poorest households, regional coordination groups were established in the four major honey producing regions of Ethiopia namely Amhara, Oromiya, Southern Nations, Nationalities and People’s Regional State (SNNPRS) and Tigray. The regional chapters are taking on increased responsibility for the sector’s governance.

Generating and disseminating Market Intelligence
BOAM supported the participation of honey processors at various international trade fairs, including in Germany, Uganda, Zambia and Dubai. This exposure has enhanced exporters’ awareness of the demand for Ethiopian honey products and their required knowledge of marketing standards. It has also built their negotiation skills and, most importantly, helped them establish a network with key market operators. By becoming more aware of their strengths and weaknesses, the exporters are better prepared and to synergise their efforts to become more competitive in the global market.

Supporting Effective Public Policy Management
EHBPEA and EAB have become important institutions that meet with the State Minister for Agriculture on a regular basis to discuss the development of the sector. One of the outcomes of these meetings was a commitment by the government to fully cover the cost of the 2011 EU Third Country Listing for the export of honey to EU countries. This included costs for collecting documents concerning the honey sector, collecting samples of honey from producers, packaging and sending the samples to the Chemiphar laboratory in Kampala, Uganda, for quality testing.
Subsequently the test documents were sent to the EU Food and Veterinary Office in Ireland. Prior to this the bulk of the cost for the certification process was borne by the BOAM programme, with a 20% contribution by the processors themselves.

Another policy measure taken by the government was the formulation of a new apiculture proclamation that clearly indicated the rights of the beekeepers and the obligation of the government to strengthen the apiculture sector. The EAB played a key role in compiling all the inputs required for the proclamation.

The development of appropriate technology

The cost of a modern top-bar hive is prohibitive for most beekeepers. One local farmer has invented a more affordable version modelled on the top-bar hive but made from cheap and locally available materials, bamboo and clay. At an average production cost of 6 US$ per hive, the transitional hive is eight times cheaper than a modern timber box hive and five times cheaper than timber-made top bar hives. The hive was tested and further improved at the Holetta Bee Research Centre (HBRC) demonstration farm as well as at the farmers’ level and has been found to produce three times more honey compared to the traditional hive. It is estimated that there are more than 4.9 million traditional beehives in Ethiopia (Government of Ethiopia, 2011), which could ultimately be replaced by improved hives.

Another advantage of the transitional bee hive is that it is suitable for women beekeepers since it can be located in the backyard whereas traditional beekeeping is a male-dominated occupation as the hives are hung high up in forest trees and difficult to reach. A stakeholder mapping exercise carried out at the beginning of the BOAM intervention showed that women were involved in the honey value chain – for example making honey wine - but not in the activities that generate a lot of income such as input supply, production and trade. Adoption of the transitional hive therefore opened up opportunities for women to engage in the more profitable activities of the chain by giving them control of the raw material, which they previously had to purchase from male beekeepers. Moreover, BOAM’s focus on quality improvements in the honey sub-sector opened up new income-generating opportunities for women, for example the production of table honey or selling protective clothing to beekeepers. As a consequence thousands of women became involved in honey production and established business relationships with processors. In Oromiya a female processor became chairperson of the regional honey board.

Business development

Business development is about supporting specific actors within the value chain. In the case of the honey chain the following business development instruments were adopted.

- Private Sector Actor Strengthening
- Business-to-Business development support
- Producer Group Strengthening
- Value Chain Financing
Private Sector Actor Strengthening
In order to improve chances to penetrate export markets several exporters pursued certification by the International Organization for Standardization (ISO). For food products ISO applies the Hazard Analysis and Critical Control Points (HACCP), which is an approach used in the food industry to identify potential food safety hazards at all stages of the chain. To meet quality standards for export, concerted efforts involving all actors in the value chain were needed.

BOAM supported three exporters: Dimma, Comel and Alem Honey, to meet the ISO certification criteria. This required strengthening their capacities in a number of areas including:

- Introducing Good Manufacturing Practices (GMP) and training staff in HACCP planning and implementation;
- Introducing measures to keep the processing plant and storage free from any contamination;
- Incorporating HACCP in their Quality Management System (QMS);
- Documenting various aspects of the production process, including procedures for: internal control; measuring customer satisfaction; internal communication; identification and traceability; training; data analysis; storage and handling; system audit; and corrective and preventive actions.

BOAM also paid the initial fees for ISO/HACCP certification. This however has to be done on an annual basis and in future the companies must be prepared to pay for the certification themselves or as a collective with partner organisations.

Business-to-Business (B2B) development support
BOAM facilitated the development of outgrower schemes between eight processors and 8,000 beekeepers. This entailed contractual relationships in which the processors undertook to provide beekeepers with embedded services such as modern beehives, protective clothes and hygienic containers in exchange for a reliable supply of honey.
In order for exporters to qualify for certification, quality improvements were not only needed at the processing level but at the level of production practices as well. Honey processors and exporters involved in outgrower schemes did not have the financial means to train beekeepers in order to meet the certification criteria. Hence, the BOAM programme provided support to enable selected processors to develop outreach programmes for beekeepers. The training provided covered general beekeeping and the construction of transitional beehives, as well as related skills needed for increased productivity and quality improvements.

**Producer Group Strengthening**

Leaders of the unions and cooperatives were trained in financial management, leadership skills and internal control systems. BOAM provided direct support to four cooperative unions with a combined membership of 21,500 beekeepers. The support covered a variety of skills including general beekeeping methods, management of transitional hives, colony multiplication, queen bee rearing, quality control, improved beekeeping practices and pre- and post-harvest handling of bee products.

**Value Chain Financing**

BOAM financed innovative business pilots – such as new product development and input supply. In addition, BOAM established a financial facility known as the Impact Investment Advisory Service to support businesses to obtain finances from sources such as banks, investors and equity funds. The facility funded the cost of all the due diligence studies - including prospecting, screening, conducting business diagnostics, business planning and investment reporting – required by financial institutions to decide whether a company was eligible for financing. BezaMar and RahiMar were among investors that successfully raised funds as a result of this support.

**Knowledge development and learning**

SNV Ethiopia supported a number of initiatives geared to knowledge development and learning. Some of the outcomes were:

- EHBPEA conducted an apiculture resource mapping study.
- The College of Agriculture and Veterinary Medicine of Jimma University in south-west Ethiopia implemented a project to improve its apiary in order to provide better support of research and teaching as well as extension services. This was complemented by radio broadcasts from the university-based Jimma FM Community Radio, which integrates student volunteers to produce educational programmes that are broadcast to the surrounding community. Qualified trainers were invited to introduce the latest knowledge on beekeeping to enhance not only honey production and processing, but also how to strengthen market linkages.
- A joint project with the Regional Government of Oromia (Livestock Development, Health and Marketing Agency) conducted a survey of beekeeping activities in Oromia Region. The information obtained will be stored in a database that can be accessed by businesses, researchers, policymakers, investors, farmers, instructors, NGOs, processors, traders and all other honey value chain stakeholders operating in Oromia region.
- A pilot innovation project by the East Shoa Beekeepers Association to produce bee forage seedlings on a commercial basis was launched. BOAM supported this initiative financially and contracted local experts to find out which types of seedlings are preferred by the bees. The initiative was replicated by two other organisations, one of which (RahiMar Plc) is a processor that buys honey from beekeepers. RahiMar has established its own network of outgrowers of forage seedlings for distribution to beekeepers.
- For a long time, the main focus in the Ethiopian honey sector - and hence the
core of BOAM’s intervention support - was on the production of standard honey and beeswax. However, many Ethiopian producers have reached a point where they can, and want to, diversify into other bee products such as propolis, royal jelly and comb honey. Pilot innovation projects to introduce farmers to these new products have started.

**Service provider development**

As described in Chapter 4, SNV contributed to the professionalisation of business development service providers through, among other initiatives, facilitating the establishment of a Competency Pool and Young Professionals Programme. In the framework of the Competency Pool 40 experts from private consultancy firms, government organisations and NGOs were trained in value chain development. The Young Professionals Programme enabled 44 young graduates to gain experience through traineeships with consultancy firms. From the participants of these programmes 17 service providers were contracted to carry out assignments in the honey chain. This included training of trainers, manual development, conducting baseline surveys (before and after training), strategic planning preparation for partners and clients, market studies and linking, MSP facilitation and moderation services.

**BOX A1.1 The importance of leadership in the honey chain - The case of BezaMar PLC**

One of the success factors in the development of the honey value chain was the availability of strong local leadership. As one of the pioneers in the value chain, Mr. Hailegiorgis Demissie, owner of BezaMar PLC, was instrumental in inspiring other chain actors. At the Apimondia apiculture trade fair in Dublin in August 2005, Mr. Demissie met importers from EU countries and learnt more about the international honey market. He was surprised to see the success of Zambian honey exporters and wondered why “as the main producer of honey in Africa, Ethiopia was not benefitting from the export of honey to the EU, unlike Zambian exporters.”

Upon his return, Mr. Demissie started to pursue this opportunity. After assuming the chair of the Coordination Group, he brought together other processors to establish the Ethiopian Honey and Beeswax Producers and Exporters Association (EHBPEA). With BOAM’s organisational and financial support the association hosted the first international apiculture trade fair in Ethiopia. He enthusiastically pursued the EU Third Country Listing process in 2008. As soon as the EU third country listing was approved, BezaMar became the first processor to export table honey to the EU, increasing its share of organic table honey exports from 30 tonnes in 2008 to 120 tonnes in 2011.

To respond better to the export market requirements, BezaMar pioneered ISO and HACCP certification expanding market opportunities and leading the way for other processors to follow. To be able to assure a reliable quality supply of honey, BezaMar with technical and organisational support from BOAM and a financial grant from the business innovation fund, tested the establishment of 349 outgrower relationships in 2007/2008. This was accompanied by skills improvement training for beekeepers aimed at increasing the production of quality honey. The services provided to outgrowers also improved with the company providing inputs such as hives and other materials on loan to beekeepers. As a result of a mix of productivity increases and price incentives, BezaMar’s outgrower network had expanded to nearly 1000 beekeepers by 2010.
The provision of technical support to beekeepers and producer organisations also led to significant quality improvements. One of the main factors in honey quality is the moisture content: raw honey containing high moisture levels requires more processing and incurs higher labour and energy costs. Through improvements in the quality of honey delivered to BezaMar, processing costs went down by 0.36 US$ per kg. The savings were passed on to outgrowers who now received an additional 30 to 50 US$ cents per kg. Annual household incomes from beekeeping went up from 92 to 152 US$ on average, per household (2008 data).

