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Trends in Import of fish and fish products in Ethiopia

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Abstract

The objective of this study is to analyze trends in imports of fish and fisheries products and their importance in the ground of Ethiopia's economy. As Ethiopia is a land locked country the demand to fish and fish products has been satisfied that comes from fresh water bodies like lakes, reservoirs, rivers and wetlands and even if it is relatively insignificant from aquaculture. On the other hand the country imported fish and fish products from different countries to satisfy the demand . The results showed imports of Fish and fisheries products tend to decrease in most years. During the study periods-2014 to 2018 imports of Ethiopia fisheries products decrease in volume. But the imported fish and fish products were marine fish products and this importation is inevitable as the importation were marine water lives.

Key words: Fish, Fish products, Import, Ethiopia, Trends

1. Introduction

Ethiopia is one of the most water store-rich African countries and it is endowed with inland aquatic ecosystem including lentic and lotic water bodies (Awoke, 2015; Utaile and Sulaiman, 2016) Pdf 8, Awulachew et al. 2007). Ethiopia has 12 river basins with a mean annual flow (runoff) estimated as 122 billion m^3(Awulachew et al., 2007) and a total length of all rivers estimated as 8065 km. In addition to this the country has many lakes and reservoirs including number of small water bodies with large floodplain areas covering a total surface area 13,637 km^2.

In Ethiopia, fish comes fully from inland water bodies including lakes, reservoirs, rivers, substantial wetland and streams which have an enormous advantageous on ecological, scientific and socio-economic factors (Janko, 2013, 2014; Tesfaye and Wolff, 2014)**.** In 2010, Ethiopia realized about 14 million USD from its capture fishery while a total of 40 000 livelihoods were positively impacted upon by the fishery sector in the same year (FAO, 2016). Now a day Ethiopian Ministry of Agriculture (MoA) considers the fishery subsector as the potential intervention areas to achieve the objective of enhancing food security, employment and provide alternative sources of income to improve the livelihoods of rural people in a sustainable manner.

The production potential of fish in Ethiopian water bodies are not in consistent manner and their estimates did not include the potential of small water bodies including rivers. However, the fish potential of Ethiopian water bodies of the major lakes, the major reservoirs, the small water bodies and rivers is estimated 94, 500 tonnes annually (Tesfaye and Wolff, 2014). However, the fishing system in the country is carried out in any water bodies, while the commercial fisheries are mainly concentrated in the central Rift Valley lakes (Ziway, Koka, Langano and Awassa), the southern Rift Valley lakes (Lake Abaya, Chamo and Turkana), and the Northern and southern Wollo Lake includes Lake Tana and Hyiq and Ardibo, respectively.

Ethiopia is one the country in sub-Sharan Africa with a high potential of water source(Awulachew et al. 2007**).** However, in less developed countries looking of aquatic ecosystems through protection and re-establishment interventions has not been given enough attention(Baron et al. 2002; Ansara-Ross et al. 2012).In addition to uncontrolled and muddled system on capture fishery, environmental pollution also another critical problem that exists naturally or anthropogenic ways. Due to the absence of proper treatments of industrial and floriculture effluents released into the streams and rivers currently affected the water quality which is used for aquaculture system in Ethiopia. However, Lakes under Rift valley areas are

highly susceptible to different source of pollutions which are raised due to urbanization and industrial influents into the water bodies.

Different studies reported that rift valley Lakes are under extreme treat and which are polluted by trace elements effluents from different industries and agricultural practices. Therefore, discharging of domestic wastewater from food or wood and other industries have significant source of pollution via livestock farming including silage production or manure/sludge spreading on land. This input of organic matter in to the aquatic environment can use massive amount of oxygen, with the potential to kill fish and disturb the aquatic ecosystem.

However, aquatic ecosystem provides the function of stabilizing of variability of natural process (climate, natural risks), transformation of toxin (self-purification, water sanitation and pollution filtration and natural functions) (The handbook for managementand restorationof aquatic ecosystems, 2015)**.**Being the Ethiopia's economy and ecological system are fragile andsusceptible to climate changes, and the environmental challenges includes soil degradation, deforestation, climate change, loss of biodiversity and ecosystem services, and pollution of land, air and water.

