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# Value Chain Analysis of Pineapple (Ananas Comosus) Production and Marketing from Traditional Agroforestry System, Southern Ethiopia

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**Abstract**
Southern Ethiopia is known with favorable environment for pineapple, coffee and many other horticultural crop Production. However, the practice has been facing a number of production and marketing constraints. The aim of the present study was therefore; identifying the value chain actors and their roles, mapping the value chain of pineapple production and marketing, and examining the determinants of market supply. Using purposive sampling technique, 105 households were selected from three representative peasant associations for in depth survey. Both primary and secondary data was collected using a combination of PRA tools. Descriptive statistics and econometric analysis using Ordinary Least Square (OLS) were used to analyze the collected data. The result revealed that both primary and secondary actors were involved in pineapple production and marketing. The percentage of market margin for producer, assembler, whole seller, retailer and processor actors were 9.41, 11.86, 18.33, 26.96 and 33.43%, respectively. Producer (34.20%), assembler (3.30%), whole seller (17.39%), retailer (26.78%) and processor (18.33%) were sharing percentage of profit margin in pineapple production. The result of the OLS regression analysis model indicated that market supply of pineapple was affected by wealthy status and duration of storage ($p<0.05$) and price ($p<0.01$), positively. Enhancing the local actors' capacity through training, providing price and market information, credit and other processing facilities and institutional support could result in increasing production and steady supply of the pineapple products.
**Keywords:** actors, pineapple producers, profit margin, value chain
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## 1. Introduction

In sub-saharan African countries the domestic value chains of agricultural products are characterized by the provision of raw materials to the market without processing (Aoudji *et al*., 2012; Bates 1981) and poor competitiveness in the market (Bates 1981). According to Mamo (2009) arguments small scale, dispersed and unorganized producers are unlikely to exploit market opportunities. Such producers cannot attain the necessary economies of scale and lack of confidence in negotiating product prices. Agriculture in Ethiopia is mainly practiced by small holder farmers who occupy the majority of land and produce most of the crop and livestock products (Adeleke *et al.,* 2010). In comparison, horticultural crop production in the country is much less developed than the production of food grains. On average, about 2,399,566 tons of vegetables and fruits have been produced per annum in the previous year by public and private commercial farms, which are 2% less than the total crop production in the same years (EIA, 2012). The total area under fruits and vegetables were about 12,576 ha in 2011 which accounts 0.11% of the total potential area in the country (CSA, 2012; EIA, 2012). Reports indicate that horticultural crop production in the country faces a number of challenges due to limited market outlets, little efforts in market linkage and poor market information among actors (Dereje, 2007; Kaleb, 2008).

Pineapple (*Ananas comosus*) is a perennial herb in the botanical family of Bromeliaceae, native to the American tropics (Bartholomew *et al.,* 2002). It is a hardy tropical fruit cultivated in all tropical and subtropical countries and grows well in frost-free areas between 25$^{o}$ north and south of the equator (Samson, 1986). Pineapple plants are drought tolerant and well adapted to sandy soils (Ubi *et al.,* 2005). It is a major tropical fruit with an estimated about 24.78 million metric tons of global pineapple production in 2013 was reported (FAO, 2013). Pineapple is one of the horticultural crops and the third most important tropical fruit in the world after banana and citrus (Hassan *et al*., 2011), contributing to the world's production of tropical fruits by over 20% (Bartholomew *et al*., 2003; UNCTAD, 2012). Costa Rica, Brazil, Philippines, Thailand and Indonesia are the leading producer of pineapple (FAO, 2013).

In developing countries like Ethiopia, it is produced by small holder farmers on pieces of land mainly in South and South-Western parts of the country. According to the key informants the introduction of pineapple in the study area, Aleta Chiko district of Sidama zone (southern Ethiopia), traced back in the 1940's where the plant introduced by a religion church for the first time. Since then, cultivation of the plant intensified and now farmers of three peasant associations in the district (Gambella, Teso and Dibicha) highly depend on cultivation of pineapple in traditional agroforestry system. The relative resistance of the crop for moisture stress, disease and pest, and the

presence of road access for marketing have made it economically attractive and important cash crop for small holder farmers of the area (Tesfaye, 2005).

