



**Original Article**

**Assessment of Fish Marketing System in Dilla Town, Gedeo Zone, SNNPRS, Ethiopia**

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**ABSTRACT**

The study was conducted in Dilla town from December to May, 2013 with the objective of assessing the fish marketing system, How markets arranged in space and time and to identify the channels and structure of marketing system. 30 respondents were selected by purposive sampling techniques. The data were collected from primary data source and analyzed by using tables graph and percentage. The market channels of fish were from Hawassa, Zeway, Chammo and Abaya fisher men to Dilla retailer, Hotel owner and owners of consumer. About 73.3 percents of the respondents transported fish carrying with their head, 23 percent of by taxi and 3.3 percent by bicycle. Market visitation patterns of consumers for fish were 66.7 percent in fasting period, 13.3 percent once a month, 10 percent twice a week, 6.7 percent of respondents once and 3.3 percent visit once and in two month. According to this study fish marketing system in Dilla town had many constrains among these, 30 percent of the respondents said that there was no fixed or permanent fish marketing place and lack of awareness, lack of transport and low price of fish compared to meat accounted 20, 16.7 and 6.7 percent respectively. From the responses obtained 56.7 percent of the respondents preferred meat to fish, 20 percent preferred fish to meet and 23.3 percent of the respondents preferred meat and fish equally. The trading activities of fish marketing system were 60 percent part time trading and 40 percent were full time trading activity. The result indicate that periodic markets are important than full time trading in Dilla market context, because of full time trading is not profitable. The fish market system in Dilla town is faced with many constraints and the government should give attention to increase the supply and satisfy the needs of consumers and it will be a job opportunity for the youngsters of the town.

**Keywords:** Dilla, fish, fish marketing system.

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**INTRODUCTION**

Ethiopian's fisheries are entirely fresh water in its many lakes, rivers, and reservoirs, as it has no marine coastline. Fishing contributed less than 1 percent of the gross domestic product

in 1987 (Wubnet Mulat, 1991). A study reported that 15, 389 tones were caught in 2001, only 30% of an estimated potential of 51, 481 tones (FMFDRE, 2003).

Ethiopian do not consume large quantities of fish, although there is no religious prohibition of the Christian and Muslim populations, rather this is a country with a strong tradition of livestock rearing and meat consumption. The Ethiopian Orthodox Church observes several fasting periods as well as fasting days every week, when meat is not consumed. Most Christians consider fish acceptable during those periods, although some strict followers will not eat any animal products (Garden *et al.*, 2007).

These factors give rise to some particular characteristics of fish consumption in Ethiopia overall, per capital fish consumption is very low (perhaps as little as 200 g/year). However, consumption is heavily biased towards quite limited geographical areas (production areas and Addis Ababa) and also heavily weighted towards fasting day (Wednesdays and Fridays ) and fasting periods (55 days in March/ April, 15 days in August, as well as other periods which may be less widely observed). Increasing scarcity (apparently reflecting both rising demand and supply constraints) has resulted in rising real prices for fish, so there is an increasing tendency for fish to be a luxury product consumed by higher income groups (Garden *et al.*, 2007).

The Refit valley lakes are highly exploited. For 8 important landing sites on lakes, FAO (2003) estimated that off take exceeds 60 percent if potential in 7 sites and 80 percent in sites (Including Hawassa where off take is estimated at 140 percent of potential). Only in Lake Tana is off take estimated to be dramatically less than potential 15 percent.

Lake Abaya is located in the main Ethiopian rift. East of the Guge mountains. It is fed on its northern shore by the Bilate which rises on the southern slopes of mount Gurage, and the Gidabo. The town of Arab Minch lies on its south western shore, and the southern shores are part of the Nechisar National park just to the south is lake Abaya is 60 kilometers long and 20 wide, with a surface area of 1162 square kilometers. It has a maximum depth of 13.1 meters and is at an elevation of 1285 meters (Baxter, 2002). This lake is the major source of fish for the study area (Dilla town) supplied by small scale fisheries men; however, the most serious marketing difficulties seem to occur in the remote communities which lack of transport, ice, poor road facilities and where the farmers are in a particularly weak position in relation to intermediaries. In addition to this there is shortage of market which it accommodate the production of fish by fisheries men. Thus, the main objective of this study is to assess the fish marketing system in Dilla town, Gedeo Zone.

