VALUE CHAIN ANALYSIS FOR DEVELOPING RURAL AGRI-BUSINESS:

Case Studies in Ethiopia

Proceedings of the

Value Chain Seminar

Organized Jointly by:

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FOREWORD

Governance of market institution becomes one of major issues of rural agricultural development in Sub-Saharan Africa since 1990s. Fragmented markets were identified as a major cause of poor performance of market mechanism and agro-business development since late 1990s. Value chain development approaches have been applied since 2000s to connect fragmented markets to link farm products to the market. Concept of value chain can be traced back to vertical integration study done by Oliver E. Williamson in 1960s. Vertical integration, according to him, is a systematic treatment of market failure to control the transaction costs. Recent value chain analysis has been carrying the tradition of this transaction cost approach. On the other hand, value chain development can be also looked at from structural aspect of market institution. Market participants can gain their competitiveness by occupying strategically better positioning within the market structure; therefore, it is crucial to understand the market structure. Competitiveness can also be created by responding to the market signal and requirement, and sound response will enable your products go up a ladder of vertical integration to reach the customer faster than other producers. Value chain development approaches can help stakeholders establish the system to catch the market signal and requirement. Several development organizations in Ethiopia have been promoting rural agri-business development as one of major strategies for poverty reduction since the year 2000. Although progress has been made, they have identified fragmented markets as major constraint in making further progress. Value chain development approaches became popular under these conditions, and development organizations such as United Nations Economic Commission for Africa (UNECA), Food and Agriculture (FAO) East Africa Regional Office, United Nations Industrial Development Organization (UNIDO) East Africa Regional Office, and World Bank East Africa Regional Office, Netherland Development Organization (SNV), USAID, JICA, ECBP/GTZ, Sasakawa Africa Association (SAA). They have applied value chain development into their policy dialogues and development field works. This seminar requested these leading development organizations in value chain development to share their experience and knowledge to each other for further improvement of value chain development. I believe the cases presented here can help practitioners in examining important issues in developing effective value chain approaches for rural agro-industry development.

Toshiro Mado
Director,
Regional Agro-processing Program
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ABSTRACT

This publication contains papers presented at the Seminar on Value Chain Analysis (VCA) which discussed issues how VCA was applied and how it can enhance the impact on the programs of the Government of Ethiopia, and the works of different development organizations in Ethiopia.

*H. E. (Dr.) Aberra Deressa (*Minister, MoARD*)*, in his keynote address, mentioned that the Government of Ethiopia has given due emphasis to the agriculture sector through its policies and strategies such as ADLI, RDPS and PASDEP. Since agricultural commercialization effort involves various institutions like the public, community and the private sector, effective partnership among these stakeholders is very important. Value chain development is becoming very popular as one of the rural development approaches which can provide strong support to the agricultural sector.

In another keynote address by *Mr. Milkias Teklegiorgis,* of the Ministry of Trade and Industry (MoTI), the importance of IVCA (integrated value chain analysis) in rural development programs was emphasized. The Ministry is currently using IVCA particularly in the development of agro-processing, textiles and garment, and leather and leather product industries. The strategy is providing valuable insights into the institutional, infrastructure, human resources, and policy challenges affecting the competitiveness of the respective value chains. It is through the development of well-functioning value chains that increase efficiency in bringing agricultural and industrial goods to consumers, including small-scale producers and poor consumers; and at the same time enhance the competitiveness of our agriculture and industry in both domestic and international markets.

The seminar discussion topics were divided into 5 sessions:

Session 1 - THE CONCEPT OF VALUE CHAIN

The concept of value chain and its relevance to agricultural and industrial sectors of the government of Ethiopia was presented.

Session 2 - GOVERNMENT POLICY/STRATEGY ON AGRICULTURAL COMMERCIALIZATION AND AGRO-INDUSTRY DEVELOPMENT

Existing policies and strategies in support of agri-business by the MoARD and MoTI and their relation to different support programs were presented.

Session 3 - STRATEGIC POSITIONING OF THE VALUE CHAIN

The regional approaches to agricultural development and food security by facilitating linkages between and among the stakeholders in the region and beyond were presented. It also included discussions on financing nutrition-related industry.

Session 4 - CASE STUDIES ON VALUE CHAIN DEVELOPMENT

Experiences on value chain development applications for honey, wheat and coffee) were shared; the benefits, challenges and lessons learned were discussed.

Session 5 – ENHANCING AGRI-BUSINESS LINKAGES

Discussions on improving the vertical and horizontal commodity value chain integration, and trade capacity building to improve the value chain and cluster development.

ACRONYMS/ABBREVIATIONS

ADLI	Agricultural Development Lead Industrialization
AISD	Agricultural Investment Support Directorate
CSA	Central Statistics Agency
EHA	Ethiopia Horticulture Agency
ELTI	Ethiopia Leather Technology Institute
EMDTI	Ethiopia Meat and Dairy Technology Institute
ETTI	Ethiopia Textile Technology Institute,
FDI	Foreign Direct Investment
IMF	International Monitoring Fund
IT	Information Technology
MDG	Millennium Development Goal
NECC	National Export Commodity Coordinating Committee
PASDEP	Plan for Accelerated & Sustainable Development to End Poverty
PA	Peasant Association
SSA	Sub-Sahara Africa
US$	United States Dollar
WTO	World Trade Organization

Other acronyms are given in the respective sections where they are used.

SECTION 1 - OPENING SESSION

- Keynote Address 1:
  His Excellency, (Dr.) ABERRA DERESSA
  State Minister, Ministry of Agriculture and Rural Development (MoARD), Addis Ababa, Ethiopia

- Keynote Address 2:
  MR. MILKIAS TEKLEGIORGIS
  Director, Private Sector Development Program
  Ministry of Trade and Industry (MoTI),
  Addis Ababa, Ethiopia




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Federal Democratic Republic of Ethiopia -Ministry of Agriculture

FDRE
Ministry of
Trade

Keynote Address

by

H. E. (Dr.) Aberra Deressa[1]

Honorable Invited Guests, Speakers and Seminar Participants, Ladies and Gentlemen,

First of all, it is my great pleasure to deliver this opening remark on the seminar entitled Value Chain Development in Ethiopia, jointly organized by the Ministry of Agriculture and Rural Development, UNECA, FAO, JICA and Sasakawa Africa Association.

As is well known, agriculture is the mainstay of the Ethiopian economy. The Government of Ethiopia has given due emphasis to the agriculture sector through its policies and strategies such as ADLI, RDPS and PASDEP. The basic directions of the rural and agriculture-centered development is to bring about rapid and sustained economic growth that guarantee maximum benefits to the majority of the people, minimize dependency on foreign aids and promote the development of market oriented economy of Ethiopia.

The main objective of PASDEP is to accelerate the transformation from subsistence to commercialization of smallholder agriculture through attaining increased productivity and increased share of marketed production and continued support to pro-poor basic agriculture within the framework of the national food security program.

Agriculture although the dominant sector of the economy is constrained by lack of capital, inadequate use of agricultural inputs and technology, lack of information and networking, weak markets and low institutional capacity of farmer organizations and agricultural traders. Of course, natural barriers like climate change, unreliable rainfall and cyclical drought poses critical challenges to agricultural development. Given these challenges, continuous efforts were made by the government and its partners to realize the objectives of the policy issued. The remarkable success that the country achieved in the last five years has been a reflection of these efforts.

[1] **H.E. (Dr.) Aberra Deressa** is State Minister of the Ministry of Agriculture and Rural Development (MoARD), Addis Ababa, Ethiopia.

Distinguished Seminar, Ladies and Gentlemen,

Although commendable efforts have been made towards realizing the envisaged objectives, much has to be done yet, and several complex issues still remain to be resolved regarding ways and extent of reducing rural poverty. This is to emphasize that reversing poverty is a complex process that demands a concerted commitment on the part of the people, research and development actors, policy makers and international communities.

During the PASDEP period, small farmers are expected to play a leading role in agricultural development of the country. To this end, the Government will facilitate appropriate conditions through providing necessary trainings, infrastructure, improving small farmers' access to market and supply of yield-enhancing technologies. Farmers and pastoralists have been encouraged to focus on agricultural activities where they have the best comparative advantage.

Since agricultural commercialization effort involves various institutions like the public, community and the private sector, effective partnership among these stakeholders is very important. As stated in the RDPS the government of Ethiopia through institutions at all levels will do its level best to facilitate and assist the participation of private investors. In this regard, due emphasis is given to streamline the agricultural training system to better satisfy the required expertise of the private sector and aligning smallholders with private sector across the value chain.

Distinguished Seminar Participants, Ladies and Gentlemen,

Value chain development became very popular as one of rural development approaches these days. Vertical integration can make great contributions to bring farm products to the market, and it can promote agricultural commercialization along the value chain, if it is applied appropriately. Value chain analysis is one of market resource management tools that are helpful to coordinate activities of all stakeholders in the sector.

This seminar provides a unique opportunity for participants to share experience and information through discussions and presentations made by development organizations that are directly or indirectly working on value chain development.

I would like to request all participants to use this opportunity, and come out with some recommendation to maximize the usefulness of value chain development approach in order to promote agricultural commercialization and food security in Ethiopia.

Finally, I would like to extend my congratulations to the organizers of this seminar for initiating this timely and pertinent event. Wishing you successful deliberations, I declare this seminar is officially open.

Thank you.

Keynote Address

by

Mr. Milkias Teklegiorgis[2]

Your Excellency, Dr. Aberra Deressa, State Minister, Ministry of Agriculture and Rural Development, Distinguished Representatives of our Development Partners, Invited Guests, Ladies and Gentlemen,

I would like to express my regret that, due to prior commitments, I am unable to be present at this important and timely seminar on value chains, the prime objective of which is promoting "Value Chain Analysis" as a tool to enhance the impact of various actors in rural development.

In recognition of the vital role integrated value chain analysis (IVCA) play in understanding the backward and forward linkages of firms in both the agricultural as well as the industrial sectors of the economy, the Ministry of Trade and Industry of the FDRE is currently implementing this tool, particularly in the development of agro-processing, textiles and garment, and leather and leather product industries.

IVCA provides a framework to analyze specific activities in a chain through which firms can create value and competitive advantage, involving the identification of:

- Value and cost drivers in the chain;
- Strengths and weaknesses; opportunities and threats; and
- Constraints to growth of production and profitability; relationships and coordination mechanisms.

A value chain includes not only individual firms or organization, but also whole supply chains and distributions networks. Enhancing the linkage in the chain of activities gives products more added value than the sum of added values of all activities. In other words, IVCA is synergistic.

This approach enhances the linkages between agricultural production and industrial processing to create value, not only at the firm level but also at national level, and thereby improve the livelihood of the rural farming

[2]**Mr. Milkias Teklegiorgis** is Director, Private Sector Development Program of the Ministry of Trade and Industry (MoTI), Addis Ababa, Ethiopia.

community as well as the urban industrial workforce. It is demand-driven and market-led, linking farmers and manufacturers to the consumer closely.

We recall a previous study, in which IVCA was conducted in six value chains, of which three were related to agricultural and industrial production and marketing. The study provided valuable insights into the institutional, infrastructure, human resources, and policy challenges affecting the competitiveness of the respective value chains, namely:

1. Leather industry
2. Cotton production to garment industry
3. Flower farms
4. Road construction
5. Housing construction
6. Tourism

Indeed, several benefits of IVCA can be cited, but it suffices to mention four that are particularly pertinent to our endeavors to promote the development of micro, small and medium enterprise (SMEs).

1. Facilities focused communication among stakeholders and actors in the value chain, promoting information flow among enterprise, policy makers, and service providers, thus paving the way for effective implementation of public-private partnerships;
2. Assists in taking measures to reform policies and also strengthen support institutions so as to provide integrated solutions to remove constraints and fill gaps in the value chain;
3. Assists to strengthen industry clusters and linkages through production processing and distribution states; and
4. Assists in the allocation of resources, e.g. technology, credit and support services.

It is worth highlighting that IVCA by itself is not a panacea and does not result in the transformation that we need to bring about pro-poor economic development. It is the appropriate implementation of the findings of the analysis that brings results in the form of pro-poor agricultural and industrial development that we desire. It is indeed the cornerstone of our development plan, PASDEP. In other words, it is through the development of well-functioning value chains that we can increase efficiency in bringing agricultural and industrial goods to consumers, including small-scale producers and poor

consumers; and at the same time enhance the competitiveness of our agriculture and industry not only in the domestic market, but also in the international market.

In an increasing globalized world, we have to aim for excellence in the operations of the various value chains of our economy and also marketing of our agricultural and industrial goods, in order to be competitive. It is in this spirit that I hope the thematic topics being presented today in this important seminar will be discussed and awareness is created to promote rural development, in which all actors in the respective value chains play their vital, enabling role in the implementation of IVCA.

At this juncture, I would like to congratulate the Ministry of Agriculture and Rural Development and Sasakawa Global for sponsoring this seminar.

Last but not least, I wish all participants in this seminar every success in their deliberations.

Thank you.

SECTION 2 -
THE CONCEPT OF VALUE CHAIN DEVELOPMENT

- Discussion Paper 1:
  The Integrated Value Chain Analysis

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• The Integrated Value Chain Analysis

by

Nebiyeleul Gessese[3]

1. Introduction

The Integrated Value Chain Analysis (IVCA) is a foremost competitiveness diagnostic tool that captures input, production, administration, distribution, and marketing costs in a multi-part, data-intensive, dynamic software model. Within this flexible framework, GDS helps clients identify time and cost savings as well as policy interventions that will enable the private sector to bring products to market on schedule and at optimal price points. The IVCA:

- Pinpoints, qualifies, and quantifies barriers to competitiveness thus allowing clients to focus on specific actions to improve competitiveness
- Reveals detailed information on multiple levels of value addition leading to targeted areas of improvement to productivity and to identify both institutional and legal barriers to competitiveness
- Benchmarks against regional and global competitors.

Development organizations and governments commonly call us at the project design stage in order to benefit from identification of prioritized issues that GDS provides: critical information in formulating strategies and designing interventions for large scale development programs. GDS also provides the key role of monitoring and evaluation when called in again to oversee implementation and to re-evaluate the value chain to determine program impact over time. The IVCA is implemented once again at the end of a development program to determine the program's effectiveness over the life of the project.

Our clients use the IVCA to assess competitiveness and formulate market and product strategies in a range of sectors including

[3]**Nebiyeleul Gessese** is Senior Industrial & Chemical Engineer, and Environmental Specialist of Global Development Solutions, LLC, Addis Ababa, Ethiopia.

agriculture, food processing, light and heavy manufacturing and even service industries such as tourism. In the decade since GDS developed its IVCA, the company has implemented the methodology more than 185 times covering 65 specific product groups performed in more than 30 different countries. With this breadth and depth of experience, we have built a robust database against which critical factors affecting a sector's competitiveness can be benchmarked.

2. Approach and Methodology

Global Development Solutions, LLC (GDS) uses its proprietary Integrated Value Chain Analysis (IVCA) approach and methodology to determine the significant policy/regulatory and market based distortions inhibiting growth and competitiveness of sectors within countries. The IVCA outcome, coupled with accompanying market research, serves as a basis for assessing the prospects for increased competitiveness and marketability (locally, regionally and/or globally) of the sectors in question. In developing the value chain, GDS employs its channel mapping methodology; a process of tracing a product flow through an entire channel from the point of product conception to the point of consumption. This process highlights the underlying patterns of inputs, constraints and competitive advantages along a particular value chain. It also traces the path of all value adding activities associated with the production of a good and approximates costs involved at each stage. While more traditional methods of product and market analysis isolate operational costs along various stages of production, the IVCA provides far more comprehensive measurement, particularly as it takes into account an entire spectrum of activities and inputs associated with a product. The IVCA provides a detailed breakdown of each stage of production, estimates the cost at each stage, and as well calculates the relative significance of these costs to the overall value of an end product. While the IVCA is typically employed at the product level, output from the analysis provides indicative production and operational cost data and as well identifies regulatory bottlenecks associated with a specific cluster. Regarding the regulatory infrastructure, the IVCA is an ideal tool for

quantifying the cost of administrative distortions that hinder competitiveness of products and industries. Similarly, the IVCA is an effective tool in identifying areas for policy reform.

Consistency in methodology across sectors and countries allows GDS to benchmark one producer against another, as well as to benchmark production activities across regions and countries. Most of the data for the benchmarking stage is a result of Integrated Value Chain Analyses of more than 180 specific product groups that have been undertaken by GDS in nearly 25 countries.

3. Creating a Product Value Chain

The GDS IVCA is a three-phased process involving (1) creating the sector-specific value chain framework, (2) field work and (3) data analysis, benchmarking and report writing. The IVCA can be used for everything from agricultural commodities to complex engineered products and is applicable as well to service industries including tourism. Regardless of the product analyzed, critical to accurately constructing a representative model in terms of an IVCA lies in understanding how to break down and categorize various activities associated with the production of the product. Creating a value chain requires products to be defined and categorized according to various production processes and procedures that capture all value adding activities associated with a final product. Depending on the complexity of the product and the level of detail required for an analysis, the number of categories of activities along a value chain can range from as few as 5 to as many as 25 or more. For example, depending on the situation, a value chain for coffee can have 15 to 20 process categories clustered under three major value adding activities, namely farming, post-harvest, and export processing/administration. A sample of process segmentation along a coffee value chain is presented in Table 1.

Each of the process segmentations represents important value adding activities relevant for tracing a product from its inception until it reaches the final consumer (farm-to-cup). When designing the actual IVCA model, GDS builds in flexibility so that variables in this dynamic model can be adjusted to reflect changes in the market.

4. Interview Process and Validation (Field Work)

A principal challenge for developing credible cluster and product level cost and market analysis in any country is the acute absence of reliable up-to-date baseline data. As a result, much of the raw data required to analyze industries and markets must be compiled through rigorous local research and individual, in-depth, firm-level interviews. Experience shows that only intensive one-on-one interviews yield the detailed data and ancillary information required to formulate a representative value chain analysis.

Table 1 – An example of a Value Chain for Coffee.
Source: Global Solutions, LLC.

FARMING	POST-HARVEST	EXPORT PROCESSING/ ADMINISTRATION
• Land preparation • Fertilizer/manure • Pesticides • Plant maintenance • Harvesting	• Transport to processor • Pulping • Drying • Hulling & grading • Bagging	• Fumigation • Phytosanitary certification • Transportation • Port charges • THC • Customs clearance Shipping • Bank interest • Miscellaneous

Because of this, GDS' value chain methodology does not rely on a survey mechanism since surveys do not yield the types and level of detail required to conduct an effective value chain analysis. Field work involves undertaking interviews at every point along the value chain. GDS's experience working with the private sector in developing countries has allowed it to develop an approach to interviewing in which selected interviewees will be forthcoming with the required information and data. For instance, GDS has found that interviewees who want to access the benchmarking data available from GDS will provide their data in return for the benchmarking data to which they have never had access in the past. The method of interviewing developed by GDS, combined with robust, proprietary

analytical tools, ensures that the results presented are pertinent and accurate. The final analysis is always confirmed and validated by stakeholders in an open forum. To conduct a successful value chain analysis, it is essential to trace a single product or a good from one end of the value chain (raw material) through to the other end of the value chain (finished product). In this context, interviews are conducted and an IVCA model developed with companies, farms and individuals that share a common value chain. Initial interviews are generally conducted with firms in the middle of a value chain; firms that are familiar with both buyers and sellers along the entire chain.

Once a set of issues is identified, the interview process continues until a noticeable pattern emerges in the responses. To ensure data accuracy, emphasis is placed on cross checking all firm-level data against other similar enterprises to help ensure that data used for the value chain analysis mirrors realities facing local enterprises. Specifically, GDS applies a principle called the *'10 percent rule'*. The 10 percent rule reflects the level of deviation in the data set that private sector buyers of goods and services are willing to tolerate. For example, if the cost and usage of a specific input such as fertilizers and chemicals does not deviate more than 10% from one interview to the next, this suggests that the data is reflective of standard practice recognized by the stakeholders in the sector. In this context, the field team continues to interview stakeholders at each level of the value chain until each variable along the value chain complies with the 10 percent rule. Generally, anywhere from 5 to as many as 50 interviews are required for each major segment of the value chain until the 10 percent rule can be achieved. In some instances a lack of consistency prevents the application of the 10 percent rule, i.e. each response varies so widely that no pattern emerges from the interview process. While this is not a frequent occurrence, when this situation arises the field team maps out the variances between each answer to determine whether the question is incorrect or whether the way the question is framed and asked is incorrect. If questions are not being presented in the right manner, the field team will frame the question in a number of different ways to see whether a pattern of answers emerges. In some instances, no

pattern ever emerges, which reflects the lack of know-how and understanding amongst the stakeholders regarding best practice, and that decision making along the value chain is ad hoc. This type of inconsistency in the interview data may arise when new crops or products are introduced into a market where no previous experience can be used to help guide the decision-making process of stakeholders.

5. Conclusion

The GDS Integrated Value Chain Analyses (see Fig. 1 for an example of IVCA) provide the following distinguishing features:

- Due to its depth of analysis, the IVCA is able to precisely pinpoint - quantitatively and qualitatively - the prevailing *market* as well as *policy/regulatory* bottlenecks along a product's (or group of products) entire value chain from its inception to its delivery to market;
- Rather than providing a superficial laundry list of issues prevailing in any given cluster's value chain, the IVCA *prioritizes* the issues with highest impact on competitiveness along a value chain, thus informing policy as well as cluster strategy makers of the most pressing issues to be addressed; and
- As a result of the depth of its global coverage of countries and industries, Global Development Solutions maintains rich, up-to-date industrial and infrastructural cost data against which the business climate can be benchmarked.

Once the analyses are completed for the products chosen, the team, in conjunction with input from stakeholders, will develop feasible solutions to problems identified during the field work phase. Interaction with the stakeholders, also done via interview, is through individual discussions revolving around *'what if'* scenarios in order to understand the reaction of the stakeholders to possible solutions. The scenario exercise is conducted with stakeholders along each part of the value chain, where the field team poses questions about *'what if'* players along a different part of the value chain changed their behavior. For example, if buyers changed their purchasing behavior

to reflect a more open and transparent system, how would sellers react to this change and what would sellers do to help improve efficiency along their portion of the value chain.

A number of specific scenarios are developed and posed to stakeholders along the value chain not only to solicit a response, but also to develop a number of viable solutions where consensus can be formed among key stakeholders along the entire value chain. In this context, the scenario process lays the groundwork for identifying possible market and policy interventions as well as technical assistance measures along the value chain. Empowered with the newly acquired knowledge about the prevailing situations in their respective value chain, stakeholders actively participate and help the design of an action-oriented program to address issues identified. Keeping stakeholders involved in the process, beginning with the initial kick-off workshop and following through subsequent meetings until the final validation workshop, is critical to ensuring the quality of the IVCA findings.

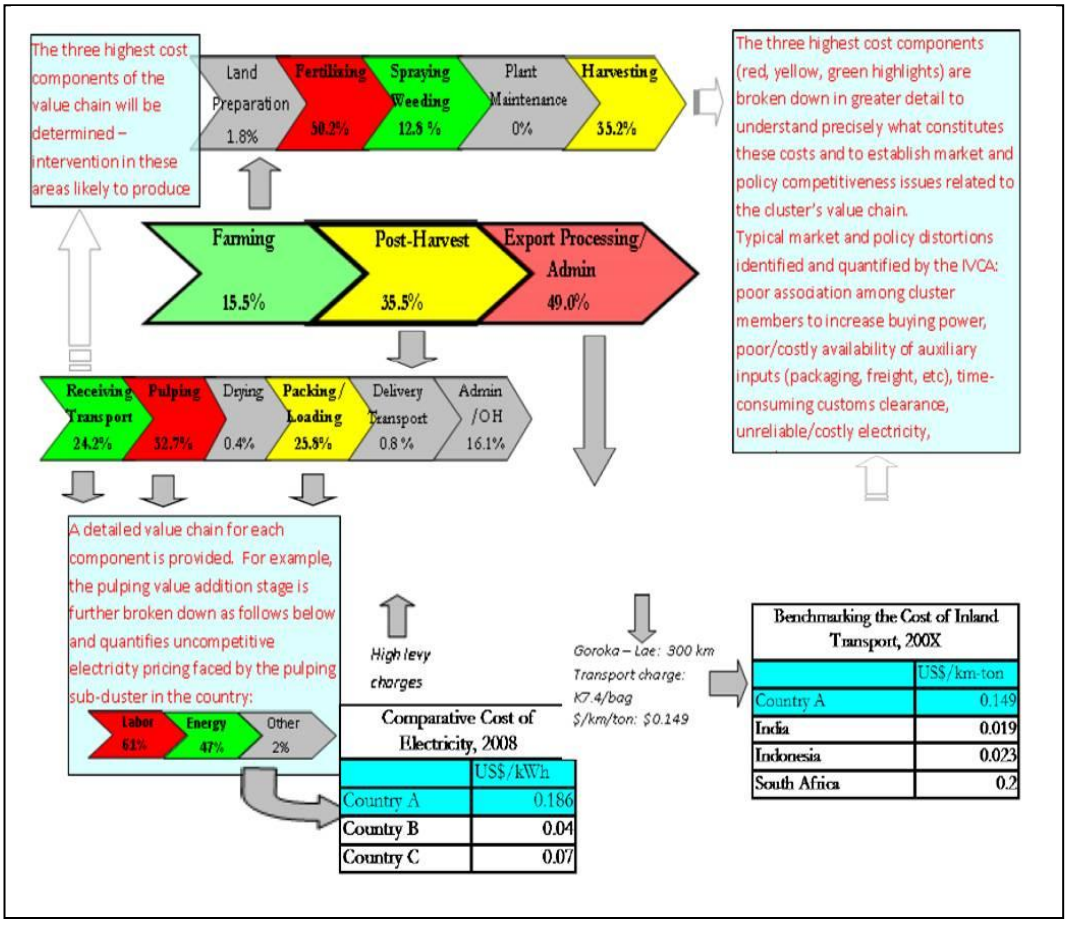

Fig. 1 – An IVCA for Exportable Coffee Beans

SECTION 3 -
GOVERNMENT POLICY/STRATEGY ON AGRICULTURAL COMMERCIALIZATION AND AGRO-INDUSTRY DEVELOPMENT

- Discussion Paper 1:
  Prospects of Agricultural Commercialization in Ethiopia
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  Director, Agricultural Investment Support Directorate of the Ministry of Agriculture and Rural Development (MoARD), Addis Ababa, Ethiopia

- Discussion Paper 2:
  Performance and Development Potential of Agro-processing Industries in Ethiopia
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● Prospects of Agricultural Commercialization in Ethiopia

by

Esayas Kebede[4]

1. Summary

The Federal Democratic Republic of Ethiopian government is implementing clear and wide policies and strategies that are believed to translate into action the attainment of rapid development and building of a democratic system with the following objectives - mainly a broad spectrum of the Ethiopian people are beneficiaries, eliminated dependence on food aid is eliminated; and, rapid economic growth is assured. Agriculture plays a leading role in the country's overall economic development. The government is considers agriculture as the pillar of the economy that provides the population with employment, foreign exchange earnings, source of raw materials for industry and source of food for the population and believes it determine the pace and direction of industrial development through financing the industrial sector and generating effective demand for industrial outputs. To increase productivity and efficiency of agricultural sector agricultural *value chains* are vital for the success of rural economies and to improve the incomes of rural populations and the commercial farms as well.