Additional participation in trade fairs has enabled BezaMar to expand exports to the US market, where it promotes the specialised honey brands Tropical Forest, Blue Nile and Lalibela. With five more processors (Tutu & Her Family, APINEC, ALEM, DIMMA and COMEL) following BezaMar’s example, honey exports have risen steadily over the years, reaching 400 tonnes by 2011 and benefitting thousands of beekeepers.

Results
In this final section we list the outputs and outcomes of the BOAM interventions in the honey value chain whereby:

**BOAM’s outputs**
- Proposal preparation and development with clients to access SNV’s sector, pilot and upscaling funds;
- Strengthening four farmer cooperative unions and three sector associations;
- Facilitating coordination and steering of value chain development through the Coordination Group;
- Sector research, pilot business innovations and standardised manuals developed;
- Capacity strengthening of private and public providers through introducing certification, intermediate technologies and inputs (HACCP, protective clothes, tools, etc). Market linkages between processors and foreign importers (forward) and beekeepers (backward) established;
- Participation in trade fairs and Apimondia;
- Further upscaling of the honey value chain in other development programmes such as PSNP Plus.

**BOAM’s outcomes**
- The EU 3rd country listing and residue monitoring plan submitted in 2007 opened the way for penetrating the EU market. The Ethiopian honey export is moving from shipping honey in small units to bulk supplies in barrels. In 2009 the six main exporting companies shipped a total of 153 tonnes into the world market, which is considered to bring enormous leap forward compared with 2008 where only 33 tonnes was exported. Based on information received from the companies, over 400 tonnes of honey had been exported by 2011. The key markets thus far are EU, the US, the Middle East and Japan.
- An assessment involving 17 organisations from 2008-2010 revealed that the training of 8,000 beekeepers had resulted in a reported 2-year average production increase of about 23% (from 104 kg per household per year) and
revenue increase in ETB of 83% (from 1,999 ETB per household per year).

- The additional income gained as a result of mastering new skills enabled beekeepers to send their children to schools, build improved houses and enhance their standard of living.
- The introduction of transitional hive beekeeping enabled women to become involved in honey production, making it more of a family business rather than an exclusive task for men.
- Input supplies and quality of services provided to producers and processors improved.
- A pool of 17 professionals and a large number of SNV advisers were equipped to provide quality services to value chain actors.
- The EAB has taken over the coordination and steering of the value chain’s upgrading with specific chapters in the geographical regions.

**Conclusion**

After several years of BOAM support, the first stage in the upscaling of the honey value chain to export quality table honey has taken place, with the involvement of a large group of processors and beekeepers. The institutions are in place to coordinate and steer further value chain development. Beekeepers and other chain actors have better access to services, inputs, new technologies and market information. Trainings have been standardised and a pool of service providers is available to provide that training. Most actors indicate that the honey value chain is ready to take off and to exploit the full potential by maintaining momentum and making additional investments. Innovations in addressing the supply constraints and attracting commercial finance will be however required.
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Annex 2

The oilseeds value chain

Yohannes Agonafir and Eleni Abraham

With an estimated total cropped area of 740,000 hectares, oilseeds are the third-most important agricultural product group in Ethiopia, after cereals and pulses. Roughly 9% of smallholder farmers cultivate oilseed crops, setting aside about one-third of the harvest for home consumption and planting material for the next season. The surplus 70% is marketed domestically or exported, half of which is suitable for export.

A number of oilseed crops grown in Ethiopia, such as safflower, Niger and linseed, contain high levels of unsaturated fatty acids, which makes them a potentially valuable export commodity. Sesame currently dominates the oilseeds export market, with a 90% share. The main destination for sesame exports is Far East Asia, where it is used in different food products.

Noug is the second exportable oil crop and has shown substantial growth as a high value bird food ingredient, especially in the USA, although demand in Europe and other parts of the world is increasing. It is a small seed and particularly attractive to finches. Noug is also the most preferred edible oil type locally. The third exportable oil seed is linseed, which is primarily used as an industrial oil. There has been a rise in demand for linseed in the world market and as one of the major producers Ethiopia is well positioned to benefit from this opportunity by increasing exports to EU countries.

Ethiopia as an importer of edible oils

Although Ethiopia is an exporter of oilseeds, the high level of edible oil imports has overshadowed its export performance. Ethiopia does not produce enough edible oils to satisfy local demand and up to 80% of domestic consumption is covered by imported oils. A recent survey of Addis Ababa trade and industry bureau has shown that there are 22 different types of oils entering the market. All imported oils are refined products that are well packaged and labelled. By contrast the bulk of local food oil supplies are not refined in accordance with Ethiopian quality standards, although a combination of factors - scarce supplies, consumer preference and an unfavourable tax regime - continues to push up the price of locally manufactured oils. To fill the huge supply gap and ensure affordable prices for consumers, the government regulates the market price by giving preferential treatment to palm oil, which is exempt from import taxes and value added tax (VAT). This policy measure, which is opposed by the local oil extraction industry, has seen a steep rise in imports, with 90% of imported edible oils currently labelled as palm oils.
Challenges in the oilseed value chain
Ethiopia remains highly dependent on imported edible oils because of a number of constraints in the oil processing and marketing chain in which oilseeds are transformed into edible oils. The cultivation of edible oil crops is dominated by smallholder farmers who practise rain-fed (and low productivity) agriculture in mixed farming systems. As a result the seasonal supply of oilseeds cannot satisfy the demand of both oil millers and oilseed exporters, leading to serious supply shortages. This situation has led to hoarding, adulteration of oil supplies and under-utilisation of existing refining capacity. It has also contributed to dependency on imported oils and ‘edible oil aid,’ especially from the US.

The Ethiopian Seed Enterprise is the only government body involved in the multiplication of improved seeds, with the aim of addressing low productivity, one of the most deep-rooted and persistent problems within the oil seed sub-sector. Yet despite the vast market for improved seeds, the involvement of the private sector in seed multiplication in general - and in the oil seeds sub-sector in particular – has remained minimal.

The total annual food oil supply is currently estimated at 40,000 tonnes. Marketing and distribution of oilseeds is mainly done by small and medium-scale traders and brokers. However, the poor marketing infrastructure - especially with regard to collecting, bulking, transporting, and distribution of oilseeds - means that most traders can only handle small volumes of the available supply. This results in a very long marketing chain with many intermediaries and without much value addition to the final product.

Oilseed processing is similarly dominated by small and micro cottage mills that do not have the capacity to refine, or even semi-refine, food oils. Despite this, the low quality oil that is produced is extremely popular and can be sold on the market due to poor law enforcement. This leads to a situation in which the small number of refineries that are equipped to produce better quality oils operate below their full capacity.

Opportunities
The government of Ethiopia is committed to addressing these challenges. In order to improve the supply chain the government has established the Ethiopian Commodity Exchange (ECX) to facilitate trade between suppliers and exporters. Commodities currently traded under ECX are coffee, maize, wheat, white pea beans and sesame. Of these, coffee, white pea beans and sesame can only be traded through the ECX, with the exception of farmers’ cooperatives and large private farms.
There is also a growing number of actors who have an interest in improving the value chain. These include a number of smallholder farmers’ cooperative unions, Ethiopian Seed Enterprise, Addis Ababa Oil Millers Association; the Addis Ababa and Ethiopian Chambers of Commerce and Sectoral Associations (AACCSA and ECCSA respectively) and Ethiopia Pulses, Oilseeds and Spices Exporters Association (EPOSPEA). Diverse government organisations are also involved, including the Ministries of Agriculture and Trade, Ethiopian Institute of Agricultural Research (EIAR) and Quality and Standards Authority of Ethiopia. Other stakeholders include collectors, transporters and commercial farmers.

**Figure A2. 1: An graphical illustration of the oil seeds value chain**

<table>
<thead>
<tr>
<th>Function</th>
<th>Inputs</th>
<th>Production</th>
<th>Processing</th>
<th>Marketing</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>Smallholder farmers Seed enterprises Research centres Importers</td>
<td>Smallholder farmers Commercial farms State farms</td>
<td>Seed cleaners Oil millers</td>
<td>Traders Brokers Transporters Wholesalers Exporters Retailers Super-markets</td>
<td>Individuals Restaurants Research centres Dairy farms (etc)</td>
</tr>
<tr>
<td>Products</td>
<td>Improved seeds Pesticides Sacks</td>
<td>Seeds Food oils Industrial oils Oil cakes</td>
<td>Clean seed Food oils Industrial oils Oil cakes Halva</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td></td>
<td>133,000 tonnes seed 40,000 tonnes oil</td>
<td></td>
<td>160,000 tonnes oil</td>
<td></td>
</tr>
<tr>
<td>Firms</td>
<td>Seed companies</td>
<td>Smallholder farmers Commercial farmers State enterprises</td>
<td>Seed cleaning companies Oil mills Exporters</td>
<td>Suppliers Wholesalers Traders Export companies</td>
<td>All listed consumers</td>
</tr>
</tbody>
</table>

**BOAM’s engagement in the oilseeds value chain**

Four broad categories of value chain interventions can be distinguished:
1. Sector development
2. Business development
3. Knowledge development and learning
4. Service provider development

**Sector development**

The sector development component aims to strengthen the sector as a whole and includes interventions that serve the interests of all actors involved in the value chain. In the case of the oilseeds chain the following sector development instruments were most relevant.

- Facilitating the establishment of Multi-Stakeholder Platforms
- Strengthening of Sector Associations
- Supporting Effective Public Policy Management
- Promoting Appropriate Technology
Facilitating the establishment of Multi-Stakeholder Platforms

BOAM facilitated consultations between the main actors of the value chain through a series of regional technical team meetings, face-to-face discussions and roundtables. The meetings led to the establishment of a multi-stakeholder platform in 2005, known as the oilseeds Coordination Group (CG). The CG started by identifying constraints, weaknesses, opportunities and strengths facing the sector and developing a strategic intervention plan to address the most critical issues.

The resulting intervention strategy consisted of the following components:

- Upgrading of unadulterated oilseeds and refined food oils for the local and export markets;
- Addressing bottlenecks related to seed multiplication for planting material at farmers’ level;
- Improving agricultural practices in the oil crops sector;
- Improving the quality of oilseed products through better local processing practices and addressing the problem of adulteration;
- Developing a market information system.

