ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 11, Issue, 02, pp.1185-1191, February, 2019

DOI: https://doi.org/10.24941/ijcr.33085.02.2019

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

VALUE CHAIN ANALYSIS OF CERTIFIED COFFEE IN SIDAMA ZONE, SOUTHERN ETHIOPIA: REVIEW OF OPPORTUNITIES, CONSTRAINTS AND GOVERNANCE STRUCTURE

Temesgen Zana and *Hiwot Abayneh

Agribusiness and Value Chain Management Program, Hawassa University, PO box 05, Hawassa, Ethiopia

ARTICLE INFO

Article History:
Received 15th November, 2018
Received in revised form
04th December, 2018
Accepted 20th January, 2019
Published online 28th February, 2019

Key Words:
Coffee certification,
Smallholder Farmers,
Cooperatives, Value Chain Analysis,
Ethiopia.

Corresponding author: Hiwot Abayneh

ABSTRACT

In international commodity market coffee is the second most traded commodity next to petroleum. Ethiopia produces coffee Arebica and it is also widely believed that the country is the birthplace of the most cherished bean. Coffee has a great social, cultural and livelihoods importance for the majority of Ethiopian population, and it is tied to complex and strong socio-cultural settings. The country produces more than 30% of the total coffee production in Sub-Saharan Africa and it also consumes nearly 50% of the total production blended with complex socio-cultural settings. The objective of this study was to analyze certified coffee value chain in the context of Sidama zone, Southern Ethiopia. The study used both qualitative and quantitative data collected through focus group discussions (FGD), key informant interviews (KII) and field observations and review of various secondary sources. The study adopted the Global Value Chain analysis framework and assessed the input-output structure, institutional context and the governance structure. Apart from the study also reviewed constraints and opportunities facing upstream value chain actors. The identified value chain actor includes input suppliers, smallholder coffee producers, coffee farmers cooperatives, Sidama Coffee Farmers Cooperatives Union (SCFCU), and international certified coffee importers, roaster and retailers. Under the value chain supporters category the government institutions at various level, research institutes and Universities, and NGOs were identified. The government through the top level ministries plays regulatory function in the overall agriculture and export trade sector, including coffee. Besides this international third party certification bodies set standards demanding all actors in the value chain to comply with. The major constraints identified includes: underdeveloped organizational and business management systems, lack of capacity to adequately implement different sustainability certification standards, gaps in coffee quality inspection skills and facilities, lack of quality payment system at smallholder level, higher cost of certification, insufficient collateral for credit guarantee from the bank, low level of female participation at leadership level. The value chain governance structure review also showed a growing power of the downstream actors' contrasted with suppliers' incompetency in production and export coordination.

Citation: ***Temesgen Zana and Hiwot Abayneh,*** **2019.** "Value Chain Analysis of Certified Coffee in Sidama Zone, Southern Ethiopia: Review of opportunities, constraints and governance structure", *International Journal of Current Research*, 11, (02), 1185-1191.

INTRODUCTION

Coffee has a great social, cultural and livelihoods importance for the majority of Ethiopian population and to the national economy. The country produces more than 30% of the total coffee production in Sub-Saharan Africa and it also consumes nearly 50% of the total production blended with complex socio-cultural settings. In 2012/13 fiscal year it generated 24.2% of the total export revenue (NBE, 2014). Moreover, about 25 % of the total population is dependent on production, processing, distribution and export of coffee (Mekonen, 2009). Due to these reasons, the coffee sub sector has enjoyed higher attention under the current agricultural commercialization strategy. The production of high value crops like coffee is one of the distinctive features of the new strategic direction being pursued by the government of Ethiopia and its development partners. This is part of the multifaceted efforts geared towards transforming the country's age old subsistence agricultural farming system into commercial oriented and export led production (MoFED, 2010). Though several efforts have been exerted to exploit the most possible reward from the coffee production and export, still several complex challenges are observed cracking the road to higher benefit share. Among the key challenges facing the whole coffee sub sector in Ethiopia, the volatile nature of global coffee price is critical one. This has been a real source of vulnerability for smallholder producers. Countries like Ethiopia have a very low market share, often below 5% in the international coffee trade. Due to this, Ethiopian smallholder coffee farmers receive only a fraction of the retail price and continued to engage in subsistence farming. In the history of the international coffee market, the period between 1990 and 2004 had been referred commonly as "The coffee price crisis" which had passed