The government focuses to attain *food security* and earning of foreign currency through expanding medium and large commercial farms in the country in addition to the best practice scaling up program. The agricultural policy also recognizes the decisive role private capital plays in the development of large-scale modern farming. To realize this, the government has created enabling conditions to encourage both domestic and foreign private investment. To accelerating the economy development the government has been heavily investing on infrastructure, rural finance, research, access to improved technology and information, market development, agricultural extension services, promotion of cooperatives, education, and resettlement programs.

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The government gives considerable emphasis to the private sector to realizing *commercial agricultural farms*; therefore now the government has established AISD, EMDTI, EHA, ETTI, ELTI and in addition to these institution the NECC have evaluated and given direction for the export-oriented agricultural and industry commodity development. In the country export volume of primary agricultural produces and value is increasing through time even though at the global level faces new challenges, therefore to attain food security and foreign earning through commercialization, *value chains concept* are a key framework for understanding how a product moves from the producer to the customer. The value chain perspective provides an important means to understand the business-business relationships, mechanisms for increasing efficiency, and ways to enable business to increase productivity and add value.

2. Background

The Ethiopian Government has been implementing clear and wide policies and strategies that are believed to translate into action the attainment of rapid development and building of a democratic system with the following objectives - mainly a broad spectrum of the Ethiopian people are beneficiaries, eliminated dependence on food aid is eliminated; and, rapid economic growth is assured.

The country's economy-wide strategy, the Agriculture Development-Led Industrialization (ADLI), is a sector wide strategy for agriculture and rural centred development (in RDPS). More specifically, ADLI is based on the following underlying principles:

- Labour intensive development
- Proper utilization of agricultural land
- A foot on the ground
- Different agro-ecological zones based agricultural development
- An integrated development path.

Agriculture plays a leading role in the country's overall economic development. The government's policy considers agriculture as the pillar of the economy that provides the population with employment, foreign exchange earnings, source of raw materials for industry and source of food for the population. In particular,

agriculture is believed to determine the pace and direction of industrial development -.through financing the industrial sector and generating effective demand for industrial outputs. In the industry development sector itself, the export-oriented principle plays a leading role.

Since 1992, the Government has successfully implemented a series of reform programs in order to transform the economy from command to market economy, speed up the integration of the economy into the world economy and encourage the wider participation of the private sector in the development of the national economy. As a result, a great deal has been achieved in moving from a highly centralized economy to a more liberal market economy. Particularly, the economy has shown growth at annual average rate of two digits in the last four years.

The government's development policies and strategies particularly recognize the need for transforming the agriculture sector from its low-productivity status and subsistence production orientation to a high productivity and market-oriented production.

3. Approach

The paper is prepared through the following approaches

- Reviewing of agricultural and investment policies, strategies and investment programs
- Assessing existing investment institutions and reviewing the existing condition through analyzing their reports
- Interviewing the key informants in addition to the collecting and reviewing of secondary data since the past government

4. Commercialization Can Integrate Producers in the Value Chain

Value chain refers to the full range of activities required to bring a product or service through the different phases of production, including physical transformation, the input of various producer services, and response to consumer demand - delivery to final consumers.

The productivity and efficiency of agricultural value chains are vital for the success of rural economies and to improve the incomes of rural populations and the commercial farms as well.

Commercial agriculture needs to be re-defined in the light of recent developments. Tamil Nadu Agricultural University, Vice-Chancellor Dr. C. Ramaswamy has said "*anything produced for the market may not necessarily qualify as commercial agriculture, whereas, high level of farm production with plenty of marketable surplus should be the basis for it*." As of his discussion:-

- Conservation of natural resources is essential, both sustainable agriculture and commercial agriculture have to co-exist in a balanced manner.
- It is a move from subsistence agriculture to sustainable, commercial and market-driven agriculture.
- Some of the important factors that are shaping today's agriculture are market forces, rising labor scarcity, shifting cropping systems, micro irrigation, new inputs like liquid fertilizers, bio-fuel crops, entry of multinationals in the agriculture retail sector, growing water scarcity and rising demand for agricultural land.
- Highlighting the strategies to be followed for commercialization of agriculture, priority should be given to vertical integration: "This requires integration of pre-production, production and post-production for which new institutional arrangements are needed. As market intelligence and insurance schemes will play a vital role in vertical integration, these will help reduce risk and uncertainty for farmers."
- He further suggested that credit support, group marketing, consolidation of land holdings, public-private partnerships, emergence and growth of commodity exchanges and future markets as favorable factors that would enhance commercialization of farming.

  Commercial agriculture refers to the production of crops for sale, crops intended for widespread distribution to wholesalers or retail outlets (e.g.

supermarkets), and any non-food crops such as cotton and tobacco. Commercial agriculture includes livestock production and livestock feed. Commercial agriculture does not include crops grown for household consumption (e.g. backyard garden or from a vegetable garden or a few fruit trees: reliance mainly on natural resource utilization that is common to subsistence and diversified agriculture).

Commercial farming is a progression from diversified (sometimes called mixed) farming, when the farmer's intention is to produce goods for sale primarily for widespread consumption by others. The farmer may acquire a sufficiently large amount of arable land and/or sufficiently advanced technology (such as improved seeds, fertilizers, pesticides, etc.). At this point, it may become more profitable for the farmer to specialize and focus on one or a few particular crops due to economies of scale. This may be further augmented by higher levels of technology that might significantly reduce the risk of poor harvests (Wikipedia).

- However, producers such as small-scale farmers often have not benefitted adequately from the returns on the commodities they produce; the highest returns increasingly concentrated in the latter stages of the value chain. Therefore, several efforts are needed to achieve a more equitable distribution for actors in the chain. There are different ways to shift more of the profits to the people who actually produce the commodities. These include: improving market entry, improving the functioning of domestic markets, helping producers to produce market-oriented and high quality products and enabling producers to carry out more of the value-addition themselves. The government can particularly play role in: (1) creating an environment whereby local markets can develop; (2) providing incentives for market formation (may be through grants, low interest loans or through favorable treatment on taxes and export duties for transaction of certain commodities); (3) providing market information; better infrastructure and (4) funding for research and development that can help this sector.
- One of the means to address these challenges is promoting commercialization and enabling small producers or enterprises to grow and become competitive economic ventures that have clear

and well-developed strategies to target and access markets that offer attractive returns.

- The main and frequently mentioned challenges and constraints of the Ethiopian agriculture have to do with issues related to supply and demand constraints; commercialization of agricultural production can be one of the solutions to address these constraints.
- Two important aspects of commercial transformation of Ethiopia's agriculture can be considered: commercialization of small-scale agriculture through market-led production and commercialization through the emergence and expansion of large and modern agricultural enterprises. The second category are emerging and expanding especially with investment in horticulture, coffee, cotton, tea, sesame, bio-fuel, etc. Small-scale farmers have also been increasingly become market-oriented producers through government's encouragement.
- In this regard, the government can play role by setting standards, and by building the capacity of producers to comply with standards, and produce market-oriented quality products with high demand.
- Cognizant of this reality, creating means and mechanisms that would enable farmers to benefit from market integration is one of the top priorities of the government. Commercialization of smallholder agriculture, which effectively links farmers to markets as well as to the world economy, is one of the core ingredients and element of ADLI.
- The agricultural policy also recognizes the decisive role private capital plays in the development of large-scale modern farming. To realize this, the government has created enabling conditions to encourage both domestic and foreign private investment.
- The government's policy focuses on expanding medium and large commercial farms in the lowlands without displacing settled farmers. It also affirms that unutilized land in the vicinity of smallholders (even in the highlands) can be leased and used for modern farming as long as it does not displace small farmers.

- To lead the policy and strategy to success, the Ethiopian government has been heavily investing on infrastructure, rural finance, research, access to improved technology and information, market development, agricultural extension services, promotion of cooperatives, education, and resettlement programs.
- More importantly, the main objective of PASDEP is to accelerate the transformation from subsistence to commercialization of smallholder agriculture through attaining increased productivity and increased share of marketed production and continued support to pro-poor basic agriculture within the framework of the national food security program.
- In all regions, the emphasis will be on ensuring everything possible is in place to facilitate the take-off of commercial opportunities; the transformation of the smallholder farmer is to be achieved through area-based specialization as well as diversification of agricultural commodities in addition to capital commercialization.

5. Implementation of Commercial Farming in Ethiopia

- The government recognizes the private sector as engine of economic development. This is clearly outlined in the Ethiopian Industrial Development Strategy. The role of the government in creating a conducive environment for private sector participation in investment is manifested in the following areas:
  a) Creating public-private partnership forum,
  b) Ensuring stable macro-economic environment,
  c) Introducing modern and development supporting financial sector,
  d) Provision of reliable infrastructure, and
  e) Provision of institutional support.
- For the last five years (2003-2008), the government is allocating, on average, 15% of the total budget for the agricultural sector;

therefore, the annual agricultural sector growth comes to 13% (CAADP 2009).

- Specifically on FDI for the last five years, the increment of licensed FDI is around 42.14% while the total domestic and foreign investor increment is 55% (EIA 2009).

  When the EPRDF coming to position 58 inefficient state farms under 9 government-owned corporations and had around 203,000 hectares of land; and the government has planned to privatize the public owned farms and manufacturing industries but the challenge is the commitment, capacity of the private investors to restructure in order to increase the efficiency, productivity, and competitiveness of the primary and manufactured products.

  The small-scale farmers are getting more benefit from their small plots through modern technologies and capacity building; in the long run it is envisaged that they will become local investors on the agricultural sector. Generally, in the last three years at the federal level, more than 1,635 small-scale farmers (Table 2) registered high production and productivity on the parcel of their own land by producing cereal and high value crops and by using modern and improved technologies therefore the government acknowledged and gave awards for these farmers.

Table 2 – Number of small-scale farmers who reported high production and awarded by the government

YEAR	NUMBER OF FARMERS		TOTAL
	FEMALE	MALE	
2007	25	500	525
2008	26	508	534
2009	90	486	576

- On the other hand, out-growers and contractual farming is one of the means of transformation of traditional farming system to modern agriculture farming system/commercialization.

- The government has prepared and delineated a million hectare of land for the foreign and domestic investors which is suitable to establish commercial farm on the other hand many thousands hectare of land prepared and delineated for to establish industry village.
- According to CSA Statistical Abstract, there are 370 food-processing establishments in 2004/05, out of which 46 (12.4%) are public and 324 (87.6%) are privately owned enterprises. Nearly 79% of the agro-based food processing enterprises are related to cereals processing (milling, bakery, animal feeds plants and extruded products).
- The agricultural based food processing industries play vital role in terms of contribution to employment, output, value addition and investment. In this context, the food processing sub-sector has accommodated 31,693 employees in 2004/05, which is about 29% of the total employment engaged in manufacturing industries. In addition to the above food processing industries, around 8 old and new modern abattoirs are established to process meat for export.
- On the other hand, 22 leather factories in the country have a large potential to produce leather products from sheep, goat and cattle hides and skin respectively.
- Nowadays, there are 11 ginneries, 2 spinning and 6 medium and large-scale textile factories that have a potential to utilize 48,000 tons of lint cotton to produce different types and quality of textiles.
- The government gives considerable emphasis to commercial agricultural farms; therefore, now the government has established AISD, EMDTI, EHA, ETTI, ELTI. In addition to these institutions, the NECC have evaluated and given direction for the export-oriented agricultural and industry commodity development.
- As of April 2009, one thousand three hundred eleven (1,311) foreign companies with a capital of 84.7 billion birr (US$6.83 billion) sole investment, or joint venture with domestic

companies are licensed and registered to involve in the agriculture investment sector. Out of which 185 are operating and contributing to the export economic growth of the country, and have created 63,741 permanent and temporary jobs. FDI contributes to: foreign currency and/or capital formation transfer of modern and improved technologies, foreign market access, promote commercialization and modernization of agriculture and job creation.

In Ethiopia the export volume of primary agricultural produces and value is increasing through time (Fig. 2) even though at the global level faces new challenges, including the need to increase the quality and sophistication of quality standard commodities and services, for new regulatory reforms to take full advantage of international markets.

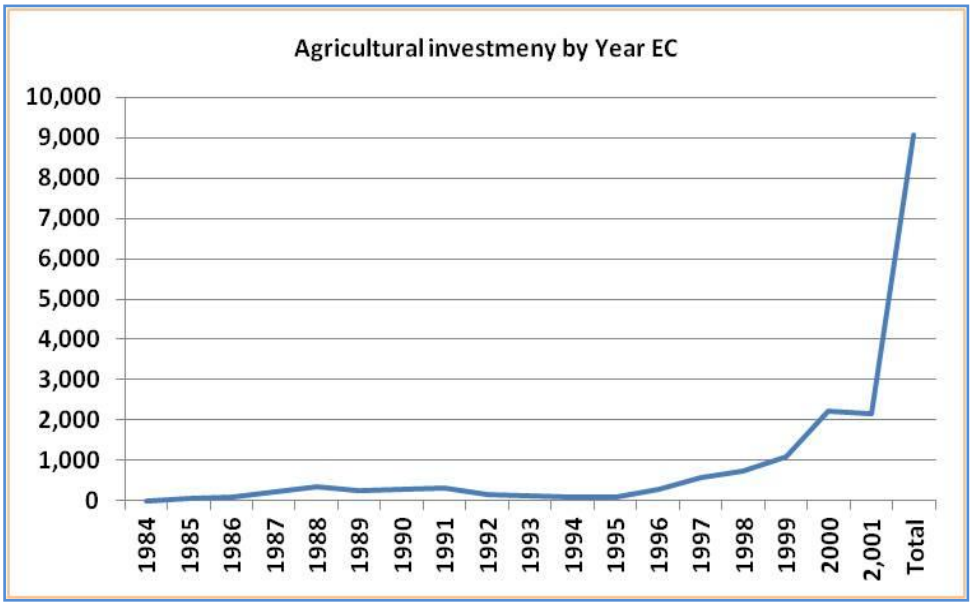

Fig. 2 – Agricultural investment by year, Ethiopia Calendar (EC).
Source: EIA, 2009

6. Major Constraints and Challenges to Commercialization of Ethiopian Agriculture

- Africa's exports remain dominated by primary commodities, and the share of agriculture in SA's total exports has declined sharply in the last 40 years (Fig. 3). Only a few SSA countries have achieved significant diversification of their exports.
- The biggest constraints is successful vertical diversification in to processing of primary commodities such as textile, oil, leather etc production in developing countries is the challenge of securing a reliable supply of raw material from domestic sources or from commercial farms.
- Local processors cannot compete with export market prices of raw agricultural produces/primary produces especially when they are at the early stage of development and have not yet earned the dynamic return of processing/manufacturing. The challenges are:
  - Low productivity and lack of competitiveness
  - Low quality products

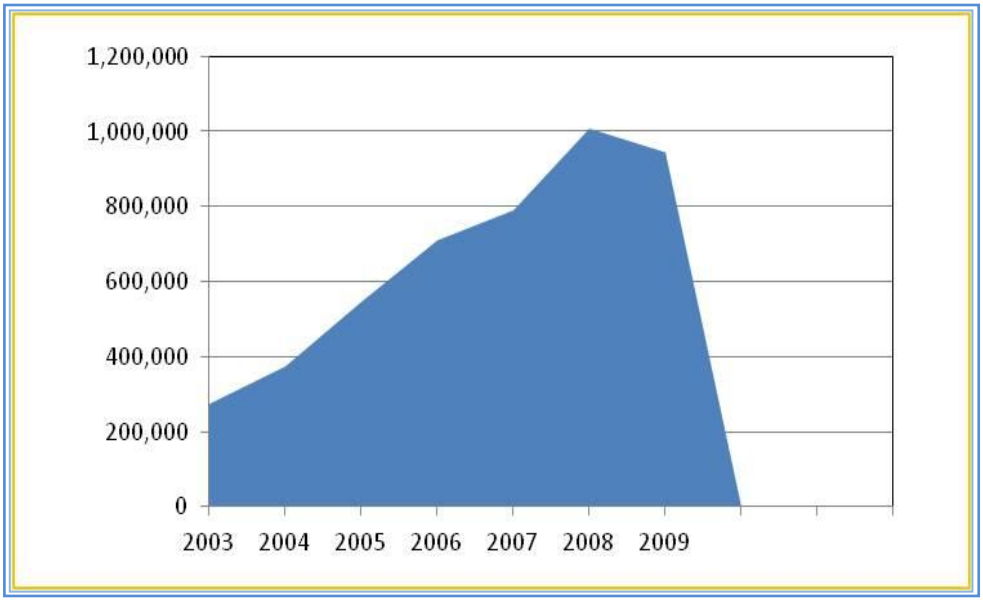

Fig. 3 – Agricultural produce exports and its value in US Dollars. (Source: 2009 MoARD Report)

- Small in volume and low values of exports

  For these challenges the major reasons are:

  - Lack of appropriate and modern technologies
  - Availability and accessibility of inputs and credit facility
  - Lack of infrastructure (roads, electricity, IT, Health, Education)
  - Lack of skilled man power and organization set up, and
  - Availability of raw material

  Despite the successes of many exporters in accessing the global markets, the risk being trapped by producing low-skill, low-value products and services, is high. Without further improvements to their business environments and the competitiveness of their export commodities, they will continue to struggle to obtain a significant value-added share in global trade.

- To increase the competitiveness of a product on the global market is to produce more efficiently. Increases in efficiency are captured by measuring the agriculture value added per worker, which is also a proxy for agricultural productivity. For African producers to capture more value and increase exports, they must increase productivity levels. SSA's agriculture productivity measure of USD 343 value added per worker (2004) is the world's lowest. In comparison, world agricultural productivity averages three times SSA at US$919, and Latin America is nearly 10 times more productive at USD 3,183 per worker as of IMF, Direction of Trade Statistics (Fig. 4).

7. Concluding Remarks

Value chains are a key framework for understanding how a product moves from the producer to the customer. The value chain perspective provides an important means to understand the business-business relationships, mechanisms for increasing efficiency, and ways to enable business to increase productivity and add value. It provides a reference point for improvements in services and the business environment. It is a vehicle for pro-poor

initiatives and for linking small businesses with the market. Therefore, it shall provide policy-makers, business leaders, and members of the development community, researchers, and practitioners with methods and approaches that can be used to promote the development of value chains in the country to attain food security and earning of foreign currency.

The government shall assure and give emphasis for local community participation and benefits, and environmental protection while capital commercialization undertaken on the large-scale commercial farm development.

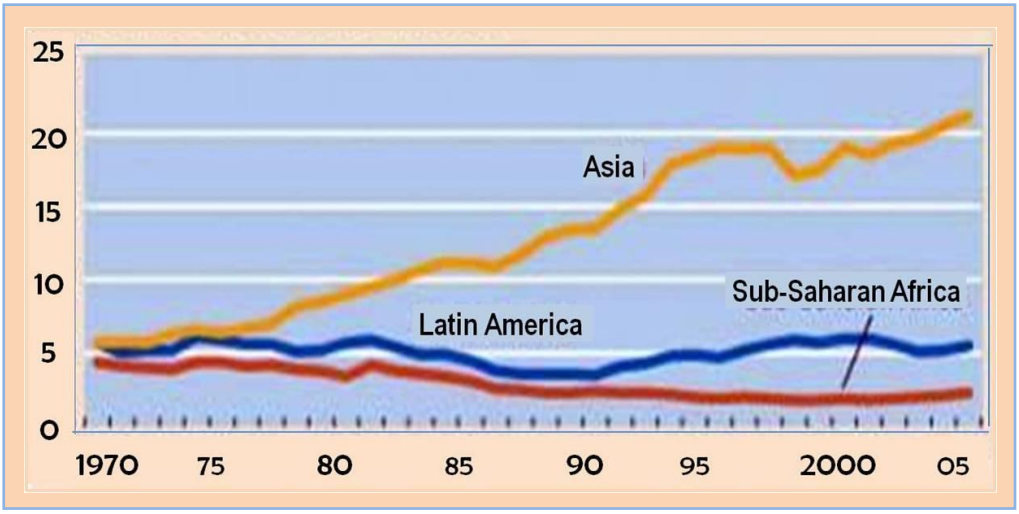

Fig. 4 – Share of world trade by region. Source: IMF, Direction of Trade Statistics

• Performance and Development Potential of Agro-processing Industries in Ethiopia

by

Dendena Chemeda[5]

THIS IS AN EXCERPT FROM THE POWERPOINT PRESENTATION OF MR. CHEMEDA.

1. The Industrial Development Strategy

1) Principles of the Industrial Development Strategy

- Recognizes the private sector as engine of growth
- Agricultural growth and export led industrial development emphasizes on:
  - Labor-intensive technology
  - Utilization of local raw materials
- Recognizes that FDI (Foreign Direct Investment) would play active role in industrial development
- Need for state involvement in development support
- Strong participation of the people

2) The Priority Areas of the Strategy

- Textile and garment manufacturing
- Leather and leather products
- Agro-processing
- Micro and small scale industries
- Construction

2. Roles of Agro-processing Industries

- Production of consumable basic products
- Creation of employment
- Creation of economic linkage
- Generation of foreign exchange
- Saving of foreign exchanges
- Utilization of local raw materials

[5]**Dendena Chemeda** is Head of the Agro-processing Industry Development Department, Ministry of Trade and Industry (MoTI), Addis Ababa, Ethiopia.

3. General Classification of Agro-processing

- Food Industries
- Beverage industries
- Rubber processing
- Fiber making
- Pulp and paper
- Wood products
- Tobacco
- Sugar and associated/by-products

4. Type and Number of Large- and Medium-Scale Food and Beverage-based Agro-Industries (2005/06)

Table 3 – Type and number of large and medium scale food and beverage-based agro-industries in 2005 and 2006

	INDUSTRIAL GROUP	NO.
1	Meat fruits and vegetables	8
2	Edible oils and fats	33
3	Dairy	3
4	Flour mills	90
5	Animal feed	5
6	Bakery	160
7	Sugar & confectionery	14
8	Macaroni and pasta	6
9	Biscuit and other food products	16
10	Beverage (brewery, soft drinks, alcohol, mineral water)	38
	TOTAL	373

5. Performance of the Agro-industry Sector

1) Value Addition (Fig. 5)

- Currently more than 40% of the total value added from manufacture is from food and beverage sector
- The key industries in this respect are beverage and sugar industries with 65% of the value added in the food and beverages. The cereals industries contribute 26%

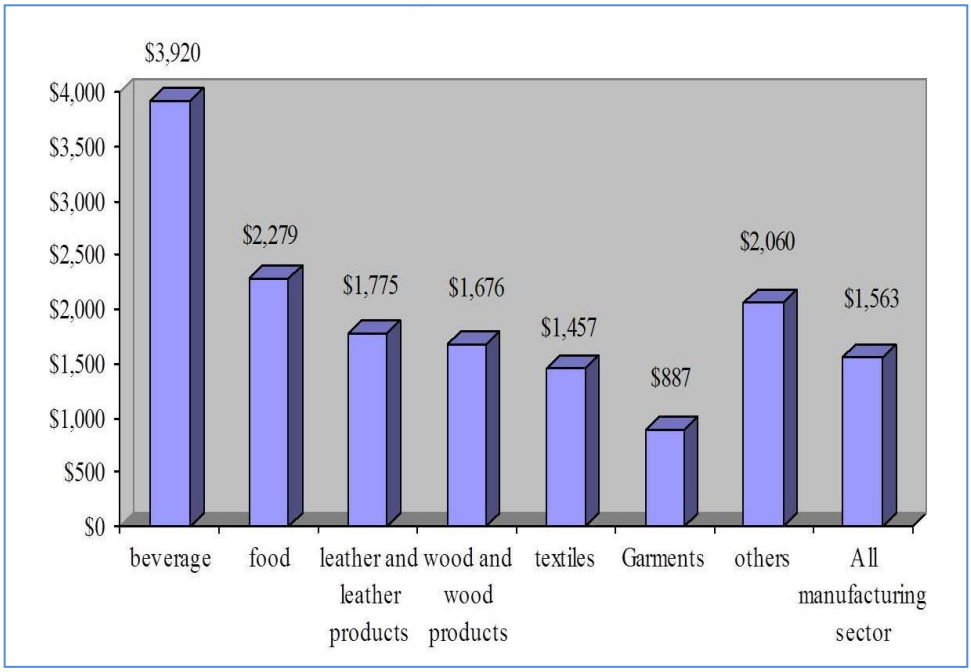

Fig. 5 – Productivity of the different agro-industries (2007).