BOAM advisers facilitated the consultation process to ensure that the main stakeholder groups were actively involved at all stages, from inception to implementation. Following the adoption of the strategy, it was agreed that BOAM would provide facilitation support to enable the CG to implement the strategy.

Strengthening of Sector Associations

The Ethiopian Pulse, Oilseeds and Spices Processors and Exporter Association (EPOSPEA) - representing over 80 oil crops processors and exporters - received support from BOAM for trade visits to importing countries. One delegation participated in a business community tour to EU countries while others participated in international conferences and market study tours to China and a number of EU countries. EPOSPEA was also represented at three trade fair exhibitions in Germany. All these activities contributed to the establishment of market relationships.

The CG was the driving force behind the establishment of the Oilseeds Public Private Partnership between the Ministry of Agriculture, EPOSPEA, the Embassy of the Kingdom of The Netherlands and the Dutch Product Board for Margarine, Fats and Oils (MVO). The objective was to address issues in the oilseeds sector requiring coordination at the macro level. The partnership facilitated the development of a code of conduct for oilseed exporters, coordinated by EPOSPEA.

Supporting Effective Public Policy Management

Following a number of BOAM-facilitated studies on the quality of edible oils, the Quality and Standards Authority of Ethiopia moved to enforce the law and closed down mills in Addis Ababa that were producing low quality oil. The research findings also provided input for the development of new quality standards by the regulating authority. The new standards will provide guidelines for the setting up of clean processing lines for the cold extraction and local marketing of high value edible oils to ensure that all the natural components that make Ethiopian oils unique and valuable are retained. Value chain studies have been done for noug, sesame and linseed.

BOAM supported a national workshop organised by the oilseeds CG on theft and illicit trade in oil crops. Most of the thefts occur during the transportation of oil to the port of Djibouti. As a result of the workshop police checks of loaded trucks en-route to Djibouti port were enforced.
BOAM also provided support for a public-private forum on price regulation within the sector that examined the implications for local oil producers who have to compete with imported palm oils that are exempt from income tax and VAT.

Promoting Appropriate Technology
BOAM supported the promotion of improved technologies for oil seed cleaning, milling, handling and the supply process. This has encouraged some owners of sub-standard oil mills to invest in refined and semi-refined oil extraction technology. The promotion also inspired the Ethiopian Consumers’ Protection Association to address the issue of food oil quality in a TV talk show.

Business development
Business development is about supporting specific actors within the value chain. In the case of the oilseeds and edible oils value chain the following business development instruments were most relevant.

- Private Sector Actor Strengthening
- Producer Group Strengthening
- Value Chain Financing

Private Sector Actor Strengthening
Many oil millers in Ethiopia use obsolete technology and are not engaged in oil refining. The working environment and the hygiene and sanitation standards are far below acceptable levels. BOAM advisers, in collaboration with a private Technical Vocational Education Training (TVET) institute, conducted an in depth problem analysis of one oil miller. The key problems identified included the limited knowledge and skills of staff, high maintenance costs of machines and unreliable suppliers. To address these problems, BOAM and the TVET provided intensive training to 33 (22 male and 11 female) employees for three months. The training covered oil refining and filtration systems, machine maintenance, electric system control, and quality and safety management (GMP, HACCP). The training resulted in improved work processes and the purchase of better milling equipment.

A small-scale oil mill, one of many in Ethiopia that process oilseeds for the domestic market
BOAM supported six companies to develop innovative business plans, of which three companies received additional support in implementing their plans.

**Woira Plc:** One of the beneficiaries of the business training was a new joint venture company named Woira Plc. The company developed a plan to introduce olive seed production for cosmetic olive oil, the first business of its kind in Ethiopia. The olive seeds will be produced by smallholders in an outgrower scheme, with processing and marketing carried out by Woira. Sixty extension workers were trained in the cultivation of olive trees and in turn they trained 5,000 smallholder farmers. The selected site is linked to rural communities who are traditionally dependent on the products of local olive trees as feed for their animals, construction and firewood. The olive trees are cultivated in an environmentally friendly manner and help to prevent soil erosion, which enhances overall farm productivity.

**Agroprom Plc** received support for the sourcing and marketing of safflower petals, that are in high demand in the EU as a natural colouring for food and cosmetics.

**Era Agrilink** received support to establish a farmers’ outgrower scheme for the multiplication of improved linseed.

**Producer Group Strengthening**

One of the main problems identified by the Strategic Intervention Plan for the oilseeds sub-sector was a lack of awareness and skills on improved agricultural practices. BOAM supported 10 Farmers’ Cooperative Unions (FCUs) to provide training to their members on agricultural practices such as pest control management, quality and safety management, and marketing of oilseeds. The training was carried out in two phases. The first was a Training of Trainers (ToT) for public extension staff from the Agricultural and Rural Development offices. During the second phase members of the FCUs received training from the extension staff in their native language. In total, the programme trained 400 ToTs who subsequently transferred their knowledge and skills to more than 23,500 smallholder farmers.

Despite the training, however, many farmers did not succeed in increasing their productivity due to a shortage of good quality planting material (see Box A2.1). BOAM subsequently supported two FCUs to engage in an innovative informal seed multiplication scheme. The project produced sufficient certified seed to meet demand, with the result that smallholder farmers who planted the improved seeds increased production by up to 58%. Encouraged by this outcome, six other FCUs started their own seed multiplication projects.

**Box A2.1: Didaa FCU produces its own planting material**

With BOAM support smallholder farmers linked to the Didaa FCU were trained on linseed crop cultivation. However, the resulting 30% increase in yields was much lower than expected. Furthermore, the quality of the linseed harvest did not improve significantly despite farmers’ application of the techniques learnt. After analysing the problem, the farmers came to the conclusion that the root cause was the lack of improved planting material. This analysis was confirmed by findings in various oilseed sector studies. In seeking to respond to the demand of the farmers, however, BOAM discovered that private and public sector stakeholders had little interest in investing in the production of improved planting material for oilseeds. Their priority was on the main food crops to enhance food security. The only option for the farmers’ union was to support the multiplication of improved seeds on farmers’ plots. With BOAM support the informal linseed multiplication scheme helped to overcome the scarcity of planting material that resulted in increased yields by up to 58%. Didaa FCU is now self-sufficient in improved planting material supply as a consequence of member farmers finding the solution to their problem.
Value Chain Financing

BOAM financed innovative business pilots, such as the alternative use of seedcake. In addition BOAM set up the Impact Investment Advisory Service to help businesses obtain finances from sources such as banks, investors and equity funds. The facility funded the cost all due diligence studies - including prospecting, screening, conducting business diagnostics, business planning and investment reporting - required by financial institutions to decide whether a company was eligible for financing. Woira Plc was among value chain investors that successfully obtained funding as a result of this initiative.

Knowledge development and learning

Several examples of BOAM investments in knowledge development and learning have been described above. They included:

- The development and dissemination of extension messages to farmers;
- Facilitating exposure visits of chain actors;
- Conducting studies for the development of business plans;
- Developing new products such as alternative uses of seedcake for firewood and construction material.

At the sector level BOAM initiated a study of the oilseed value chain (Agonafir, 2005) that enabled chain actors to gain a better understanding of the sub-sector and develop a Strategic Intervention Plan. BOAM also supported a preliminary survey on oil quality and standards carried out by the Addis Ababa Industry Bureau.

In 2009 the oilseeds coordination group decided to support research into the quality of selected Ethiopian edible oils in order to facilitate the establishment of a national standard for cold extracted, unrefined oil.

Service provider development

Between 2005 and 2011, 17 service providers were actively involved in the oilseeds value chain development process. Their contributions included: business plan preparation; conducting baseline surveys and sub-sector studies; value chain analyses; training and demonstrations on improved farming and manufacturing practices; supporting farmers’ cooperatives to develop informal seed multiplication programmes; and convening and moderating workshops and multi-stakeholder platforms.

Results

In this section we list the outputs and outcomes of the BOAM interventions in oil seed value chain whereby:

- Outputs are defined as: “the products and services which result from the completion of activities within a development intervention.”
- Outcomes are defined as: “the intended or achieved short-term and medium-term effects of an intervention’s outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions which occur between the completion of outputs and the achievement of impact.”

BOAM’s outputs

- A value chain Coordination Group was established as a platform for public and private stakeholders and met on a regular basis to further develop the chain.
- 400 public extension workers and development agents were trained as ToTs to further knowledge of good agricultural practices, informal seed multiplication, and olive tree pruning and management skills among smallholder farmers.
- 28,500 smallholder farmers were trained in good agricultural practices in oilseeds cultivation. They were drawn from 10 farmers’ cooperative unions with a total membership of 230,000 as well as farming communities in Atsbi woreda (district).
- A private company, Woira Plc, received support to introduce olives as a new agro-processing industry and import substitute for Ethiopia.
• Eight FCUs started innovative seed multiplication schemes and provided training to their members with a view to achieving self-sufficiency in high quality planting material.
• A private vocational and technical training school provided technical training to 33 staff members from a private oil processing company, which contributed to improved processing capacity at the plant.
• A value chain investor established a new oilseed processing plant in the vicinity of Addis Ababa and has start processing high quality products to the EU and Middle East markets.

**BOAM’s outcomes**
• BOAM engagement in the oilseeds sub-sector has attracted new investors in oilseed processing and export.
• The strengthening of the oilseeds value chain has contributed to a substantial increase in oilseed exports.
• The government of Ethiopia has identified oilseeds and food oils as a priority sector in its 30 year agro-processing masterplan.
• The Ethiopian Consumer Protection Association has highlighted issues of food oil quality to the Ethiopian society through different media and communication tools.
• The Ethiopian Quality and Standards Authority has enhanced law enforcement by closing sub-standard oil mills in Addis Ababa. As a result, most members of the Addis Ababa Oil Millers Association have upgraded their cottage oil processing facilities into semi-refinery plants, and six processors with sufficient resources have converted their cottage mills to refinery-level processing plants. The remaining millers have indicated that they will also upgrade their plants in future.
• About 5,400 smallholder farmers from Didaa and Ambo FCUs achieved increased Niger seed and linseed yields of up to 58% after applying improved agricultural practices and the use of improved seeds. Follow up training and coaching support by an experienced seed technologist has further assisted farmers to multiply improved planting materials on their own plots, achieving self-sufficiency in high quality seeds for the two FCUs.
• One private company has created an outgrower network of 5,000 smallholder farmers and has started piloting extraction of cosmetic olive oil from indigenous olive seeds. The company has also introduced exotic olive varieties for harvesting of olives and oil extraction for consumption.
**Conclusion**

BOAM’s efforts to enhance value chain upgrading in the oilseeds sub-sector initially focused on providing capacity development support to Farmers’ Cooperative Unions upstream of the chain in order to address immediate supply constraints. However, the anticipated rise in demand from the middle section of the chain emerged quite slowly and was limited to a small group of processors. According to Muradian et al (see Chapter 6) this was evidence of the weak ‘pulling effects’ of the interventions, which created insufficient incentives for farmers to engage in production increases, as happened in the honey chain.