## METHODOLOGY

### Description of the Study Area

Geodo zone is one of the thirteen zone of SNNPRS of Ethiopia along the rift valley of great east Africa. Dilla town the capital of the zone and where the Gedeo people are residing densely and located 359km south from Addis Ababa and 90km south east of Hawasa, the capital city of SNNPRS. The geographical location of Dilla town lies between 7°39' North latitude and 35°24' to 37°90' east longitude. The zone has an area of 134,700 hectare and the zone is surrounded by Oromia region from east, south and west of sidama zone from north.

The topography of the area is almost the altitude ranges from 1350-3000m above sea level and the temperature ranges within 11°C-29°C. The rainfall ranges from 760-1700mm. The agricultural practice in zone is both crop cultivation and livestock production which is generally dependant on agroforestry. The major crop cultivation in the region is coffee, and livestock are sheep, goats, equines and chickens.

### Methods

In this study the primary data were obtained through structural interview, questioners and personal observation in the market. The questions were designed to gather general

information about market places, nature of market place interaction among consumers and traders as well as the role of periodic market in providing non farming employment opportunity for the agricultural population.

In Dilla town there was no fixed market center but there was temporary market of fish at Kebele 07 around Dilla tell communication office. There for, temporary market and hotels were selected for fish markets centers for this study.

The selections of sample respondents in the market center were on the size of market attendants. A stratified purposeful sampling was used to select respondents in hotels and local temporary fish market traders. Hotel managers, local traders and fishery men were the basic source of information essential for this study. Five hotels, twenty consumers both from hotels and temporary markets, five fisher men all temporary local market traders were selected for questionnaire and interviews. The collected data were analyzed using descriptive statics like percentage, tables, average and graphs.

## RESULTS

### Personal Characters of the Respondents

Among the total respondents 76.6 percent of them were males and the females accounted only 23.3 percent of the respondents. The respondents were represented with the age intervals of 20 to 30, 31to 40, 41 to 50 and 51 to 60 years. The highest numbers of respondents were in between the age groups of 20 and 30 and 41and 50 years and the lowest number is between the age group 51 and 60 years (Table 1).

**Table: Age and sex compositions of the respondents**

| Age   | Sex  |      |        |      | Total number | Total percentage |
|-------|------|------|--------|------|--------------|------------------|
|       | Male | %    | Female | %    |              |                  |
| 20-30 | 6    | 20   | 4      | 13.3 | 10           | 33.3             |
| 31-40 | 5    | 16.7 | 1      | 3.3  | 6            | 20               |
| 41-50 | 8    | 26.7 | 2      | 6.7  | 10           | 33.3             |
| 51-60 | 4    | 13.3 | 0      | 0    | 4            | 13.3             |
| Total | 23   | 76.7 | 7      | 23.3 | 30           | 100              |

Table 2 showed that 50 percent males and 13.3 percent females respondents were married whereas, 23.3 and 13.3 percent males and female s were unmarried respectively.

**Table 2: Marital status of the respondents**

| Sex    | Married | Percentage | Unmarried | Percentage | Total | Percentage |
|--------|---------|------------|-----------|------------|-------|------------|
| Male   | 15      | 50         | 7         | 23.3       | 22    | 73.3       |
| Female | 4       | 13.3       | 4         | 13.3       | 8     | 26.7       |
| Total  | 19      | 63.3       | 11        | 36.6       | 30    | 100        |

As shown in table 3 below 33.3, 30, 13.3, 10, 6.7 and 6.7 percent of the respondents were farmers, merchants, daily laborers, civil servants, teachers and students respectively.

**Table 3: Percentage occupation types of the respondents**

| Occupation    | No of respondents | Percentage |
|---------------|-------------------|------------|
| Students      | 2                 | 6.7        |
| Farmers       | 10                | 33.3       |
| Teachers      | 2                 | 6.7        |
| Civil servant | 3                 | 10         |
| Merchant      | 9                 | 30         |
| Daily laborer | 4                 | 13.3       |
| Total         | 30                | 100        |

Of all total respondents 10 (33.3%) were between 1<sup>st</sup> to 8<sup>th</sup> grade, 8(26.7%) were 9<sup>th</sup> up to 12<sup>th</sup> grade, 6 (20%) were greater than grade 12, 4 (13.3%) were adult educated and only 2 (6.6%) were illiterate (Figure 1).