shading enormous economic and social impacts on smallholder coffee grower farmers around the globe (Mendez *et al.*, 2010). In an effort to identify ways out of the periodic crisis and to confront the coffee price crisis, various 'sustainable coffee' certification initiatives have emerged as key alternative options for smallholder coffee farmers (Wollni and Zeller, 2007; Mendez *et al.*, 2010). Following this, due to the increasing poverty and vulnerability of smallholder coffee farmers in major coffee producer countries and growing demands for healthier and more socially and environmentally-friendly coffee, coffee certificate ion of cooperatives has gradually gained wider recognition and significance worldwide (Petit, 2007; Stellmacher and Grote, 2011; Jena *et al.*, 2012).

In Ethiopia also, several initiatives led by various stakeholders involvingthe government,NGOs and multi-lateral development organizations have been working extensively in supporting coffee farmers' cooperatives certifications and enhancing the whole coffee value chain. As a result, over a period of a decade or so, many coffee farmers' cooperatives have been certified to different certification schemes, including Fairtrade, Organic, and Utz Kapeh. Moreover, the Ethiopian Government made a number of institutional reforms which are aimed at enhancing smallholders' participation in the international coffee value chain. Despite such initiatives and regardless of the existing immense potential in the country, the share of certified coffee out of the national export volume has been insignificant. Previous coffee related studies have mainly focused on the conventional coffee value chain and gave relatively less space for the certified channel. Thus, this is study attempts to analyze certified coffee value chain in Dale District, Sidamo area, Southern Ethiopia.

MATERIALS AND METHODS

Description of the study area: Dale district is located in Sidama Zone, Southern Ethiopia, at 320 km south of Addis Ababa and 50 km from the regional capital, Hawassa. The total population of the district is 237,106 (119,894 male and 117,212 female). The district is one of the most densely populated areas in the region, with population density of about 856pers/km^2. The average annual rainfall is 1200 mm, ranging between 801 to 1600mm. The altitude in the physical areas across the District ranges between 1501 to 2500m.a.s.l (BoFED, 2012). Currently there are eight coffee farmers' cooperatives (CFCoops) in the study area, having a total member size of more than twenty one thousand. Out of these, five are Organic and Fairtrade certified while the rest three are only Fairtrade certified. In Sidama Zone there are 51 coffee farmers' cooperatives which operate under the umbrella of the Sidama Coffee Farmers Cooperatives Union (SCFCU), having over 87,000 member individual smallholder farmers. The number makes the Union the second largest coffee producing cooperative union in Ethiopia. The cooperatives are all established in the late 1990s and early 2000. Since 2003, the Union has been aggressively supporting its cooperatives to get Fairtrade, Organic, Utz Kapeh, and Rainforest Alliance certifications. Fairtrade and Organic certifications are the top priority schemes perused so far. Currently 41 of its member coffee cooperatives are Fairtrade certified, 39 are Organic certified, 5 with Rainforest Alliance and 2 with Utz Kepeh. Double certifications of Fairtrade and Organic are common and the number of triple certified cooperatives is also growing slowly.

Data types and sources: The study used both qualitative and quantitative data types from primary and secondary data sources. Participatory approach was employed to collect primary data that covered key players in the coffee value chain. The data used for this study was collected through different methods, which mainly include reviewing secondary data sources from internet websites, government office reports, cooperative and union records, and study publications. Apart from these qualitative and quantitative data was also collected through conducting two focus group discussions (FGD) with randomly selected smallholder coffee farmers from two CFCoops, and key informant interviews with other actors in the value chain including Coffee cooperatives, SCFCU, extension service providers (District Agriculture and Natural Resource Development Office, Cooperative & Marketing Development Office), research institute, NGO - TechnoServe, and an anonymous certification and quality inspection company. As shown in table 1, a total of 27 individuals have directly participated in either of the FGD or KII and provided relevant information for this study (for a complete list see Appendix 1). The discussions and interviews were assisted by predesigned semi-structured interview guiding questions specific to each value chain actor and supporter. The primary data collection was carried out from January to March 2016. Secondary data was also collected from various sources including Sidama Coffee Cooperatives Union, Coffee cooperatives and other governmental and non-governmental organizations, different studies and official web sites.