Another factor that contributed to a lack of incentives for farmers and processors to invest in quality improvements was the thriving trade in illegal crude oil. A ban on sales of crude oil for consumption due to the associated health hazards was not enforced. In fact, despite its higher cost in comparison to refined imported oils most consumers prefer the colour and smell of crude oil from local oilseeds. This established market for local crude oil made value chain upgrading a difficult undertaking.

In this context there are two possible pathways to encourage value chain actors to invest in improving oil quality and further upgrading of the chain. The first avenue is legislation: enforcing the ban on crude oil and existing standards for refined oil. However, a more viable option, given strong local demand for unrefined oil, is to explore processing technologies that take into consideration consumer preference for the characteristics of crude oil. It is possible to introduce standards for cold pressed oil, which has the same colour and taste as crude oil but without harmful impurities. The development and enforcement of such standards would generate an incentive for smallholder farmers as well as processors to invest in improved quality. The value chain coordination and governance structures that would emerge from such a process would also enable the chain to explore opportunities to access the international as well as the emerging local market for refined food oil.

**References**


In Ethiopia the demand for dairy products is expanding. This is especially the case in urban areas where there is a growing group of consumers who can afford to buy high quality dairy products. However the Ethiopian dairy sector has not been able to take advantage of growing demand to boost domestic production and imports of dairy products continue to rise. Between 2001 and 2011, the value of dairy imports increased almost seven-fold, to 20 million US$.

Introduction
Ethiopia boasts the largest livestock population in Africa. The livestock sector currently comprises 46 million head of cattle, almost all of which are local breeds. The sector plays an important role in economic development, contributing about 12% of the Gross Domestic Product (GDP) and 26% of the agricultural GDP. Livestock keeping is generally viewed as an economic asset, with cattle additionally valued for their draft power and milk production. The female stock (comprising 55% of the total cattle population) produces an estimated 2.76 billion litres of milk per year. This low productivity means that domestic supply cannot keep up with Ethiopia’s population growth and milk consumption per head remains low. In 2009 the average Ethiopian consumed only 19 kilogrammes of milk (Government of Ethiopia, 2009).

At the household level, the milk produced is mainly used for subsistence and non-commercial distribution to neighbours. There is also limited marketing of cottage cheese and butter produced at home using small-scale processing technologies. Commercial dairy farming is mostly practiced in the urban and peri-urban areas especially in and around the capital, Addis Ababa.

For more than 50 years, the processing of milk was monopolised by the government-owned processing company, Dairy Development Enterprise, under the Shola Milk label. Recently privatised and renamed Lame Dairy Plc, the company remains the largest pasteurised milk producer, processing over 30,000 litres of milk a day. In the mid-1990s, Sebeta Agro Industry (Mama Milk) entered the market. Compared to other processors Sebeta Agro Industry offers the broadest range of products including Ultra-High Temperature (UHT) milk. Family Milk, based in Lafto, Addis Ababa, is the third largest dairy processor followed by Ada’a Liben Dairy Cooperative (Debre Zeit) and other small-scale processors. In total there are about 10 processing companies active in the market producing mainly pasteurised milk and to a very limited extent products such as yoghurt, cheese and butter.
Large private investors are starting to see opportunities in the dairy sub-sector. Three shareholding companies so far have started investing in large-scale dairy production and processing. One of them is the Dutch company, Velocity Capital, which will invest in a processing plant with a daily capacity of over 100,000 litres, including the production of UHT and milk powder.

There are also a number of development organisations that are actively involved in the livestock sector. The most prominent are SNV Netherlands Development Organisation (funded by the Embassy of the Kingdom of the Netherlands) and a USAID-funded dairy development programme. The UN Food and Agriculture Organization and the International Livestock Research Institute (ILRI), run dairy development projects in several localities.

In order to address the constraints facing the livestock sector as a whole, the Federal Government created the Ethiopian Meat and Dairy Technology Institute (EMDTI) in 2008 with a specific mandate to support change in the targeted sub-sectors. EMDTI is spearheading the application of milk quality standards as a first step in the transition from the current voluntary framework to a mandatory application of standards for raw milk and milk products.

**Challenges and opportunities for smallholder dairy producers**

Despite having the highest livestock population on the African continent, dairy production cannot keep up with the growing demand. An increasing number of people, especially in the rapidly expanding urban areas, have benefited from the steady economic growth in recent years. Their disposable incomes have increased and they tend to consume more milk and other dairy products. To satisfy demand imports of milk products have grown significantly, from a total value of 3.1 million US$ in 2001 to 9.3 million US$ in 2008 (UNIDO, 2009) and 20 million US$ in 2011 (Government of Ethiopia, 2012). Despite the potential that this creates for upgrading of the dairy sub-sector, however, efforts so far by the government, private sector and development agencies have not been very successful.

It is against this backdrop that BOAM decided to engage more actively in the dairy sub-sector from 2005 onwards. The programme started by making an inventory of the main challenges and opportunities facing the sub-sector.

**Challenges related to production:** The productivity of local cattle breeds remains low and this is exacerbated by poor dairy management skills among smallholder farmers. There are hardly any professionally managed family-sized or commercial dairy farms. Most smallholder producers have little means to move ‘up’ in the sector. Furthermore production is hampered by:

- A high incidence of communicable diseases (zoonoses) transmitted through unhygienic milk handling, for instance tuberculosis, brucellosis and gastrointestinal infections (posing a veterinary-public health challenge);
- An erratic milk supply due to reduced production during dry seasons;
- Poor extension services such as artificial insemination (AI) results in extremely high production costs for milk – the highest in the Eastern Africa sub-region;
- Scarcity of land for dairy farming development.
Challenges related to physical and processing infrastructure: The general condition of Ethiopian roads is quite poor, which hampers milk collection and leads to losses for producers and processors as milk is a highly perishable product. Poor roads also affect the provision of inputs to smallholder producers. Furthermore the limited access to electricity prevents the use of cooling systems. The processing sector as a whole has very limited capacity, with minimal diversification into long shelf life products such as UHT milk. Outside the major towns there are no processed dairy products available on the market.

Challenges related to regulation and service provision: Public regulation relating to the quality of milk remains weak. Extension services are not well organised and have limited outreach.

Challenges related to demand and consumption patterns: The dominant Ethiopian orthodox religion plays a major role in demand and consumption patterns of milk products. With the exception of small children, pregnant women, and the elderly who are allowed to drink milk daily, milk consumption is prohibited during the orthodox fasting periods, which amount to a total of 236 days each year. When coupled with what is already a highly seasonal milk market and the limited capacity to process and store milk that is produced during the fasting periods, this uneven demand presents a formidable challenge to the further development of the sub-sector.

Challenges related to price and marketing: Relatively few smallholder farmers are organised in milk marketing cooperatives. This is mainly due to the fact that dairy farming occurs on a smallholder, subsistence basis. Moreover the lack of enforcement of milk quality standards means that there are no price incentives to improve quality.

Opportunities
While the challenges faced are huge, Ethiopia’s livestock sector also enjoys significant opportunities that make it worthwhile to pursue further development of the dairy value chain. To list a few:

Clear demand: The steady rise in imports of milk and milk products is an indication of substantial and growing demand, especially in urban areas. This is further enhanced by the fact that overall population growth is increasing above the rate of increase of milk production and, mostly importantly, the urban population is increasing.
Natural and genetic resources: Ethiopia is a large country with vast areas suitable for intensive dairy production based on imported or crossbred stock. The road infrastructure continues to improve, opening up access to more distant milk-producing areas. This also provides opportunities to better utilise the large reserves of livestock feed and other inputs for improved productivity.

Policy support and regulation: The dairy sub-sector is high on the policy agenda of the Ethiopian government as seen, for example, in efforts to facilitate better exploitation of the agricultural growth potential in highly productive areas. Hence the required policy framework for strengthening regulatory and support services is taking shape. An example is the recent establishment of EMDTI, with a mandate to enhance dairy farming and improve the quality of the cattle stock.

Donor focus on dairy development: When BOAM entered the dairy sub-sector in 2005, there were two other major externally funded dairy development programmes being implemented in partnership with Ethiopian institutions. They were: ILRI’s Improving the Productivity and Market success of Ethiopian Farmers (IPMS) programme, funded by the Canadian International Development Agency (CIDA) and the Ethiopian Dairy Development Programme funded by USAID and implemented by Land O’Lakes. More recent initiatives include the Enhancing Dairy Sector Growth in Ethiopia programme funded by the Embassy of the Kingdom of the Netherlands and implemented by SNV and Wageningen UR; the USAID-funded Livestock Growth Project; the Eastern Africa Dairy Development programme funded by Heifer Project International and the Bill and Melinda Gates foundation; and Livestock and Irrigation Value-chains for Ethiopian Smallholders (LIVES) a CIDA project. This shows the high priority given to dairy on the development agenda.

A positive investment climate: Favourable policy measures aimed at encouraging the establishment of commercial dairy farms (under foreign, local or mixed ownership) are starting to attract foreign investors to the dairy sub-sector.