- The production value that is contributed by small scale food processing enterprises, accounts for about US$ 34 million (2006)
- Edible oils and bakeries are the dominant the category and accounted for 91% of the value of production
- In addition, grain milling business contributed a gross value product (GVP) of US$57 million during the same period

- Productivity, as measured by value added per worker, the food and beverages sector has more than US$2,300 compared to the manufacturing sample averages of US$1,560. High productivity sectors are also generating the most jobs

2) Capacity Utilization (2007)

- Industry average: 64.2%
- Sugar industry group with better capacity, utilization – sugar (99.7%)
- Winery (101%), malt and liquor (85%)
- Least capacity utilization – meat, fruit and vegetable (19%)
- Flour mills (40.4%), macaroni and spaghetti (42%)
- Edible oil and fats (53%)

Contributions of Agro-industries (2008/2009)

- Gross value of production (GVP): 16.8 Billion Birr
- Employment created: 102,781 employed
- Export generated USD 51.7 Million (2001 EFY)

3) Employment Generation by the Agro-industries (Fig.6)

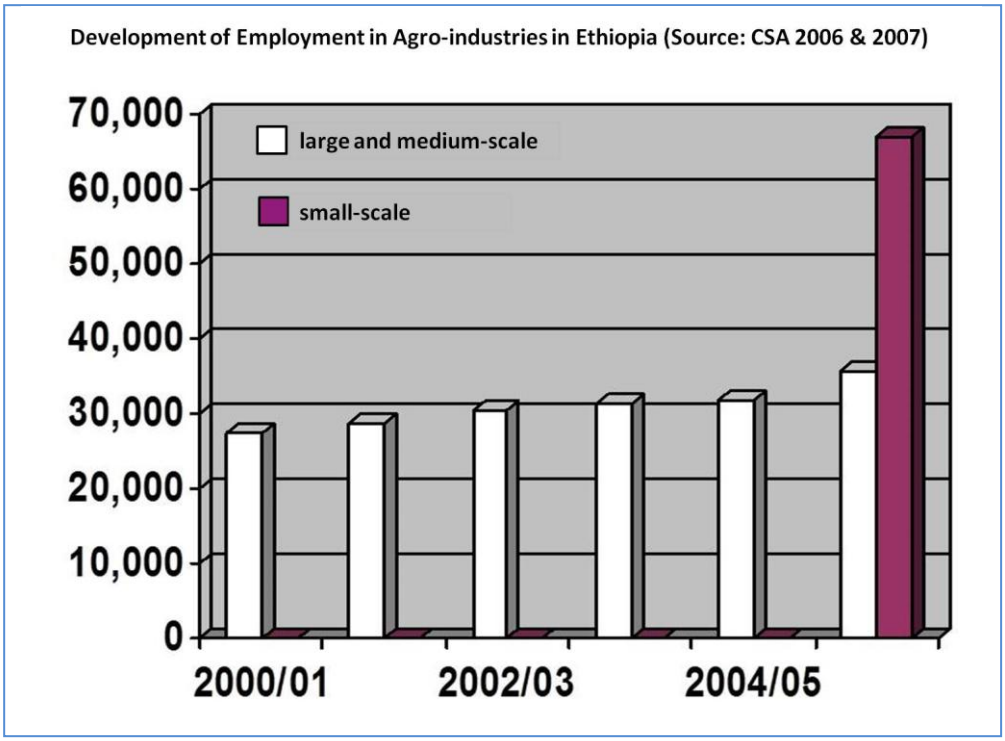

Fig. 6 – Development of employment in Agro-industries in Ethiopia. Source: CSA 2006 & 2007

The agro-industrial sector is an important source of waged employment with more than 50% of employment in the overall manufacturing sector. The food and beverages sector employed more than 35,660 in 2006 which is more than 30% of the total employment of the manufacturing industries.

4) Export Performance (Table 4)

Table 4 – Value of Exported Agricultural Products (in Thousand USD).

ITEM	1997	1998	1999	2000
Sugar	14,600	8,145	15,836	16,015
Meat	25,600	18,323	15,491	20,949
Tea	1,800	837	913	1,219
Wax	1,200	1,516	1825	1,278
Honey		79	1,179	1,847
Molasses		984	1,718	2,360
Ethanol		1,598	613	-
Oleoresin		1,207	568	68.6
Thahina		?	1,183	3516
Canned Fruits & Vegetables		30	87	78.3
Beverages		328	613	579.4
Others		2,969	3,741	3,797
TOTAL	**34,570**	**36,115**	**43,767**	**51,702**

6. Conducive Business Environment for Agro-processing

- Free market economic policy
- Agricultural and export led industrialization development strategy
- Abundant and low cost labour availability
- Big population size, market, source of labour
- Friendly investment law

7. Potential Source of Raw Materials for Agro-processing

A big portion of Ethiopia's economy is contributed by agriculture. Ethiopia is endowed with natural resources and has a big potential to develop its agricultural sector which could supply the raw materials required by various agro-processing industries.

- **Arable land** - about 51 million hectares (45% of the total area of the country)
- **Cultivated area-** only about 20% of the available land
- **Irrigable area**- about 10 million hectares of which only about 3% is irrigated
- **Major Food Crops and Potential Agro-processing Enterprises**
  - ***Food crops:*** Cereals and pulses include Wheat, Maize, Beans, Peas, Soya beans, Haricot beans, Chickpea, Lentils, etc.
  - ***Oil crops:*** Sesame, Niger seed, Linseed, Groundnuts, Sunflower, Soya beans ,Cotton seed
  - ***Fruits and vegetables*:** Oranges, Mangos, Banana, Pineapple, Tomato, Potato, Green beans, etc.
  - ***Spices:*** Pepper, Ginger Turmeric, Garlic
  - ***Beverage:*** Coffee, Tea, Grape, Beer, Barely, Honey, etc
- ***Meat and Dairy:*** About 41 million cattle, 25 million sheep, 23 million goats, 38 million poultry
- ***Sugar and related products:*** Vast suitable land, labour, Water for irrigation, domestic and foreign demand
- ***Apiculture*** (Honey and Beeswax**):** About 30,000 tons of honey is produced per annum and there is big potential to increase the production. Ethiopia is one of the world's leading exporter of beeswax

8. Investment Opportunities for Food Processing

- Flour, pasta, macaroni, bakery, biscuits
- Frozen, chilled, vacuum-packed and canned meat
- Refined edible oil, processed oil seeds
- Oleoresin and processed dry spices

- Pasteurized milk, butter and cheese
- Canned and packed liquid and dried fruits and vegetables
- Animal feed production
- Roasted and ground coffee
- Tea processing and packing
- Palm oil

9. Incentives for Agro-processing Industries

1) Investment Incentives

- Exemption from the payment of customs duty and other taxes on capital goods and construction materials
- Spareparts valued not more than 15% of the total value of capital goods for projects are duty-free
- Exemption from payment of income tax for 2-5 years depending on the type and location of the project

2) Export Incentives for processed products

- Free from sales and value added taxes
- Free from all forms of price control by the NBE
- Duty drawback and voucher scheme
- Bounded manufacturing warehouse scheme
- Export credit guarantee
- Retention and utilization of export earnings and inward remittance

3) Market outlets for agro-processing industries

- Domestic market (about 74 million people)
- COMESA market with about 400 million people of 20 member states
- The Middle East (Fast growing market)
- AGOA, EBA and other opportunities given by Canada, Japan and China for selected products

10. Basic Challenges of Agro-processing Industries

- Lack of competitiveness in quantity, quality, food safety, packaging, labeling and prices

- Lack of proper raw materials supply (price, quality, quantity)
- Capacity under utilization (product diversification, raw materials, market)
- Difficulty to export to developed countries such as the European Union (Safety and Standards)
- Lack of investment and working capital
- Lack of appropriate institutional support (research, technology, product development, management skills)
- Illegal trade activities for some products
- Limitation of product diversification & specialization
- Weak production and marketing management skills and capability
- Obsolete and inefficient technologies

11. Possible Interventions

- Expansion of appropriate modern technology with utilization skill
- Strengthen human resource development for the industry in collaboration with Colleges and Universities
- Establish agro-industrial clusters (food parks) in potential areas
- Strengthen efforts on the raw material supply (MoARD)
- Enhance the roles of cooperatives (effectiveness and efficiency)
- Infrastructural development
- Facilitate easy access to finance for investment and working capital
- Establish proper supporting institution for the sector
- Effective use of donors support

12. Proposed Strategic Objectives for Agro-processing Industries (GOE Master Plan Study)

NO.	STRATEGIC OBJECTIVES	TARGET BY 2015
1	Agro-food parks together with Rural Transformation Centers (RTC) established	5 Food parks with 20 RTC
2	Strategic alliances (contract farming) between agro-industries and the primary producers guaranteed	80% large and medium agro-industries purchase through contract farming
3	Agro-industries have easy access to finance	$300,000,000 to be allocated for agro-industries through International Financing Institutes
4	Efficient and effective institutional capacity built to support and coordinate the development of agro-industries	50% of the agro-processing industries meet international requirements
5	Skills and education system aligned to the agro-industries	- 5 centers of excellence operational - The skills required by agro-industries included in TVET training
6	Agro-industries export products systematically branded and promoted in world market	Export earnings from the sector increased by 300% compared to 2007
7	Investment in agro-processing systematically and aggressively promoted	3-fold achievement compared to 2007
8	Micro and small scale agro-industries become competitive locally and internationally	• Capacity utilization reach 85% • Meet required quality standard

End of presentation//

SECTION 4 -
STRATEGIC POSITIONING OF VALUE CHAINS

- Discussion Paper 1:
  Regional Value Chain Approach for Agricultural Development and Food Security in Africa
  MAURICE TANKOU
  Chief of Agricultural Marketing and Support Services Section of the Food Security and Sustainable Development Division (FSSDD) of the UN Economic Council for Africa (UNECA), Addis Ababa, Ethiopia

- Discussion Paper 2:
  Value Chain Finance for Nutrition-Related Industry
  YUKI ISOGI
  Nutrition Project Coordinator and Private Sector Development Advisor of the World Bank, Addis Ababa, Ethiopia




Economic Commission for Africa


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Federal Democratic Republic of Ethiopia -Ministry of Agriculture
FDRE
Ministry of Trade

• Regional Value Chain Approach for Agricultural Development and Food Security in Africa

by

Maurice Tankou[6]

THIS IS AN EXCERPT FROM THE POWERPOINT PRESENTATION OF MR. TANKOU.

1. Definitions of Food Security and Commodity Value Chain

- In this presentation the definition of food security adopted by the 1996 World Food Summit will be used:

  *Food security exists when all people, at all time, have **physical** and **economic** access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for a healthy life.*

- What is Value Chain?

  The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal/recycling after use.

2. Why a Value Chain Approach?

- To address African farmer's disconnection from the input and product markets
  - Responding to domestic regional demand fueled by population growth, income growth and urbanization – esp. dynamic regional demand for processed products

[6] **Maurice Tankou** is the Chief of Agricultural Marketing and Support Service Section of the Food Security and Sustainable Development Division (FSSDD) of ECA, Addis Ababa, Ethiopia.

- Responding better to opportunities of global markets - esp. niche markets
- Responding to farmers' need and demand for modern farm inputs and support services - esp. extension, financing

- To maximize the contribution of agriculture to economic growth and poverty reduction – Beyond the narrow perspective "agriculture = farming"
  - Tapping inter-sectoral growth linkages to realize the full potential of on-farm and non-farm employment and income generation of the food and agriculture systems (Fig. 7)

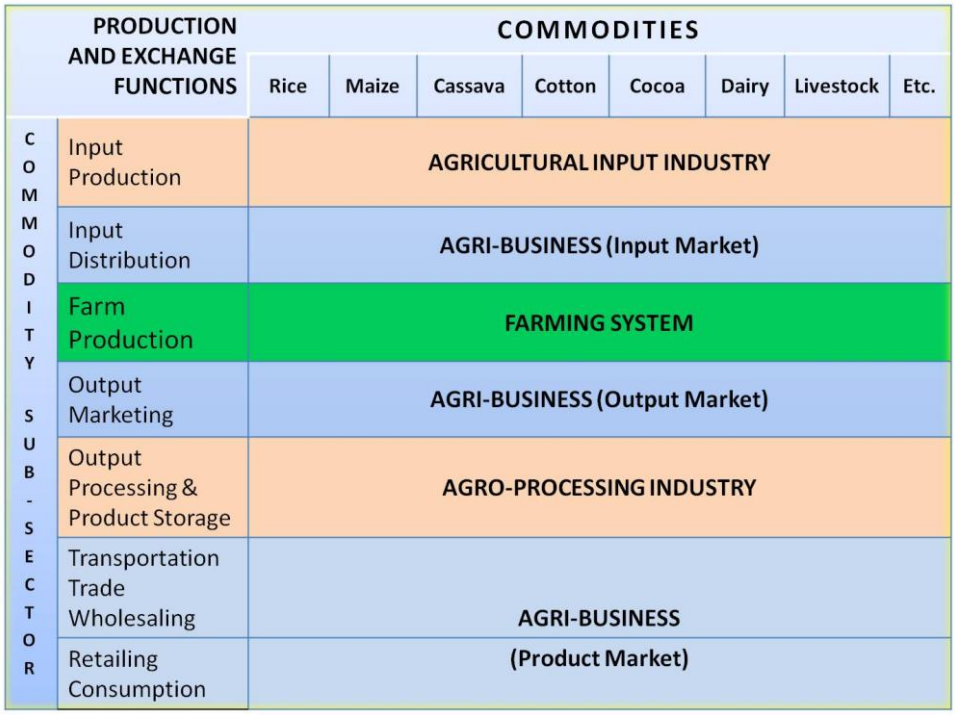


Fig. 7 – Sub-sectors involved in the production and exchange functions across various commodities (Illustration of the Food and Agricultural Matrix System)

3. Why a Regional Approach to Value Chain

- To address the fragmentation of African food and agriculture economy

- Extremely fragmented regional economy along sub-regional and national lines – sub-optimal economic space
- Fragmented market segments closed to each other but increasingly open to global trade outside of Africa
- Constrained perception of investment and trade opportunities for African agribusiness communities
- Prevent land grabbing

- To maximize the exploitation of:
  - Regional economies of complementarities and intra-African trade potential – 'Comparative' and 'Competitive' advantage beyond national boundaries
  - Regional economies of scale at all stages of the value chains
  - Regional economies of vertical coordination (transactions) among the productive/services sectors involved in value chains

4. How to Promote Coordinated Regional Value Chains

- Focus on filling the gap in production and trade for strategic food and agricultural commodities:
  - Of important weight in the African food basket and rural economies
  - Of important weight in Africa's trade balance through their contribution to export earnings or the import bill
  - For which Africa has significant unexploited production and trade potential
- In essence, deliver on one of the main outcomes of the 2006 Abuja Food Security Summit:
  - 9 continent-level strategic commodities: rice, maize, legumes, cotton, oil palm, beef, dairy, poultry, fisheries
  - 3 sub-regional-level strategic commodities: cassava, sorghum, millet

- Build regional cooperation and public-private partnerships to articulate investment in the 4 pillars of CAADP around the development of the value chains of such strategic commodities:
  - Land and water
  - Rural infrastructure and trade capacities
  - Supply chains
  - Research, technology dissemination and adoption
- Link with NEPAD infrastructure corridor and spatial development (SDI) initiatives
- Deepen regional integration for the development of coordinated value chains of the strategic agricultural commodities by:
  - Moving market integration beyond national and sub-regional levels to encompass the global regional market -- Common African Market
  - Mapping potential regional production and processing belts of strategic commodities (REC x Agro-ecological approach)
  - Creating an enabling environment for profitable and secure private investment in coordinated regional agricultural input and commodity value chains -- preferential sub-regional/regional agricultural investment zones
  - Designing and implementing policies, legal and institutional frameworks, and PPPs to promote private investment in regional agribusiness joint ventures – investment codes, land policies, fiscal policies, etc.
- Create/strengthen sub-regional/regional agricultural research and education centres of excellence to harness the best technologies and sustain innovation in strategic commodity chains
- Address the double disconnection of farmers from input and product markets through:
  - Promotion of the development of regional agro-industry/agri-business

- Innovative contractual arrangements linking farmers to agro-industry/agribusiness through networks of rural agro-dealers (out-grower schemes, contract farming, etc.)

5. Summary

- Link efforts on CAADP pillars around the explicit objective of developing regionally-coordinated value chains of strategic commodities for agriculture to yield its full potential in:
  - Enhancing food security (reliable and affordable supply)
  - Creating value-added and employment, especially for women and the poor (rural and urban)
  - Providing capital and inputs to other economic sectors
  - Creating demand for the non-farm sectors
  - Improving export performance (integration in the global economy)

End of presentation//

• Value Chain Finance for Nutrition-Related Industry

by

Yuki Isogai[7]

THIS IS AN EXCERPT OF THE POWERPOINT PRESENTATION OF MS. ISOGAI[8].

1. Background

- **What is Ready-to-Use Therapeutic Food (RUTF) and Corn-Soya Blend (CSB)**

  Ready-to-Use Therapeutic Food

  Ready-to-Use Therapeutic Food (RUTF) is an energy-dense paste typically derived from a mixture of milk powder, vegetable oil, sugar, peanut butter and powdered vitamins and minerals that resists microbial contamination and is used as a therapeutic food to treat severe childhood malnutrition. RUTF is a generic term including different types of foods such as spreads or compressed products used to treat severely malnourished children, and *Plumpy'Nut*® is a one such product produced commercially by Nutriset (Malaunay, France).

  Given the enriched vitamin and mineral content of products like Plumpy'Nut, RUTF is used as both a food and a medicine to treat malnourished children, and is used in an in-patient and out-patient settings. In addition to water, with the proper dosage, children receiving RUTF to treat malnutrition require no other food during the treatment period.

  Corn-Soya Blend (CSB)

  Corn-Soya Blend (CSB) is product under the category of Fortified Blended Foods (FBFs), which are blends of partially precooked and milled cereals, soya, beans, pulses fortified with vitamins

[7] **Yuki Isogai** is Nutrition Project Coordinator and Private Sector Development Advisor of the World Bank, Ethiopia

[8] Notes by the Rapporteur, Mrs. L. Halos-Kim, SAA; Member Seminar Secretariat; on slide presentation by Ms. Isogai. Also reference was made to GDS. LLC Consultation Report on 'Operational Support for Ethiopia Nutrition Project – Phase 1' for the World Bank. June 2009, unpublished.

and minerals used as a protein supplement to prevent and address nutritional deficiencies. CBS are generally mixed with water and cooked as porridge. In general, CSBs are a blend of cornmeal, soy flour, soybean oil and vitamin and minerals.

The nutritional value of a typical CSB is approximately 375 kcal for a 100 gram serving. In addition to the high caloric value, CSBs offer a range of essential minerals and vitamins to help supplement nutritional deficiencies suffered by the poor. Given the relative simple composition of the recipe, CBS are produced widely in both industrialized and developing countries.

2. Demand and Production of RUTF in Ethiopia

UNICEF and WFP are willing to purchase from suppliers, but the local supply is still very low (Table 5).

Currently only one enterprise produces Plumpy'Nut in Ethiopia, Hilina Enriched Food Processing Center with a production capacity of approximately 150 tons per month; according to a representative in Hilina it plans to increase production 10 folds by 2011. At the same time, Seka Business Group, an Ethiopia-based agro-processing business formed a partnership with Valid Nutrition (Ireland) to produce RUTF under the name Valsek. It expects to have an operating capacity of 500 tons per month by late 2009 or early 2010.

Given a favorable business environment, if Hilina and Valsek are to meet their respective investment plans in late 2010, Ethiopia would have RUTF production capacity of 1,800MT per year.

3. Demand and Production of CSB in Ethiopia

According to the World Food Program, demand for CSB in Ethiopia in 2008 was approximately 126,064MT. Over 76% is directed towards meeting emergency food demand.

The installed capacity for CSB production is estimated to be about 43,200MT per year, however, the actual production in 2008 was only, 9,683MT. Currently six companies in Ethiopia produce CSB which source input material from Oromia (maize and soy), Benishangul (soy), Amhara (maize), and SNNPR (maize).

Table 5 – Demand and Local Production of *Plumpy'Nut®* and CSB in Ethiopia

PRODUCTS	DEMAND	LOCAL PRODUCTION	CAPACITY
Plumpy'Nut®	~ 3,273MT	385MT (11.7%)	1,800MT
CSB	~ 126,000MT	9,683MT (7.7 %)	43,200MT

4. Value Chain Analysis for the Production of RUTF and CSB

Results of the value chain analysis (VCA) for the production of *Plumpy'Nut* ® (RUTF) and *Corn-Soya-Blend* ((CSB) conducted by GDS is illustrated in Fig. 8.

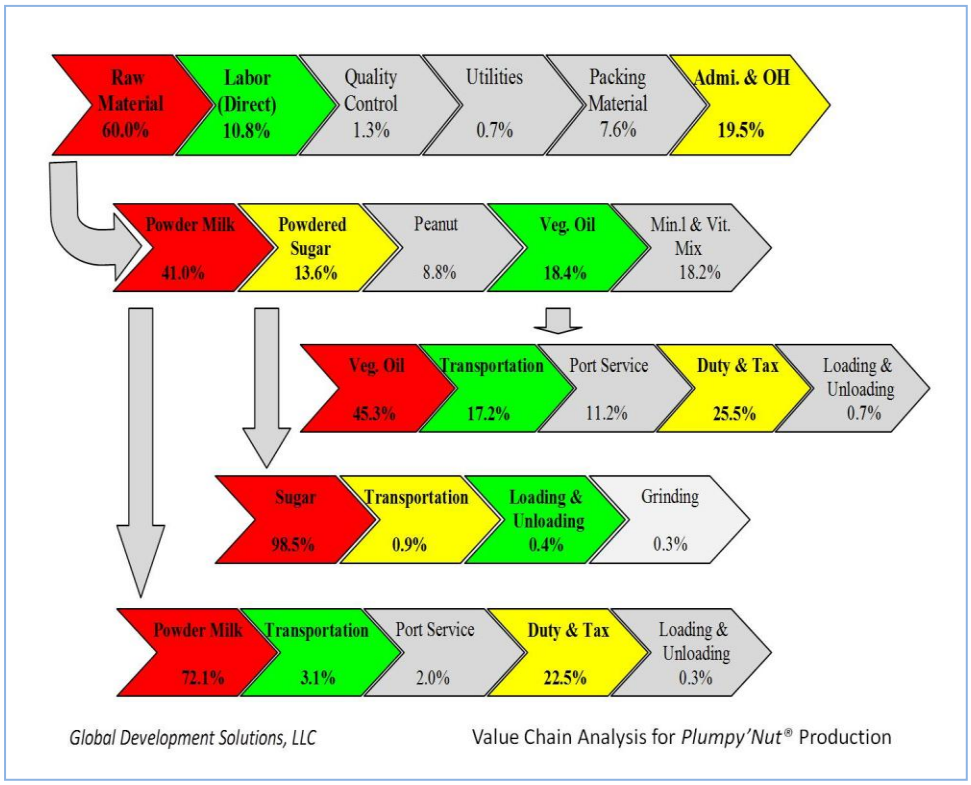
- Value Chain Analysis for *Plumpy'Nut* (RUTF)

  The value chain analysis (VCA) for RUTF looks into the raw materials and input ingredients, utilities, direct labor, quality control and administration overhead costs of the production cost (GDS LLC Report, 2009).

  The value chain analysis suggests that the average cost of RUTF is ETB38.77/kg (US$3.46/kg). The highest costs are contributed by raw material purchases which account for 60% of total production costs, followed by overhead costs (19.5%) and direct labor (10.8%). Most of the raw materials are imported.

- Value Chain for CSB

  The VCA for CSB production reveals that the average cost of CSB is ETB4.00/kg (US$0.36/kg). The highest cost is attributable to raw material inputs which accounts for 95.9% of the entire value chain, followed by administration and overhead costs (1.8%) and packing materials (1.6%).



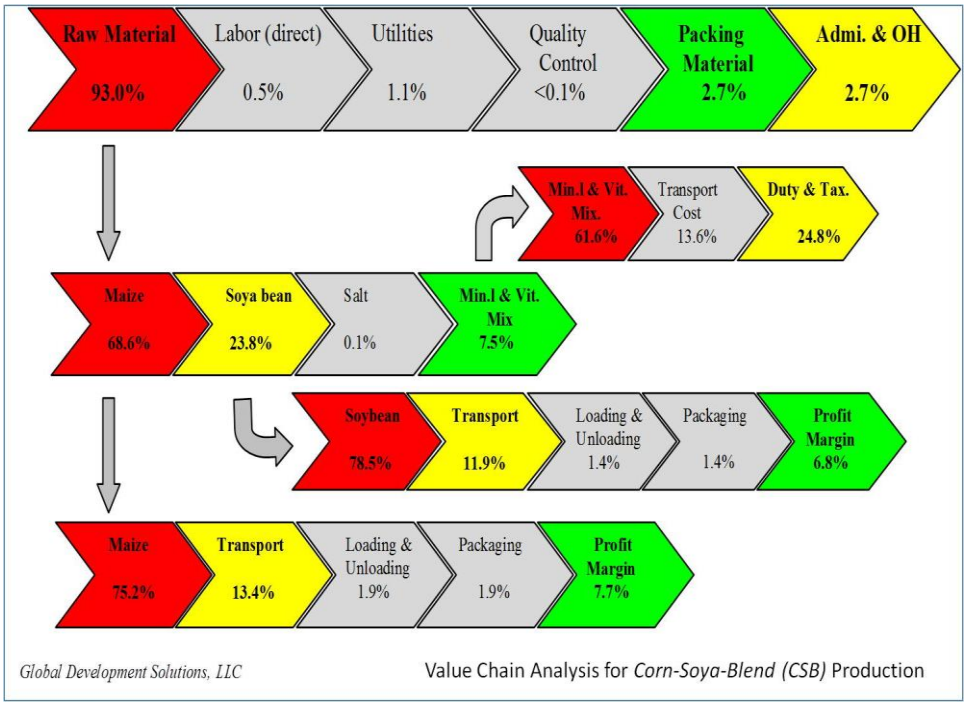


Fig. 8 - Value Chain Analysis for *Plumpy'Nut®* and *Corn-Soya-Blend* Production (GDS, LLC)

5. Constraints of Nutrition-Related Industry

- Local sourcing of input materials

  The major direct inputs for the production of RUTF are peanut, vegetable oil, powdered milk, powdered sugar, minerals and vitamin premixes. Packing is a major indirect input. While most of the inputs are imported, peanut, sugar and cartons for packing the RUTF sachets are available from local sources.

  In the case of CSB production, the major direct inputs are a mixture of maize, soybean, salt, mineral and vitamin mix and the indirect input is the packing materials. Except for vitamin and mineral mix, all other inputs are sourced locally.

  The costs of imported materials are extremely high, while local production is low (Tables 6-8).

  The cost of importation will be reduced with increased production of local materials. The constraints to low production are:

  1) Lack of market information: sources and prices
  2) Weak financial support for producers and processors
  3) Low access to finance by producers and processors.

  Development projects, banks and micro finance institutions must work together to strengthen the financing scheme to allow processors acquire sufficient raw materials for their operations.