Methods of Data Analysis

Value chain analysis: The study adopted the Global Value chain (GVC) analysis methodology developed by Gerefi and Fernandez, 2011, as a guiding analytical framework. Global value chain methodology explores four basic dimensions: "(1) an input-output structure, which describes the process of transforming raw materials into final products; (2) an institutional context in which the industry value chain is embedded; (3) a governance structure, which explains how the value chain is controlled; and (4) a geographical consideration" (Gereffi and Fernandez, 2011). Based on the objective and scope of the study, the analysis in this study is limited to the first three dimensions. Value chain mapping exercise is also carried out to easily depict the flow of the product, value adding functions/activities and participating value chain actors, supporters and influencers.

RESULTS AND DISCUSSION

Ethiopian certified coffee value chain analysis: global value chain perspective: The findings of the certified coffee value chain analysis are organized into three sub sections dealing with three of the four dimensions of the GVC methodology. Accordingly the first sub section, the input-output structure of the value chain is described by identifying key value chain actors, their roles and value addition functions. The second sub section deals on the institutional context in which the value chain operates, while the third sub section discusses issues about the governance structure.

***Input-output structure*:** The input-output structure describes the process of transforming raw materials into final products by the value chain actors. The study identifies the role of value chain actors in adding values to the product by performing

Table 1. Number primary respondents by category and method of data collection used

S/NO	Description of respondents	Number of Respondents Participated	Method of data collection
1	Smallholder coffee farmers	15	FGD
2	Coffee farmers cooperatives and union	5	KII, secondary data collection formats
3	Extension service providers and government officials (District Agriculture and Natural Resource Development Office, Cooperative & Marketing Development Office)	3	KII, secondary data collection formats
4	Research Institute - Jimma Agricultural Research Center Awadda Sub-Center	2	KII
5	Certification and quality inspection company	1	KII
6	NGO-Technoserve	1	KII
	Total	27	

Source: Own survey result, 2016

Table 2. Certified coffee value chain actors with opportunities and constraints

Value chain actors	Functions	Opportunities	Constraints
Input suppliers:- farmers, Coops, Union, farm tool retailers	Supply inputs like coffee seeds and seedlings, small farm tools, organic fertilizer (compost), coffee shade tree seedlings, bamboo made baskets, and jute sacks	✓ Government support ✓ Availability of research institutes ✓ Market demand for inputs ✓ Seedling raising and supply seen as a profitable business	✓ Uncontrolled seedling production and distribution ✓ Limited availability improved coffee seedlings ✓ Shortage of inputs for production and postharvest ✓ There are few traders of manufactured inputs (polyethylene tube, jute bags, tools etc) ✓ Weak coffee nursery management
Coffee producers: Smallholder farmers	**Production:** Coffee shade tree planting, coffee planting holes preparation, planting and caring coffee seedlings and mother coffee tree management **Harvesting and supplying produces:** Hand picking red cherries and deliver the produce to coops within 24 hours of harvesting time	✓ High global market demand for certified coffee ✓ Government and NGO support to expand production with quality ✓ Different coffee development national programs ✓ Favorable agro ecology and environment to produce coffee that comply with various certification schemes	✓ Low level of knowledge on improved agronomic practices and very old trees. ✓ Low compost using practice, reduced productivity ✓ Extreme climate variability resulting in disease spread, reduced productivity ✓ Law precautions taken to protect coffee diseases ✓ Poor harvesting techniques, packaging & labor shortage during harvest ✓ Lack of access to transport, road infrastructures, credit and shortage of household income
Collectors, Processors, Exporter: CFCoops and SCFCU	**Collection, Sorting, Processing & Exporting:** Purchasing and bulking red cherry coffee, primary grading/sorting, wet & dry processing, drying and packing, exporting	✓ Government and NGO support ✓ Direct access to better international market ✓ Increased participation of smallholder farmers ✓ International roasters and importers making huge investments for creating stronger partnerships with farmers and cooperatives at origin	✓ Underdeveloped organizational and business management skills ✓ Lack of capacity to implement certification standards ✓ Insufficient collateral to access credit from the bank ✓ Limitations to provide market information to members ✓ Attitudinal problem of regarding certifications as irrelevant ✓ Reduced supply of coffee as farmers shift to other crops ✓ Competition from newly emerging private voluntary sustainability standard supply chains ✓ *"… a growing gap between the volumes of standard compliant coffee available at producer level and the volume actually procured as standard compliant coffee with the buyer" (Panhuysen & Pierrot, 2014).*

several activities. Simultaneous the associated opportunities and constraints are also briefly reviewed. The value chain map is also developed to give comprehensive information on the flow of the product, value adding functions, and the institutional context.