BOAM’s engagement in the dairy value chain
Four broad categories of BOAM interventions can be distinguished:
1. Sector development
2. Business development
3. Knowledge development and learning
4. Service provider development

Sector development
BOAM’s sector development component aimed to strengthen the sector as a whole and included interventions that served the interests of all actors involved in the value chain. In the case of the dairy value chain the following sector development instruments were most relevant.
• Facilitating the establishment of Multi-Stakeholder Platforms
• Strengthening of Sector Associations
• Supporting Effective Public Policy Management

Facilitating the establishment of Multi-Stakeholder Platforms
BOAM facilitated the establishment of a dairy value chain Coordination Group (CG) composed of representatives of producer cooperatives, producer unions, processors, the government, research institutes, financing institutions and NGOs working in the dairy sub-sector. The CG met every three months and was facilitated by SNV through a contracted local service provider. The chairperson of the CG is Mrs. Hirut Yohannes, owner of the Rut & Hirut milk processing company. One of the main activities undertaken by the Coordination Group was the development of a Strategic Intervention Plan. With a view to the challenges and opportunities described above
the plan focused on:
- Milk quality improvements;
- Skills upgrading in processing and packaging;
- Improved provision of feed, AI services and breeding stock;
- Promotion of consumption of dairy products;
- Strengthening the enabling environment through sector organisations, policy support and provision of value chain financing.

**Strengthening of Sector Associations**
At one of its quarterly meetings, the CG initiated the establishment of a steering committee to develop documents and plans for the formation of the Ethiopian Dairy Board (EDB). The EDB aims to bring together all stakeholders in the dairy sub-sector including direct value chain actors (producers and processors), sector enablers (government, research institutes) and supporters (financiers, development organisations) to enhance the development of the sub-sector. The results of the steering committee were presented at a National Dairy Forum, which developed a declaration aimed at:
- Increasing funding;
- Improving market transparency and marketing structures;
- Improving regulation and introducing quality-based prices for raw milk;
- Making standards mandatory and certifying producers and processors;
- Strengthening research on pertinent issues that hinder the continued development of the sector (for instance access to good quality feed and AI services);
- Strengthening local capacity developers.

BOAM further supported the establishment of the Ethiopian Milk Producers and Processors Association (EMPPA) in 2011, which brings together primary cooperatives, cooperative unions and processors. However, the two largest processing companies are not represented in EMPPA.

**Increased investment in modern dairies is contributing to reliable supplies of high-quality milk**

**Supporting Effective Public Policy Management**
The EMDTI, established by the Ethiopian government in 2010 to enhance dairy farming and improve the stock and quality of cattle, has been put in charge of implementing policies relating to quality standards. BOAM provided capacity development support for EMDTI, enabling it to establish reference laboratory services to monitor the physico-chemical and bacteriological quality of raw milk.
**Business development**

Business development is about supporting specific actors within the value chain, with a focus on the actors in the middle of the chain. In the case of the dairy chain the following business development instruments were most relevant.

- Private Sector Actor Strengthening
- Business-to-Business development support
- Producer Group Strengthening
- Value Chain Financing

**Private Sector Actor Strengthening**

Processed products make market entry easier and create sustainable relationships between processors and their suppliers. BOAM facilitated business development support for more than 10 private sector producers, collectors and processors that covered such areas as business plan preparation for firm expansion. A good example was the support given to Rut & Hirut milk processing company. BOAM facilitated the technical training of company staff to improve the quality, type and volume of cheese production. The company’s daily production of cheese and butter increased 10-fold from 30 kg a day in 2009 to 300 kg a day in 2011. This enabled Rut & Hirut to open a second sales outlet and start to deliver dairy products to larger up-market supermarkets. The support provided to Rut & Hirut also benefitted other chain actors. The number of suppliers increased from 109 to 400 and the company took on more staff.

Similarly, with the technical and financial support it received, Life Agro, was able to upgrade its cheese processing facility, resulting in a more efficient production process and improved product quality and diversification.

**Business-to-Business (B2B) development support**

BOAM supported six B2B development projects involving smallholder farmers or their organisations. An example was the support provided to the Sellale Dairy Cooperative Union and its dairy producer groups aimed at establishing a pilot business hub for dairy farmers. A business hub is a central location where farmers can procure dairy inputs and related services. A business hub starts with the establishment of a cooling facility to bring the collection of quality milk closer to the producers. The facility gradually evolves into a one-stop service centre where milk producers can, in addition to delivering milk, also buy feed and access services such as AI and veterinary services, as well as finance. All in all it requires considerable investments, managerial capacity and high internal and external coordination of efforts, which makes it a risky undertaking for any business. A business hub also needs to have good linkages with various service providers, making sure all parties benefit. BOAM’s support to the Sellale cooperative included facilitating a study visit to dairy hubs in Kenya and the development of a feasibility study and project plan.

**Producer Group Strengthening**

BOAM supported the producer group members of the Sellale Dairy Cooperative Union, Biftu Dairy Cooperative, Hebert Dairy Cooperative and Jimma City General Purpose Dairy Development Cooperative with training on a number of issues including:

- Cattle management;
- The hygienic production, collection and transportation of milk;
- Optimal feeding focused on maximising productivity.

As a result of these trainings the collection of milk increased by 30% and rejection rates went down from 13% to around 5%.
Value Chain Financing
Milk producers need finance to procure improved livestock feed and other inputs needed to increase their productivity. Processors and collection centres require funding to meet their commitments to milk suppliers and to invest in improved processing technologies and storage of surplus dairy products during the fasting season. BOAM provided funding for pilot business innovations to improve milk collection and processing as well as the provision of agricultural inputs and services. Through its Impact Investment Advisory Service facility, BOAM provided support to businesses so they could obtain funding from sources such as banks, investors and equity funds. The facility funded the cost of all due diligence studies - including prospecting screening, conducting business diagnostics, business planning and investment reporting - required by financial institutions to decide whether a company was eligible for financing.

Rut and Hirut Dairy Processing, Engeda Yemane Dairy Farm, Almi Dairy and Frag Agro-Industry are among value chain investors who benefitted from BOAM financial support. In the case of Rut & Hirut, BOAM helped to develop and implement a financing mechanism that enabled the business to enter into medium-scale processing. BOAM support also enabled a number of cooperatives, including Biftu Dairy Cooperative, Hebert Dairy and Rut & Hirut to enhance their business operations in milk procurement and processing. To ensure steady milk supplies, the cooperatives set up credit mechanisms to procure livestock feed and other inputs for their members and suppliers. The costs were deducted from milk payments every fortnight.

Knowledge development and learning
In addition to training various actors in the chain BOAM supported knowledge development and learning through research, pilot innovation projects and facilitating exchanges.

Research
The CG commissioned studies to help find solutions to key bottlenecks to the further development of the livestock sector. The studies focused on practices by smallholder farmers in major Ethiopian milk sheds and covered, among other topics:

- Animal feed (Solomon, 2010);
- Animal fertility / AI (Desalegn, 2010);
- Products (Shimelis, 2010);
- Milk quality issues (Zelalem, 2010; Bhagiel, 2010; Dehinenet, Hiwot and Fisseha, 2011).

The study findings were shared with the valued chain coordination group and made accessible on BOAM’s website.

The knowledge gained from these studies was used in interventions targeted at realising sectoral as well as business development improvements, as described above. Specific interventions undertaken included:

- Further developing the products and services provided to farmers at the business hubs (livestock feed, AI and other veterinary services, laboratory services, access to credit, etc);
- Promotional activities by the Ethiopian Consumer Protection Association;
- Supporting EMDTI to enforce Ethiopian Standards for raw milk;
- Working with innovative processors to develop new dairy products with a longer shelf life.

Pilot innovation projects
The case of business hub development by the Selalle Dairy Cooperative Union described above illustrates BOAM’s innovative approach to supporting business development initiatives. In this case, BOAM provided 80% of the funds required for
the establishment of the hub. The pilot project was then closely monitored at the level of the cooperative union and the dairy producers. The results were shared with other actors in the sector. If the pilot proves successful others may be interested establishing similar business hubs without financial support from BOAM.

BOAM funded two more pilot innovation projects in collaboration with Life Agro and Rut & Hirut. The projects aimed to develop business models for the upgrading of a processing facility for pasteurised milk and cheese. Both business models entailed the establishment of business relationships with associations of smallholder farmers that were formalised through contracts to supply embedded services such as livestock feed. These pilot projects demonstrated good results and offer useful insights for upscaling the business models under similar conditions.

Exchanges
BOAM supported exchanges to enhance skills upgrading and learning within the dairy sector. Two examples are:

- Funding a group of women entrepreneurs to attend a specialised course on product development and marketing in Jerusalem, Israel, in 2010.
- Facilitating the participation of a group of value chain actors at the Eastern and Southern Africa Dairy Association meeting and a trade fair in Kenya. It is during this visit that representatives of the Selalle Dairy Cooperative Union picked up the idea of establishing a dairy business hub.

Service provider development
Whenever possible, BOAM outsourced the provision of advisory services to local service providers. In total ten service providers (including consultants and technical service providers) were contracted. The service providers also benefitted from coaching by BOAM staff while conducting their assignments. The types of tasks undertaken by local service providers included technical advice on production and processing, value chain facilitation activities, conducting impact assessments and facilitation of multi-stakeholder processes. A number of service providers, for example the technical auditors, now have an assured demand for their services from the private sector.

Results
This section highlights specific outputs and outcomes of SNV BOAM Interventions in the dairy value chain whereby:

- Outputs are defined as: “the products and services that result from the completion of activities within a development intervention.”
- Outcomes are defined as: “the intended or achieved short and medium-term effects of an intervention’s outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions that occur between the completion of outputs and the achievement of impact.”

BOAM’s outputs
- Jointly developing project proposals with clients to enable them to access SNV’s sector, pilot and upscaling funds;
- Strengthening of four farmers’ cooperatives;
- Developing of sector studies and pilot business innovation projects;
- Establishing market linkages between smallholder dairy farmers and farmers’ cooperatives and processors. These relationships were based on innovations such as improved milk collection facilities, quality-based payment systems and provision of technical services and inputs;
- Building processors’ capacity through technical advice and on the job training schemes;
- Enhancing linkages and steering of knowledge sharing within the Coordinating Group which created opportunities for B2B relationships.
**BOAM’s outcomes**

- Milk collection increased by 30% and the rejection rate of milk was reduced from 13% to 5% (in some cases this was as low as 1%).
- An impact assessment of the activities of six organisations representing 2,500 smallholder dairy farmers between 2008 and 2010 found evidence of productivity increases amounting to 904 litres per trained dairy farmer per year representing a sales value of 371 US$ per farmer per year (as compared with the control group of non-trained dairy farmers).
- A steering committee was established to prepare for the establishment of the National Dairy Forum, which will eventually evolve into the Ethiopian Dairy Board.
- The number of processors with the capacity to produce diversified dairy products like pasteurised milk, cheese and yoghurt rose to ten.
- There was increased engagement of family labour in milk production as a result of increased income generation opportunities at the household level.
- A more competitive environment emerged in which the two largest processors no longer dominated the dairy market. In 2005 the two processors were responsible for the bulk of dairy processing capacity of 75,000 litres a day. By 2011, their share accounted for less than half of the total capacity of 150,000 litres a day. The other half of the market share was now divided among many smaller processors.