Table 6 – Demand and supply of raw materials for RUTF and CSB

INGREDIENTS	DEMAND	SUPPLY	REMARKS
Milk Powder	982 MT	None	No. of milking cows ≈ 9.9 mil Total milk output: ≈ 976,615 MT
Soya Beans	74,762 MT	6,790 MT	
Soya Bean Oil	7,242 MT	None	

Table 7 – Import of selected inputs required for RUTF and CSB (2008/2009)

INPUTS	VOLUME	VALUE
Edible Soya Bean Oil	6,453 tons	$7.38 million
Soya Beans	578 tons	$0.29 million
Soya Flour / Meal	368 tons	$0.19 million
Milk Powder	22,020 tons	$19.81 million
SUB-TOTAL IMPORT VALUE		**$27.67 million**
Other Edible Oil	12,977 tons	$18.32 million
TOTAL IMPORT VALUE		**$45.99 million**

Table 8 – Comparative production cost of *Plumpy'Nuts*® in Ethiopia and Malawi

	ETHIOPIA (2009)		MALAWI (2006)	
INGREDIENTS	INPUT COSTS	% OF TOTAL	INPUT COSTS	% OF TOTAL
Milk powder (full fat)	$0.85	40.9%	$0.63	44.4%
Sugar	$0.28	13.5%	$0.17	12.0%
Vegetable oil	$0.38	18.3%	$0.18	12.7%
Peanut butter	$0.19	9.1%	$0.18	12.7%
Mineral/Vitamin Mix	$0.38	18.3%	0.26	18.3%
SUB-TOTAL	**$2.08**	**100.0%**	**$1.42**	**100.0%**
Other costs*	$1.38		$1.18	
TOTAL	**$3.46**		**$2.60**	
***Other costs includes labor, quality control, packaging, energy and OH**				
Compiled by Global Development Solutions, LLC				

6. Value Chain Approach for Nutrition-related Industry

The value chain analysis approach for nutrition-related industries integrates the various players and identifies sectors that need to be strengthened.

For producers, the potential market for raw materials is high (Table 9). Increasing the production means a sustained supply of raw materials to the industry in order to meet the demand for RUTF and CSB.

Table 9 – Potential market values of raw materials

INGREDIENTS	TONS		MARKET VALUE, $	
	LOW	HIGH	LOW	HIGH
Soybeans	9.500	20,000	4,750.000	10,000,000
Maize	56,000	70,000	19,600,000	24,500,000
Peanuts	2,300		2,231,000	
Powder Milk	1,200		5,808,000	
Sugar	750	1,500	592,500	1,185,000
Edible Oils	1,500		8,490,000	
TOTAL			41,471,500	52,214,000

Value chain approach had cross-sectoral effect both for humanitarian and economic growth of the country. The value chain analysis approach for nutrition-related industry revealed that:

- Huge market exists and it is relatively secured
- Value chain approach have synergic effect than ad-hoc approach
- It can affect on small scale farmers in rural areas
- It has cross sectoral effect, both to humanitarian activities and economic growth

Further, VCA emphasizes the importance of public-private partnerships for the development of value-added agriculture and emergency nutritional food supply chain (Fig. 9). The World Bank and other Development Programs supports the nutrition-related industries by providing matching grants and technical assistance through its partners to encourage the growth of nutrition-related industries.

If local production of nutritional foods and supplements increases, it will benefit the industry and the country:

1) Hard currency remains in the country
2) Positive economic impact in the rural areas
3) Improve timeliness of delivery
4) Improve access to los cost products
5) Eliminate importation costs
6) Lower production costs.

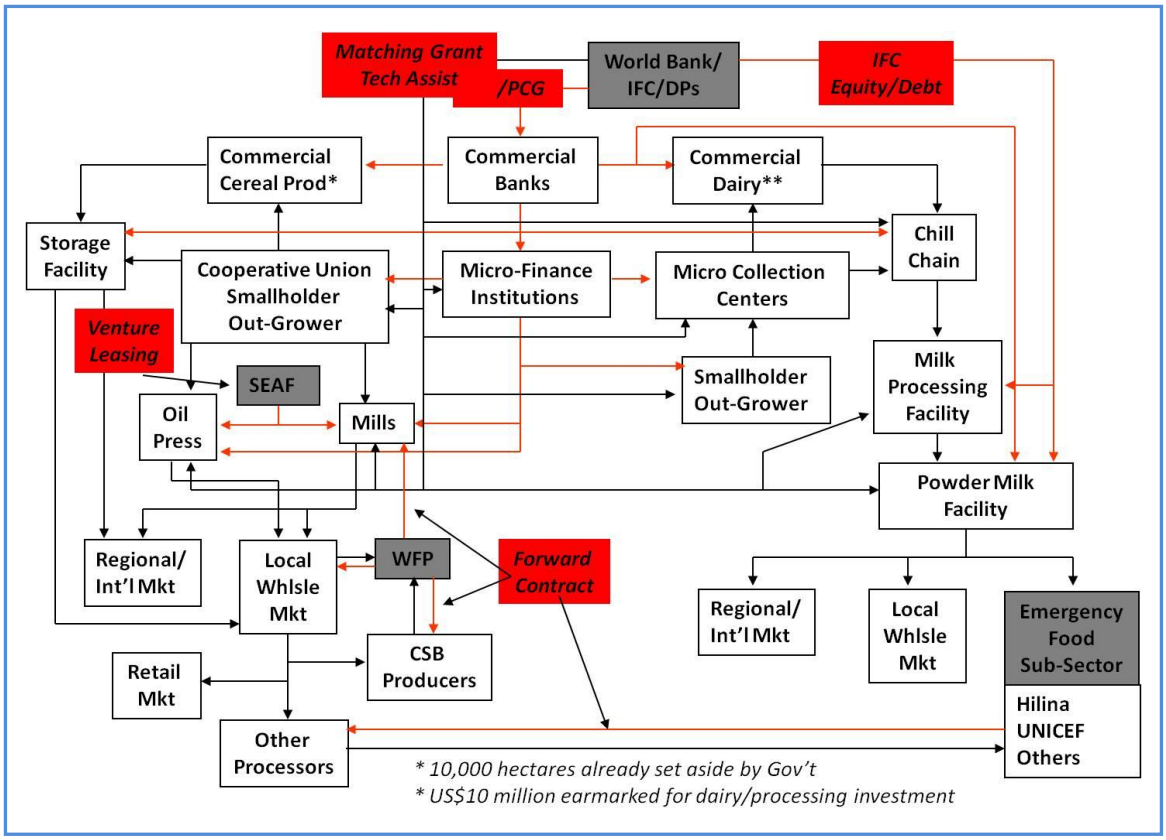


Fig. 9 –VC Approach integrates Public-Private Partnerships (PPP) for the development of value-added agriculture and emergency nutritional food supply chain

SECTION 5 -
CASE STUDIES ON VALUE CHAIN DEVELOPMENT IN ETHIOPIA

- Discussion Paper 1:
  SNV's Value Chain Development Approach, The Case of the Honey Value Chain
  MARC STEEN
  National Portfolio Coordinator, and Head of Value Chain Development of the Netherlands Developments Organization (SNV), Addis Ababa, Ethiopia

- Discussion Paper 2:
  Value Chain Concept and Its Application to Wheat in Ethiopia
  MOHAMMED HASSENA
  Agri-business Senior Program Officer, GTZ-ECBP, Addis Ababa, Ethiopia

- Discussion Paper 3:
  One Village One Product Movement and Value Chain
  TAKAHIRO NAKAMURA
  Agricultural Team Leader, Japan International Cooperation Agency, JICA Ethiopia Office, Addis Ababa, Ethiopia

• SNV's Value Chain Development Approach, The Case of the Honey Value Chain

by

Marc Steen[9]

1. Introduction

In order to identify the best entry points for capacity development, SNV has under the BOAM[10] program adopted the value chain approach. A value chain refers to the full range of activities that are required to transform a product or service from conception to markets and consumers. BOAM considers that enhancing the inclusion of small farmers in local, national and global value chains, is a good strategy to increase production, income and employment opportunities for these small farmers. Many NGOs and public support organizations are increasingly involved in value chain development, although mainly in strengthening individual farmers and their organizations to increase productivity and quality and address an immediate local market demand (the "push" in value chain development). These markets are to a large extend informal and of a "spot" nature, making them less reliable with buyers being able to purchase one day, but not the next day. This creates high transaction risks for any investment of these small farmers. It is therefore increasingly recognized that market opportunities can be best explored by strong private sector actors closer to these markets. Strengthening of these downstream private sector actors is therefore seen as a strategy to maximize market opportunities by aligning more upstream actors towards these market requirements (the "pull" in value chain development). This alignment is not only important for the individual business, but also for the necessary institutional support and the service requirements of all the actors in this specific business to business value chain. These services include the services provided by the public sector and other development facilitators. Increasingly value chain practitioners are recognizing BOAM for its

[9] **Marc Steen** is National Portfolio Coordinator, and Head of Value Chain Development, SNV (The Netherlands Development Organization), Addis Ababa, Ethiopia.

[10] Support to *Business Organizations and their Markets* program, financed by the Embassy of the Kingdom of the Netherlands in Addis Ababa, Ethiopia.

competencies in strengthening the more downstream value chain actors and creating a "pull" for value chain development.

2. Rationale for the Demand Driven Value Chain Approach

In order for a small farmer to acquire income from agricultural produce, (s)he has to produce what the market demand and according to the market requirements. If not, productivity increase will not lead to additional income or can even lead to higher price fluctuations, due to the high price elasticity of many in particular "commodity" type of products. This is often demonstrated by NGO and public sector support in the form of access to micro-credit, organizational capacity building, input supply and even asset transfers, under the assumption that increased productivity and bulking can be marketed through existing market outlets and arrangements (Fig. 10). This approach is often referred to as a "push" approach to market development and is a common feature of NGO and public sector support to farmers and their organizations. In this situation a demand driven value chain development, the "pull" approach in value chain development, becomes even more critical.

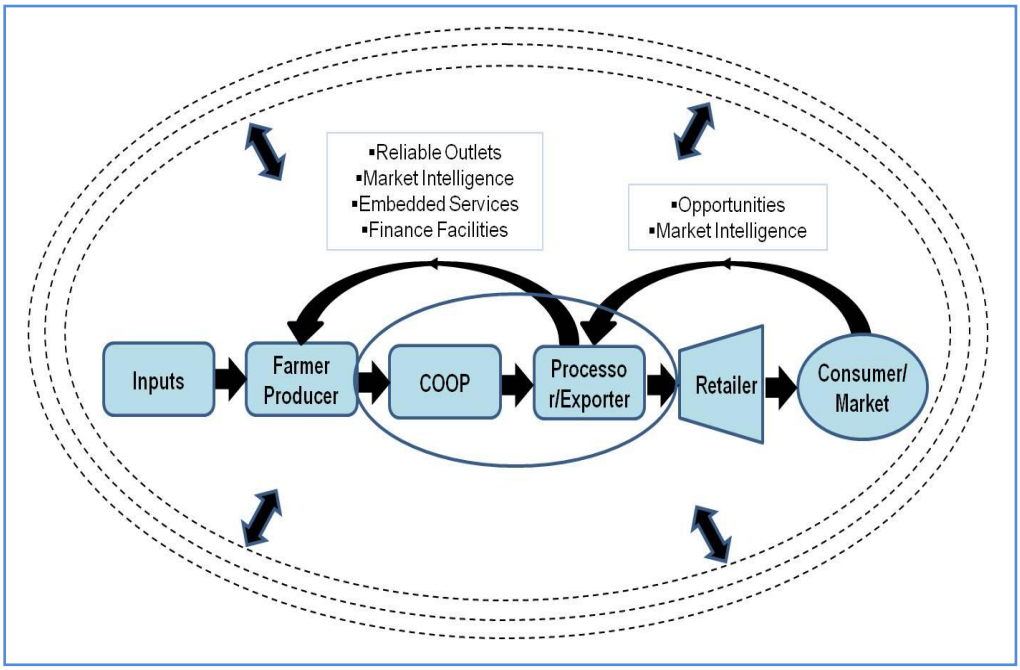


Fig. 10 – Rationale for the demand-driven value chain development approach

Strengthening the more downstream private sector actors and their business to business relationships will maximize market opportunities and provide market intelligence to the more upstream actors. This is because downstream private sector is per definition focused on these market opportunities. To access a market, the private sector needs to guarantee a quality supply by upstream smaller actors. This will increase the need to invest in the upstream supply to obtain the right quantities and qualities, with not only market intelligence, but also with specific services. These services can be technical, financial and organizational and will be increasingly supplied embedded in the business transaction by private service providers or own staff. Embedding therefore lowers the threshold for the business to business value chain actors to access services and requires the need to develop the service market. The business to business value chain relationship can also align the NGO and public sector "push" support to farmers and their organizations and guarantee in this way a more reliable outlet for the products. In the context of the value chains in Ethiopia "pull" interventions mean mostly interventions at the level of trader/exporter, processor and the farmer organizations.

On top of this, these business-to-business value chains will need an enabling environment, which is supportive with favorable environment, i.e. favourable policies, intelligence, quality control and standardization, accreditation, and sector or value chain promotion. What the strengthening options are for the individual businesses, business-to-business relationships, sector and service market will be informed by a sector and value chain(s) analyses process with key stakeholders in the sector. Aspects as business and industry competitiveness, equitability of margins, the level of value chain development and prospects for inclusion of small farmers are however critical. Standard tools do however not exist and although sector and value chain analysis are instrumental, substantial knowledge development and learning is required to effectively up-scale value chains.

3. The Concept of Demand-driven Value Chain Approach

The value chain development approach is characterized by the combination of strengthening whole sectors as well as supporting individual businesses as traders/exporters, processors and farmer organizations and their business to business value chain relationships (Fig. 11). Sector development provides for new opportunities to the actors in the sector, business-to-business development assures that the opportunities are turned into concrete results.

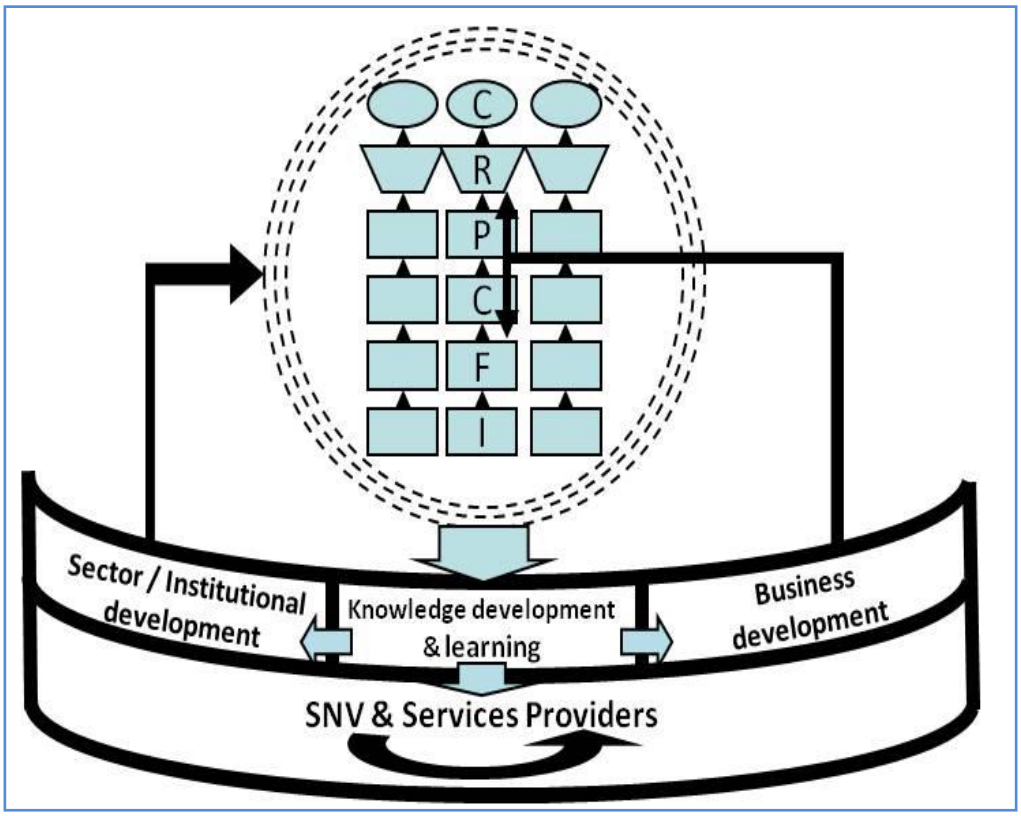


Fig. 11 – Key intervention areas for the demand-driven value chain approach

These results are related to the increased number of business to business value chains, increased volumes, value added, equitability of margins, efficiency and overall competitiveness of individual businesses and the value chain(s). SNV and other service providers are providing services, which will be increasingly market based and

with increased volumes to match the up-scaling requirements of the value chains. To achieve a sustainable up-scaling of the approach to new sectors and value chain(s), knowledge development and an increased service provider capacity is required to take over SNV services or products.

Key interventions areas for the demand driven value chain approach are therefore:

- Sector development;
- Business development;
- Knowledge development and learning;
- Service capacity development.

1) Sector Development

Sector development is seen as providing opportunities for business development to turn these opportunities into concrete results. A critical number of value chain actors and other stakeholders are instrumental to steer the sector development. In particular, prominent private sector actors in trade and processing are important to make use of business opportunities. Furthermore these private sector actors can develop good relationships with the public sector and stimulate the interest of the public sector. Other relationships between direct value chain actors, between actors and private and public service providers provide a multifold of potential win-win relationships. Associations and stakeholder events are important in defining critical and implementable sector development interventions. The enabling environment can be supportive with favourable policies, intelligence, control and standardization, accreditation and sector or value chain promotion, providing the necessary incentives for decreased transaction costs. This will than result in increased efficiency and improved sector competitiveness. Financing critical sector projects as public good or as temporary interventions are however needed in particular in the embryonic stages of value chain development. Since here many small informal "spot" market transactions and monopolistic market arrangements are dominant, creating limited opportunities for business development.

To support sector or institutional development SNV provides the following products as services:

1) Multi Stakeholder Platforms (MSP) - Promoting efficient and equitable linkages for the economically active poor along the value chain. Promote strategic partnerships with key stakeholders using the Public Private Partnership (PPP) model. Promote "meaningful dialogue" focusing on impacts and economic performances, strategic planning, cooperative implementation or action, collective monitoring and mutual learning;

2) Sector Association Strengthening (SAS) - Developing the capacities of association so that they are able to provide services to members in a sustainable way and are recognized representatives by other stakeholders;

3) Market Intelligence (MI) - Promoting access "to both" supply and market information in an interactive manner along the segments of the value chain capturing market signals (trends, requirements, standards, new technologies and new products) and fostering pro active reactions about VC "resilience";

4) Effective Public Policy Management (EPPM) - Facilitating processes of design, implementation, and evaluation of public policies under an analytical framework for effectiveness and inclusion.

6) Value Chain Financing (VCF) - Facilitate sustainable business linkages between service providers and their clients along the segments of the value chain. Advocate for strategic and digressive "grants", "subsidies", "debt" and "equity" instruments to kick off and spur the growth of value chain actors.

7) Appropriate Technology Promotion (ATP) – Disseminating and propagating locally developed and successfully tested appropriate technology innovations.

2) Business Development

Business development is seen as turning the opportunities created by sector development into concrete results. These results are related to the increased number of business-to-business value chains, increased volumes, value added, equitability of margins, efficiency and overall competitiveness of individual businesses and the value chain(s).

Important are here the linking of businesses to new or existing markets in for example new processors to farmer organizations, new products for existing markets or new retail or export markets. Different arrangements can be used like the usage of a joint venture, setting up trade relations, development of a linkage (processing company), EU labeling for eco markets etc. In many value chains there is a change from a transaction based relation towards a contract based relation. Part of the formal or informal contracting is often all kinds of embedded services provided by private service providers or own staff. So besides price per volume and differentiated qualities, arrangements are made about logistical, technical and financial service provision, quality control and measurement, market information and even organizational services. These services can include the services provided by the public sector and other development facilitators. New type of products and qualities means often different input material, of which the commercial availability is very important to keep up with the demand. Innovative business strategies and arrangements are needed for matching the demand and supply of inputs. These strategies and arrangements contain substantial risks for the individual business or the business-to-business value chain relationship, which justifies testing in the form of subsidized pilots.

Value chain development means that farmer (organizational) development is coordinated by the downstream private sector in the business-to-business value chain. Thus, farmer organizations are receiving technical, financial and organizational services however the actual delivery is often the mandate of the public sector and other development organizations. From the

perspective of the value chain(s) increased market and business orientation is however required as part of the services delivered to farmer organizations.

Access to capital for input suppliers, processors, traders and farmer organizations to finance investments is important to make sure that tested business to business pilot innovations are being copied or up-scaled by other value chain actors. Information on sector development, key figures, risk profile etc. is therefore needed to give interested outsiders the right information to make an investment decision.

To support business development SNV provides the following products as services:

1. Producer Group Strengthening (PGS) - Facilitating the growth and graduation of informal businesses, producers and natural resource users, to the formal sector. Strengthening legitimacy, credibility and viability of the different forms of the economic group is required.
2. Business-to-business support (B2B) – Facilitate the development of business relationships and arrangements between downstream traders, processors and farmer organizations on one side and small farmers and their organizations on the other side, to guarantee that a reliable supply and market outlet is assured.
3. Private Sector actor Strengthening (PSS) - Develop the capacities of private sector actors like processors and traders so that they are able to improve business operations in terms of market response, business partnerships and the accessibility to financial and other market services.
4. Value Chain Financing (VCF) - Facilitate sustainable business linkages between service providers and their clients along the segments of the value chain. Advocate for strategic and digressive "grants", "subsidies", "debt" and "equity" instruments to kick off and spur the growth of value chain actors.

3) Knowledge Development and Learning

To achieve a sustainable up-scaling of the approach to new sectors and value chain(s), knowledge development and learning is critical. Knowledge areas related to constraints from embryonic to maturity stages of value chain development are however important. Learning in the form of testing innovative business to business value chain pilots, exchanging sector development experiences and overall program level documentation will have to assure that critical knowledge is generated. Replication is taken place in the form of up-scaling business-to-business value chains within a specific sector, up-scaling sector development to other sectors and up-scaling the overall value chain approach in new programs.

4) Business and Service Provider Development

A strong service sector is critical to address the increasing demand for services in the up-scaling of business to business value chains. It is expected that these services will have to become increasingly market based, since customer confidence will improve with the increasing volumes and use of the services in the up-scaling of the business to business value chains. Therefore, service providers are promoted in providing services from the start of any value chain support intervention and are integrated in business to business value chain pilots. On top of this specific capacity development programs are developed as the young professional program and competency pool to assure a substantial increase of the supply of quality services.

To achieve a sustainable up-scaling of the value chain approach to new sectors and value chain(s), these service providers will increasingly take over SNV services or products.

To support service capacity development SNV provides the following product as service:

1. Service Providers Strengthening (SPS) - Developing the capacities of services providers so that they are able to capacitate both economic chain actors as well as non-economic actors.

2. Local Capacity Development Facility (LCDF) - increase the access to funds for local capacity development in a way that empowers local actors and allows them to acquire tailor-made services, geared towards their needs.

4. Program Development

NGOs and public support organizations are increasingly involved in value chain development, although mainly in strengthening individual farmers and their organizations to increase productivity and quality (the "push" in value chain development). Strengthening of the downstream private sector actors to maximize market opportunities by aligning more upstream actors towards the market requirements is facilitated by BOAM (the “pull” in value chain development). Increasingly value chain practitioners are recognizing BOAM for its experiences with the more downstream "pull" interventions and want to develop partnerships with SNV for a combined "push" and "pull" approach. This combined approach is expected to provide results with small farmers at a basic subsistence level.

The SNV partners are providing micro-finance, organizational capacity development, input supply and often asset transfers to small farmers and their organizations. SNV is facilitating the business to business relationships, market linkages, direct business support and market intelligence to traders, processors and farmer organizations with the aim to establish strong business to business value chains with targeted small farmers. Alignment of the "push" and "pull" for in particular the required services for small farmers and their organizations, is being done by the downstream private sector actor in the business to business value chain and by SNV as a coach in value chain development for the partners. Furthermore multi-stakeholder platforms facilitated by SNV do assure overall coordination of both sector and business development.

5. Key Success Factors

Based on our experiences with value chain development, we have identified a number of key success factors for future programs:

1. Opportunities for markets have to be assured for any support to productivity and quality improvement to be effective in increasing income of small farmers. The lack of reliable market outlets will cause increased price fluctuations and related risks for small farmers when productivity increases.
2. A balanced sector and business support will make sure that sector development provides opportunities for businesses development to turn the opportunities into result, thus having private sector as engine for growth with the public sector focused on sector identified priorities;
3. Involvement of a critical mass of value chain actors as prominent downstream private sector leaders and other stakeholders is important to create ownership of defined intervention priorities;
4. The combination of capacity strengthening and funds for grants and investment capital assures that both critical sector interventions can be supported effectively and that business-to-business value chain innovation can be tested and replicated.
5. Quick wins with short-term interventions preferably by private sector combined with longer term interventions guarantees an active involvement of stakeholders in the value chain(s).

6. Summary

SNV has worked for the past years intensively on value chain development. The gained experiences have resulted in a comprehensive approach comprised out of four key elements: sector development, business development, knowledge development and learning and business development service provider development. Sector development provides for opportunities to value chain actors, business development transforms the opportunities into concrete results. Knowledge development and business development service provider development assure the sustainable up-scaling of the value chain development approach.

• Value Chain Concept and Its Application to Wheat in Ethiopia

by

Mohammed Hassena[11]

1. Introduction

1- Why value chain

Africa's exports remain dominated by primary commodities, and the share of agriculture in SSA's total exports has declined sharply in the last 40 years. Only a few SSA countries have achieved significant diversification of their exports. Despite those trends, agriculture remains the main export-revenue source for many SSA countries and the largest income generator for their populations. Much, even most, African agricultural production is of low unit value and the result of low-productivity. SSA's agriculture productivity measure of US$343 value added per worker (2004) is the world's lowest - world agricultural productivity per worker averages three times that of SSA; Latin American productivity per worker averages nearly ten times the sub-Saharan African average.

The productivity and efficiency of agriculture and related activities are thus basic to the success of SSA rural economies and to the incomes of SSA rural populations. Such low levels of productivity hinder Africa's attempts at reducing poverty. African agriculture competes in international and domestic markets with the exporters and products of Asia, Europe, and the Americas. SSA's agricultural to be competitive in the global market the agricultural goods need to achieve greater value within Africa as well.

The development and business communities involved in the African agriculture and agribusiness sectors have recently experienced a tremendous resurgence of interest in promoting value chains as a way to add value, diversify rural economies, and contribute to increasing rural household incomes in most sub-Saharan Africa (SSA) countries. Value chains are increasingly recognized as a means to reduce the rural poverty prevalent in the region.