The production of market-oriented crops by the smallholder farmers plays a vital role in poverty reduction strategy of developing countries (Jama and Pizarro, 2008). Moreover, the participation of farmers in the market is very crucial for sustaining economic growth and poverty alleviation (Jari, 2009). This has resulted in value chain development for agricultural commodities (Stoian *et al*., 2012). The value chain refers to a full range of activities and consists of all members of the supply chain involved in the process of value creation and delivery of products to the end customers, and final disposal after use (Kaplinsky and Morris, 2002).Majority of small holder farmers in Sidama zone practice traditional agroforestry system of crop production with integrating fruit trees for income generations and livelihood improvement. Kochhar (2006) reported that 80% of the tropical fruits came from small farms of mixed cropping systems. The small holder farmers in Aleta Chucko district are known in such type of crop production in which pineapple is a major component of the system. However, the production and market constraints of pineapple in the area has been inadequately studied and not well documented. Therefore, the present study was proposed with the aim of investigating the market constraint and value chain of pineapple production for better understanding of the ability of different actors to derive commercial benefits in the district. The study also attempted to identify the actors involved and their role in the value chain of pineapple production and marketing.

## 2. Materials and Methods

### 2.1 *Description of the study area*

The study was conducted in Aleta Chuko district of Sidama zone, Southern Ethiopia, located at about 80 km south of regional capital, Hawassa (Fig. 1). Geographically, the study area is located within $5^0$45'-$6^0$45'N latitude and $38^0$-$39^0$ E longitude, covering a total area of 7672 $km^2$ (Tesfaye, 2005). Sidama zone constitutes diverse altitudinal zones ranging from 500 to 3500 m.a.s.l. Topography, it is generally undulating with massifs, plateaus and plains, and crossed by a number of permanent rivers (Tesfaye, 2005). The area receives an annual rainfall from 1000-1800mm and dominated by perennial crops where the enset-coffee agroforestry system along pineapple farm takes the large proportion. *Cordia africana, Podocarpus falcatus, Milletia feruginea* and *Bersama abyssinica* are some of the common plant species available in the study area.

### 2.2 *Sampling techniques and sample size*

Based on accessibility and tangible potential in pineapple production, three peasant associations (Dibicha, Tesso and Gambela) were selected from the district. Purposive random sampling techniques were carried out, in which 35 pineapple producers selected from each peasant association. Accordingly, a total of 105 pineapple producer households were taken as a sample population in the study area.

### 2.3 *Data collection methods*

The socio-economic characteristics of producers were recorded though direct interview. Preliminary identification of different stages (planting, harvesting and marketing both on farm level and in the market) in the value chain were made based on secondary sources and information from key informants. Identification of actors that are directly involved in the pineapple value chain from Aleta Chucko district was done through consultation of key informants. Both primary and secondary data were collected from relevant sources using combination of different Participatory Rural Appraisal (PRA) tools (semi-structured interviews, key informant interviews, group discussion and direct observation).

 