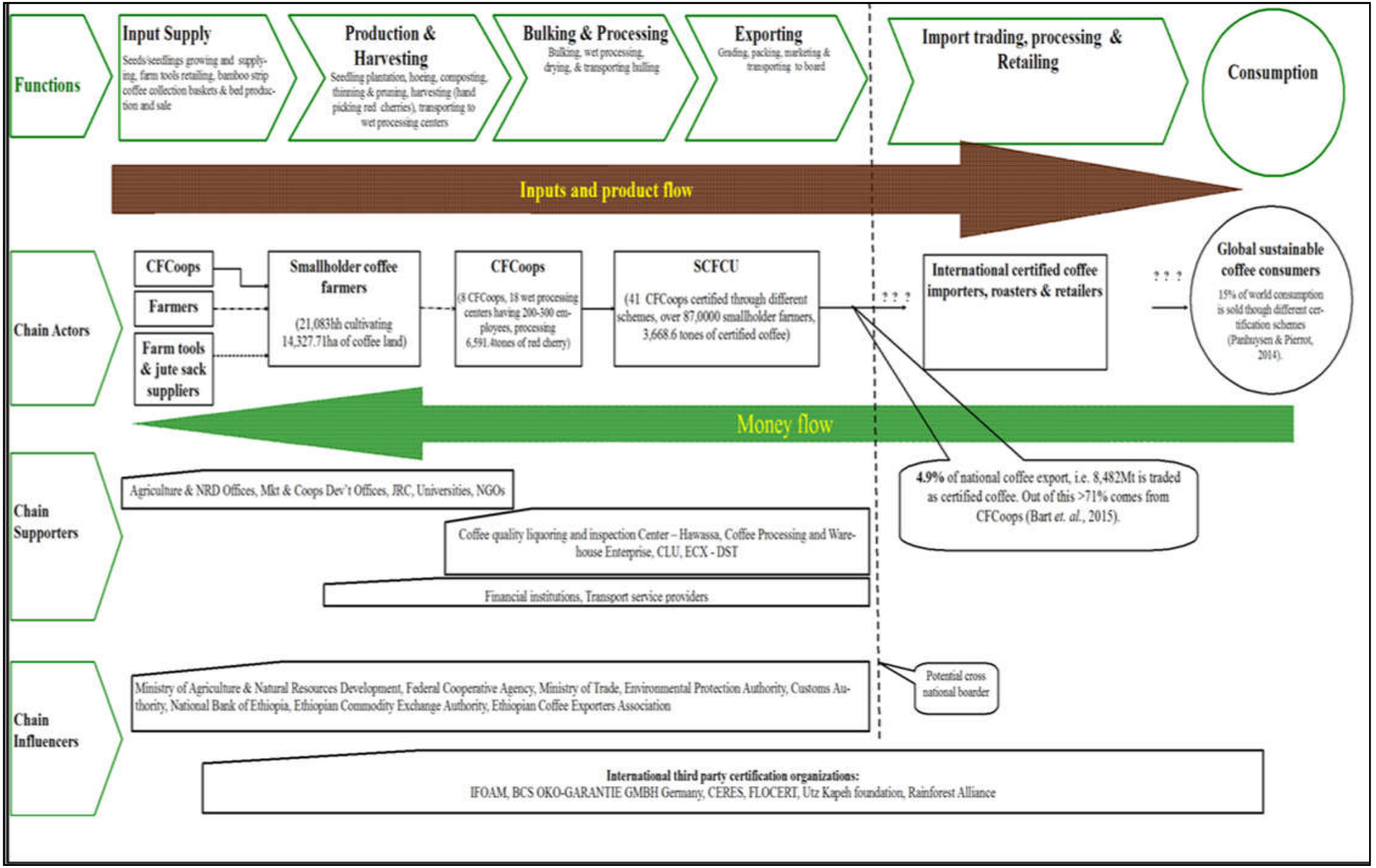
Role of value chain actors: The value chain actors are directly involved in the transformation of the product from input all the way through the final delivery to consumers. These include input suppliers, smallholder coffee farmers, coffee farmers cooperatives, Sidama Coffee Farmer Cooperatives Union, and international certified coffee buyers (coffee importers, roaster, retailers). However, due to the scope and limitation of this study, the discussion here is restricted to the four upstream chain actors. It covers all the value addition activities from input supply to exporting of green coffee to international certified coffee buyers. The table below summarizes these activities synthesized with the existing opportunities and constraints at each stage.