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More recently, governments and donors, realizing that upgrading the performance of individual firms may have little impact and thus have shown significant interest in value chain analysis and implementation. In their effort to devise interventions that reposition entire industries, build business competitiveness, and economic growth, governments and donors can use value chain-based approaches as robust tools to protect threatened links, facilitate upgrading of others to generate greater returns, and to promote Foreign Direct Investment (FDI) programs. Additionally, value chain analysis has been used to examine constraints in the enabling environment in which the chains operate.

In summary, there are three main sets of reasons why value chain analysis is important in this era of rapid globalization as follows:

1) With the growing division of labor and the global dispersion of the production of components, systemic competitiveness has become increasingly important
2) Efficiency in production is only a necessary condition for successfully penetrating global markets
3) Entry into global markets which allows for sustained income growth -that is, making the best of globalization - requires an understanding of dynamic factors within the whole value chain

2- What is value chain?

Value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use. As such, value chains include the vertically linked interdependent processes that generate value for the consumer. While value chain takes a public perspective, supply chain management aims at optimizing the logistics of input sourcing and marketing – from the perspective of a particular lead company. The latter is a private management instrument and much more limited in scope.

Value chains are a key framework for understanding how a product moves from the producer to the customer. The value chain perspective provides an important means to understand the business-business relationships, mechanisms for increasing efficiency, and ways to enable business to increase productivity and add value. It provides a reference point for improvements in services and the business environment. It is a vehicle for pro-poor initiatives and for linking small businesses with the market.

2. Value Chain Analysis Can Inform Debate on Globalization

The key issue thus is *how* producers –whether firms, regions or countries – participate in the global economy rather than whether they should do so. If they get it wrong, they are likely to enter a "race to the bottom", that is a path of negatively affecting growth in which they are locked into ever-greater competition and reducing incomes. Value chain analysis provides a key entry point into this analysis, as well as into the policy implications which are raised:

- It addresses the nature and determinants of competitiveness, and makes a particular contribution in raising the sights from the individual firm to the group of interconnected firms
- By focusing on all links in the chain (not just on production) and on all activities in each link (for example, the physical transformation of materials in the production link), it helps to identify which activities are subject to increasing returns, and which are subject to declining returns.
- As a result of being able to make these distinctions regarding the nature of returns throughout the various links in the chain, policy makers are hence assisted in formulating appropriate policies and making necessary choices. These may be to protect particularly threatened links (e.g. poor informal operators) and/or facilitate upgrading of other links in order to generate greater returns.
- It shows that even though competitiveness may have been achieved, the mode of connection into the global economy may require a focus on macro policies and institutional linkages, and

these require a different set of policy responses to those which deliver firm-level competitiveness

- Participating in global markets, however competitive at a single point in time, may not provide for sustained income growth over time. By focusing on the trajectory which participation in global markets involves, value chain analysis allows for an understanding of the dynamic determinants of income distribution.
- Value chain analysis need not be confined to assessing the extent to which participation in global markets determines the spreading of the gains from globalization. It can also be used to understand the dynamics of intra-country income distribution, particularly in large economies.

3. Wheat Value Chain Analysis

Analyzing value chains comprises a whole series of different methods. The most essential method and the core of any analysis is value chain mapping. Building on a value chain map, additional analyses may become necessary, including quantifying and describing value chains in detail and economic analysis of value chains and benchmarking.

Value chain mapping means drawing of the visual representation of the value chain system. Maps identify business operations (functions), chain operators and their linkages, as well as the chain supporters within the value chain. Chain maps are the core of any value chain analysis and therefore indispensable. Quantifying and describing value chains in detail includes attaching numbers to the basic chain map, e.g. numbers of actors, the volume of produce or the market shares of particular segments in the chain. Depending on the specific interest, specific chain analyses 'zoom in' on any relevant aspect could be made. Economic analysis of value chains is the assessment of chain performance in terms of economic efficiency. This includes determining the value added along the stages of the value chain, the cost of production and, to the extent possible, the income of operators. The economic performance of a value chain can be 'benchmarked'.

Usually value chain is named after the final product. Yet the final products could be aggregated to one common product. Level of aggregation and disaggregation is important in value chain analysis. This depends on the level of market segmentation and the size of the value chain operators.

In terms of products, pasta and biscuit are completely different products and the analysis to be made at the wheat level rarely shows the details of either pasta or biscuit thus affecting the accuracy of intervention. On the other hand, splitting the product to the level the different types of soft biscuit will only marginally contribute and could not worth investing in such intervention. As the result, there is a need to find the optimum level of aggregation/disaggregation that optimizes the benefit of investment in the value chain support. Given the current level of development of the wheat sector, particularly in terms of the value chain linkage, disaggregating to the level of biscuit, pasta and bread (Fig. 12) could help the chain analysis for the development of the sector.

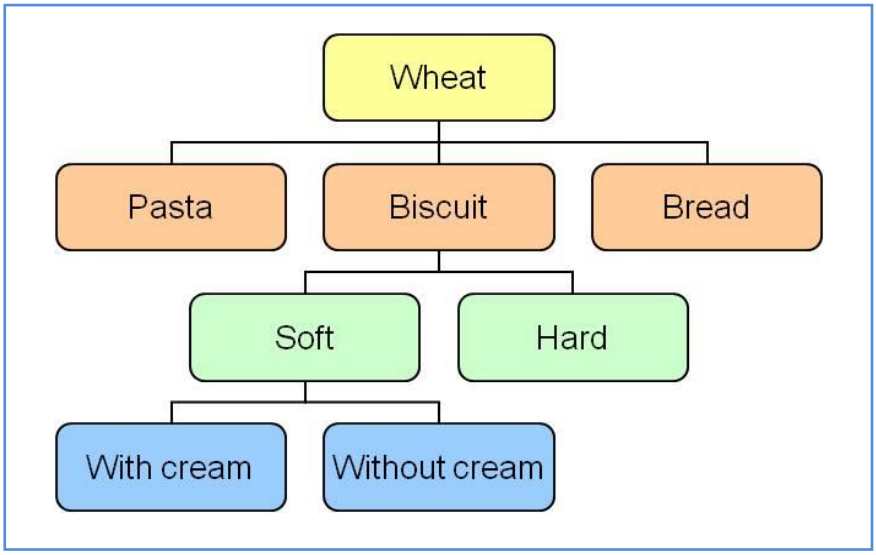

Fig. 12 – Possible aggregation and disaggregation of wheat value chains

Accordingly, during the plan of intervention in ECBP, two value chains had been identified in the wheat sector including the biscuit

and pasta value chains. The following paragraphs and sections reveal the experience we have during the planning and the some of the interventions started.

These value chains had been developed through a long process of consultations at different levels. The analysis includes not only the chain and the actors in the value chain but also the problems and opportunities at different levels of the value chains. This analysis is not yet very exhaustive but it gives the general picture of the value chains.

The pictures in Fig. 13 show how wheat marketing and processing are done in Ethiopia, in general. What was not included is the case where commercial farmers supply the bulk of the wheat directly to the processing plant. This accounts for the smaller proportion of wheat production and marketing. The pictorial representations of the value chains will include all those elements as well as the supporting and enabling institutions. It also shows the level of transaction between the actors along the value chain.

Through the value link training in late 2006, the initial value chain for biscuit and for pasta were developed. Using this initial idea, the chains were visualized by including more information to reflect the reality of the two value chains. During the series of consultations particularly with the core group, it was indicated that the quality of pasta and biscuit compared to the international standard is low mainly because of the raw material supply.

In the value chain analysis, identifying the generic function is important followed by identifying the three different actors in the value chain. These are micro-, meso- and macro- level actors having their specific roles in the value chain.

In a value chain, the micro-level includes the VC operators and the operational service providers taken together. The enterprises performing the basic functions of a value chain are VC operators. Typical operators include farmers, small and medium enterprises, industrial companies, exporters, wholesalers and retailers. They have in common that they become owners of the (raw, semi-processed or finished) product at one stage in the VC.

Fig. 13 – The traditional wheat marketing channel

In the biscuit value chain (Fig. 14), there are a number of value chain operators including the producers, traders, millers, biscuit producers, biscuit sellers and consumers. Although not included in the diagram, it is also important to note role of the input suppliers, the wheat producers. Other participants within the wheat traders and biscuit sellers are not indicated.

Operational services are those services that either directly perform value chain functions on behalf of the VC operators or are directly related to them. Operational services therefore are business-to-business (B2B) services. They include value chain specific services as well as generic business services such as, for example, accounting services, transport services. These service providers, although they benefit out of the value chain, they do not own the product. The value chain also explain how the operators are linked and in many

cases the linkage is based on spot marketing showing the less development of the sector in general.

In value chain analysis, further quantification could be done as indicated in Figs. 15 and 16 where the source of pasta for the different market operators in major cities of Ethiopia is indicated. For instance restaurants get 56% from wholesalers, 32% from supermarkets and 11% from retail shops.

In a value chain, the meso-level actors include all chain-specific actors providing regular support services or representing the common interest of the VC operators. Functions at the meso-level include, for example, public research and technology development, agreement on professional standards, promotional services, joint marketing or advocacy.

The macro-level refers to the public agencies and institutions constituting the business enabling environment. Typically, the micro-level of a value chain is made up of national, regional and local government, the judicial system and major providers of public utilities (especially roads, water supply, policies). The macro-level determines the general cost of doing business cutting across different value chains and sectors of the economy. In addition to the regional and federal government, the macro-level operators in case of wheat are MoARD and MoTI.

Following the initial value chain mapping, it is important to identify the problems and opportunities along the value chain. Note that for each basic function in the value chain, the problem and opportunities are identified and thus value chain mapping makes simple its identification. In case of pasta, the problem ranges from the shortage of durum wheat to physical capacity of the industries to produce quality pasta. Some of the major problems in pasta production are shortage of durum wheat, marketing problem of wheat, no production of semolina, no quality and standard control, etc. Although quality and standards exist for pasta, there is no attempt from regulatory body to make sure that the specified quality is mate by the companies (Fig. 17). As a result, Ethiopia remains to produce poor quality pasta that is already forcing households in the major cities to consume imported pasta (Table 10).

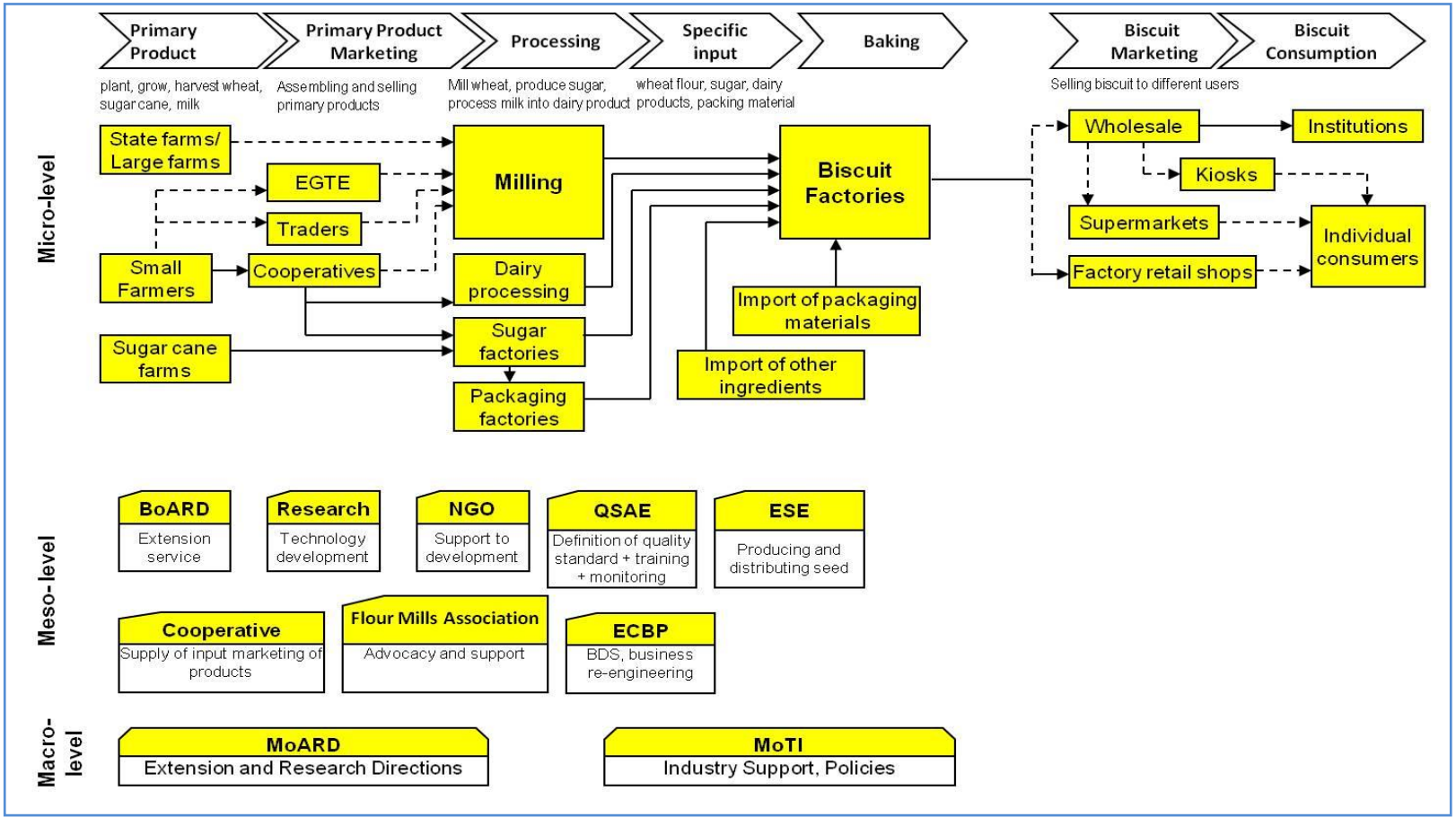

Fig. 14 – The Biscuit Value Chain

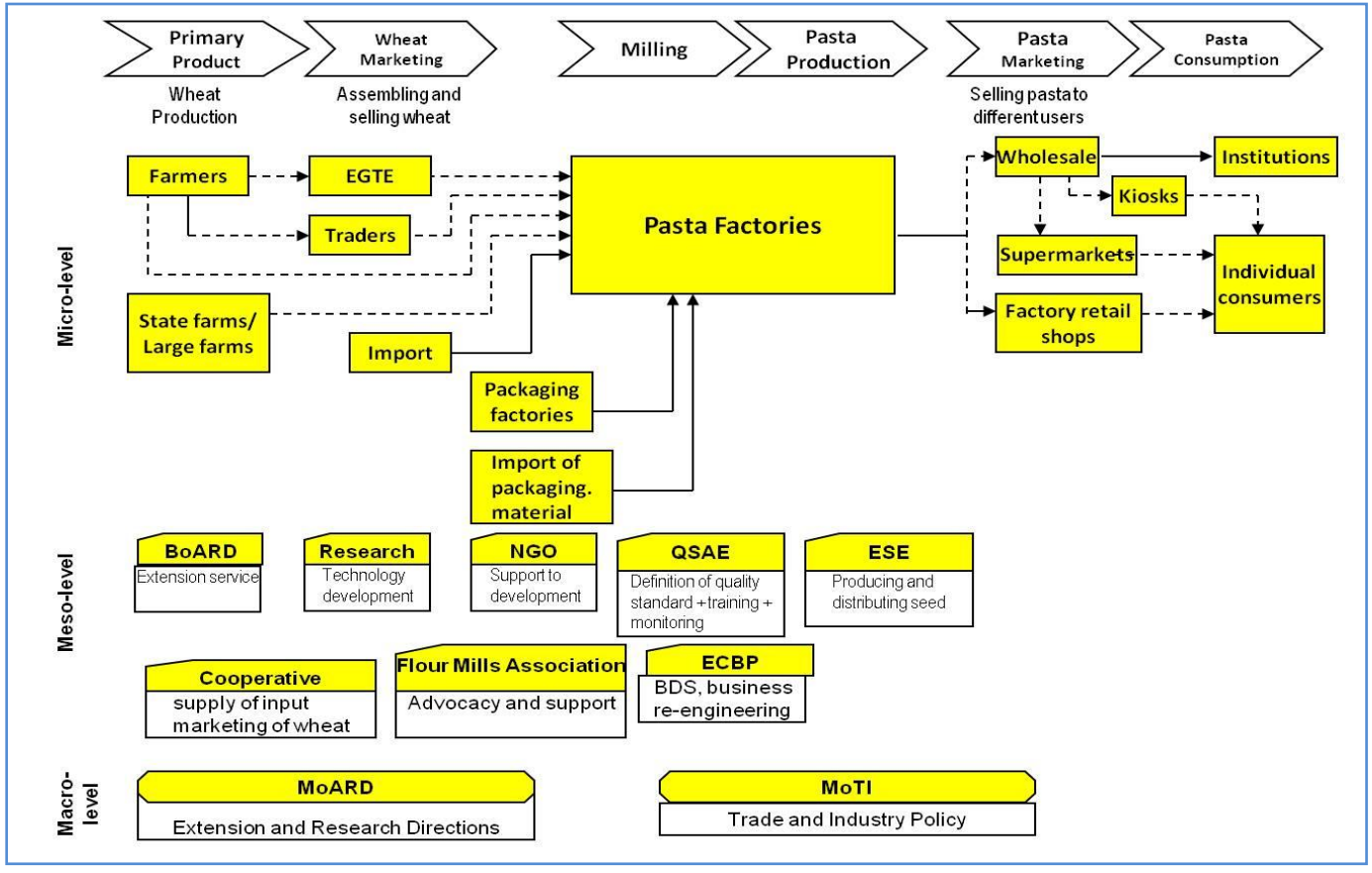

Fig. 15 – The Pasta Value Chain

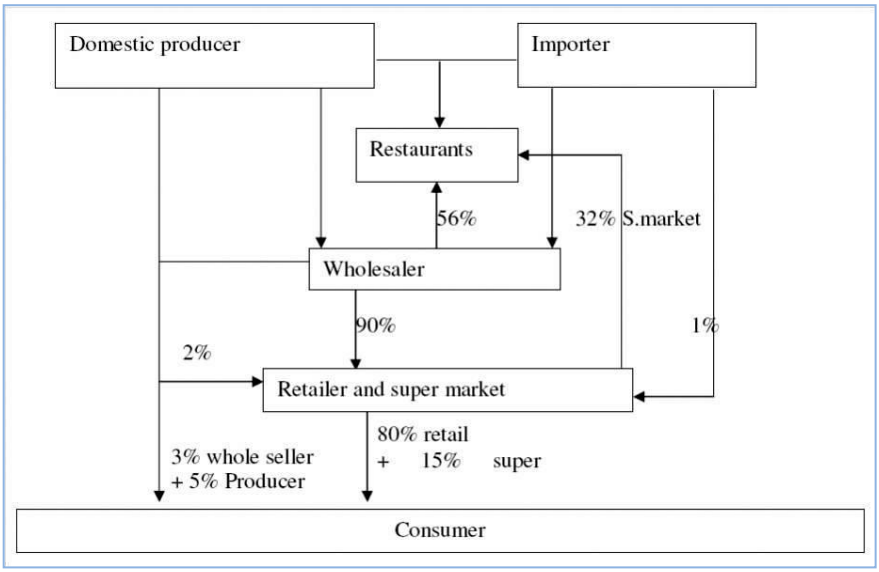

Fig. 16 – Sources of pasta at different marketing stages. Source: ECBP 2008

Table 10 - The proportion of households consuming different brands of pasta. (Source: ECBP, 2008)

PASTA TYPE	MEKELE	BAHIR DAR	JIMA	HAWASSA	ADAMA	DIRE DAWA	ADDIS ABEBA	TOTAL
Local								
Vera	95.6	93.4	86.5	98.0	99.0	99.4	92.2	95.1
Ceralia	50.0	57.4	58.3	73.1	48.2	0.6	40.3	46.4
Mondial	46.2	16.2	59.6	43.3	34.0	0.6	30.7	32.9
Bouna	9.5	27.2	6.4	6.5	36.5		15.2	14.5
Others	17.1	22.8	30.1	28.4	23.4	3.3	9.1	18.7
Imported								
Golda						**57.2**	3.9	8.9
Spaghetti	**40.5**		1.3	1.5			8.7	7.1
Magda	17.7	2.9			17.3	2.8	2.6	6.1
La caza	1.9		8.3	1.5			14.3	4.1
Others	9.5	1.5	0.6	1.0	3.0	16.7	15.2	7.2

Particularly in Mekele and Dire Dawa, many households tend to consume imported pasta. Currently, companies tend to produce pasta from hard bread wheat but the marketing problem does not allow them to get the required quality of hard bread wheat. As a result of low price incentive for durum wheat, its production is dwindling.

4. Upgrading the Wheat Value Chain

Upgrading the wheat sector takes into account the systematic review of the problems and opportunities that exist across the value chain from input supply to marketing of the final product. In the above analysis, the constraints were identified across the value chain which will be the base for designing intervention areas. For instance, in wheat production, the issue of quantity and quality wheat production was emphasized and in order to overcome such problems lists of options could be identified. In this the major target is to produce quality marketable surplus that could feed the increasing population in the urban sector. Some of the bigger options could be:

- Support the existing commercial farmers to improve productivity
- Identify the possibility of irrigated wheat production and attract commercial farmers
- Improve the productivity of small holders.

These options are not an activity by themselves and they need further disaggregation to reach at meaningful work packages. Disaggregating and designing work package could be easy but the coordination of the work package may be an issue in Ethiopian context as the activities in the package has to be done by different institutions at the same time. For instance, identifying possibility of wheat irrigation and attracting commercial farmers will be done by MoARD, BoARD, Research and Investment Authorities, and others.

In a similar vein, upgrading options need to be identified for all the major value chain stages. What is more important is how strong the work packages at one stage of the value chain are linked to the work packages of the other value chain stage. It is mainly the coordinated

work packages that bring change in the value chain. But the coordination and effective implementation is the major problem in Ethiopian context. The very simple reason is that each institution has their activity plan and looks such activity as additional or project. Thus if value chain is to be supported it should be long term plan to make sure that the system run on its own. In, we have gone only to the extent of developing the work package and because of change of direction, support to wheat sector stopped. Thus, the following work packages will only give starting point to develop work packages towards supporting the wheat value chain.

5. The Challenges in Upgrading the Wheat Value Chain

The major challenge in the wheat value chain and the reason behind supporting this value chain in general is because of the incoming globalization. Under current productivity and service provision, it will become more difficult for Ethiopian wheat sector to withstand the competition from more productive and efficient system of most other countries. More productive and efficient countries can provide wheat products at lower cost to the consumer which has repercussion on the economy in general. Some of the specific challenges in this regard are discussed below.

1- No Quality Control System

There are quality and standards for different products and including the wheat products with Ethiopian Standard Authority. However, unless the standards are hazardous to the consumer, they are all voluntary. As the result, it could be said that if any factory produce pasta or biscuit of any lowest possible quality, they can sell on the market so long as there is no health hazard. Although this is possible, under the condition we are in now (shortage), the quality tends to be low and the companies have less concern on the improvement of quality since there is no major problem from the market side. The companies are not expected to attain certain level of quality that makes them competitive in the international market. This is already eroding the technical capacity of the companies to produce quality product.