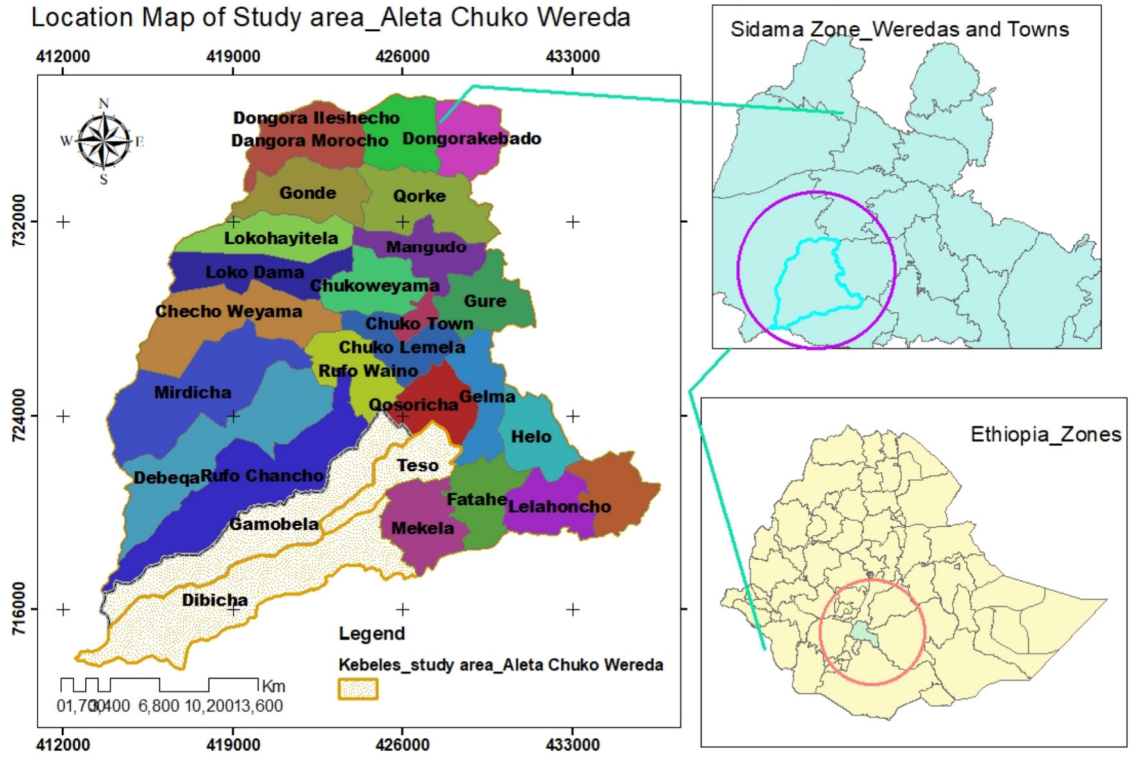


**Fig.** 1 Location of the study area

2.4 *Data analysis*

Descriptive statistics and Econometric analysis were used to analyze the data using STATA software version 11. Descriptive statistics were used to describe the socio-economic characteristics of the pineapple producers in terms of mean, percentage and frequencies. Value chain analysis following Ribot (1998), Kaplinsky and Morris (2001) and Marshal *et al.* (2006) was applied for the analysis and presentation of data that involves (i) Mapping and description of the different actors involved in the value chain and their principal activities (ii) Estimating market and profit of different actors involved in pineapple value chain. Following Marshal *et al* (2006), marketing margins were calculated as indicators for distribution of benefit along the chain. Market and profit margins of each actor was calculated to evaluate the benefits along the commodity chain as follows:

$$\text{Marketmargin}(\%)=\frac{\text{Difference between sale and purchase price of the product}}{\text{Consumer price}}*100$$

$$\text{Profit marigin } (\%) = \frac{\text{Revenue} - \text{Total cost}}{\text{Revenue}}*100$$

Econometric analysis using Ordinary Least Square (OLS) regression model was applied to analyze the determinants of household pineapple market supply (Wooldridge, 2000 and Greene, 2003).

$$Y = \beta 0 + \beta i Xi + Ui$$

Where, i = 1,2,3,4… (i is the number of variables), Yi = Market quantity supplied of pineapple, Xi= Set of explanatory variables, and Ui= an error term with the usual OLS properties.

Test for heteroscedasticity was undertaken using the Breusch and Pagan test of heteroscedasticity, especially for its simplicity. The explanatory variables are given in Table 1.

**Table 1**: Definitions of explanatory variables

| Variable | Definition | Type of variable | Hypothesized impact on variable |
|---|---|---|---|
| Age of household | Years | Continuous | ± |
| Marital status | 1. Single<br>2. Married<br>3. Divorced<br>4. Widowed | Discrete | ± |
| Education level of the household | 1. No education<br>2. 1-4 grade<br>3. 5-8 grade<br>4. 9-10 grade<br>5. 11-12 and above | Discrete | ± |
| Household Size | Number | Continuous | ± |
| Cultivated Land size | Hectares | Continuous | + |
| Wealth status of the household | 1. Rich<br>2. Medium<br>3. Poor | Discrete | + |
| Storage duration of pineapple | No. of days | Continuous | ± |
| Price of pineapple | ETB | Continues | + |