Value chain mapping: The certified coffee value chain map is shown in the next page. The map was developed following the step by step procedure of the M4P (Making Markets Work Better for the Poor Project) tool book (M4P, 2008).

Value chain institutional context: The institutional context assesses issues related with the role of value chain supporters which are mostly referred as second level players in the value chain next to the main chain actors. They provide different support services including financial services as well as a wide array of non-financial services such as transport, grading, processing, storage, advertising, research, training, advice, organizational strengthening, and so on (KIT & IIRR, 2010). In the certified coffee value chain the following organizations and institutions participate as supporters:

Government institutions: The Government of Ethiopia plays an indisputable role in providing various support service to the overall coffee sector. Regional bureaus of the Agriculture and Natural Resource Development and its descendant organs at zonal and district level are responsible for implementing extension services and other on-farm aspects relating to coffee and other crops. The extension unit at *kebele*[1] level is organized constituting three extension agents for crop production, animal husbandry and natural resources. Due to high staff turnover and other institutional capacity gaps, the number of staff can fall to only one. At district and zonal level, the marketing and cooperatives development sector has been frequently restructured where-by in some occasions it is merged under the Agriculture and Natural Resource Development section and in other cases it is established as separate section. The other key supporting institution is ECX. Established in April 2008, following the release of Proclamation No-551/2007, by the Ethiopian Parliament, the

[1] *Kebele* the lower level administration structure in Ethiopia


Functions
Input Supply
Seeds/seedlings growing and supplying, farm tools retailing, bamboo strip coffee collection baskets & bed production and sale
Production & Harvesting
Seedling plantation, hoeing, composting, thinning & pruning, harvesting (hand picking red cherries), transporting to wet processing centers
Bulking & Processing
Bulking, wet processing, drying, & transporting bulking
Exporting
Grading, packing, marketing & transporting to board
Import trading, processing & Retailing
Consumption
Inputs and product flow
Chain Actors
CFCoops
Farmers
Farm tools & jute sack suppliers
Smallholder coffee farmers
(21,083hh cultivating 14,327.71ha of coffee land)
CFCoops
(8 CFCoops, 18 wet processing centers having 200-300 employees, processing 6,591.4tones of red cherry)
SCFCU
(41 CFCoops certified through different schemes, over 87,0000 smallholder farmers, 3,668.6 tones of certified coffee)
? ? ?
International certified coffee importers, roasters & retailers
? ? ?
Global sustainable coffee consumers
15% of world consumption is sold though different certification schemes (Panhuysen & Pierrot, 2014).
Money flow
Chain Supporters
Agriculture & NRD Offices, Mkt & Coops Dev't Offices, JRC, Universities, NGOs
Coffee quality liquoring and inspection Center – Hawassa, Coffee Processing and Warehouse Enterprise, CLU, ECX - DST
Financial institutions, Transport service providers
4.9% of national coffee export, i.e. 8,482Mt is traded as certified coffee. Out of this >71% comes from CFCoops (Bart et. al., 2015).
Chain Influencers
Ministry of Agriculture & Natural Resources Development, Federal Cooperative Agency, Ministry of Trade, Environmental Protection Authority, Customs Authority, National Bank of Ethiopia, Ethiopian Commodity Exchange Authority, Ethiopian Coffee Exporters Association
Potential cross national boarder
International third party certification organizations:
IFOAM, BCS OKO-GARANTIE GMBH Germany, CERES, FLOCERT, Utz Kapeh foundation, Rainforest Alliance

Exchange defines itself as "a marketplace, where buyers and sellers come together to trade, assured of quality, quantity, payment and delivery". Besides coffee, sesame, haricot beans, maize, and wheat are traded in the ECX floor. In response to the critics of its failure to guaranteeing coffee traceability for specialty or certified market, ECX has come up with a new platform – Direct Specialty Trade (DST) (ECX, 2010).