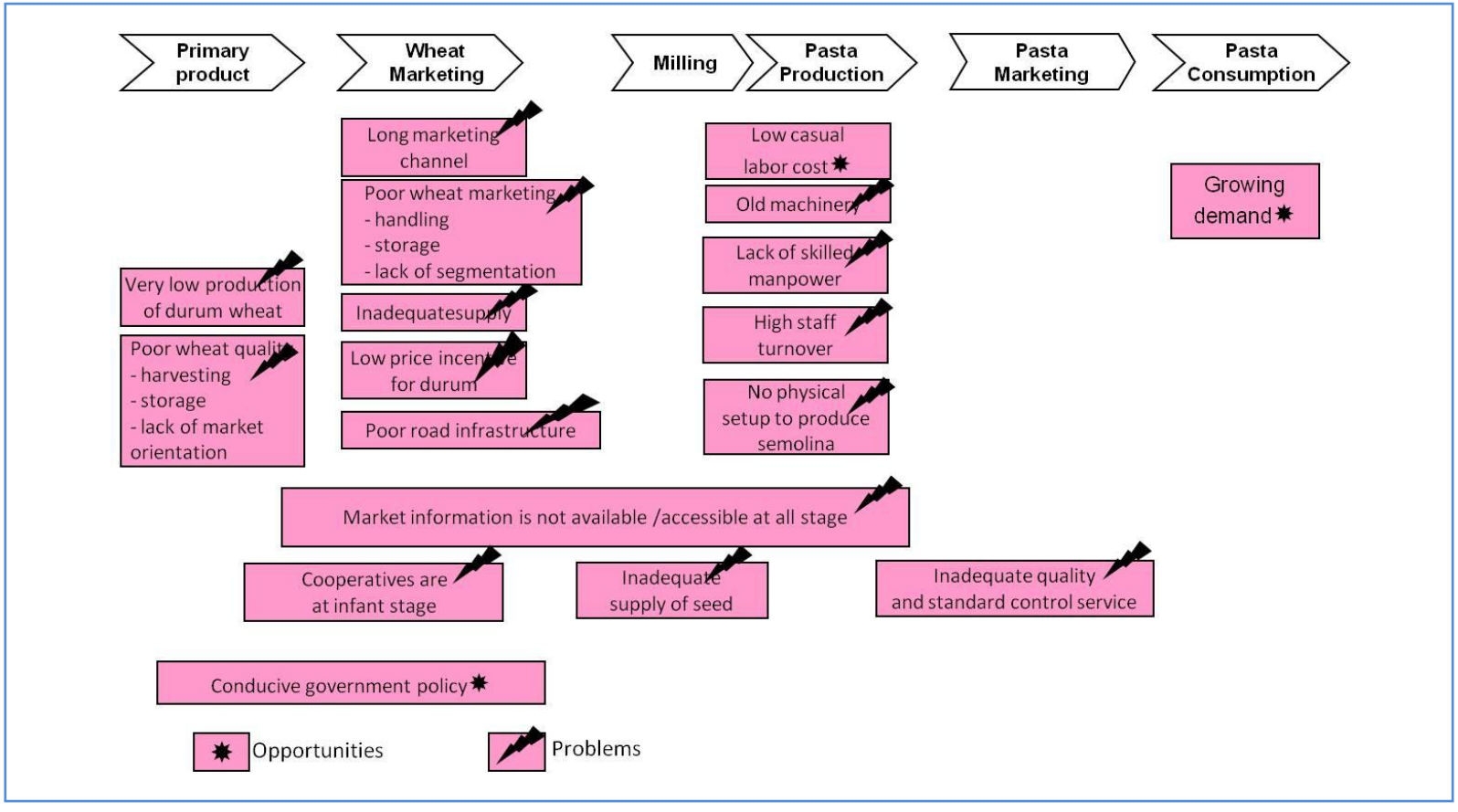

Fig. 17 - Problems and 0pportunities in the Pasta Value Chain

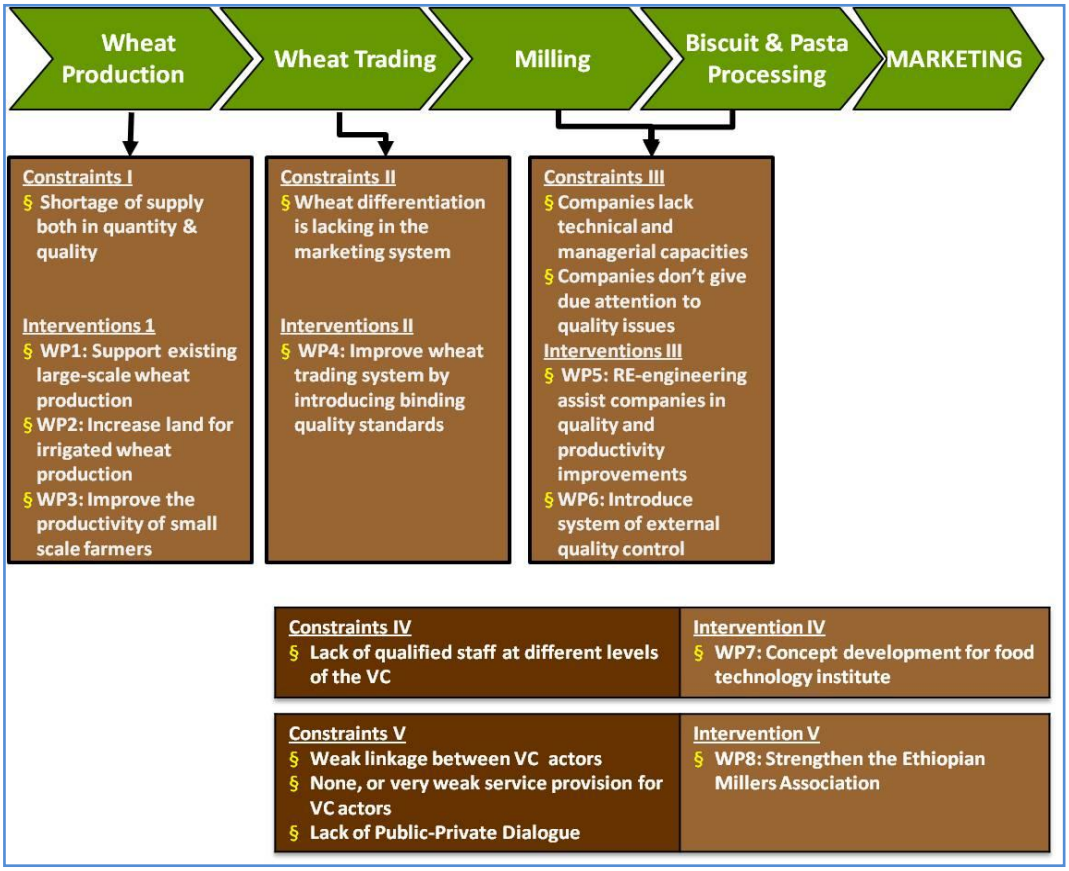

Fig. 18 – Recommended work packages (WP) for upgrading wheat value chains

2- Weak Quality-based Pricing System

Wheat marketing in general is still traditional. Farmers bring different wheat to the traders or cooperatives at market places where they mix wheat. More important to the trader and the farmer is the physical parameters such as weight, grain filling and the admixtures to negotiate for price. Wheat marketing in general, with the exception of few cases, does not target the final product (biscuit, pasta, bread). The knowledge of trader in terms of quality mainly limited to purity and level of grain filling, as these are required by most of the buyer. However, classifying wheat into hard and soft is becoming common recently among the traders, mainly because some factories are demanding wheat

by these categories. In such cases there is price difference paid for wheat and such initiative need to be strengthen to improve the quality of the final product. Yet, hard and soft are relative terms and the analysis if at all done only indicates the average value of the sample and does not indicate the level of variability within the sample. As a result, in a sample there could be very soft wheat as well as hard wheat and the average value may tend to be hard or soft. The qualities of wheat which are important for final product are grain hardness and protein content (Oliver 1990). The processing companies usually mix different quality wheat to attain a certain standards of the final product. In the current case, the processors has less control over the quality of the final product as mixing has been done before it reached the processing companies. Those companies who want to improve the quality of their product by using quality raw material have the challenge, as they could not get the expected quality because of mixing. Quality based pricing system is not strong enough to lead wheat market towards quality improvement of the final product.

3- Low Wheat Production

Ethiopia with 1.6 million hectares is the largest producer of wheat in Africa, in terms of area. Yet Ethiopia also imports large amount of wheat and in 2007 this was about 457,000 tones showing the unmated demand. One major issue with agricultural sector in general in Ethiopia is the domination of smallholder farmers in the production system which has limited the marketable surplus. Moreover, small farmers focus primarily on their consumption and market is not their major focus to produce the quality and type of wheat the market is looking for. The buyers are thus obliged to buy what is in the market. Little effort is there in terms of targeting the wheat research and development towards the quality requirement as there is already food gap that has to be filled. Durum wheat in particular is very sensitive to the agro-ecology in which it grows.

4- Low Technical Capacity of the Industries

Most of the companies, there are very limited technical professionals that could make the system run perfectly. There is no milling school in the country and thus the existing about 200 milling houses do not have professionals. Only limited companies have laboratory facilities that help them to produce quality product. None of the milling houses currently installed to produce semolina to produce quality pasta. Thus, the technical capacity and capability of the wheat processing industry is limited to produce quality product in general.

6. Recommendations

1- Think outside the box

In ECBP, we were trying to look into these companies for sometimes and I can see many problems with them. However, unless we put these companies on tract, still the success of the projects we are trying to develop will be low. Thus, we have to join our hands to be successful. I know research and MoARD do not have the competence to support the industry, but MoTI is responsible to support these companies and link their support to the project activities. The Ministry of Capacity Building through the Engineering Capacity Building Program (ECBP) is investing millions of Euros to capacitate these companies. What is needed now is to link the different interventions to make the whole system effective. During our support to the companies, we recognized the problem of shortage of wheat and we believe there is a need to support that. However, that support need to be linked directly to the final processors and sustainable linkage created.

I am not sure how the project considered the marketing issue. I want to bring to your attention that even if we produce quality wheat, the marketing system will destroy the whole quality issue and that is the reality we are in. Under current market arrangement, never expect to produce quality pasta or biscuit. I know there is Ethiopian Commodity Exchange which was not yet fully functional. Even if it is functional, there is a need to change

the wheat grading, as the current grading system does not serve the purpose.

In summary, there are still many problems, there are also many organizations working to solve the problems, however, they are not linked to each other, and hence it is difficult to attain the objective of improving the wheat value chain, or any crop for that purpose. Thus, let us find ways of making the whole system successful.

In we in ECBP have analyzed the wheat value chain and tried to identify the major problem areas, our intervention was mainly at the company level, but the root of the problem is found at the production, or raw material supply level. We should continue to find ways to make our efforts work.

2- Don't try to push the chain

We have been doing research and extension for long. There is progress in bringing changes to production and productivity of wheat. We could not maintain the productivity attained at certain time for longer period raising the issue of sustainability of our intervention. This is mainly because we always try to push the chain. There is a need to change the mindset of always pushing the technology to farmer but not in terms of pulling the chain. I know in research there are many attempts in this direction including the wheat, particularly in *Debre Zeit* and *Sinana* on Durum wheat. In *Debre Zeit*, there were activities to link the production of durum wheat with *Kality* as well as *Ada'a*. In Bale, there was similar attempt to link production to *Dire Dawa* food complex. However, our success is still below the expectation. We have to learn from this and try to provide the appropriate support. Thus, the issue is where to start the support (production? marketing? processing?) With the principle of pooling the chain, we have to make sure that the processing companies do have the capacity that enables them to compete in the globalized world.

3- Meet international standards

If we continue to produce the current quality of pasta and biscuit with the current cost of production, we are certain that we cannot compete in the global market. The productivity of wheat in other countries is very high contributing to low production costs and they also produce better quality. Unless we solve this market barrier, this product will be sold cheaply in the market and the local companies cannot be competitive. This entails that there will be negative effect not only on the processing industry but also on the production of wheat. In order to avoid such complication there is a need to upgrade the local companies to meet international standards in terms of both quality and cost.

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• One Village One Product Movement and Value Chain

by

Takahiro Nakamura[12]

1. Introduction

Ethiopia is an agrarian country with more than 80% of its population living in the rural area. In recognition to the national food insecurity problem, the Government has given priority to food security and improvement of productivity. Yet nowadays, due attention is also given to value addition of agricultural products with the continuous economic growth. This may encompass the fields of agricultural products processing and looking at the value chain as a whole system instead of focusing only on the farming practice of staple food crops. This can contribute to solve the issue of food insecurity, as stable economic growth can create new job opportunities to the farmers and revenue can be re-invested to solve the existing food insecurity problem in sustainable manner.

Developing new value added products could be seen from the following three different viewpoints

- Improve the quality of existing agricultural products (cereals, pulses, vegetables etc.)
- Introduce new agricultural products (flowers, oilseeds, fruits etc.)
- Develop new processed agricultural products (dairy products, fruit juice etc.)

In the context of overall economic growth which contribute to GDP or acquisition of foreign currency, much attention is tended to be given to products targeting residents in the big cities like Addis Ababa or the global markets. However, great majority of the population is living in the rural area. Therefore, alleviating the poverty or improving of the livelihood should also be fully considered when the value addition is discussed.

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In this paper, the theme of livelihood improvement of the rural community through development of value added products is discussed citing the achievements of One Village One Product Movement in Japan and best practices in Ethiopia.

2. One Village One Product Movement and Value Chain

1. One Village One Product Movement

One Village One Product (OVOP) is a movement or campaign initiated in 1979 in Oita prefecture (South-Western part of Japan) by Mr. Hiramatsu, governor of the prefecture. The name OVOP is intended to show the notion of 'Developing at least one special product in one community'. But it doesn't intend to limit one product in one community. (In this case, the definition of community depends on the condition of the area. It can be in towns, rural villages or can be formed by a group of rural entrepreneurs.)

At that time Oita prefecture was suffering from growth impediments such as: (a) losing driving force in the rural area by de-population and aging society, (b) strong economic dependence on the public administration, and (c) deprivation of confidence and negative attitude towards the place where they were living. Under this condition the newly elected governor of the prefecture, Mr. Hiramatsu visited several local entrepreneurs, NGOs, etc. to exchange views to address the situation. He promoted newly developed special product as the sale manager of the prefecture to the big cities like Tokyo under the motto 'One Village One Product' movement. The OVOP movement was promoted based on the following three key principles:

1. Local yet Global

   Not simply make products rather create special products with local resources by local people which can be accepted not only in the big cities but also in the global market.

2. Self Reliance and Creativity

   The driving force of this movement is the community. It is not the public administration but the local residents who

choose and decide what to produce as their special product. Creating unique products relying on their own creativity is strongly encouraged.

3. Human Resource Development

   Development of people who can challenge new things, have courage to overcome constraints and lead the community to success is the most crucial objective of the OVOP movement.

   In case of Oita, public administration supported the movement through:

   - Technical support to the group or community utilizing approved technologies from research institutes of Oita prefecture
   - Support promotion of the products to big cities through festivals and governor' s active appearance on mass media
   - Encouraging the group or community by giving awards from the governor. It should be emphasized that 'financial support' was not given from public administration.

   The other distinct characteristic of the movement is the approach to consider all the stages from production to brand development. To be specific, these are: (a) full utilization of the resource in the rural area and process it in a bid to add value with the creativity of local residents, (b) promote it to big cities or global market and (c) create a 'Regional Brand' with the image of high quality or uniqueness. This is taken for granted these days, but it was not well understood in the rural area at that time. The common recognition among rural residents was *'The products in the rural area are low quality and never accepted by the urban people'*, *'Producing staple food crops is the role of rural area*', and the like.

4. OVOP and the Value Chain

   In general, the objective of OVOP is to change the people from 'supplier' to 'value provider as the part of the value

chain'. The supplier is the people just focus on their products without seeing the expected value, without considering the value addition from the view of the buyer or just following the instruction of public administration. On the other hand, the Value provider see the overall value chain proactively, how the products will be processed, where it is consumed, and what they can do to add more value for their products or overall value chain.

This mind-set among rural people occurred through the OVOP movement in the beginning of 1980s.

5. Crucial Viewpoints for Value Chain

In order to grasp and analyze the value chain, the value creation (ideas for value addition such as processing, packaging, quality improvement) and value management (group management, marketing management such as transaction and negotiation with the buyers) are both crucial viewpoints. Under the OVOP movement, groups mainly focused on value creation at the initial stage. Yet, in the course of the development, they tried to cover the management area looking at overall value chain.

3. Best Practices of One Village One Product in Japan

1. *Oyama* Town

Oyama town with a population of about 3,800 persons is located in Oita prefecture. After the Second World War, Japanese government recommended farmers to grow more rice and raise more livestock. *Oyama*, is however a tiny town located deep in the mountain and not applicable to this recommendation. Therefore, they started to grow chestnuts and plums as value added agricultural product. Under the slogan of "Let's plant chestnuts and plums and go to Hawaii", the Head of the *Oyama* Agricultural Cooperatives promoted the chestnuts and plums. Also they started to produce pickles, juice and many other value added products from plum. As a result the *Oyama*'s growth rate of 2004 was 1.76 times that of 1980, which is the top position in Oita prefecture. More interestingly, 70% of the residents in

Oyama town possess a passport which is the highest rate in Japan at present. This shows that they have huge interest to travel abroad despite living deep in the rural area. They are still improving their activities to expand their role from value creation area to management area. They have opened a direct sales shop where farmers can sell their product directly and also run a restaurant serving delicious local dishes cooked by the farmers' wives. They could succeed to maximize the benefit by managing the overall value chain, from producing raw material to processing and selling those by themselves.

2. *Irodori*

This is not an example from Oita prefecture where OVOP movement was initiated but very similar case to be considered as an OVOP model. *Irodori* is related to Kamikatsu Village. Kamikatsu is located in the mountains of Tokushima Prefecture with a population of 2500 persons. While Kamikatsu has the highest rate of aged population in Tokushima prefecture, the elderly people are healthy and lively. One of the reasons is the company called "*Irodori*" meaning colorful decoration in Japanese. "Kamikatsu is dying, no industry survives here" lamented the residents in early 1970s and a lot of younger generation left Kamikatsu to seek employment in bigger cities. In 1979, one extension agent worker, Mr. Yokoishi initiated the idea to collect beautiful leaves in the town and sell it to the high-end Japanese restaurants. At the beginning, the idea was laughed by all the residents and said "leaves are available all over the country and are just trashes. How it can be a product?" However, Mr. Yokoishi didn't give up. He visited many restaurants and collected market information for two years. He visited the farmers one by one to convince them to join the activity. Also he initiated the community to make miniatures of different items from grass and leaves and promoted to the restaurants to use them as decoration of Japanese dishes. Today, more than 200 members have joined *Irodori*; and their sell has jumped from 9,000 USD in the late 1980s to 1.7 million USD in ten years.

"Anything shared by the whole community can be a local resource" says *Mr. Yokoishi*.

4. Best Practices in Ethiopia

1) Creation of Value as 'Forest Coffee'

Japan International Cooperation Agency (JICA) is supporting a project named "Participatory Forest Management in *Belete-Gera* Regional Forest Priority Area" since October 2003 in Jimma Zone of the Oromia National Regional State. The first phase of the project had been completed in September 2006 and the second phase has been started in October 2003 and runs till September 2010.

The objective of the project is to establish Forest Management Associations to conserve as well as utilize the forest resource with sustainable manner. It needs proper management system which requires active participation of the local community dwelling in the *Belete* and *Gera* natural forest area which covers a total of about 150,000 hectares.

This system of participatory forest management was introduced by the Oromia Regional State with due support of legal framework (proclamation). However active participation of the local community cannot be achieved only by applying modern management system as they have been living in the forest area and utilizing the forest resource traditionally. The modern management does not mean anything for them without any incentives. Then, "Forest Coffee" was one of the ideas initiated by the project team to attract the local residents to participate in the project actively. As it is well known, *Belete-Gera* forest area is the home of coffee growing under natural conditions. The livelihood of the forest dwellers was based on production of annual crops at the expense of clearing the forest and to some extent by collecting, drying and selling the coffee without appropriate care and processing of the coffee beans. As a result this distinct coffee was sold at low price predominantly for local consumption. On the other hand, coffee which is naturally grown without any chemicals can be one of the value-added products in

international markets like in Europe or Japan. In this relation, the 'Forest Coffee' can fetch better price and improve the livelihood of the community which in-turn motivates the community to conserve the natural forest.

The program started in 2007 and some coffee was exported to Japan as a trial in 2008. As a result, a number of Japanese private companies showed interest in importing the 'Forest Coffee'. This year, 47 communities which comprise around 2,700 households are expected to join the 'Forest Coffee' business.

2) Value Chain of 'Forest Coffee'

Based on this creative idea, the project has invited an international NGO named "Rainforest Alliance" to conduct a study for issuing certification. Then, "Rainforest Alliance" has issued a certificate of 'Forest Coffee' in 2007 which enables the producer to get 15-25% price premium in the international market. One trading company for *Belete* area and another one for *Gera* area were selected by the project based on the proposal provided by several traders. Each company contracts with the forest management association (group established in each community) to purchase the certified coffee when it is harvested. The coffee were picked, dried, packed in the bag and brought to the center of village by farmers. The purchased coffee is sent to Addis Ababa, processed by the trader, and exported based on the transaction with importer in EU or Japan; and then premium is paid back. Repacking is done in Japan, and sold in supermarkets in Tokyo. The value chain for the 'Forest Coffee' is shown in Fig. 19.

3) Quality Improvement

Previously people in the forest were just picking the coffee cheery and sell to the local trader without considering the quality of coffee or where they will be consumed. When the programme started, the trader asked farmers several kinds of criteria for the coffee such as no extra mixture other than coffee, pick only the red cherry, dry them on the proved bed other than on the soil and so on. Those are clearly mentioned in the contract agreement

and explained to all the participants. In the harvest season, the trader came to village to collect the bag of coffee and check the quality of each coffee. The coffee which could not meet the criteria were rejected though the coffee which passed the criteria were purchased and money was paid there, in front of the people. This changed their attitude. People fully understand the benefit to follow the instruction agreed with trader, and for the first time understood the reason why trader request the criteria as the part of value chain through discussion with them.

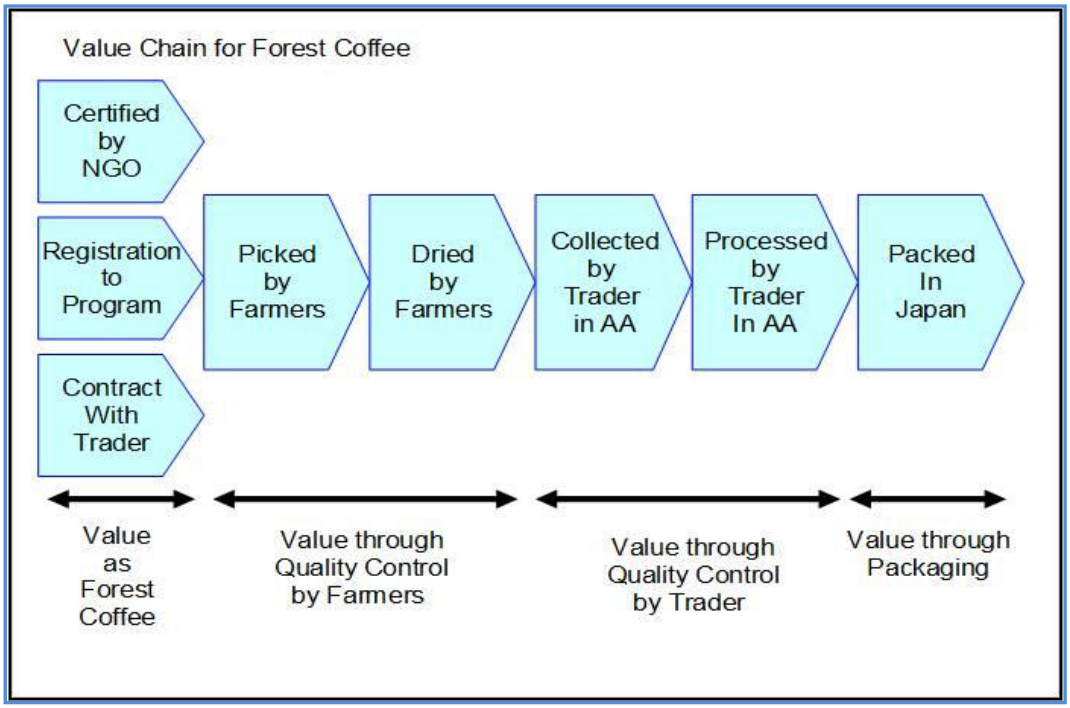

Fig. 19 – Value Chain for 'Forest Coffee' in Ethiopia

4) Make Farmers' Groups to be Cooperative

In the course of the second year, the new Ethiopia Commodity Exchange (ECEx) was commissioned by the government. Under the new system, all coffee had to be transacted under the ECEc, other than producers' group such as cooperatives. There was high possibility for 'Forest Coffee' to be affected by the system, because ECEx set the standard unit of amount to be transacted.

But 'Forest Coffee' is so scarce that those cannot satisfy the demanded quantity. The only options were: to mix with other coffee and forget about value as 'Forest Coffee' or to be cooperative. This year, the issue may be solved because ECEx opened new transaction system which applies to coffee with scarcity value such as 'Forest Coffee' in *Belete*-and *Gera*. However, some of people involved in the 'Forest Coffee' business recognized the necessity to cover the management aspect of value chain with this news. If they become the cooperative, they can obtain the legal entity and the credit from the bank to be utilized for inviting the certifier, renting trucks and collecting more coffee, and can minimize the effect of external condition. The process to register as the cooperative has just started. This means people started to be interested in the management aspect of the value chain though it is given accidentally from external condition.

5. Further Value Creation

Project team members including Ethiopian and Japanese experts and also Japanese private companies are working together towards adding more value to the coffee. In addition to appropriate picking, drying and hulling of the coffee, they are planning to roast the coffee by the community themselves or promoting the coffee as a package of coffee ceremony (sell the coffee with the image of coffee ceremony, traditional dishes or cups and so on).

6. Lessons Learned to Promote OVOP or Community Development

Based on the lessons learnt through various activities related to OVOP, following are key areas to be kept in mind to conduct value chain related activities in the context of livelihood improvement in the rural area:

1) Value Creation and Value Management

Some start from management part first, others focus on the value creation. More or less the balance of both value creation and management is crucial for the sustainable business yet there is no need to be intervened simultaneously.

2) Remove the One-side Assumption and Nurturing Confidence

There is a generalized negative belief that people in the rural area have less creative or innovative sense. However they their own accumulated knowledge and wisdom transferred from generation to generation which is in reality a seed for innovation. New innovative ideas can be unfolded by removing the assumption that "anything in rural area is not good". Furthermore, provision of opportunities to many people through exchange visits, positive evaluation like awarding prizes or inviting successful people to make presentations and lectures, will function as a tool to remove the assumption and nurturing confidence among them. Attitude change of the supporters' sides also should be fully considered.

3) Long-term View and Attitude to Learn from Failure

Innovation will occur in the process of trial and error. Sometimes it can happen fast and yet most of the time it takes long time, like few years. Supporters tend to expect quick results to show to the financers (i.e. to the taxpayers in case of donors). However, failure can be an opportunity for the people to learn and improve the strategy in the future.

4) Proper Needs Assessment

Needs assessment is essential to conduct any business activities. An actual example can be cited from Malawi. In case of Malawi, one group found out that the people need packages of rice without small stones as all the rice sold in the area was mixed with small stones, and women had to clean the stones at home. Then the group started to pick out the small stones by hand without any machines and sell clean rice. As a result, the sale has boosted. Therefore, one needs to conduct appropriate need assessment of users' so that value addition can be achieved without huge investment.

5) Consideration of Social Positive Impact

Sales amount or profit is one of the indicators to evaluate success. Yet less measurable but no less profound factor is attitude or

behavior of the people involved in the activity. In case of "*Irodori*" in Japan, the rural women have enjoyed exposure to new environments outside of home. They are proud of their culture, tradition and look at the natural resource as a treasure from their ancestors. Same impact is expected in case of 'Forest Coffee'. Therefore, social factors should be monitored and recorded properly to evaluate the impact of activities, in addition to the economic aspect.

6) Participation of Rural Women

Lots of reasons behind success stories are raised. But one common condition for success is the active participation of rural women. Culture and tradition should be fully considered, but it is worth paying attention to the capacity of rural women and empowering them.

7) Pursuing Further Value Creation

Value should not be one in one group or one region and never a given. Continuous attitude to seek and add new value is strongly required for the sustainability.

7. Framework of Support to the Community

Based on the above mentioned examples, the following points are considered as the framework to support community-based-micro-business:

1) Technical Assistance for Value Creation

Technical assistance for processing and quality improvement is essential. Coordination to gain support from Development Agents, Researchers, NGOs and micro-enterprises is basic rather than obtaining high-tech equipment and machineries from abroad in terms of sustainability.

2) Business Management Assistance for Value Chain Management

Whether to apply for micro-finance credit or other purposes, basic business management skill is crucial for sustainable business activity. This covers from in-side group management such as book keeping to negotiation with buyer, and

management of value chain overall. Assistance on business management can be sought from cooperative promotion offices, public administrations related to industry sector and private institutions.

3) Financial Assistance

Micro-finance institutes are one of the options for financial resource when some amount of investment is required by a group. To get financial support the MF-institutes request a business plan which should be prepared with the support of Development Agents or NGOs. Another option of getting the financial resource is to raise small fund by the group members. Either way, too much reliance on the external investment from the initial stage should be carefully avoided. Mr. Hiramatsu, the governor who promoted OVOP in Japan, emphasized the importance of sustainability and was cautious about the reliance on subsidies. He stressed it by saying "*End of money is end of love*".