## 3. Results and Discussions

3.1 *Socio economic characteristics of pineapple producers*

The present investigation revealed that the study area is highly populated with an average of 1.5 ha per household for average family members of 7.3 (Table 1). The family size of the study area (7.3) was higher than the national rural average 5.13 (CSA, 2014) which indicates the presence of high fertility rate. The land-to-man ratio of the area was less than the average national land holdings reported by menberu (2014) and the average crop productivity is far below potential. Out of the total land (166.65 ha) size of the sample producers, 16.8 ha is allocated for plantation and grazing while the remaining 149.85 ha were used for crop such as cultivation mainly Pineapple, Chat, Coffee and Enset under agroforestry system (Table 1). Land fragmentation and dependency on a piece of land were observed as a characteristic feature of the study area. The land holdings in individual farm units are too small to be economically viable (Belay and Manig, 2004).

Pineapple producers in the study area keep different livestock in their compound, but there is little usage of the byproducts of the livestock as fertilizer. The high level of soil fertility in the area may be attributed to the negligible utilization of the byproducts as a fertilizer. According to Kyle and Andrew (2008) organic fertilizers are important to maintain the soil fertility and maximize pineapple productivity. However, the income from the livestock products reported to be indirectly utilized in pineapple production activities.

**Table 1.** Socio-demographic profile of pineapple producers (Sample size, n=105)

| **Variable** | **Mean** | **Std.** | **Min** | **Max** |
|---|---|---|---|---|
| **Household character** | | | | |
| Age of household head | 44.2 | 11.4 | 25 | 76 |
| Family size | 7.3 | 2.8 | 1 | 16 |
| Land size (ha) | 1.5 | 0.82 | 0.25 | 3.5 |
| **Land allocation (ha)** | | | | |
| Pineapple | 1.05 | 0.87 | 0.2 | 4.5 |
| Coffee | 0.097 | 0.14 | 0 | 0.5 |
| Chat | 0.18 | 0.24 | 0 | 1 |
| Enset | 0.1 | 0.16 | 0 | 0.5 |
| Plantation and grazing | 0.16 | 0.3 | 0 | 1.5 |
| **Income source (ETB*)** | | | | |
| Pineapple | 18,064.76 | 17,038.06 | 1,500 | 80,000 |
| Livestock | 471.05 | 1,619.25 | 0 | 7,500 |
| Coffee | 1,013.45 | 1,459.94 | 0 | 5,600 |
| Chat | 11,282.86 | 18,099.44 | 0 | 70,000 |

*ETB: Ethiopian Birr, the country's currency

Absence of processing technology and limited scientific knowledge of the farmers were identified as a major limitation in pineapple production. Among the sample respondents in the study area, 28.57% did not attain any formal education. Whereas 13.33, 32.28, 19.05 and 6.67% of the respondents attended 1-4, 5-8, 9-10 and 11-12 grades, respectively. These producers can at least read and write in their mother tongue. In farming community with low level of literacy extension and research work to improve the production processing is hardly possible.

Rehima *et al.* (2013) investigated the effect of farmers' literacy level on crop management and diversification and recommended the need for farmers' education. Zechaias *et al*. (2012) study indicated that education improves the capacity of smallholder farmers to attain new idea in relation to coffee production techniques and market information in Ethiopia. Adenuga et al. (2013) in his study of tomato value chain in Nigeria found that education had a positive and significant influence on the production, productivity and quantities of tomato supplied to the market.

3.2 *Pineapple cultivation*

Although the region is known as one of major fruit and vegetable producing areas in the country, pineapple is one of the main income sources for the local community than any other crops in the study area (Tadele and Derbew, 2015; Zemenu *et al*., 2017). The key informants explained that the extent of dependency on pineapple in the study area increases from time to time. According to Zemenu (2017), the production percentage of pineapple in Aleta chuko district reaches 95%. The cultivation requires relatively less management and production costs. Pineapple growth and development require the mean annual rainfall of 1200 mm (Bartholomew *et al*., 2003) and soil pH ranging from 5.5-6 (Hepton, 2003; Morton, 1987) with good soil drainage (Hepton, 2003). Once the farm established, the plant is not as such sensitive to moisture stress, weed, pest and disease, reducing the cost of production. According to the respondents, the problem comes during hoeing and harvesting due to the thorny nature of the plant leaves. Planting starts with land preparation and the farmers preferred the start of the first rainy season for planting. Fassinou *et al*. (2012) observed that that small holder producer preferred the beginning of the first rainy season for pineapple planting. Pineapple is typically propagated from the new vegetative growth of the mother plant.