Research Institutes and Universities: The Ethiopian Institute of Agricultural Research (EIAR) is the leading role player in managing various research centers and sites that specialize according to different agro ecological characteristics. Among these is the Jimma Agricultural Research Center (JRC) which primarily focuses on conducting research on coffee and releases improved coffee seed varieties. Taye *et al*. (2011) indicated that the research center has released 37 coffee varieties (and counting) along with improved agronomic and processing techniques. The task of producing and supplying coffee seeds and seedlings at national level has been primarily carried out by this institution and this has become beyond its capacity. Over the years the demand for coffee seeds have been increasing rapidly yet the supply side has depicted worrisome progress. Apart from this, Universities and other academic institutions contribute in an effort to boost the competitiveness to the value chain, through training and educating competent human resource and conducting researches and other community development services. Among numerous such efforts, it is worth nothing the research initiative being carried out by Hawassa University – Chemistry Department, in collaboration with TechnoServe Ethiopia. The University with other partners is conducting research on mitigation of environmental pollution and waste water management related with rural wet processing centers. In doing this it seeks to promote better water use efficiency, reduced/no natural rivers and streams contamination by the waste water from the coffee washing facilities, and enhance organic compost making from coffee pulp (Interview with TechnoServe Business Advisor, 2016).

NGOs: The role of various national, multinational and bilateral agencies funded development projects has always been a critical success factor for transforming agricultural value chains. In this regard the works of USAID, TechnoServe Ethiopia and other organizations are involved. The USAID funded "Feed the Future AGP-Agribusiness Market Development" project is US Government's largest contribution to the Ethiopian Government's Agricultural Growth Program (AGP) and Agricultural Transformation Agency (ATA) national strategies, which aims to sustainably reduce poverty and hunger by improving the productivity and competitiveness of selected value chains (coffee, sesame, chickpea, honey, maize, and wheat) that offer jobs and income opportunities for rural households. Moreover creating an enabling environment for traceability and improvements in quality are key objectives (USAID 2015). Similarly TechnoServe (a non-profit organi-zation), is undertaking projects that focus on supporting producer organizations to improve coffee quality and expand specialty coffee sales, training farmers on improved agronomic practices and mitigate the problem of environmental impact of rural wet mill processing stations in collaborating with Hawassa University and other partners to promote proper waste water management and disposal of coffee pulp (TechnoServe, 2013).

Certification entities: International third party certification bodies on the other side also constitute the certified coffee value chain context/influencers. In the Ethiopian context, and particularly in the case of SCFCU, BCS OKO-GARANTIE GMBH Germany, Fairtrade Labeling Organization, Utz Kapeh Foundation, Rainforest Alliance, and Starbucks operate in the certified coffee value chain. The problem in this regard is the high certification cost. Apart from this, in preparing cooperatives, there is lack of technical personnel/consultant firm – with an international accreditation to assist the national movement of certification.

Value chain governance: Governance refers to the "the inter-firm relationships and institutional mechanisms through which non-market coordination of activities in the chain is achieved" (Humphrey and Schmitz, 2001). Gereffi *et al.* (2005) have developed a global value chain governance theory which identified five types of governance structures - hierarchy, captive, relational, modular, and market – which range from high to low levels of explicit coordination and power asymmetry. In light of this brief theoretical background and based on the qualitative and quantitative information accessed, the certified coffee value chain governance in this study is reviewed from two perspectives. These are the "inter-firm relationships" and "the institutional coordination". Regarding the "inter-firm relationships" in the value chain, the major area of interest should be the position of big multinational companies in the global coffee consuming countries and their interactions with voluntary sustainability standards. In this regard, it is boldly noted that internationally the market for certified coffee is growing fast and it is dominated by a handful of transnational corporations. These include: Nestlé, Mondelºe¯z and DE Master Blenders 1753 - and a few big coffee roasters such as Smucker's, Strauss, Starbucks and Tchibo. 40% of all the coffee that is consumed worldwide is processed by ten largest roasters, that have a market share ranging from 1% to over 10%. These numbers show a growing control of the coffee marketing chain by the roasters (Panhuysen and Pierrot, 2014). The key to such level of power control mainly accounts to the strategic alliances that these coffee roasters have developed with a number of international sustainability standards initiatives, like FLO, Rainforest Alliance and Utz. Apart from this, few have also developed their own private coffee standards systems (e.g. Starbuck's C.A.F.E. Practices and Nespresso's AAA Sustainable Quality Program) as part of their overall corporate strategies. Parallel to these efforts, the companies are also making significant investments in their supply chains (mostly in partnership with development project initiatives),-which often means establishing stronger relationships with farmers and cooperatives at origin (TechnoServe, 2013). The forecast is also in favor of increasing demand for sustainable coffee in Europe and North America.