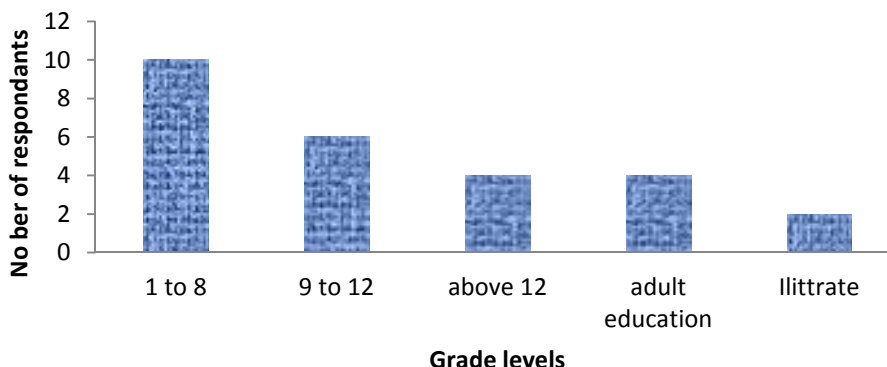


Figure 1: Educational levels of the respondents

### Marketing Channel and Source of Fish in Dilla Town

The marketing channel of fish in Dilla depends on how far the primary landing site and marketed place are suited. According to this survey there were two types of marketing channels. The first one was directly from fisherman to the consumer and the other one was from individual fishermen to retailer hotel owner and consumers (Figure 2).



Figure 2: Market channel of fish in Dilla town

This study identified the fish source of Dilla town. These were Hawassa, Ziway, Abaya and Chamo lakes but Abaya lake the major source of fish for Dilla town (Figure 3).

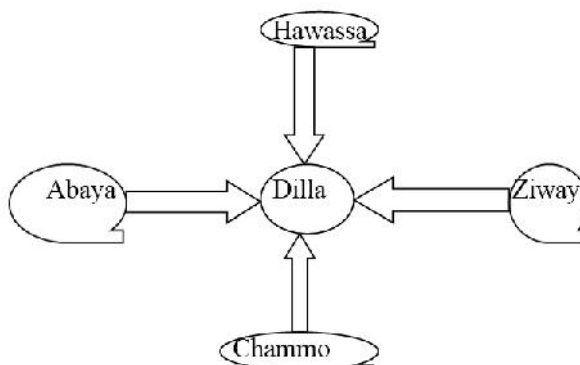


Figure 3: Source of fish for Dilla town

### Means of Transportation of Fish from Abaya to Dilla

Transportation of fish from Abaya to Dilla was carrying on their back without refrigerator which accounted 73.3 percent from the total respondents'. 23.3 and 3.3 percent of the respondents transported fish by taxi and 3 by bicycle respectively (Table 4).

**Table 4: Means of transportation of fish from Abaya to Dilla**

| Means transportation | No of respondents | Percentage |
|----------------------|-------------------|------------|
| By bicycle           | 1                 | 3.3%       |
| By taxi              | 7                 | 23.3%      |
| Carrying with head   | 22                | 73.3%      |
| Total                | 30                | 100%       |

### Fish market visitation patterns by consumers

The result obtained from the questionnaire showed that 66.7 percent of the consumers visited fish market only at fasting days, 6.7 percent once a week, 10 percent twice a week, 3.3 percent once in two month and 13.3 percent once in a month (Table 5).

**Table 5: Fish market visitation patterns of the consumers**

| Visitation pattern     | No of respondents | Percentage |
|------------------------|-------------------|------------|
| Once a week            | 2                 | 6.7        |
| Twice a week           | 3                 | 10         |
| Once in two month      | 1                 | 3.3        |
| Once in a month        | 4                 | 13.3       |
| In fasting days/ month | 20                | 66.7       |
| Total                  | 30                | 100        |

### Market Constrains Of Fish in Dilla Town

This study identified six major fish market constraints. These were lack of adequate storage and preservation facilities, lack of transport from the catch site to the storage facility and to retail outlets to move fish, lack of knowledge about price, present and distributed fish, and inability to educated and introduced fish groups which are unfamiliar as sources of foods.