In many developing countries humanactivities, such as unmanageable land-use, discharge of untreated urban and industrial wastes and exhaustive use of agrochemicals are affecting the quality of natural water bodies (Beyene et al. 2009; Ansara-Ross et al. 2012; Abong'o et al. 2015; Teklu et al. 2016) and may damage the capacity of these ecosystems to deliver anticipatedecosystem good and services (Maltby et al. 2018).However, recently the aquatic lives including fish are affected due to the alteration of water quality. Water pollution is a global problem and it needs critical attention (Abrehet et al., 2015; Ali et al., 2008). Human madeactivities that lead to aquatic pollution includes, number of industries, agricultural and commercial chemicals discharged into the water bodies causes various toxic effects on the aquatic biota (Ali et al., 2008) and the pollutants can be accumulated directly in fish organ and these easily causes affects human health. Currently, there are limitations of information on the effects of climate changes, environmental pollution including effects of urbanizations, invasive weeds and irrigation practices associated with banded agricultural chemicals on Ethiopian fisheries. So the country imported fish and fish products to meet the demand to fish and fish related products. This study is aimed to analyze and summarize facts about the import of fish and fish products to the country.

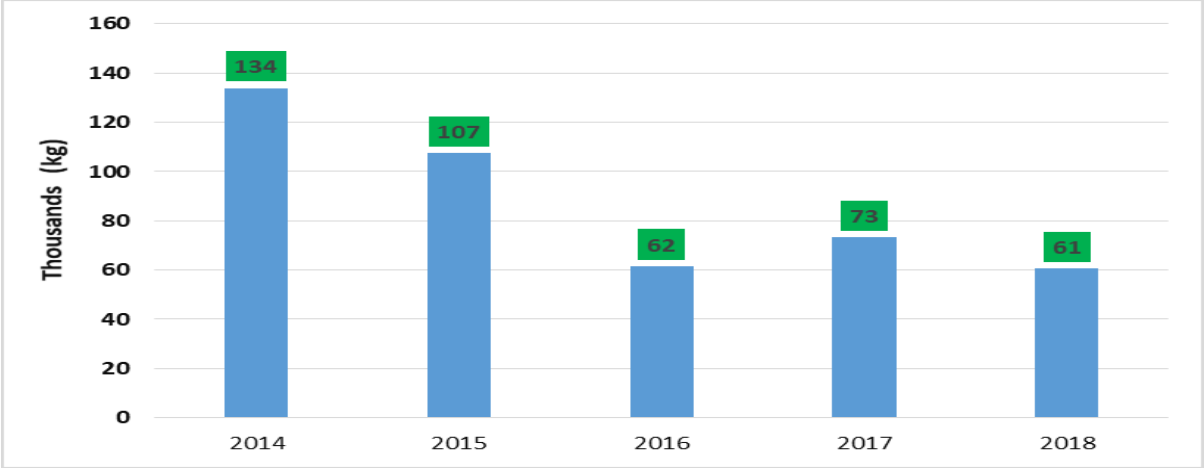
2. Methodology

The study used secondary data from the department of agricultural economics at National Fishery and Aquatic Life Research Center data base. A broad literature review related to import of Fish products was used to achieve the objective of this paper. Ethiopia as a developing country has data-limited situations in fisheries. The information needed for this study was collected from the concerned institution and some various related publications. Most of the data on import of Fish products of Pakistan Ethiopia was derived from secondary sources such as National Fishery and Aquatic Life Research Center Fisheries Reports and publications or journals related to Fishery import in Ethiopia.

3. Results and discussion

As per the information we derived from the data we realized that Ethiopia has been a net importer since 2014. It imported 437 thousand kg of fish products over 2014 to 2018, with a peak of 134 thousand kg in 2014 and a minimum of 61 kg during 2018. And from the figure we can depict that the trends in the import of the fish and fish products was decreasing gradually along the study periods.