In contrast to this huge growing market and multi stakeholder collaboration and commitment for inclusion of smallholder coffee farmers – Ethiopias' certified coffee export share stayed small, with the biggest record being 5.3% of the total export in 2011. Even though the share of cooperatives in total exports is still minor (often below 5%), they contributed the lion share in the countries certified coffee exports. From 2010 to 2013, the share of cooperatives' certified coffee export, out of the total national certified coffee exports (which is itself 4.9%, of which 4.3% is from cooperatives) varied between 72% and 83% (Bart *et al.*, 2015). Secondly, the institutional coordination mechanisms which govern the production and flow of the product are the other interest areas for identifying leverage

points. These mainly deal with local market structural reformations and regulatory measures that have been undertaken by the government to enhance the coffee sector and improve the livelihoods of coffee farmers. The major reforms in this regards include the passing of two key proclamations, (1) Proclamation No. 602/2008, Coffee Quality Control and Marketing Proclamation and (2) Proclamation No-551/2007- that established ECX and subsequent formation of Direct Specialty Trade (DST). Despite these and varied efforts, as discussed above the certified coffee export performance is low and the benefits transmitting to the smallholder farmers is not as promised. Bart *et al.*(2015) identified that only one-third of the quality premium at the export level is directly transmitted to producers.The quality premiums are used for financing communal investments and much larger part of it is also used for overheads and program management, indicating the prevalence of bigger efficiency gaps in coordinating exports. In summary, the certified coffee value chain governance is mainly characterized by stronger power from the downstream actors' side (roasters and importers) and supplier incompetency in production and exporting. An increasing global demand for sustainable coffee accompanied with emerging private standards (like what is initiated by Starbuck's Coffee and Farmer Equity Practices and Nespresso's AAA guideline) in the value chain, might further open spaces for strengthened roaster driven governance structure. This form of networking in the value chain may further impose capability concern among the upstream actors (smallholder farmers and cooperatives) in their effort to comply with the emerging standards (IDH, 2014).

Conclusion

The objective of this study was to analyze certified coffee value chain. Accordingly in the value chain analysis the study identified value chain actors including input suppliers, smallholder coffee producers, coffee farmers cooperatives, Sidama Coffee Farmers Cooperatives Union (SCFCU), and international certified coffee importers, roaster and retailers. Under the value chain supporters category the government institutions at various level, research institutes and Universities, and NGOs were identified. The government through the top level ministries plays regulatory function in the overall agriculture and export trade sector, including coffee. Besides this international third party certification bodies set standards demanding all actors in the value chain to comply with. The study also identified value chain constraints and opportunities at different levels.

The major constraints identified include: underdeveloped organizational and business management systems, lack of capacity to adequately implement different sustainability certification standards, gaps in coffee quality inspection skills and facilities, lack of quality payment system at smallholder level, attitudinal problem of considering certification investments and compliance measures as irrelevant/less important, higher cost of certification, insufficient collateral for credit guarantee from the bank, low level of female participation at leadership level, limitations to provide market information at the smallholders level, management gaps (efficiency and environmental impact mitigation) in wet processing machines, gaps in marketing and export trade promotion skills. The value chain governance structure review also showed a growing power of the downstream actors' (roasters and importers) contrasted with suppliers' incompetency in production and export coordination.

Conflict of interest statement: There is no conflict of interest and the authors are included. The paper work is sponsored by the researcher himself.

Funding statement: This thesis is self sponsored research work submitted to Hawassa University as requirement of MSc degree in Agribusiness and value chain management.

REFERENCES

Bart, M., Mekdim Dereje, Ermias Engeda, and Seneshaw Tamru, January 2015. Who benefits from the rapidly increasing Voluntary Sustainability Standards? Evidence from Fairtrade and Organic certified coffee in Ethiopia. ESSP Working Paper 71. Addis Ababa. IFPRI-ESSP, 2015.

Bishop, D. and McConnen, R. 1999. Purpose of Cooperative. VOCA/ Ethiopia, Addis Ababa, Ethiopia.

BoFED, SNNPR. 2012. Annual Statistical Abstract 2003 E.C (2010/11). Hawassa.293p.

ECX 2010. ECX Direct Specialty Trade (DST) Concept Paper. AccessedonDecember 15, 2015 <http://www. ecx.com.et/>.