The quality and productivity of pineapple fruits depend on the viability and healthy of planting materials (Arinloye, 2013; Garnier, 1997).The planting material used in the study area includes all traditional propagule types (Slips, Hapas and Suckers). In Rwanda, the main planting materials used by the smallholder farmers are pineapple suckers and tops (Regina, 2011). Crowns (produced at the top of the fruit) were not preferred by the producers in the study area. Slips, hapas and suckers were used by 'Sugarloaf' producers whereas only hapas and suckers were used by 'Smooth Cayenne' producers. The observation was in agreement with the report of Fassinou *et al*. (2015). The producers got their planting materials either from plants kept in the field after the previous harvest or other producers.

3.3 *Planting space and production constraints*

Most producers grow pineapples in rows intercropped with maize. Reports suggested that the plant can be intercropped with other crops like cassava, banana, rice and ginger at various densities (Rajasekharan and Veeraputhran, 2002; Sukanta, 2011). The planting densities were highly variable with the type of pineapple, land size and the demand for other crops. To improve productivity and maximize the yield in, Regina (2011) recommends that distance between two row ranges from 40cm to 30 cm, whereas, the distance between to pineapple plant varies from 30 to 25 cm. Also the fertilization practices were not common, some farmers used to apply organic fertilizers like animal dung when intercropped with enset at its early growth stage. Unlike for other vegetables, application of fertilizer, pesticide and/or herbicides for pineapple production was not common in the study area.

During individual interview as well as group discussion, the pineapple producers pointed out certain production constraints apart from market related problems for their product. The main constraints were:

- The non-availability of planting material from other producers when needed
- The heterogeneity nature of the planting material (mainly when sourced from other producers)
- The variation in planting material age (mainly when the planting material was derived from plants kept after the previous harvest).
- The thorny nature of the plant during hoeing and harvesting times
- Labour requirement during land preparation, hoeing and harvesting

3.4 *Seasonal price of pineapple*

The present investigation revealed that producers sell their product at local market, on farm and other secondary markets to different actors involved in the chain. The market price varies with season and it is based on the quantity of pineapple produced and supplied to the market. Many studies have indicated that crop productions are seasonal and their prices are inversely related to supply (Bezabih and Hadera 2007). During the peak supply of pineapple to the market the prices decline, and the perish ability nature of the product and poor storage facilities worsen the situation. Seasonal price fluctuations of the product on average higher, medium and lower prices were set between June-August, January-March and April-December, respectively (Table 2). It was in line with pineapple value chain report by Kyle and Andrew (2008) where seasonal production of pineapple is combined with pricing. Farmers can produce large amounts of fruits and vegetables, but with the absence of fast and equitable means of distributing

such goods to the end users, it will end up with higher losses (Kader, 2010). Wilson *et al*. (1995) pointed out that due to lack of storage facilities force the smallholder farmers to sell their products almost immediately after harvest, and lead them to sell lower prices

**Table 2**: Seasonal pricing of pineapple in ETB

| Category | Obs | Mean | Std. | Min | Max | Season |
|---|---|---|---|---|---|---|
| High-priced | 105 | 14.3 | 4.46 | 7.5 | 25 | June-August |
| Medium-priced | 105 | 8.7 | 1.95 | 4 | 12 | January-March |
| Low-priced | 105 | 5.4 | 1.33 | 2.5 | 8 | April-December |

3.5 *Value chain map of pineapple*

The constructed map showed input-output relationships including physical flow of pineapple along the chain, destination of sales, flow of information and supporting sources in Aleta chuko district (Figure 1). The numerical values showed the average value-added price of the product per vehicle with loading capacity of sixty quintals at each stage of the pineapple value chain.