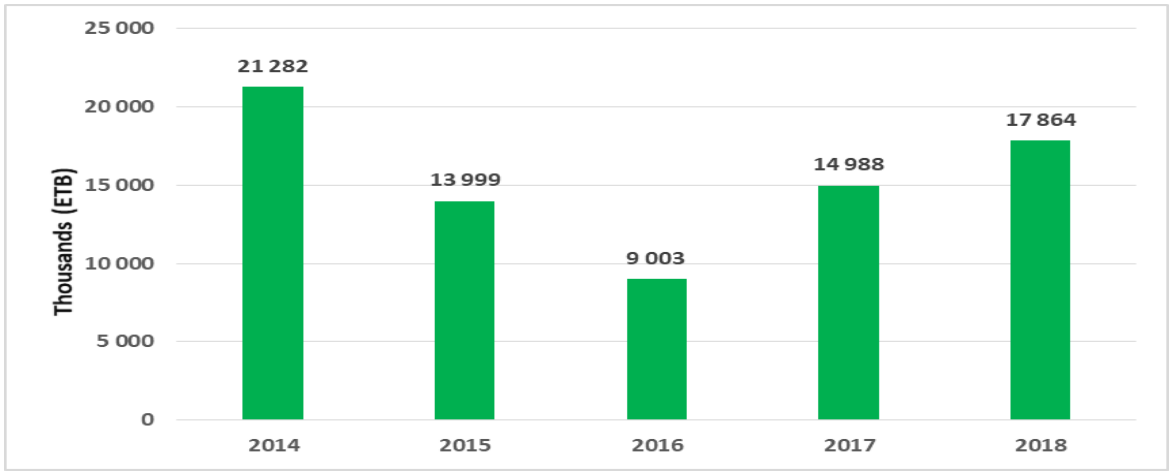
Fig. Import of fish products, (in quantity, '000 kg), 2014-18



Authors calculation based on the data from AG.eco dept of NFARC

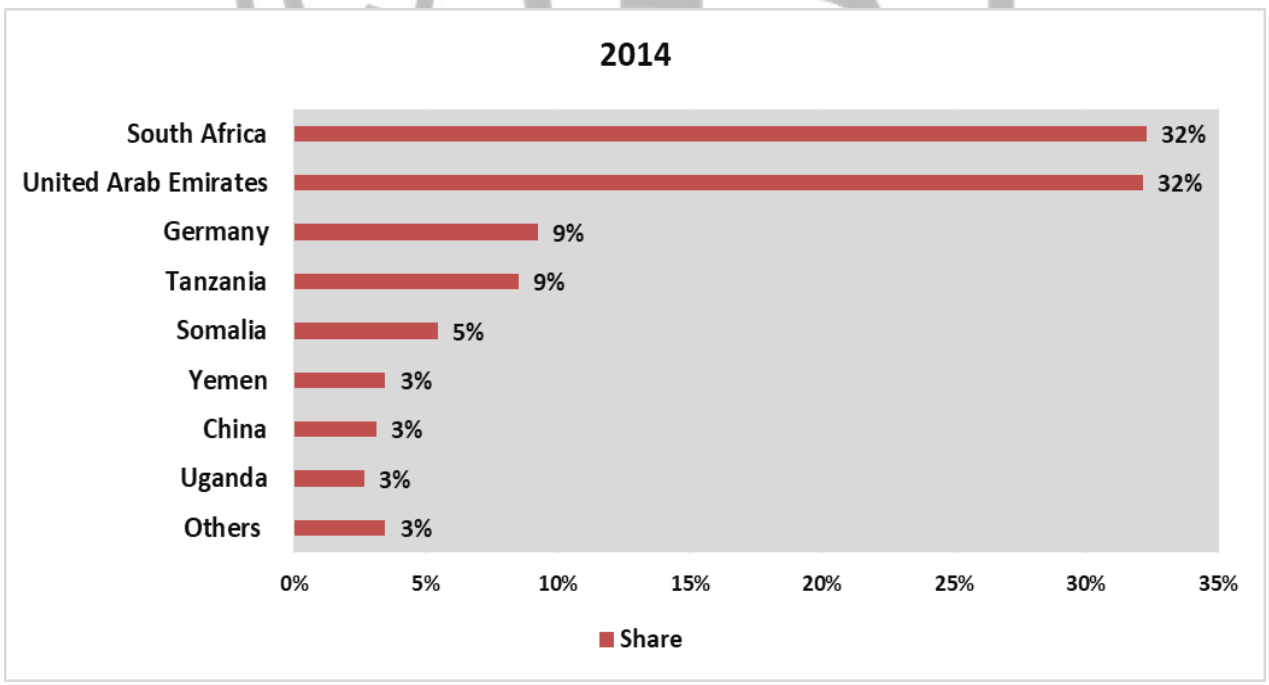
On the other hand Ethiopia spent 77 million ETB for the import of fish & fish products over 2014-18. And as we can take a look at the figure below trends of import value is increasing.