8. JICA's Support for One Village One Product Project Promotion

Currently JICA is preparing a project to start One Village One Product promotion considering the above mentioned assistance areas, namely: (a) technical assistance, (b) business management assistance (c) financial assistance, (d) collaborating with public administration and local service providers such as micro-finance institutes and small-scale private enterprises. The initial geographical target will be 4 –5 selected Woredas as a pilot project in SNNPR. The basic procedure is attached as a chart. It includes starting from preparation of proposals by the group with the assistance of DAs to conducting screening at Woreda and Regional level. One cycle is assumed to be 6 months. A group which has interest to get the support but unable to pass the screening process will be continuously advised by the project team until it can be accepted. As discussed previously, innovation will only be generated through the process of trial and error. The procedure itself will be improved to make the process more effective and efficient. The support mechanism is described in Fig. 20.

This project intends to more highlight the potential of value creation among people in the rural area, considering proper value management aspect.

9. Conclusion

In this paper, brief explanation of OVOP and practice in Ethiopia are described. In addition, the lessons learnt and the framework of the assistance is also described. OVOP is not a completely established approach rather it is an initiative or philosophy to promote business practices in rural areas.

The discussions emphasized:

a) All rural areas have their own resource which can be utilized for value addition or as a unique product, and

b) Continuous and long-term trial and error process is the key for success.

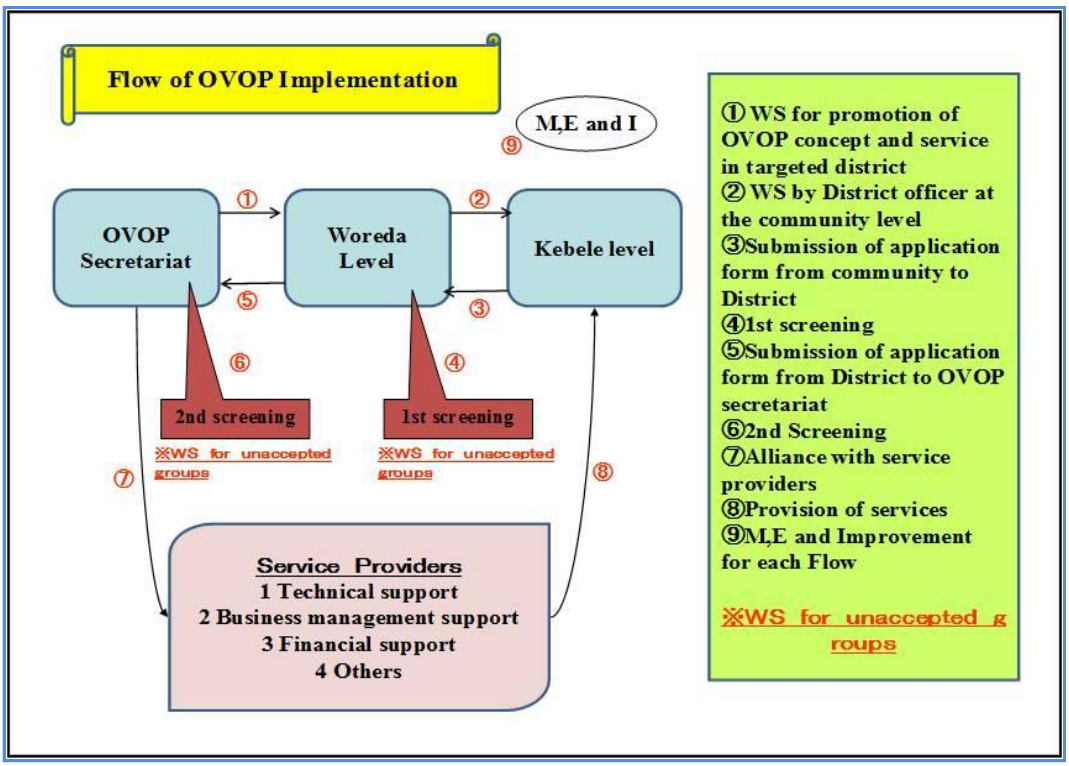

Fig. 20 – Flow of OVOP Implementation in Ethiopia

SECTION 6 - -
ENHANCING AGRI-BUSINESS LINKAGES

- Discussion Paper 1:
  UNIDO Trade Capacity Building and the Approach to Value Chain and Cluster Development
  DR. DAVID TOMMY
  UNIDO Representative and Director of the Regional Office, Addis Ababa, Ethiopia

- Discussion Paper 2:
  Enhancing Agri-business through Horizontal and Vertical Commodity Value Chain Integration
  DR. SUSAN MINAE
  Agri-business and Enterprise Development Officer, SFE - FAO, Addis Ababa, Ethiopia

- Discussion Paper 3:
  A Perspective of Ethiopia's Agri-business Future
  BRUCK FIKRU
  Investment and Markets Advisor, Agri-business and Trade Expansion Consulting Firm, Addis Ababa, Ethiopia

• UNIDO Trade Capacity Building and the Approach to Value Chain and Cluster Development

by

Dr. David Tommy[13]

THIS IS AN EXCERPT OF THE POWERPOINT PRESENTATION OF DR. TOMMY.

1. What is Value Chain

- Value chain is a sequence of target-oriented combinations of production factors to create a marketable product or service - from its conception to the final consumption. This includes activities such as design, production, marketing, distribution and support services to the final consumer, and now also recycling.
- It works on the demand side concept

  In the context of value chain, the starting point is often defined as the final sales. In a sustainable value chain, businesses work together to reach a common goal – providing consumers with a product they want.

  The concept of supply and value chain is illustrated in Fig. 22.

  1) The Supply Chain

  Traditional supply chains push products through to the consumer

  2) The Value Chain

  In a value chain approach, it is the consumers that pull a product through demand

[13] **Dr. David Tommy** is UNIDO Representative and Director of the Regional Office, Addis Ababa, Ethiopia

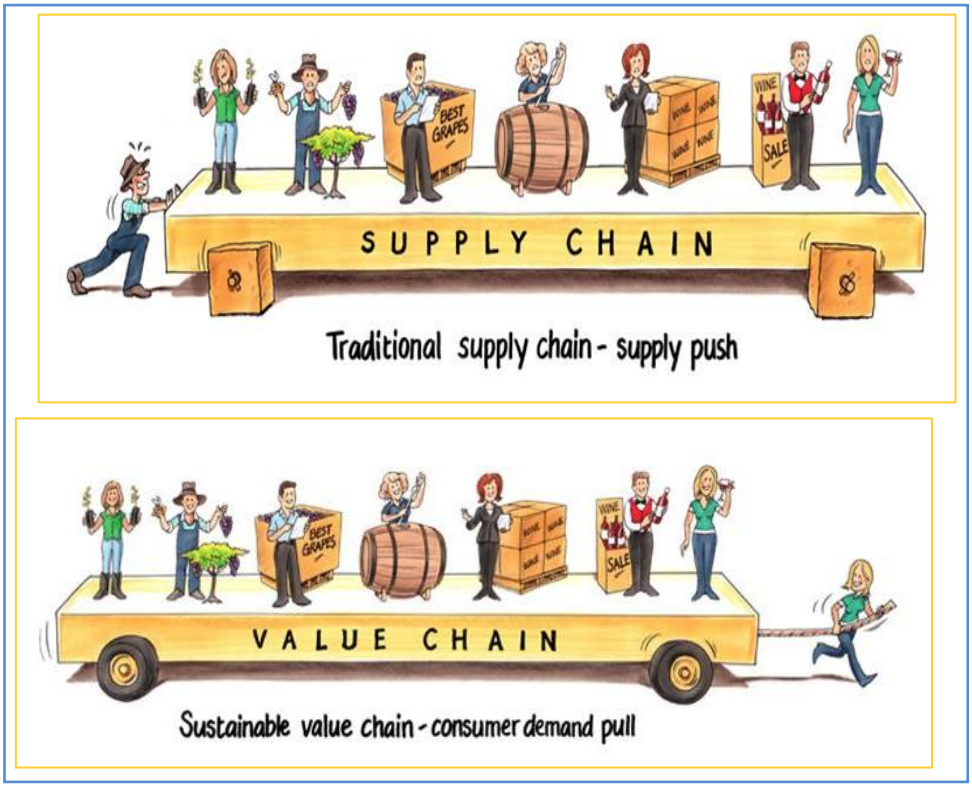

Fig. 21 – Illustration of the concept of supply chain and value chain

The primary difference between a supply chain and a value chain is a fundamental shift in focus from the supply base and producers to the customer base and consumers

2. Value Chain Analysis and Competitive Advantage

Sustainable Value Chain Analysis follows a product from production to retail, to objectively assess how well all the businesses involved in making and delivering the product to consumers worked together, and what activities added value in the eyes of consumers.

The outcome is a clear direction for everyone to work together to maximize opportunities for adding value in line with what consumers want, and, where possible, to lower costs and environmental impacts (Fig. 22).

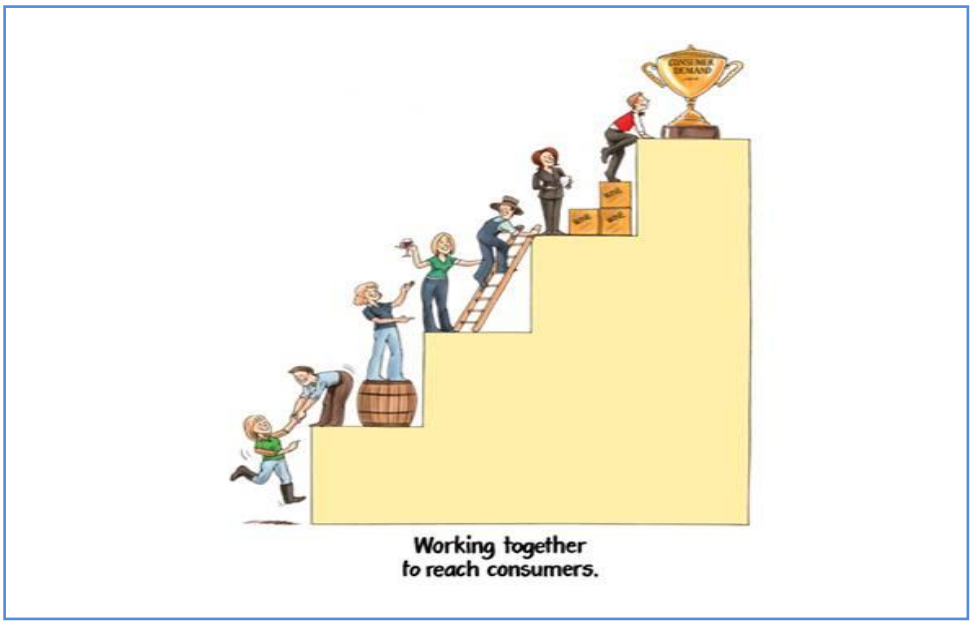

Fig. 22 – Illustration of businesses working together to satisfy the consumers

Sustainable Competitive Advantage:

There are three critical elements to sustainable value chains:

1. Working together with the other businesses in the chain
2. Understanding consumers
3. Being environmentally sustainable

While businesses might be working on one or all of these elements, the real benefit and sustainable competitive advantage are realized when all three are considered together (Fig. 23).

Fig. 23 – Illustration of the 'competitive business advantage'

3. UNIDO 3Cs Approach

The UNIDO 3Cs approach (Fig. 24) are:.

- COMPETITIVITY of productive capacities

  Countries have marketable products to trade

- CONFORMITY with standards

  Products must conform to requirements of clients and markets

- CONNECTIVITY to markets

  Rules for trade must be equitable and customs procedures harmonized

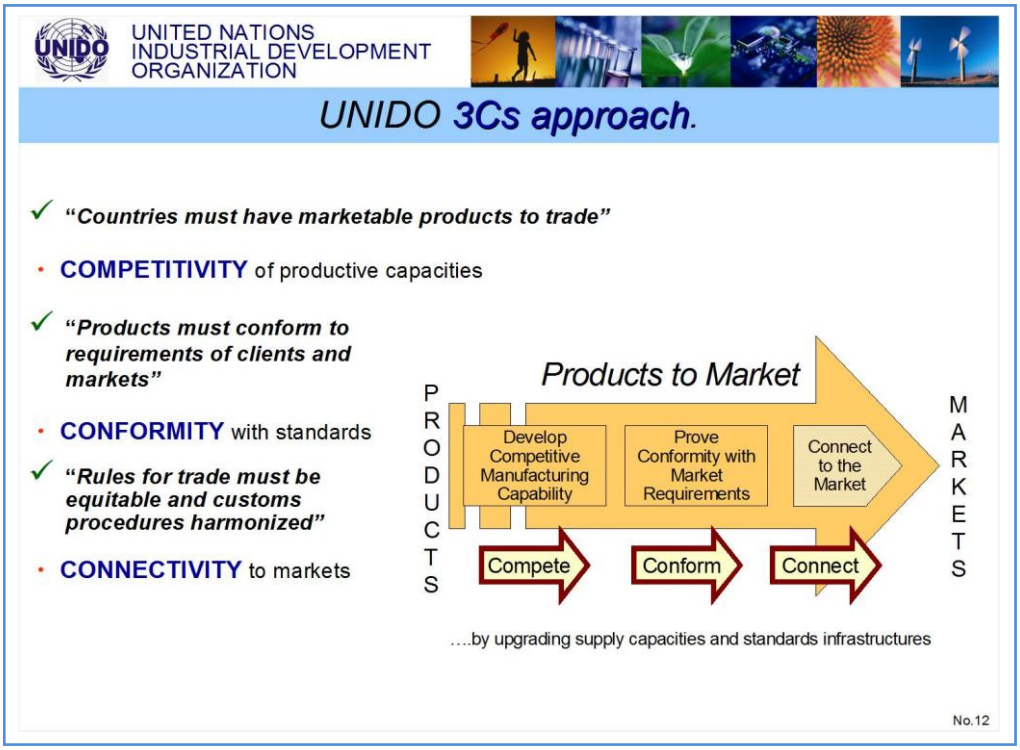

Fig. 24 – UNIDO 3Cs Approach

4. What are Clusters?

Clusters are agglomerations of interconnected companies and associated institutions. Firms in a cluster produce similar or related goods or services and are supported by a range of dedicated institutions located in spatial proximity, such as business associations or training and technical assistance providers. Vibrant clusters are home of innovation oriented firms that reap the benefits of an integrated support system and dynamic business networks.

The cluster structure is illustrated in Fig. 25.

Clusters are not equivalent to:

- Network: Share interest of business but lack institutional support
- Export consortium: Only focused on export, lacks pro-poor element

- Value chain: 'Long but thin' – lacks the geographical agglomeration

Clusters and business networks have become keywords in the policy debate in industrialized and developing countries. They are regarded as tools to promote poverty reduction and the development of competitive industries. However, several bottlenecks may hamper their performance.

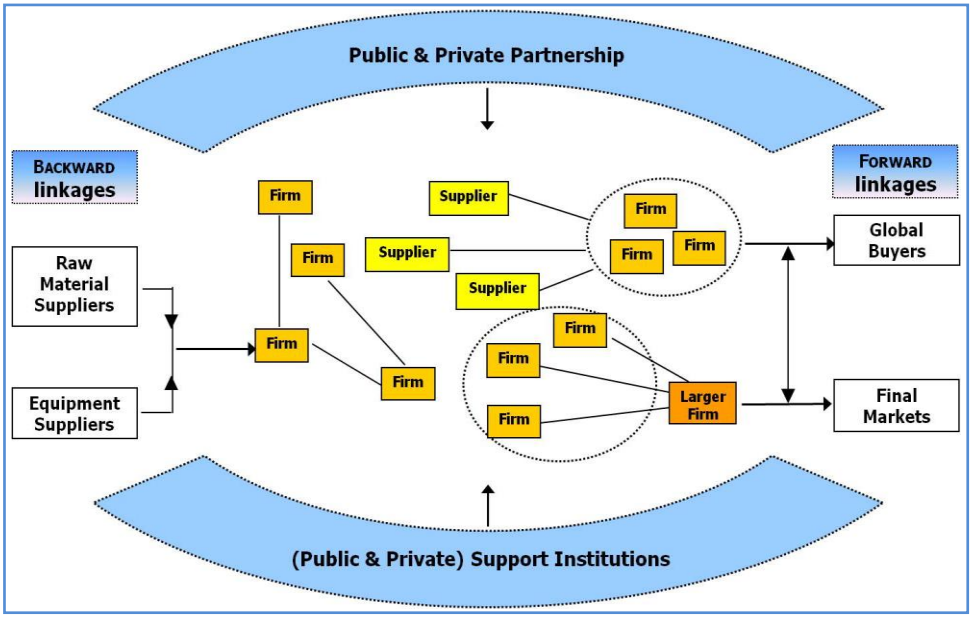

Fig. 25 – Illustration of the Cluster Structure

5. Rationale for the Cluster Development (CD) Approach

Cluster Development brings collective efficiency for pro-poor growth.

- **Competitive economic systems** - learning, technological spillover and infrastructure investments benefits productivity increase in the whole economy
- **Pro-poor impact – i**ncome and employment generation and expanded consumer choice

- **Example:** Tirupur in India cotton hosiery cluster benefitted more than 7000 SMEs, US$650 mil/year export
- **Technical assistance** for cluster development (technical assistance to networks of firms and institutions, training and mentoring of Cluster Development Agents – CDAs, monitoring & evaluation of cluster initiatives)
- **Raise awareness , training and policy advice** for policy makers and representatives of support institutions on the cluster approach and for up-scaling at the national level
- **Cluster to cluster initiatives**: organization and facilitation of study tours, joint workshops, twinning of similar clusters in different countries
- **Delivery of training** at the regional/global level and **formulation of knowledge resources** (training packages, guidelines etc.)

6. The Cluster Development Approach

UNIDO has designed a six-stage methodology for the formulation and implementation of cluster development projects.

- **Cluster selection**, which entails the identification of the cluster(s) to be assisted;
- **Diagnostic study**, an action-oriented analysis of strengths, weaknesses, opportunities and threats of the cluster(s);
- **Vision building** and **action planning**, which refers to the formulation of a vision and a corresponding development strategy shared by the entire cluster;
- **Implementation**, i.e. the management and coordination of the activities outlined in the action plan, including the establishment of horizontal and vertical networks.
- **Monitoring & evaluation** (M&E) of the qualitative and quantitative outcomes of the project.

This methodology helps trigger the process of cluster development. To make it sustainable over time, UNIDO works with local

institutions strengthening their capacity to assume leadership of the process and support cluster firms in their future endeavors.

7. UNIDO Cluster Development Project in Ethiopia

i. Project Title: Unleashing the Potential of MSMEs

- Under implementation since 2005, budget around US$1.2 million (funded by Austria)

ii. Objective

- To enhance competitiveness of MSMEs in four selected clusters, improve their income and livelihood and contribute to poverty reduction effort

iii. The Selected Clusters

- *Gullele* handloom cluster
- *Merkato* leather shoe cluster
- *Addis Ababa* ready-made garment cluster
- *Mekelle* metal and wood work cluster

Each cluster is managed on day to day basis by trained Cluster Development Agents (CDAs).

iv. Diagnostic Study and Major Findings

- Opportunities
  - Availability of major raw materials
  - Strong commitment of the government
  - Large market, etc.
- Challenges
  - Low level technical and business management skill
  - Financial problem and availability
  - Poor working premises
  - Low access to market
  - Undeveloped BDS
  - Weak network of operators
  - Loose linkage between support institutions

v. Major Project Interventions

- **Strengthening/ Establishing of networks and linkage**

  Trust building, common purchasing of raw material, common business interest

- **Capacity building – Provision of tailor made training**

  Entrepreneurship, technical skill upgrading, new product development, marketing, etc

- **Marketing support**

  Trade fairs, sub-contracting, etc.

8. Cluster as a Part of the Value Chain (Example of the Handloom Fabric Cluster)

The illustration in Fig. 26 shows that a cluster of service providers can support the production sector for the fabric weaving enterprise. The different firms in the cluster can compete with each other to give the best service to the processors.

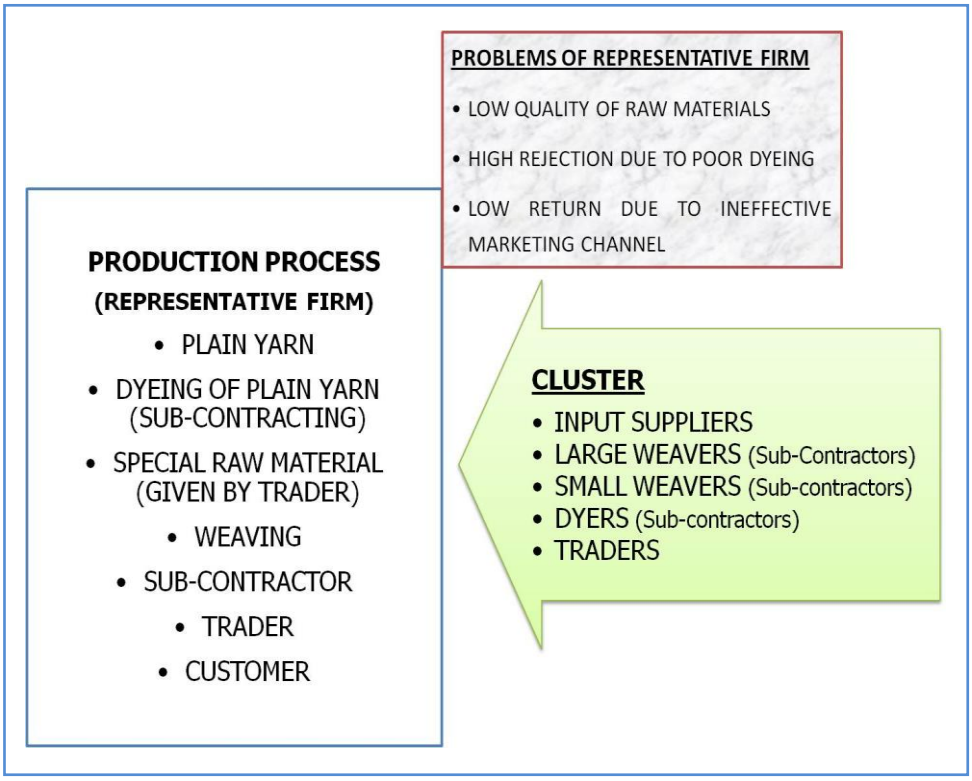

Fig. 26 – Illustration on how a cluster can provide the industry's requirements

9. Concluding Remarks

UNIDO's assistance to SMEs focuses on the promotion of joint actions within clusters.

By engaging in joint actions, cluster firms can attain achievements that are out of reach for individual enterprises. It is the case, for instance, of bulk input purchase, the establishment of a joint warehouse of retail shop, or the purchase of new machinery for shared use. Policy changes can be advocated and investments deployed or sought for new infrastructure and services. As a result, clusters are able to overcome bottlenecks and **accomplish the transition from stagnation to growth**.

More readings refer to www.unido.org//: Clusters and Business Linkage Unit

● Enhancing Agri-Business through Horizontal and Vertical Commodity Value Chain Integration

by

Dr. Susan Minae[14]

1. The Value Chain Development Approach

Value chain development approach is based on mapping and analyzing the actors, the functions and services along commodity value chain, to identify opportunities to enhance performance of the chain as well as the main challenges, in order to establish potential areas of intervention to improve efficiency in the system, as the product/commodity moves from producer to the final consumer.

Value chain development is aimed at:

- Reducing operational and handling costs
- Increased traded volumes and hence generation of economies of scale;
- Enhancing agribusiness linkages along the value chain especially by facilitating business platforms where different value chain actors can interact;
- Improved access to business services and facilities for the different actors such as financing/credit, supply of input/ equipment, capacity building especially in management and entrepreneurship as well as enhanced technical skills and technological upgrading; and
- Provision of enabling environment and incentives including policy strategies to enhance investments in agri-business development.

Value chain development is based on market-oriented solution and is a demand driven approach. The opportunities and challenges faced by different chain actors, for instance in the simplified example of the oilseeds commodity value chain, (Fig.

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27) may therefore differ based on the end-products. In the example, the products comprise oil seeds and edible oils, which technically speaking are two value chains. Thus, the functions performed by the different actors for oil seeds as the end-product, are not necessarily the same as the edible oil.

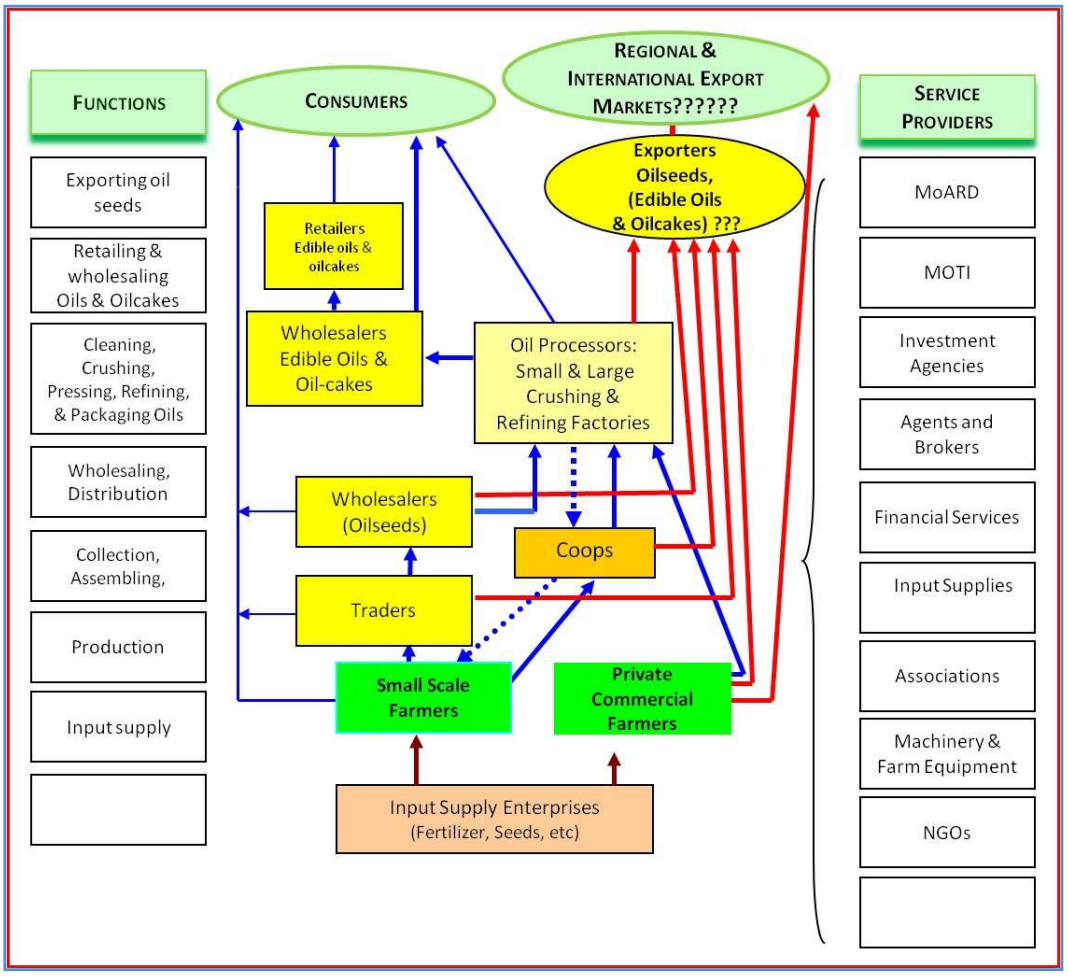

Fig. 27 - Oil Crops Value Chain in Ethiopia

The capacities and challenges faced by chain actors performing similar functions e.g. small scale vs. commercial large-scale producers also differ and value chain analysis and mapping can therefore be used to identify constraints and opportunities to improve performance of each group of actors. In the case of

Ethiopia, for example, small scale oil-seed crop producers are fragmented, produce small volumes under low input systems and are not well informed of the oil seeds quality standards required by edible oil agro-processors. A value-chain development approach would include recommendation for improved horizontal linkages such as organizing or strengthening producer groups to improve their performance such as bulking, storage and transportation. The recommendations would also include improved marketing especially the strengthening of vertical linkages between producers and agro-processors to improve on information flow on what is the demand in terms of quantity and quality and at what prices are acceptable by agro-processor and vice-versa what is quality and quantity and at what price is available from the supply side.