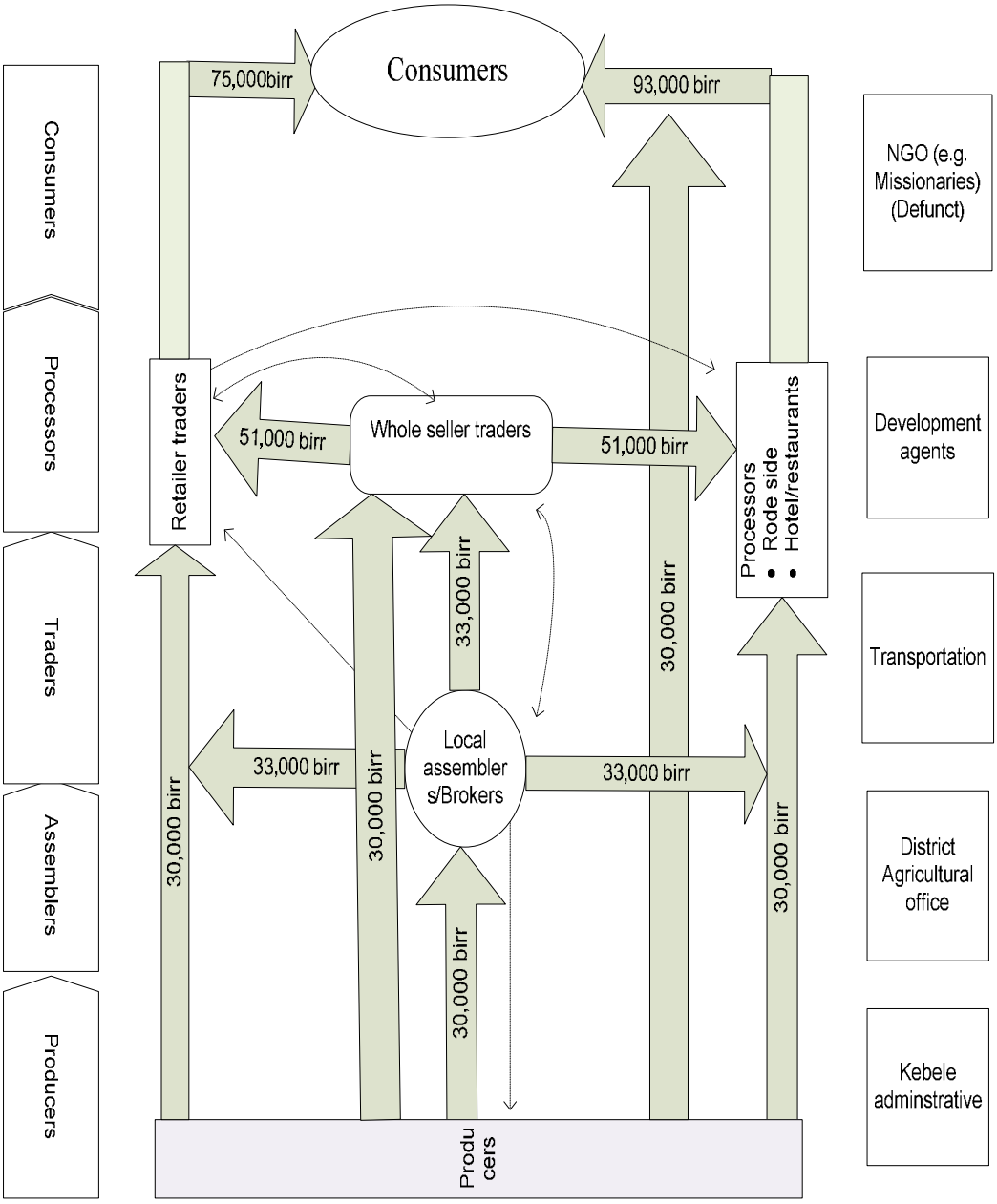


**Figure 1** Value chain map of pineapple in the study area district

The produced pineapple in the study area has been distributed through different marketing channels. These are described in the following manner:

Channel 1: Producer → Consumer
Channel 2: Producer → Retailer → Consumer
Channel 3: Producer → Processor → Consumer
Channel 4: Producer → Local assembler/broker → Retailer → consumer
Channel 5: Producer → Local assembler/broker → Processor → Consumer
Channel 6: Producer → Local assembler/broker → Whole seller → Consumer
Channel 7: Producers → Local assembler/broker → Whole seller → Retailer → Consumer
Channel 8: Producer → Local assembler/broker → Whole seller → Processor → Consumer

3.6 *Value chain actors and their cost benefits in the study area*

Value chain actors in pineapple production in the present study include both primary and secondary actors. Producers (Farmers), Assemblers, Traders, Processers and Consumers were identified as primary actors in the study area. Bezabih and Hadera (2007) pointed out that producers, intermediaries or brokers, traders and consumers are categorized actors in the marketing channel. Supporting individuals and institutions that facilitate marketing of the pineapple at different stages of the value chain were identified as secondary actors. In the present investigation; NGOs like Ethiopian Evangelical Church, Development agent, Transporters, District agricultural office and Kebele administration were pointed out by key informants as secondary actors of the business. Lunndy *et al*. (2004) reported that the secondary actors are provider of business development services. The provide services like transport, machinery, technical assistant, training and others.

Different actors were involved in pineapple production and marketing activities. Land preparation and planting, management, collection and sorting, whole selling (packing and transporting), retailing and processing with their appropriate costs were identified as major activities in the study area. The present investigation revealed that producers are getting better profit margin (Table 3). The finding was in agreement with Adesina (2013) who conclude that pineapple production is profitable, as compared to other actors involved in the chain but not as to the expected maximum level of profit gain with smallest market margin.

**Table 3**: Average marketing costs and benefits of pineapple value adding activities (Birr/year)

| Activities/costs | Producer | Assembler | Whole seller | Retailer | Processor | Sum |
|---|---|---|---|---|---|---|
| Production costs | | | | | | |
| Seedling | 112.4 | - | - | - | - | 112.4 |
| Land preparation | 1366.7 | - | - | - | - | 1366.7 |
| Planting | 518.2 | - | - | - | - | 518.2 |
| Weeding | 1491.4 | - | - | - | - | 1491.4 |
| Harvesting | 341.1 | - | - | - | - | 341.1 |
| Sub total cost (A) | 3829.8 | - | - | - | - | 3829.8 |
| Marketing cost | | | | | | |
| Purchasing | - | 30000.0 | 33000.0 | 51000.0 | 75000.0 | 189000.0 |
| Packing | 600.0 | 600.0 | 600.0 | 600.0 | 600.0 | 3000.0 |
| Loading/Unloading | 160.2 | - | 180.0 | 180.0 | 180.0 | 700.2 |
| Sorting | 491.4 | - | 90.0 | 90.0 | 90.0 | 761.4 |
| Transportation | - | - | 3000.0 | 3000.0 | 3000.0 | 9000.0 |
| Warehouse/storage | 685.8 | - | 1500.0 | 683.8 | 820.0 | 3689.6 |
| Sub total cost (B) | 1937.4 | 30600.0 | 38370.0 | 55553.8 | 79690.0 | 206151.2 |
| Total cost (A + B) | 5767.2 | 30600.0 | 38370.0 | 55553.8 | 79690.0 | 209981.0 |
| Selling price | 30000.0 | 33000.0 | 51000.0 | 75000.0 | 93000.0 | 282000.0 |
| Market margin | 26170.2 | 33000.0 | 51000.0 | 75000.0 | 93000.0 | 278170.2 |
| % market margin | 9.41 | 11.86 | 18.33 | 26.96 | 33.43 | 100.00 |
| Price margin | 24232.76 | 2400.00 | 12630.0 | 19446.20 | 13310.00 | 72018.96 |
| % profit margin | 34.20 | 3.30 | 17.39 | 26.78 | 18.33 | 100.00 |

3.7. *Econometric analysis result*

Results of the present investigation the coefficient of determination ($R^2$) showed that the econometric model explains 81% of the variations in amount of pineapple supplied to the market. The result of the OLS regression analysis model indicated that market supply of pineapple was affected by wealthy status and duration of storage at 5% and the price at 1% level, positively (Table 4). This finding is supported by Birachi *et al*. (2011) that pointed out a relationship between the price of the beans and quantity supplied to the market.