Fig. Import of fish products, (in value, ETB), 2014-18

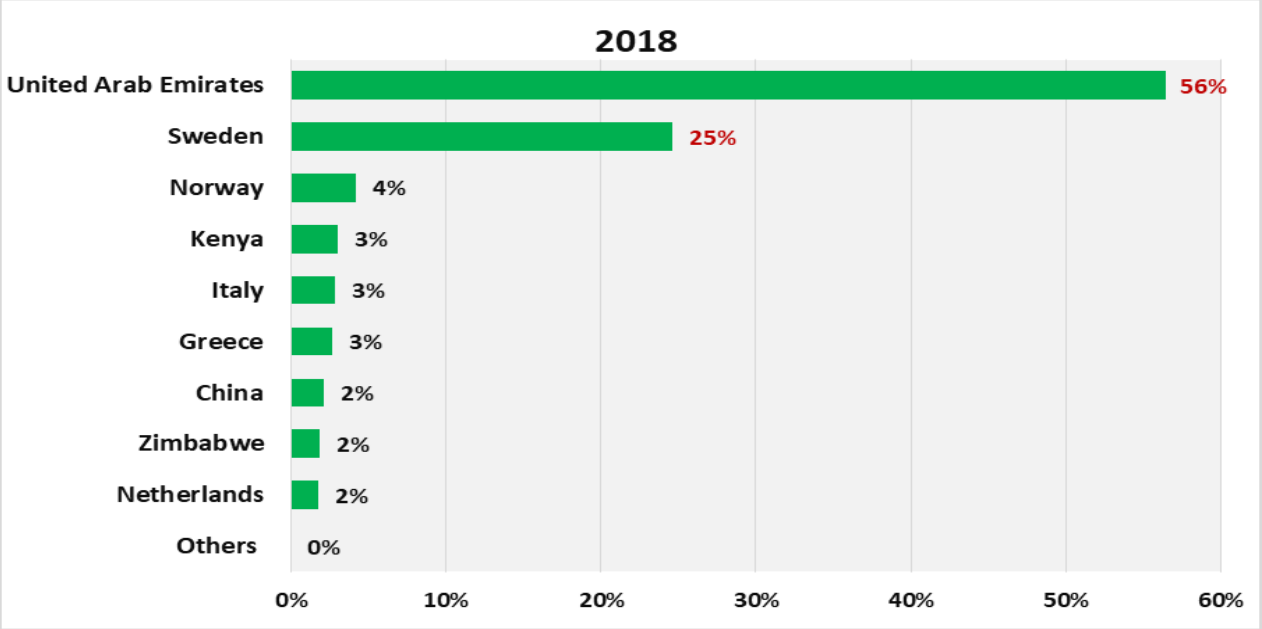


Country of consignment & share of imported quantity, in 2014

In the following figure we can depict the fact that South Africa, United Arab Emirates, Germany, Tanzania & Somalia have been the consignment areas of fish and fish products which contributes around 90% percent of fish imports to the country while South Africa and United Arab Emirates contributed about 64% in 2014.