Gereffi, G. and Fernandez, K. 2011. GLOBAL VALUE CHAIN ANALYSIS: A PRIMER. Center on Globalization, Governanceand Competitiveness (CGGC) Duke University Durham, North Carolina, USA. May 31, 2011.

Gereffi, G., Humphrey I, and Sturgeon T. 2005. The governance of global value chains, Review of International Political Economy 12:1 February 2005: 78–104

Greene, William H. 2003. Econometric Analysis, Prentice Hall, section 22.1-22.4.

Humphrey J. and Schmitz H. 2001. Governance in Global Value Chains. IDS Bulletin 32.3, 2001; Institute of Development Studies 2001.

IDH (The Sustainable Trade Initiative), 2014. Ethiopia: A Business case sustainable coffee production. An industry study for The Sustainable Coffee Program. Accessed on December 17, 2015, at www.idhsustainabletrade.com/ coffee.

Jena P. R, Bezawit Beyene Chichaibelu, Stellmacher T. and Grote U. 2012. The impact of coffee certification on small-scale producers' livelihoods: a case study from the Jimma Zone, Ethiopia. Agricultural Economics 43: 429–440.

KIT and IIRR. 2010. Value chain finance: Beyond microfinance tor rural entrepreneurs. Royal Tropical Institute, Amsterdam; and International Institute of Rural Reconstruction, Nairobi.

M4P 2008. Making Value Chains Work Better for the Poor: A Toolbook for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4) Project, UK Department of International Development IDFID). Accessed on October 10, 2015, at http://aciar.gov.au/publication/cop019

Mekonen Hailemichael Salla, 2009. Influence of genotype, location and processing methods on the quality of coffee (coffea arabica l.). Msc. Thesis. Hawassa University, Hawassa, Ethiopia. 105 p.

Mendez, V., Bacon, C., Olson, M., Petchers, S., Herrador, D., Carranza, C., Trujillo, L., Guadarrama-Zugasti, C., Cordon, A. and Mendoza, A. 2010. 'Effects of Fairtrade and organic certifications on small-scale coffee farmer households in Central America and Mexico'. Renewable Agriculture and Food Systems, 25(3): 236- 251

MoFED (Ministry of Finance and Economic Development) Federal Democratic Republic of Ethiopia. November 2010. Growth and Transformation Plan 2010/11 – 2014/15, Volume I: Main Text. Addis Ababa. 127p.

NBE 2014. Annual Report 2012/13. Available online at: http://www.nbe.gov.et/publications/annualreport.html.

Panhuysen, S. and Pierrot, J. 2014. Coffee Barometer. Hivos, IUCN Nederland, Oxfam Novib Solidaridad WWF 2014.

Petit, N. 2007. Ethiopia's Coffee Sector: A Bitter or Better Future? *Journal of Agrarian Change*, Vol. 7 No. 2, pp. 225–263.

Stellmacher, T. and Grote, U. 2011. Forest coffee certification in Ethiopia: Economic boon or ecological bane?, ZEF Working Paper Series, No. 76.

Taye Kufa, 2010. Environmental sustainability and coffee diversity in Africa. Paper presented in the ICO World Coffee Conference, 26-28 February2010, Guatemala City. Available online at: http://dev.ico.org/event_pdfs/ wcc2010/presentations/wcc2010-kufa.pdf.

Techno Serve 2013. The Coffee Initiative Phase One Final Report 2008-2011, Accessed December 17, 2015 <http://www. technoserve.org />.

Tium Gebrehiwet, 2013. Impact of Fairtrade certification on smallholder coffee producers' income: the case of Gimbo district, South Western Ethiopia. MSc. Thesis. Haramaya University, Ethiopia. 81 p.

USAID 2015. Feed the Future Agricultural Growth Program-Agribusiness and Market Development (AGP-AMDe), year four annual report, July 1, 2014 – June 30, 2015. Accessed on March 10, 2016, at <http://ethioagp.org/ download/ reports>.

Wollni, M. and Zeller, M. 2007. Do farmers benefit from participating in specialty markets and cooperatives? The case of coffee marketing in Costa Rica. *Agricultural Economics*., 37(2): 243- 248.

Wooldridge, J. 2002. Econometric Analysis of Cross-section and Panel Data. MIT Press, USA.

Wubshet Chala, 2010. Value chain analysis of Fairtrade coffee: The case of Bedeno District primary coffee cooperatives, East Hararghe Zone, Ethiopia. M.sc. Thesis. Haramaya University, Ethiopia. 84 p.

****