**Table 4**: Variables affecting pineapple market supply

| Quantity supply to market | Coef. | Std. Err. | t | P>t |
|---|---|---|---|---|
| Marital status | -0.35 | 1.07 | -0.32 | 0.75 |
| Age | 0.00 | 0.02 | 0.12 | 0.91 |
| Religion | 0.83 | 1.97 | 0.42 | 0.67 |
| Education status | 0.24 | 0.19 | 1.28 | 0.20 |
| Household size | 0.08 | 0.10 | 0.82 | 0.41 |
| Cultivated land size | 0.37 | 0.38 | 0.99 | 0.33 |
| Wealthy status of household | 0.93 | 0.42 | 2.22 | **0.03**** |
| Duration of storage | 0.34 | 0.16 | 2.06 | **0.04**** |
| Price in 2009 | 0.00 | 0.00 | 18.94 | **0.00*** |
| _ cons | -3.51 | 4.20 | -0.84 | 0.41 |

*, ** significant at 1 and 5 % probability level, respectively

3.8 *Challenges and opportunities in pineapple value chain*

Even though, pineapple production in the study area does not employ any value adding stage at the inception or farm, it is surrounded by several obstacles. The problems were related with the production, harvesting and post harvesting, and marketing activities until the product reaches to the final consumers and even the waste disposal (Table 5). The major challenges in pineapple production were those related with wedding due to the thorny nature of the product and absence of advanced weeding technology (Tadesse *et al*., 2007; Fassinou *et al.*, 2012). The interviewed farmer households also expressed that the perishable nature of pineapple affects their profitability. This agreed with (Olayinka, 2013) who observed that high perish-ability nature of the fruit affects smallholder farmers' profitability in Nigeria. Marketing related problems like low price for the product at harvest time, poor product handling and packaging, imperfect pricing system and lack of transparency in market information system were identified. Such reports were also reported in fruit and vegetable production in the region (Rehima *et al.,* 2013; Takele, 2014; Zemenu *et al.,* 2017). Bezabih (2008) reported that marketing problem is one of the main challenges to smallholder farmers producing horticultural crops in eastern parts of Ethiopia. Ayelech (2011) find out that low price, lack of market information, lack of capital and credit availability also affect fruit productions in the southwest part of Ethiopia. These findings were in agreement with Kayitesi (2011) who reported that low sale price and lack of access to credit are the main constraints hinder pineapple production in Rwanda.

**Table 5**: Challenges and opportunities in pineapple value chain in the area

| | Challenges | Opportunities |
|---|---|---|
| Production related | High cost of land preparation, absence of trust between producers and laborers, weeding problem, lack of capital and awareness about advanced pineapple production and processing technologies | Serves as emergency guaranty for the producers generating better and frequent income than other cash crops in the area |
| Harvesting and post - harvesting related | Thorny nature of the pineapple, absence of protection, lack of finance to hire supporting human resources, perishable nature of the product, and absence of further processing facilities | Value adding concept introduction, experience sharing, introduction of advanced processing technology, and expansion financial credit |
| Market related | Existence of collusive agreement from the whole sellers, absence of competitive market price, late payment of credit by traders deteriorating trust and vertical value chain linkage and unreasonable high cost of transportation | Emergency of institutional cooperatives |

## 4. Conclusion

Pineapple is one of the main income sources for local communities than any other crops in the study area. The cultivation requires relatively less management and the extent producers' dependency on pineapple in the study area increases from time to time. The business found to be profitable for producers, brokers, wholesalers and retailers. However, the benefit distribution along the value chain revealed that the producers (farmers) receive less benefit in spite of their efforts and role in the production. The perishable nature of pineapple is the major problem as there is no preservation and/or processing facilities for farmers. Farmers are forced to sell the products at very low price at a peak harvesting time. Strengthen existing producer cooperatives and their price bargaining power, the introduction of new technologies for the preservation of the product and developing market information sharing system at local level is required to maximize the producers benefit.

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