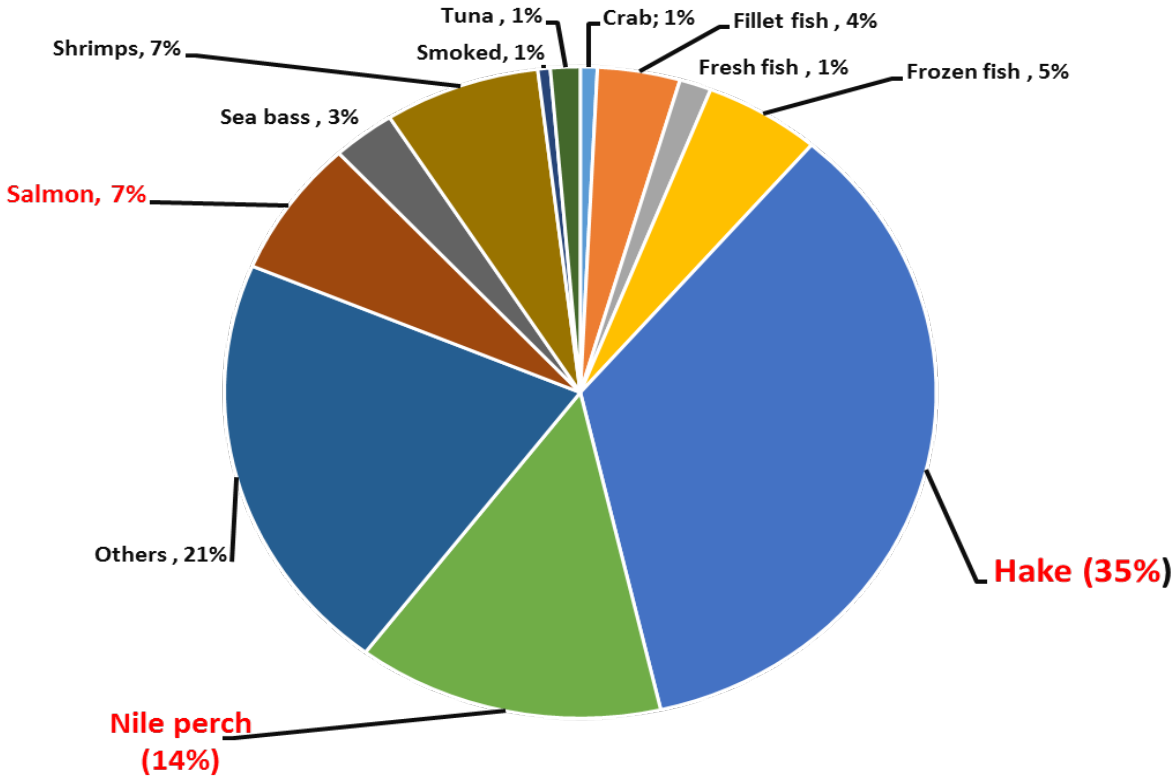


On the other hand, if we take the look at 2018 United Arab Emirates & Sweden took 81% of the share of imported fish & fish products in 2018 while Norway, Kenya, Italy, Greece, Netherlands, China, Yemen & Uganda are other trade partners which contributed less than 20 % of the total imported amount (Fig 3).



Imported fish species & products

According to the information generated from the data frequently imported fish species & products were Sea bass, salmon, hake, Nile perch, shrimps, tuna & cured, frozen, fillet & fresh fish. Hake and Nile perch constituted Constituted 35% and 14% of the total fish import in 2014. In 2014the same year, Ethiopia imported crabs, lobsters, dried squid, tuna, & tiger prawns from Tanzania. United Arab Emirate was the main supplier of Nile perch, sea bass, tuna, & shrimp while South Africa was supplying mainly **salmon & hake**.



Import price

From the following table we can get information on the import price the country cost. And according to the result, in 2014the country was costing more to import Hake, Nile perch and sea bass.

2014			2018	
Country of consignment	Quantity (kg)	Share	Country of consignment	Quantity (kg)
Uganda	3 570	3%	Netherlands	700,5
China	4 190	3%	China	869,99
Yemen	4 660	3%	Greece	1085,3
Somalia	7 300	5%	Italy	1152
Tanzania	11 412	9%	Kenya	1238
Germany	12 400	9%	Norway	1691,32
United Arab Emirates	43 067	32%	United Arab Emirates	23046,08
South Africa	43 259	32%	Sweden	10051,25
			Zimbabwe	760
Others	4 114	3%	Others	200

Type of fish/product	2014		
	Quantity (kg)	Share (%)	Median price/ kg
Hake	41179	35	112
Nile perch	16352	14	106
Shrimps	8309	7	293
Salmon	7965	7	265
Frozen fish	6200	5	37
Fillet fish	4399	4	147
Sea bass	3361	3	1104
Fresh fish	1694	1	243
Tuna	1580	1	152
Craps	903	1	105
Smoked	662	1	383
Others	24833	21	42