Incorporated in the value chain analysis are the service providers who include private firms that provide essential services in transportation, bulking, storage and brokerage linkages as well as agribusiness services such as input and equipment supplies, finance institutions that supply financing services, credit and risk management services (insurance). Service providers also include public and semi-public services such as provision of extension services, technical capacity building and research and technology development.

Semi private - public services in the case of Ethiopia (and similarly in most other sub-Saharan Africa) are provided by Governments and NGOs and are mainly concentrated on those services that private sector is unlikely to undertake since there are no direct benefits e.g. organizing producers into cooperatives or market oriented groups. However private firms for example in the horticultural sector, have been known to collaborate with public sector in technical capacity building and technological up-grading as in the example of contract farming where a private companies are willing to provide extension services to their out-growers, so that they can maintain the demanded market quality standards.

2. Strategies to Improve Value Chain Efficiency

1. Horizontal Linkages

Horizontal linkages refer to when commodity value chain actors who perform similar functions get together for mutual joint action to enhance competitiveness, and as way of strategic positioning, and to reduce transaction costs by undertaking joint actions. In most cases, business activities continue to be undertaken on business lines on individual. However, for instance a group of producers can decide to work together to purchase inputs or to organize transport jointly because they can purchase in bulk to reduce overhead costs, exploit economies of scale, and hence improve efficiency. Farmer cooperatives and similar farmer groups or trader associations are good examples of horizontal linkages and networks.

Overall the level of business integration in horizontal linkages for such groups vary from basic sharing of information through network e.g. the chambers of commerce, to joint venture and implementation of business activities. For example, some of the commodity-based cooperatives engage in all the value chain functions and activities for their members, including marketing and agro-processing. Horizontal linkages are of two major types:

a) Based on mutual networking or collaboration/coordination of the value chain actors performing similar functions or handling the same commodity or in the same sector. These includes commodity associations (for example by farmers, traders, agro-processers), cooperatives, chambers of commerce, sector consortiums, etc

b) Based on regional or agro-ecological catchment area such as agro-geographical zoning, clusters, transport/trade corridors, (economic growth corridors), rural growth centres, business growth centres, e.g. Export promotion zones (EPZ), etc

Horizontal value chain linkages take advantage in developing common strategies in negotiations as well as sharing information/market intelligence. For example, a farmer co-operative is in a better position to negotiate high prices for its

members rather than individual producers due to enhanced bargaining power. Likewise, traders associations can garner the capacity to negotiate policy lobbying with national governments for concessions such as tax rebates/exemptions. Thus, horizontal linkages have potential in facilitating mutual economic benefits through improved access to infrastructure, facilities and services and hence enhancing the economies of scale. Other economic benefits include:

a) Shared services e.g. in training and capacity building, organizing common transport and storage facilities, joint procurement of inputs/ equipment as well as in commodity promotion

b) They can also pool resources and set up joint investments ventures, especially to establish common services such as warehouses and transport facilities.

2. Vertical Linkages

Commodity value chain integration implies 'formal' business arrangements between the chain actors performing different functions in order to improve the efficiency of the value chain by strengthening vertical linkages. In other words, there is clear delineation of functions between the value chain actors and there is an effective information flow among the different actors. For example, under market oriented production system, before the producers engage in production, they need to know what quality and quantity are demanded, and what prices they are likely to get. This makes it easier for the producers to plan without leaving it to chance of getting a market, as is currently the case with most small-scale producers in Ethiopia and elsewhere in developing countries. Likewise, the buyer should know what the potential supply is. Thus, in this case vertical linkages are enhanced culminating in effective communication, as the commodity moves along the value chain.

Value chain integration invariably results in shortening the value chain and hence reduced transaction or handling costs. For example if producers are well vertically integrated with an agro-

processor, they can organize themselves into groups or cooperative to provide the necessary services such as bulking, (including sorting, grading, packaging and storage [where necessary] and transportation to supply directly to the processing firm, and hence reduce the process of using traders and brokers. In this way the value chain is very much shortened and made more efficient and hence has reduced and more equitable marketing margins.

Inversely improved vertical linkages imply effective communication among chain actors and reduced operation costs; i.e. if the producer and trader have similar market information, business transaction are made on plain level ground without on party taking advantage of the other (As is the case presently where traders and brokers are said to take advantage of producers giving them lower market prices). Effective transactions mean reduced costs and risks for the value chain actors which can translate into effective investments and financing as well as improved access to inputs and equipment. Capacity building is also better organized since the training needs to improve business linkages are well articulated among the chain actors.

3. Tools and Mechanisms for Enhanced Vertical Integration

Tools and mechanisms to enhance vertical integration include contract farming, warehouse receipts, commodity exchanges, agro-industry food parks, agro-industrial clusters/zones.

1) Contract Farming

Contract farming (sometimes also referred to as out-grower scheme), as implied, consist of a binding understanding, that might include a legal contract, in which the two parties normally pre-agree on terms of conducting agri-business. Thus, the volume and quality and indicative price is arrived at before the producer embarks on the production.

The contracting firm is either an agro-processing firm or a large-scale producer or exporter who has identified comparative

advantage in organizing the production of the commodity they require in order to be assured of a certain quality and quantity. Thus, they are normally willing to commit to work with producers and provide support services such as input supply and other materials and facilities (e.g. seed, fertilizers, packaging materials, transportation, land preparation, etc), in form of in-kind credit. Technical advice that might include up to-date technology is also included in the package that is provided by the contracting firm. In other words, the contracting firm more or less evaluates what is required to meet it s requirements and includes this support in the package agreement.

Contract farming is common between commercial farmers and exporters and agro-processing firms (such as breweries, sugar factories) that need to be assured of certain quantities of specific varieties and specification. Contact farming is also in the interest of contracting firms since they need to meet their upstream contracts or commitments and targeted performance. In the case of contact farming with small-scale producers, there is need for organizing farmers, especially into groups to facilitate the necessary capacity building and provision of support services and infrastructure, such as input supply and other materials and marketing services including transportation.

Tripartite agreements are common mechanism for arranging the provision of support services. For example, the contracting firm can arrange with an input supply company to provide inputs to farmers who have vouchers supplied by the contracting firm indicating the value and quantity. Likewise, credit facilities and other support services can be provided by a third party and the contracting firm do not necessarily handle physically, the support services but can sub-contract service providers.

Advantages of Contract Farming

The main advantage is based on the fact that both contracting partners have an assured market in terms of both the demand and supply. It is easy to plan since the 'formal' linkages are well established and with a very short value chain. Because of the improved efficiency of the value chain, contract farming can be a

useful system for increasing farm incomes. In most cases there is also an agreement for enhancing farm level value addition such as grading, sorting and packaging which also increases the marketing margin retained by the producers.

Contact farming provides opportunities for improved access to support services such as financing and credit as well as marketing facilities such as packaging, grading and sorting facilities and services for the small scale producers. In the case of the contracting firm, the main advantage is enhanced consistency in the quantities and quality supplied.

Disadvantages

The main challenge in implementing contract farming is defaulting by the partners. There is a big temptation for the producers to engage in side-sales if traders offer them slightly higher prices than agreed with the contracting firm, (sometimes forgetting the investments the contracting firm has contributed to the production). By the same token producers have embarked in the production only to find their supplies being rejected by the contracting firm (even when they meet quality conditions especially if there is oversupply), and hence undergoing heavy losses. While it is possible to sue for breach of contract and some countries in the sub-region, have clear laws against defaulting, it is not common for wronged party (either producers or the buying firm) to sue since the required efforts do not compensate or commensurate the lost business.

It has been argued by some quarters that in cases where the contract comprise a full package, the contract may be one sided with the contracting firm controlling the transaction arrangements. In some of the cases, it is felt that producers have limited contribution to the management decision of the production operations and are mainly relegated to providing labor and land.

2) Warehouse Receipts

The main feature of warehouse receipt is that it acts as a tool for stabilizing prices and regulating commodity supply. Producers

or traders have the provision to enter into a trading transaction and delivering the commodity to a designated warehouse (for example for farmers – as soon as they harvest), but only to finalize the sale when the price is right. In other words by delivering the commodity to the warehouse, a voucher system is established that allows the seller to use the voucher as collateral to access cash before the produce is sold. The seller is able to indicate when the produce is to be sold based on seasonal price trends.

The voucher system can be considered as a form of credit system or pre-finance since the seller is able to access cash before they actually finalize the business transaction. This aspect is very important especially for small-scale producers who are forced to sell produce when prices are low because they urgently need cash to finance their household commitments. Under warehouse receipts, producers and traders can hold on to their produce, until the price has gone up.

The warehouse provides the necessary high quality storage facilities and can provide other handling services such as sorting, grading, packaging and pre-storage treatment to reduce storage losses. However, the seller has to pay for the commodity storage and handling costs before the final payment.

The warehouse receipt works well when linked with an efficient formal marketing system such as commodity exchange where market information is readily available and there is good information to predict seasonal price trends. The system requires an effective financial system to undertake the management of the voucher system that has is well linked with commercial banking. The warehouses have to be of high management standards and appropriate facilities to ensure that storage risks and costs are maintained to minimum.

Because of the administrative requirements, the warehouse receipt system is likely to be more effective for 'commercial' producers (i.e. producers well linked with private sector banking). The warehouse system is effective for bulky commodities that normally involve handling of large volumes

and require storage especially for domestic markets, such cereals and grain legumes.

3) Commodity Exchanges

Commodity exchanges provide the platform for buyers and sellers to interlink to conduct business. Their role is to facilitate agri-business linkages by providing brokerage services through provision of market information on prices, quantities and qualities that are in demand or are available for sale.

Commodity exchange require minimum physical commodity handling since their main function is to link buyers and sellers however they require effective support on market information such as from e- marketing systems. The system also promotes quality assurance since the seller has to be able to quote in a language that is clear for the buyer to know what is exactly available especially in term of quality. In other words, the products have to have quoted and described by universally accepted descriptors and standards regarding varieties, grades and other quality standards. For example, Grade I Red Kidney beans should display certain agreed standard size, weight, color and moisture content. It should contain minimum acceptable level of foreign bodies and contaminants. Maintaining quality standards is one of the major challenges in Ethiopia and requires change in business ethics as well as increased support for professional services, for instance in quality testing and certification and other support services.

Commodity exchanges work well for bulky products such as grain where both the buyer and seller need to minimize physical handling. For example a grain miller could from contacting the commodity exchange obtain information that a trader or farmer cooperative is offering for sale a certain quantity of grain. The two business partners would then conduct the necessary business transaction through the facilitation of commodity exchange. Once this is completed, the grain is transported directly to the mills from the warehouse, with the assumption that the sellers has adhered to the agreed standards and grades.

4) Agro-industrial Clusters

The main features of agro-industry clusters is that they bring small and medium entrepreneurs (SMEs) together, (sometimes physically), by setting up agro-industrial parks or promotion zones, with the aim of improving technical support and capacity building for the SMEs. The main aim is normally to improve quality standard, reduce handling costs and promote business linkages by bringing together actors who perform similar functions albeit at low and unviable economic operations that are normally inefficiently managed. Agro-industry cluster are targeted to small-scale manufactures operating with low level technologies and who would benefit from upgraded technologies and enhanced scaling up, for example, edible oil millers or cotton spinners in Ethiopia.

Cluster system means that provision of support services can be facilitated in a centralized manner, such that facilities such as financing/credit, e-services and other utility supplies e.g. electricity, organized transport, supply of basic materials, waste management, etc, can be accessed and managed under a cost sharing/joint venture arrangement. Thus, it is a mechanism for creating economies of scale and/or hence reducing overhead costs. Capacity building especially to enhance entrepreneurship, technology upgrading and business management (including mentorship); can also be organized under reduced overhead costs.

5) Integrated Agro-industry Food Parks

Agro-industry food parks are based on similar concept as clusters by enhancing concentrated agro-industrial estates or zones/cluster, but mainly focused on value addition/agro-processing services of food products. In most cases the agro-industry food park are linked with the production zones with the idea that the value addition/agro-processing that is being supported is closely linked with production and supply from the catchment area.

The integrated food park development aims at supporting agri-business development in food commodities especially small and medium enterprises. It supports and enhances linkages of all the functions of a commodity value chain from production to the final consumer. It is based on the concept of:

- Shared capital investment: The physical facilities such as the processing firms could be physically located in the same building or within an agro-industrial park and the entrepreneurs lease the facility or they procure their buildings/facility on credit arrangement;
- Shared common services/facilities: For example, the provision of utilities such as water and electricity is centralized and under the same management, reducing overhead costs significantly. Thus the provision of support services is very efficient;
- Creation of economies of scale is a strong element of agro-food parks through pooling of resource to develop facilities through joint venture that would be too expensive if embarked on by a single entrepreneur. There is improved access to technical support and information and management services such as IT, laboratory services; legal and accounting services since this are also organized in a centralized manner;
- Likewise access to infrastructure is enhanced since it is also organised centrally; and
- There is an effort to link up the agribusiness operations to reduce losses. For example, horticultural producers could supply grade A of their supply to the fresh produce market Grade B for processing into soups, etc and grade C, for animal feed factory, which would all be located in the same agro-industry food park.

6) Small-scale Entrepreneur 'Agri-business Models'

There are currently various agri-business models that are being used or promoted by different organizations especially by the government and NGOs. This include concepts such as 'one

village one product'; promotion of 'commercial villages', 'one-stop shop', and so on. Agri-business models have a strong component in institutional strengthening and capacity building especially in management and entrepreneurship. Majority of agri-business models are also linked to horizontal networks such as; rural transformation centres, commodity groups, co-ops, agro-industry clusters, economic growth corridors with the aim to create platforms and facilitate agri-business linkages and support to business development services (BDS).

The current agribusiness development models have emerged in developing countries such as Ethiopia because small scale producers need to be organized into market oriented institutions or cooperatives in order to be integrated into formal agribusiness arrangements. For most part, small-scale entrepreneurs are burdened by production and marketing features that include:

- Production or handling of small volumes of low quality. The supplies are of inconsistent quality and irregular quantities. Most entrepreneurs use low input systems and have limited access to technology and equipment, resulting in inefficient production systems.
- The marketing is mainly under the informal sector that tends to be disorganized with long value chains which invariably translate to high cost and poor handling facilities. Overall they display high post harvest losses and low value addition for most agricultural products.
- Poor horizontal-vertical linkages along the commodity value chains result in inefficiency and high marketing margins
- Poor institutional support has culminated into low investments and overall poor economic development

The efforts to facilitate integration of small scale entrepreneurs into commercial agriculture and agro-industrial development has meant that provision of public-private sector services especially technical support and infrastructure development which were previously assumed

by parastatal organizations such as marketing boards and authorities has to be undertaken by the public sector. These include:

- Capacity building in technical and management areas to enhance entrepreneurship at farm level. The aim is to increase market orientation production and agricultural commercialization of small-scale producers,
- Small scale businesses also require to have access to improved organization and management so that they can have better access to marketing services such as bulking, storage, transportation, in order to create economies of scale, competitiveness, and improve their negotiation skills and enhance their bargaining power along the value chain,
- Improvement of 'vertical integration' of agri-business linkages especially linked with business service development as a means for linking producers to buyers and agro-processing firms is crucial,
- Capacity building, financial support and technology upgrading is also essential for value chain actors such as traders and agro-processors and service providers such as transporters for overall value chain efficiency.

To date most of the on-going support to value chain development is still limited to project level operations and is therefore at very low operational levels. The majority of agribusiness models are largely still at piloting level**.**

4. Concluding Remarks

There is need for coordination between the various efforts especially between government institutions, NGO and the private sector. Of key is the enhancement of business platforms to promote linkages between commodity value chain actors.

A strong need for private-public partnerships especially to improve capacity building and increase access to the necessary facilities/ services and to develop supporting infrastructure has been identified including the support business service development (BDS).

Lessons and best practices need to be documented and scaled up. Value chain development in Ethiopia is still in its early stages as is the case in most sub-Sahara Africa. Policy strategies and institutional support is weak and needs critical attention to support agricultural commercialization and agro-industry development as anticipated under PASDEP.

● A Perspective on Ethiopia's Agri-business Future

by

Bruck Fikru[15]

THIS IS AN EXTRACT FROM THE POWERPOINT PRESENTATION OF MR. FIKRU.

1. Abstract

Mr. Fikru defined the concept of agri-business and described the complexities in relation to its dynamic nature.

Ethiopia's agri-business has serious constraints as already seen in its rampant failures. He associated these failures to lack and fragmented knowledge system, and the high cost of energy required by the industries.

Mr. Fikru sees the future of Ethiopia's agri-business facing high uncertainly due to unpredictable climatic conditions, environmental, social and geopolitical realities. He offered some line of thinking towards overcoming these constraints: institutional leadership must evolve, identify and address the specific gaps, and develop a system of learning. *- by Ms. L. Halos-Kim, Rapporteur*

THE PRESENTATION OUTLINE

2. The Concept of Agri-business

Agri-business is a concept of agriculture that goes beyond the growing of crops and raising of animals (Ray Goldberg and John Davis, 1957).

Agri-business is the sum total of:

- All operations involved in the manufacture and distribution of farm supplies, and the
- The storage, processing and distribution of farm commodities and the items made from them.

3. Characteristics of Agri-business System

Agribusiness systems are complex. Complex systems evolve depending on their adaptive capacity and their systems of learning.

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[15] **Bruck Fikru** is Investment and Markets Advisor, Agri-business and Trade Expansion Consulting Firm, Addis Ababa, Ethiopia

Adaptive capacity

- Resilience in the face of shocks
- Capacity for continuous improvement
- Capacity to anticipate, recognize and effectively deal with large scale problems

Systems of learning

- Learning is the basis for increased adaptive capacity
- Learning happens at all levels
- Learning takes time
- Failure in learning systems is common

4. Ethiopia's Agri-business Systems

- Serious constraints
  - Energy is expensive
  - Knowledge systems are weak and fragmented
- Failure is rampant
  - Learning is mostly random, not systematic
  - Adaptive capacity is low

5. The Future of Ethiopia's Agri-business

- Uncertainty is high
  - Due to climate unpredictability
  - Rising energy costs
  - Growing demand for food and natural resources in the emerging industrial economies
  - Ethiopia's geopolitical realities
- How will the lead institutions evolve?
- How much of the challenges are specific to the agribusiness system?
- How will a system of learning and continuous improvement emerge?

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Annex 1 – Seminar Program

Annex 2 – List of Participants

TIME	TOPICS/PROGRAM	RESOURCE SPEAKER
SESSION 1: VALUE CHAIN CONCEPT AND SETTING-UP THE SCENE MODERATOR: TECHANE ADUGNA, MOARD		
08:30	Welcome Remarks, Introductions Workshop Objectives	Dr. Susan Minae, FAO
08:45	Keynote Address: The Value Chain Approach for Rural Development in Ethiopia	H.E. (Dr.) Aberra Deressa, State Minister, MoARD Mr. Milkias Teklegiorgis, MoTI
09:15	Concept of Value Chain Development	Mr. Nebiyeleul Gessese, GDS
SESSION 2: GOVERNMENT POLICY/STRATEGY ON AGRICULTURAL COMMERCIALIZATION AND AGRO-INDUSTRY DEVELOPMENT MODERATOR: TECHANE ADUGNA, MOARD		
10:00	Agricultural Commercialization Policy	Mr. Esayas Kebede, MoARD
10:20	Agro-Industry Development Strategy	Mr. Dandena Chemede, MoTI
SESSION 3: STRATEGIC POSITIONING OF VALUE CHAINS MODERATOR: TOSHIRO MADO, SAA		
11:30	Value Chain Development and Food Security	Mr. Maurice Tankou, UNECA
11:50	Value Chain Financing	Ms. Yuki Isogai, WB
SESSION 4: CASE STUDIES ON VALUE CHAIN DEVELOPMENT MODERATOR: DR. JULIANA RWELAMIRA, SAA		
13:30	Honey Value Chain Development	Mr. Marc Steen, SNV
14:00	Wheat Value Chain Development	Mr. Mohammed Hassena, ECBP/GTZ
14:30	One Village One Product	Mr. Takahiro Nakamura, JICA
SESSION 5: AGRIBUSINESS LINKAGES ENHANCEMENT MODERATOR: MR. MAURICE TANKOU, UNECA		
15:40	Ethiopia's Agribusiness Future	Mr. Bruck Fikru, USAID
16:00	Cluster Approach and Value Chain	Dr. David Tommy, UNIDO
16:20	Agro-business Linkage and Vertical Integration	Dr. Susan Minae, FAO
17:30	Closing Remarks	Mr. Wondirad Mandefro, Director, Agricultural Extension Department, MoARD

ORGANIZATION	NAME	POSITION*
Addis Ababa University	MEHARI, Tetemke (Dr.)	Associate Professor of Biochemistry
Agri-business and Trade Expansion Consulting Firm	FIKRU, Bruck	Investment and Markets Advisor
ChemTest Consulting	MOGES, Ghirma (Dr.)	Managing Director
Embassy of Japan	YOKOTA, Akiko (Mrs.)	Second Secretary
Ethiopian Health and Nutrition Research Institute (EHNRI)	WONDIMU, Asrat (Mrs.)	Senior Researcher
Food and Agriculture Organization (FAO)	MINAE, Susan (Dr., Mrs.)	Agri-business and Enterprise Development Officer, Sub-Regional Office for Eastern Africa (SFE)
Global Development Solutions, LLC. (GDS)	GESSESE, Nebiyeleul	Senior Industrial and Chemical Engineer
GTZ/ECBP: German Development Cooperation Office/ Engineering Capacity Building Program	HASSENA, Mohammed	Agri-business Senior Program Officer
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	HAGOS, Amare	Head, Department of Rural Development and Agricultural Extension
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International Forest Products Research Institute (IFPRI)	NEGASSA, Asfaw (Dr.)	Visiting Research Fellow
Japan International Cooperation Agency (JICA)	HISATO, Suzuki	Agricultural Expert
	KATSUHIRO, Sasaki	Resident Representative
	NAKAMURA, Takahiro	Agricultural Team Leader
JICA-MoARD	NEGUSSIE, Teshome	Coordinator, Rice Research & Development Program
	TESSEMA, Girma	Program Coordinator
Ministry of Agriculture and Rural Development (MoARD)	ABERRA, Deressa (H. E., Dr.)	State Minister
	ADUGNA, Techane	Director, Planning and Programming Directorate

*Positions and Agency Affiliations were as registered during the seminar.

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	GETAHUN, Sileshi	Director, Natural Resource
	KEBEDE, Esayas	Agricultural Investment Support Directorate Director
	MANDEFRO, Wondirad (Dr.)	Coordinator, Rural Capacity Building Program (RCBP)
	MANDEFRO, Wondirad	Director, Agricultural Extension
	MULUGETA, Assefa	Director, Agricultural Marketing
	SEYOUM, Zertihun (Ms.)	Women Affairs Office
	ZEBERGA, Feta	Planning and Programming Department
Ministry of Trade and Industry (MoTI)	CHEMEDA, Dendena	Head, Agro-Processing Industry Development Department
	FELEKE, Zergaw	Expert
	TEKLEGIORGIS, Milkias	Director, Private Sector Development Program
Netherlands Development Organization (SNV)	CUPERS, Carlo	Lead Advisor, Honey Value Chain
	STEEN, Marc	National Portfolio Coordinator
	VISSER, Piet	Learning Coordinator
SAA (Sasakawa Africa Association)	HALOS-KIM, Leonides (Mrs.)	Program Officer, Agro-processing Program (Rapporteur)
	BERHE, Tareke (Dr.)	Regional Director, Regional Crop Production Program
	MADO, Toshiro	Regional Director, Agro-processing Program
	RWELAMIRA, Juliana (Dr.)	Managing Director
	GALIBA, Marcel (Dr.)	Thematic Director, Public-Private Partnerships
	YOHANNES, Genet (Mrs.)	Program Assistant, Secretariat
Sasakawa Fund for Agricultural Extension Education (SAFE)	WORKU, Tesfaye	Program Officer

ORGANIZATION	NAME	POSITION
Sasakawa Global 2000 (SG 2000) - Ethiopia	ABERRA, Debelo (Dr.)	Country Director
The World Bank	ISOGAI, Yuki	Nutrition Project Coordinator
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	NEGA, Meseret (Ms.)	Sector Manager, Business Development Unit
United Nations Economic Commission for Africa (UNECA)	BOEL, Taro (Mrs.)	Associate Economic Affairs Officer, FSSDD UNECA
	TANKOU, Maurice	Agricultural Economist, FSSDD - UNECA
United Nations Industrial Development Organization (UNIDO)	TOMMY, David (Dr.)	Representative to Ethiopia, Rwanda and Burundi
World Food Program (WFP) of the United Nations	PAUSILLI, Enrico	Country Coordinator, Purchase for Progress (P4P)


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Federal Democratic Republic of Ethiopia -Ministry of Agriculture
FDRE
Ministry of Trade