**Conclusion**

SNV BOAM contributed to a doubling of processing capacity in the dairy value chain, from 75,000 litres a day in 2005 to 150,000 litres a day in 2011. The processing capacity of companies that directly benefitted from the BOAM programme amounted to about 35,000 litres a day. BOAM also contributed to a more diversified supply of dairy products with a longer shelf life to overcome the problems related to the high fluctuating demand for milk and milk products due to the fasting culture in Ethiopia. Moreover, efforts were made to improve the supply of good quality milk.

BOAM introduced the dairy business hub concept to combine collection and cooling centre facilities, quality based payments and the provision of critical inputs and services close to the dairy farmers. This has led to increases in the collected milk volumes as well as improved quality.

The business hub concept has the potential for upscaling in many dairy sheds in Ethiopia. With the process of establishing a dairy board currently underway there is potential to create institutions that can continue to coordinate and steer the further development of the dairy value chain.

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Rising demand for fruit in Ethiopia’s urban areas is creating opportunities for smallholder farmers to diversify their livelihood options. However farmers need to produce more and better quality fruits, which requires substantial investments in improved services, technologies and inputs. This chapter describes how BOAM contributed to the development of value chains for highland fruits, pineapple and mango.

Introduction
Ethiopia’s diversified agro-climatic conditions provide a favourable environment for the production of a broad range of temperate and tropical fruits. Approximately 2.6 million smallholder farmers are currently involved in fruit production. However the volumes produced remain very low. The low productivity is attributed to poor agronomic practices, including insufficient application of farm inputs and the absence of quality fruit varieties. In addition a few wholesalers dominate the market. According to the Central Statistical Agency (Government of Ethiopia, 2010) Ethiopia produced about 408,911 tonnes of fruit in the 2009/10 season, of which nearly two-thirds was grown in the Southern Nations Nationalities & Peoples’ Regional State (SNNPRS).

While overall fruit consumption in Ethiopia remains low, dietary habits are changing, especially in major towns. The growing demand, both in terms of volume as well as varieties of fresh and processed fruits, can be seen in the rise of imported fruit. Processed fruit imports increased by 271% between 2005 and 2008 (from 2.1 million to 7.7 million kg), which signifies an average annual growth in consumption of 55% (YONAD, 2011).

Fruit trees provide an additional source of income for smallholder farmers in Ethiopia’s highlands.
**Box A4.1 Overview of BOAM fruit value chains**

<table>
<thead>
<tr>
<th>Value Chain</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>Highland Fruits (mainly apple) value chain (2007-2011)</td>
<td>Chencha and other 7 highland fruit growing woredas near Arbaminch, Hula, Bule &amp; Ezha woredas</td>
</tr>
<tr>
<td>Mango value chain (2007-2011)</td>
<td>Arbaminch Zuria woreda, Mirab Abaya woreda and 8 woredas in Wollaita</td>
</tr>
</tbody>
</table>

Four broad categories of interventions can be distinguished:
1. Sector development
2. Business development
3. Knowledge development and learning
4. Service provider development

**Sector development**

The sector development component aimed to strengthen the sector as a whole and included interventions that served the interests of all actors involved in the value chain. In the case of the fruit chains, the following sector development instruments were most relevant.

1. Facilitating the establishment of Multi-Stakeholder Platforms
2. Generating and disseminating Market Intelligence
3. Promoting Appropriate Technology

**Facilitating the establishment of Multi-Stakeholder Platforms**

For each of the three fruit value chains (mango, apple and pineapple), BOAM facilitated the establishment of a multi-stakeholder forum known as a Coordination Group (CG). The CGs provided a platform where public and private stakeholders could meet on a regular basis to discuss how to further develop the chain. The CGs were instrumental in establishing new partnerships, sharing market intelligence, and disseminating technical knowledge on issues such as improved husbandry practices and disease management.

One of the first activities undertaken by each of the Coordination Groups was to develop a Strategic Intervention Plan (SIP). Initially, the focus of each plan was quite different. The SIP for pineapples contained a very broad range of interventions. The mango and highland fruit value chains adopted a two-pronged approach that simultaneously addressed the provision of quality planting material and services to producers, and the strengthening of farmers’ organisations and linking them to other actors in the chain. Over time, as the SIPs were gradually revised and improved, there was more convergence in the approach taken. The most recent SIPs are characterised by three main types of intervention:

- Establishing market arrangements between wholesale traders or processors and farmers’ organisations;
- Improving the quality of supplies for fresh fruit consumption and processing;
- Expanding into new market segments and products.

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1 A woreda is a local administrative unit that is equivalent to a district.
All in all, BOAM funded 21 critical enabling sector interventions as agreed by the respective value chain stakeholders. These included the coordination of multi-stakeholder platforms and related action groups, strengthening of extension services, development of improved planting material, research and documentation, and support to strategic government offices and research centres.

Although the CGs were an important element in the BOAM approach, a recent study by researchers at the Maastricht School of Management (MSM, 2011) indicated major challenges in the pineapple CG because it was dominated by public sector actors and a few ‘monopolist’ chain actors who were not ready to make the changes needed.

**Generating and disseminating Market Intelligence**

In 2010, BOAM commissioned a market study by a local business consultancy, YONAD Plc, to identify opportunities for upscaling fruit marketing at the local, regional and international level. The study identified critical success factors for each potential market and developed business plan templates for interested investors.

**Promoting Appropriate Technology**

In order to improve the performance of the fruit value chains it is necessary to produce adequate supplies of high quality planting material and provide quality extension services. Moreover, unless farmers have successfully adopted high quality planting material it is generally not feasible for private entrepreneurs to make additional investments in processing facilities and other value-adding activities.

Across all the fruit value chains various initiatives were taken to improve the quality of planting material and seedlings.

*Highland fruits (apples)*: BOAM supported Holetta Agricultural Research Centre to establish a national model nursery to serve as a dependable source of seedling multiplication. Holetta conducted a study to identify apple varieties that perform best in different agro-ecological conditions. Holetta also carried out an assessment of areas that were badly affected by the apple woolly aphid and introduced pest resistant rootstocks.

*Pineapple*: The pineapple CG initiated research to identify the most appropriate variety of pineapple. BOAM subsequently facilitated the production and distribution of close to 400,000 seedlings of the new variety. Public and private facilities for tissue culture production speeded up the availability of improved planting material. Inspired by this success several private entrepreneurs decided to invest in pineapple production.

*Mango*: The technique identified as being most effective in improving the quality of mango is known as ‘top-working’ whereby scions from improved varieties are grafted onto existing mango trees. This process transforms traditional varieties into high quality and high-yielding trees in a much shorter period of time as compared to planting grafted seedlings. BOAM introduced the technique to agriculture staff and selected farmers in the Arbaminch Zuria district and Wolaitta Zone. The trained extension staff and smallholder farmers provided top-working services to 2540 farmers of which 980 are already harvesting the improved mango varieties.

With BOAM support, two local service providers - the Arbaminch Plant Health Clinic and the Arbaminch Zuria Agriculture and Rural Development Office – developed an extension service to improve mango husbandry, including disease and pest management and post-harvest handling. The extension services have been rolled out to 10 cooperatives and 7,000 smallholder farmers.
Business development

Business development is about supporting specific actors within the value chain. In the case of the fruit chains the following business development instruments were most relevant.

1. Private Sector Actor Strengthening
2. Business-to-Business development support
3. Producer Group Strengthening
4. Value Chain Financing

Private Sector Actor Strengthening

BOAM was involved in two private sector initiatives.

The first aimed to encourage large-scale investments in fruit farming in order to scale up fruit production and jump-start the development of new value chains and marketing arrangements. The focus on commercial scale production also aimed to open up opportunities for contract farming arrangements with smallholder farmers. Following a BOAM-supported study to identify suitable land for commercial production, four local companies began to develop pineapple plantations. One company has already received the first delivery of 135,000 tissue culture improved ‘Smooth Cayenne’ pineapple plantlets from Alaje TC, a private tissue culture laboratory.

BOAM further provided support to a small seedling company, KBSPE. The company was established by a local entrepreneur, Ato Kifle, winner of a 15,000 US$ award in a ‘best business plans’ competition organised by the Ministry of Trade and Industry and the World Bank. Kifle applied to BOAM for financial support to pioneer a new seedling production method known as misting. Misting allows one to control the temperature and humidity of the environment for the fast growth of seedlings. It is
also less susceptible to diseases and pests than normal multiplication because the seedlings are grown in a confined area. Misting can reduce the seedling maturity period from 18 to 6 months. With the support provided by BOAM, KBSPE secured mist houses and equipment, imported rootstock and made available the first round of seedlings for farmers. KBSPE delivers properly tagged (rootstock and variety) and fully matured seedlings. The seedlings produced are of the low-chilling variety suitable to many mid-altitude areas. Due to their quality, the seedlings are sold at higher prices (60 ETB) compared to 35-43 ETB charged by other suppliers.

**Business-to-Business (B2B) development support**

BOAM facilitated several B2B relationships between processors and farmer organisations.

BOAM brokered a supply agreement between two fruit and vegetable marketing cooperative unions, Gamo Gofa and Damota (with a total of 3,500 members) and a private processing company, africaJUICE. The agreement concerned the potential supply of 25,000 tonnes of mangoes for processing as fruit concentrate, for which africaJUICE would provide advance payments to the cooperatives to facilitate the collection of fruits from producers. BOAM provided support to africaJUICE as well as the farmers’ unions: the processor received training in quality assurance at the collection centres and farm level, while cooperative staff received training in leadership, business orientation and planning.

During the first harvest season of 2010, farmers supplied a total of 731 tonnes of mangoes worth 913,910 ETB [about 57,000 US$]. This translated into a margin of 109,669 ETB for the farmers’ organisations, the first time that Gamo Gofa FCU had sold such a high quantity of mangoes. The supply agreement was renewed for the 2011 season.

A similar agreement was brokered between the fruit marketing and wholesale company Etfruit and Lante primary cooperative that resulted in the sale of 278 tonnes of bananas for 320,045 ETB (yielding a margin of 41,745 ETB for the cooperative). At the request of the two parties, BOAM provided advice and coaching support on alternative market opportunities, improved customer service and cooperative management skills.