Fish marketing system in Dilla town had many constrains among these, 30 percent of the respondents said that there was no fixed or permanent fish marketing place, but the researcher observed that there was a market place near to Dilla telecommunication office in Keble 07. The sanitation of the place and the smell of the fish were not good for fish market exchange. Lack of awareness, lack of transport and low price of fish compared to meat accounted 20, 16.7 and 6.7 percent respectively (Table 6).

**Table 6: Fish market constrains in Dilla town**

| Constraints                                  | No of respondents | Percentage |
|--|-------------------|------------|
| Lack of transport                            | 5                 | 16.7       |
| Low price of fish                            | 2                 | 6.7        |
| Lack of fish processing and storage facility | 8                 | 26.7       |
| Lack of a wariness                           | 6                 | 20         |
| Lack of permanent fish marketing places      | 9                 | 30         |
| Total  | 30                | 100        |

### Preference of Consumers' Fish to Meat

The percentage computed from questionnaire in Dilla town showed that 56.7 percent of the respondents preferred meat to fish, 20 percent preferred fish to meet and 23.3 percent of the respondents preferred meat and fish equally (Table 7).

**Table 7: Fish and meat preferences of consumers**

| Preferences         | No of respondents | Percentage |
|---------------------|-------------------|------------|
| Prefer meat to fish | 17                | 56.7       |
| Prefer fish to meat | 6                 | 20         |
| Prefer both equally | 7                 | 23.3       |
| Total               | 30                | 100        |

### Distribution of Traders by Type of Trading Activities

Five traders were taken as a sample in this study among these 60 percent the respondents were part time trader where as full time trader accounted only 40 percent of the total sample (Table 8).

**Table 8: Distribution traders by trading activities**

| Means transportation | No of respondents | Percentage |
|----------------------|-------------------|------------|
| Part time            | 3                 | 60         |
| Full time            | 2                 | 40         |
| Total                | 5                 | 100        |

## DISCUSSION

According to Mekonen Melaku (2007), fishing in Ethiopia is constrained by lack of efficient infrastructure and marketing network. The infrastructure at fishing sites is underdeveloped as well as inadequate, and is devoid of transport facilities to link remote water bodies with the major consumers at distant. Similarly this study also identified lack of transportation facilities, lack of adequate storage and preservation facilities, lack of transportation are the major problems that greatly affect the fish marketing system in Dilla town.

The marketing source of fish was from Hawassa, Ziway and Chammo before six years but now days the only fish marketing channel is from Abaya to Dilla. In fact there are some Hotels that are supplied from Hawassa and Ziway lakes. The results from the study show that there are two types of market channels in Dilla Town. The first one is directly from fisher man to the consumer and the second is from individual fisher to retailer hotel owner and consumers.

Marketing costs are high if the market functions are not performed efficiently due to functional difficulties. Such as poor roads, inadequate storage lead to losses and poor handling as well as profits are high if there are high risk of losses and huge capital investment (Rahman *et al.*, 2009).

A visitation pattern of fish market system was seasonal. In fasting days (months) mostly from November 15 to December 28 and February 20 to April ten, fish marketing in Dilla town has been better than the other months of the year. This is because during fasting time hotels stopped cooking meat so that the followers of Catholic, Protestant, Muslim and others except Orthodox religion shift to fish meat in place of cattle.

Periodic market was important than full time trading in Dilla market context, because of full time trading was not profitable due to preferences of peoples meat to fish, fish spoiled in short time and the higher risk of fish for storage and marketing without adequate storage material and appropriate marketing in all time leads to part time trading.

## CONCLUSION

This survey showed the market price is depend on the distances from landing site, transportation facility, transportation cost, storage facility and species of fish. In Dilla town there is only one type of marketing channel from Abaya to Dilla and Abaya fisher men sales to Dilla retailer, Hotels and consumers, retailers also to sale consumers.

The major market constrains are lack of proper fish processing and storage facility, lack of proper fish processing and storage facility, lack of proper fish processing and storage facility, lack of awareness, storage facility and low price of fish as well as lack of permanent fish market place. The attendances of market visitation are high in fasting periods.

Mostly means of transportation of fish from Abaya to Dilla town was by carrying with head. Part time trading activity is practiced by fish traders in Dilla town. So, the government

should give attention to Dilla town fish marketing system by constructing fish market place and giving the supply of business and awareness to traders to satisfy the need of consumer and use alternative job opportunity for the youngsters.

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