Conclusion and discussion

As we know Ethiopia is a land locked country. To satisfy the increasing demand of the society to fish and fish products the country's major fish and fish products are from capture fishery. This comes from its lakes, reservoirs, rivers and wet lands. On the other hand even if aquaculture's contribution relatively insignificant comparing to the capture fishery the country is trying to fulfill the demand from the production of aquaculture. But the country is still importing fish and fish products from foreign countries. It is inevitable to import fish and fish products. This is because as we can see from the result the imported fish and fish products were mainly marine fish and their product. And as Ethiopia is a land locked country these products could not be produced here in the country and to full fill the demand of the society of the country importing the materials were important.

References

Awoke T (2015). Fish species diversity in major river basins of Ethiopia: A review. World Journal of Fish and Marine Sciences 7(5):365-374

Awulachew SB, Yilma AD, Loulseged M, Loiskandl W, Ayana M, Alamirew T. 2007. Water Resources and Irrigation Development in Ethiopia. Working Paper 123. Colombo, Sri Lanka: International Water Management Institute.

Janko A (2013). Assessment of fish products demand in some water bodies of Oromia, Ethiopia.International Journal of Agricultural Science 3(8):628-632.

Janko A (2014). Fish Production, Consumption and Management in Ethiopia. International Journal of Economics and Management 3:183.

Gashaw Tesfaye, Matthias Wolff (2014). The state of inland fisheries in Ethiopia: a synopsis with updated estimates of potential yield

Baron JS, Poff NL, Angermeier PL, Dahm CN, Gleick PH, Hairston NG, Jackson RB, Johnston CA, Richter BD, Stenman AD. 2002. Meeting ecological and societal needs for freshwater. Ecological Applications12: 1247–1260. https://doi. org/10.1890/1051 0761(2002)012[1247:MEASNF]2.0.CO;2

Ansara-Ross TM, Wepener V, Van den Brink PJ, Ross MJ. 2012. Pesticides in South African fresh waters. African Journal of Aquatic Science37: 1–16.https://doi.org/10.2989/16085914.2012.666336.

International network of basin organization, Office national de l'eau et des milleuxaqutiques (ONEMA) International office for water, global water for partnership (2015). The handbook for management and restoration of aquatic ecosystems in river and lake basins. www.basins-management-publications.org.

Beyene A, Addis T, Kifle D, Legesse W, Kloos H, Triest L. 2009. Comparative study of diatoms and macroinvertebrates as indicators of severe water pollution: Case study of the Kebenaand Akaki rivers in Addis Ababa, Ethiopia. Ecological indicators9: 381–392. https://doi.org/10.1016/j.ecolind.2008.05.001. Bird Life International. 2019. Country profile: Ethiopia. A

Abong'o DA, Wandiga SO, Jumba IO, Van den Brink PJ, Naziriwo BB, Madadi VO, Wafula GA, Nkedi-Kizza P, KylinH. 2015. Occurrence, abundance and distribution of benthic macroinvertebrates in the Nyando River catchment, Kenya. African Journal of Aquatic Science40: 373–392. https://doi.org/10.2989/16085914.2015.1113397

Teklu BM, Adriaanse PI, Van den Brink PJ. 2016. Monitoring and risk assessment of pesticides in irrigation systems in Debra Zeit, Ethiopia. Chemosphere161: 280–291. https://doi.org/10.1016/j.chemosphere.2016.07.031.

Maltby L, Van den Brink PJ, Faber JH, Marshall S. 2018. Advantages and challenges associated with implementing an ecosystem services approach to ecological risk assessment for chemicals. Science of the Total Environment621: 1342–1351. https://doi.org/10.1016/j.scitotenv.2017.10.094.

Abrehet KM, Shewit G, Belayneh A (2015).Effects of Bahir Dar Textile Factory Effluents on the Water Quality of the Head Waters of Blue Nile River. Ethiopia. International Journal of Environmental Analytical Chemistry 7 p

Ali Kh, Saber A, El-Shafai, Farag A, Samhan, Wagdy KB (2008). Effect of water pollution on expression of immune response genes of Soleaaegyptiaca in Lake Qarun. African Journal of Biotechnology 7(10):1418-1425