**Table A4.1 Overview of B2B support in the fruit value chains**

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<thead>
<tr>
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<th>Product Total Volume Sold (tonnes)</th>
<th>Total Sales and Margins (ETB) (1 US$ = 16 ETB)</th>
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BOAM also brokered partnerships between Ecological Products of Ethiopia (Ecopia) Plc – a company involved in the processing of organic products – and four fruit cooperatives supplying pineapple, mango and highland fruits. BOAM further provided training in processing and products development. As a result of the partnerships, 16 new processed products were developed, including several jam varieties, dried fruits, wine, juice, compote, tea and syrup. These were branded as ‘Ecopia’, and promoted and marketed locally as well as in the high-end Addis market.

![Jars of Ecopia Plc processed fruit](image)

**Producer Group Strengthening**

BOAM strengthened various producer groups in a number of areas. The 600-member Chencha Highland fruits cooperative received support to develop a business plan. Based on the plan, BOAM provided additional support to enable the cooperative to promote its products, including through a television advertisement. Following the advertising campaign, the cooperative’s office received orders for seedlings worth 1.1 million ETB and increased its revenue from sales of top grade fruit by 200,000 ETB in 2010. Encouraged by the positive outcome the cooperative decided to allocate resources to pay for future campaigns.

With BOAM support the seven highland fruits cooperatives in Chencha woreda - with a total membership of over 3,000 smallholder farmers - formed a taskforce in order to increase their bargaining power and improve quality. The task force developed several by-laws to set quality parameters, price harmonisation and market sharing arrangements. One of the concrete outcomes of the partnership was the implementation of a seedling quality assurance code that enabled the cooperatives and their members to benefit from high prices and establish a reliable and high quality seedling supply system.

BOAM also provided support for the organisational strengthening of two pineapple cooperative unions (Teso and Safa) with a total membership of 900 members. The training covered basic business principles followed by coaching to transform the cooperatives into more business-oriented organisations. With time, the cooperatives entered into negotiations with two fruit wholesalers, ETfruit and ELFORA, for the direct purchase of pineapples from the cooperatives. Another development was the establishment of a marketing outlet in Hawassa Town by Gamo Gofa fruits and vegetables marketing cooperatives union.
Value Chain Financing

BOAM established a financial facility known as the Impact Investment Advisory Service to support businesses to obtain finances from sources such as banks, investors and equity funds. The facility funded the cost of all the due diligence studies - including prospecting, screening, conducting business diagnostics, business planning and investment reporting - required by financial institutions to decide whether a company is eligible for financing. BOAM supported four of the above mentioned large-scale investors to acquire bank loans so they could invest in the cultivation of over 500 hectares of pineapple. BOAM’s support included facilitating discussions with the banks, undertaking a market study and business plan development.

BOAM business innovation funds were applied for business support and the testing of innovations at the smallest scale possible with, for example Ecopia, africaJUICE, KBSPE, and various farmers’ organisations.

Knowledge development and learning

As described above BOAM supported the development of new fruit varieties and processed products, better quality seed material, innovative techniques (top-working, misting), new ways of engaging in B2B relationships and marketing. The CG was the central hub where innovations were shared with all value chain actors in order to encourage replication. The innovations were also incorporated in the extension messages that, through a cascading system of training of trainers (ToT) of extension workers, were disseminated to thousands of farmers.

This approach is well illustrated in the way new apple varieties and husbandry techniques were disseminated in Chencha woreda. Chencha was one of the first localities in Ethiopia to adopt the production of highland fruits. However little had been done to help smallholder farmers to improve their apple husbandry practices. BOAM first convened a meeting of local service providers to discuss how to improve extension services to farmers. This led to the establishment of an extension providers’ forum bringing together representatives of nine cooperatives, the district Agriculture & Rural Development office and NGOs such as the Kale Heywet Church and World Vision. The forum developed a practical ToT course on apple tree management. The trainers subsequently passed on their knowledge to 12,500 smallholder farmers and cooperative members in Chencha woreda. The extension forum also coordinated the import of selected scion varieties for grafting onto apple seedlings and disseminated them to farmers.

Using this approach, Kale Heywet Church trained a further 70 agricultural experts from the different districts. The ToTs were equipped with training manuals and grafting tools. By the end of 2011 the ToTs had carried out one-day training sessions with some 29,000 farmers.

Service provider development

Whenever possible BOAM out-sourced the provision of advisory services to local service providers. In total, nine service providers were contracted (including trainers, management consultants and technical experts). The service providers were also coached by BOAM staff in the course of carrying out their assignments. The types of services provided included conducting studies, developing training manuals and providing training, and facilitating organisational development.

Furthermore, BOAM facilitated training for 15 staff members of the Enterprise Development Agency, which is responsible for strengthening micro and small-scale enterprises. Agency staff then trained operators in Hawassa and Arbaminch towns.
on various aspects of fruit and honey processing. Business development training was also provided to more than 70 ToTs across 19 towns in SNNPRS.

Results
In this final section we list the outputs and outcomes of BOAM interventions in the four fruit value chains whereby:

- **Outputs** are defined as: “the products and services which result from the completion of activities within a development intervention.”
- **Outcomes** are defined as: “the intended or achieved short-term and medium-term effects of an intervention’s outputs, usually requiring the collective effort of partners. Outcomes represent changes in development conditions which occur between the completion of outputs and the achievement of impact.”

**BOAM’s outputs**
- 50,000 smallholder farmers benefitted from BOAM-supported extension work in the fruit value chains;
- Trust was enhanced and linkages establishment between processors/wholesalers and farmers’ organisations;
- Value chain coordination groups and extension forums took ownership for coordinating and steering value chain development and extension;
- 16 cooperatives received support in strategic planning and business management;
- Knowledge and skills on appropriate technologies, inputs and other services tested and brokered between research institutions and producer support organisations;
- 1200 hectares of land earmarked for development by pineapple investors.

**BOAM’s outcomes**
- Smallholder farmers have greater access to high quality planting material. Appropriate technologies were applied for the propagation of various fruits (tissue culture for pineapple, top-working grafting techniques for mangoes and mist propagation for apple seedlings).
- Extension services to improve husbandry in each of the three value chains have been established.
- Apple productivity gains for one 600-member cooperative nearly tripled between 2008 and 2011, from 53 to 142 kg per farmer per year. As a result of increased fruit quality, the fruit fetched higher prices in urban retail markets and income from apple sales rose from 77 to 131 US$ per farmer per year during this period.
- In 2008/2009 four cooperatives reported that engaging in business relationships with wholesalers had resulted in an average increase of annual income of 80 US$ for 800 farmers. This amount is roughly equal to the cost of services provided by BOAM. In other words, the pay-back period for this investment was only one year. Total fresh apple production in Chencha alone increased from 32 tonnes in 2007 to 180 tonnes in 2011.
- Following the signing of a supply contract between africaJUICE and two cooperative unions, the cooperatives delivered 749 tonnes of fresh mangoes in 2010. The cooperatives’ 1,600 members benefitted from an increase in their annual income.
**Conclusion**

After several years of BOAM support the upgrading of three fruit value chains to deliver high quality fresh and processed fruits markets is taking shape. Smallholder farmers and other chain actors have better access to services, inputs, new technologies and market information. Training methods have been developed that can be delivered to farmers at a cost that they can afford. This opens up opportunities for private sector providers of extension services to enter the market.

Furthermore, farmers’ cooperatives have been strengthened to the extent that they can directly engage in business relationship with processors. This has contributed to shortening the value chain and the associated reduction of transaction risks and costs. It has also created incentives for smallholder farmers to invest in productivity and quality improvements that have enhanced their income from fruit production.

**References**


This annex elaborates on the theoretical framework used in a study of BOAM’s outcomes by researchers from CIDIN (Radboud University, the Netherlands) and Hawassa University. The study is presented in Chapter 6.

**Key elements in the theoretical framework**

Figure A5.1 depicts the main components of the theoretical framework that we adopted for the study. A key assumption is that changes in economic performance are to a large extent determined by two processes: upgrading capacity and inclusion. The latter comprises participation (being engaged in commercial transactions) and the conditions of participation. We consider these as proximate causes of economic performance. Furthermore, we identify four main mechanisms through which value chain interventions induce changes in the upgrading capacity and the processes of inclusion, namely: coordination; social structure; entrepreneurial/technical capacities and finance. In the following paragraphs we define these different analytical categories and discuss how they relate to each other.

**Figure A5.1: Upgrading and inclusion in the BOAM value chains**
Upgrading capacity
We consider upgrading capacity as the ability of agents to appropriate rent in an economic transaction through their agency. The literature on global value chains has identified four main types of upgrading processes (Greffti et al, 2001).

a. **Product upgrading** refers to the capacity of agents (firms or individuals) to appropriate rent by means of changing the attribute of a product;

b. **Process upgrading** can be achieved when the transformation of inputs into outputs is carried out in a more efficient way;

c. **Functional upgrading** refers to the capacity to generate and retain rent through the adoption of new functions in the value chain (vertical integration for instance);

d. **Network or "relational” upgrading** is the process of acquiring rent through changes in the relationships with suppliers or costumers.

In the present chapter we introduce a new typology of upgrading: **collective or horizontal upgrading** is the ability to add value through the concerted action of agents in the same node of the value chain, through collective action (for instance by means of the activities of farmers’ groups).

Although these categories are defined as distinctive processes, the way most value chain players appropriate rent is usually through a combination of different types of upgrading mechanisms, which indeed might be very complementary. Upgrading is a dynamic concept, which allows grasping the changing role of agents in value chains. Rents can be added or eroded, depending on the competitive forces and the responses of actors to them. The capacity to upgrade is a key aspect of entrepreneurship and it is expected to determine the prospects to retain or add value to production across time.

In addition, an important contribution of the value chain thinking is the notion that the capacity of an agent to appropriate rent depends not only on its own agency, but also on the upgrading strategies adopted by other players down- or upstream in the chain. The upgrading opportunities of different actors in the chain are hence interconnected. The appropriation of rent by a particular agent may occur at the expense of others along the chain. However, it is also possible that a number, or all the actors involved in a value chain, could simultaneously enhance their ability to generate and retain rent. This is only possible when the total income allocated to the chain is enlarged. From this point of view, it would be possible to talk about ‘value chain upgrading’ when all the agents involved, or a particular set of them, upgrade their capacities to retain rent in a concerted way (creating the possibility of win-win situations).

In Chapter 6 we introduce two new concepts to understand the relationship between the upgrading of different agents along the chain. By ‘concerted upgrading’ we refer to the situation that arises when upstream and downstream agents of the value chain reinforce each other’s upgrading strategies, by means of concerted action. An example of this kind of situation is the improvement of the quality of a particular product facilitated by the provision of training or advisory services from buyers to suppliers. For instance, Ivarsson and Göran Alvästam (2010) report a deliberate strategy of IKEA to engage in concerted upgrading with its suppliers, as a move to reduce costs and ensure products specificities. Bolwig et al (2009) show evidence of concerted upgrading between coffee farmers and a lead firm. The opposite process in which agents diverge in the capacity to appropriate rent can be referred to as ‘divergent upgrading.’ This means that the upgrading of one is achieved at the expense of the other or in other words, while the rent of one agent is enhanced the added value of the other is squeezed. Value chain interventions are based on the assumption that buyers (lead firms for example) will engage in concerted upgrading with ‘poor’ suppliers, contributing through this ‘pulling effect’ to poverty alleviation. Below we explore the conditions that favour processes of concerted upgrading.
Among the agents of a value chain there is a constant interplay between competition and cooperation. Understanding this interplay is essential for addressing the question of how targeted social groups benefit from value chain interventions. The interplay is basically the result of both the agency of actors and external factors, such as the general level of competition in the sector and the relative scarcity of the concerned products. A global context of high inflation in agricultural goods, for instance, may favour the bargaining capacity of upstream agents of the value chain (such as smallholder farmers), since downstream agents might find it difficult to transfer higher prices to consumers.

By participation we refer to the degree of involvement of a particular social group or firm in the economic transactions that take place along a value chain. The conditions under which these stakeholders participate are critical in determining their economic performance. These conditions are related, for instance, to market requirements (standards); the distribution of risks, coordination and transfer of know-how, access to external support and the bargaining power vis a vis other actors in the value chain.

Value chain governance
Value chain governance has to do with the nature of the economic relationship between agents of the chain, and more particularly about the configuration of power that determines basic ‘rules of the game,’ such as entry barriers, market conditions (standards), who participates, how risk is distributed, the transfer of know-how and how activities are aligned (coordination). The degree of coordination is a very important attribute of the governance of value chain relations. Through coordination, extra-market information is transferred between agents, so the attributes of a product or service, or the time and conditions of delivery, can be aligned. The literature of new institutional economics and organisational theory has identified three main categories of governance for economic transactions; hierarchy, hybrid or network structures and markets. Vertically integrated firms are example of hierarchical organisations, while spot markets where transactions between agents are exclusively driven by price considerations are examples of market forms of governance. Between these two extremes, there is a broad spectrum of different types of ‘partnerships’ that have been described as ‘hybrid’ organisational structures.

A very relevant issue for the theory of value chain interventions is the understanding of the conditions under which concerted upgrading is likely to occur. The literature on transaction costs economics has elaborated a robust theoretical background to explain why vertical integration (or hierarchical forms of governance) takes place. This conceptual framework has been supported by abundant empirical evidence (Joskow, 1988). A transaction costs perspective predicts that more hierarchical structures tend to arise in situations where the chance of opportunistic behaviour and the cost of monitoring imperfect contracts is high (in other words, in situations where transaction costs are high).

Opportunistic behavior is more likely when asset specificity is high. Asset specificity refers to assets whose returns are more valuable within the context of a particular exchange than outside it. Relationship-specific investments allow one of the parties to obtain rent from the fact that it could threaten to stop transacting with the other. This potential threat reduces the incentives to undertake relationship-specific investments, which might lead to inefficient outcomes. In his seminal contribution to the theory of organisations, Williamson (1983) has identified four types of asset specificity: site specificity (highly immobile); physical asset (equipment specific to the transaction); human asset (relationship-specific human capital); and dedicated assets (general investments that would leave the supplier with significant excess capacity in case the transaction does not take place). Masten et al. (1991) have added a fifth type, temporal specificity, which has to do with relationship-specific temporal requirements.
In addition to a high degree of asset specificity, the theory of transaction costs economics predicts that more hierarchical governance modes are likely to emerge when the transaction takes place at a high frequency, there are a small number of potential trading partners, and when there is high uncertainty and complexity in the transaction.

We propose that concerted upgrading is likely to arise when there is a high degree of dependence between suppliers and buyers. That is, when transactions are characterised by high switching costs for buyers and low chances of opportunistic behaviour by suppliers. This is expected to occur in hybrid types of governance with a high degree of coordination between the parties. In the continuum between markets and hierarchical structures, this situation corresponds to governance modes close to vertical integration. We argue then that the factors that induce the emergence of concerted upgrading are essentially the same as those that influence the degree of hierarchy in governance structures (asset specificity; number of potential trading partners; frequency of the interaction; degree of uncertainty and complexity). A high degree of coordination is however not enough to ensure concerted upgrading. We argue that three additional factors are necessary: (i) a relative low capacity of suppliers (in relation to the complexity of the transaction); (ii) a high degree of bridging social capital (to reduce the chances of opportunistic behaviour by suppliers) and (iii) low possibilities of functional upgrading by suppliers. The latter has to do with the fact that buyers will be less interested in investing in upgrading activities if they know that this process could help their suppliers become direct competitors in the future. In transactions that require a high level of coordination, buyers might be interested in engaging in concerted upgrading but maintaining information asymmetries, capacities (know-how) and other features that create entry barriers to their particular functional node in the value chain.

Social capital and collective action
When farmers are organised in groups to jointly market their products, concerted upgrading will be only possible if they also engage in collective or horizontal upgrading. Again, from the point of view of transaction costs economics, we can expect that smaller, more homogeneous and groups with a higher degree of bonding social capital are more able to coordinate activities efficiently at the horizontal level (among members). Therefore, it could be argued that buyers would prefer to engage in concerted upgrading with groups that are smaller and hold a higher degree of internal social cohesion. From the point of view of the buyers, an additional advantage of small groups is that they tend to have lower bargaining power. Nonetheless, there is a trade-off between the search for groups that are able to coordinate efficiently at the horizontal level and the transaction costs involved in dealing with many groups as suppliers. The importance of economies of scale for the transaction is therefore a key factor affecting concerted upgrading decisions by buyers.

The academic literature dealing with social capital is wide and extensive. From this large body of literature, we could nevertheless take two heuristic concepts that are relevant for our discussion. Broadly speaking, we could define bonding social capital as social features involved in relations within groups (i.e. among members of a farmers’ group), such a trust, commitment, identity and participation. Bridging social capital refers to a similar set of social features but involved in the linkages between different social groups, such as between suppliers and buyers (O’Brien, 2005). These concepts are very context-dependent (Svensen, 2006; Schuller, 2007). For our analysis, it is also useful to differentiate between the structural and cognitive dimensions of social capital. The structural dimension has to do with the quantity, intensity and frequency of ties and interactions. The cognitive dimension refers to the behavioural framework (attitudes, values) in which these ties and interactions are embedded (Lancee, 2010). The notion of social capital stresses the idea that a network is a social resource, which might render economic returns.
It can be argued that value chain interventions are characterised by a high level of investment in social and human capital, since they basically deal with the creation of linkages and interactions between agents and the strengthening of entrepreneurial capacities. Since investment in structural social capital (establishment of ties) is not sufficient to ensure long term relationships and concerted upgrading, trust building becomes a critical process. Cognitive social capital is the mechanism through which buyers and suppliers are able to consider each other reliable business partners. The establishment of reliable partnerships is probably the most critical success factor of value chain interventions.

**Entrepreneurial and technical capacities**
The transfer of technical capacities is often a key component of value chain coordination. It is therefore expected that such transfer (aiming at the alignment of productive activities and to ensure particular attributes of products) plays a significant role in concerted upgrading. The creation of productive capacities has traditionally been one of the main areas of action of international cooperation. Nonetheless, the enhancement of entrepreneurial capacities has become part of the agenda of global rural development interventions relatively recently.

Entrepreneurship is basically the ability to create new business opportunities and to respond effectively to them. Important components of the entrepreneurship capacity are the ability to innovate, to extend the business network and to establish reliable business partnerships. Concerted upgrading requires collective entrepreneurship capacity, since it involves cooperation among entrepreneurs, as well as processes of joint innovation (among farmers and between suppliers and buyers), willingness to take risks and flexibility to adapt to new situations. Collective entrepreneurship (Cook and Plunkket, 2006) is a subject that has not, however, received the necessary academic attention. We propose the following features as key determinants of collective entrepreneurship: the alignment of incentives; the possibilities of coordination (organisational structure and value chain governance); attitudes towards risk, and; psychological traits and social abilities of managers. Among these variables we think that the incentive structure plays a particularly important role, especially in the context of rural development. The reason is that ill-designed incentives often hamper the motivation of entrepreneurial agents (such as farmers’ groups) to undertake collective endeavours, even though the potential returns (for both the individuals and the group) might be significant.

**Finance**
Access to finance remains a key limiting factor to business development in rural areas. In the agricultural sector, the importance of access to finance is even more significant, given the structural financial constraints that characterise the sector. As part of the emergence of value chain thinking, there has been a rise in the attention paid by practitioners to ‘value chain finance’ (KIT and IIRR, 2010; Miller and Jones, 2010). This is a generic term used to indicate financial arrangements either between agents of the chain or between them and financial organisations, which are built on the established relationships along the chain and the flow of products. Value chain finance is expected to contribute to filling the gap left by the relative scarcity of financial services serving agricultural development and to enable a more efficient management of risk along the chain and within financial organisations. It works as a ‘catalyser,’ enabling innovation, the establishment or new linkages along the chain and the flow of products. Value chain finance is expected to take advantage of the investment in social capital (trust) and the establishment of strong and long-term relationships along the chain. It is thus intimately related to and builds upon the interventions in the fields of value chain governance and social capital. Without access to finance, the scope of the other dimensions of intervention will be very much constrained.
References


KIT and IIRR (2010) Value chain finance: Beyond microfinance to rural entrepreneurs, Royal Tropical Institute, Amsterdam and International Institute of Rural Reconstruction, Nairobi


Annex 6

BOAM partners

s = service provider          b = boam general

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