Business Process Analysis of Exporting and Importing Few Specific Products

Import of Palm Oil

WP No. 229

November 2023

This study is prepared by the Egyptian Center for Economic Studies (ECES) for the USAID-funded Trade Reform and Development in Egypt (TRADE) project (Agreement Number: 217798, Trade FFP Subcontract-ECES BPA). It is authored by Sahar Aboud, PhD, Lead Economist at ECES, and Mohanad Mahdy, Economist at ECES, under the supervision of Abla Abdel-Latif, PhD, ECES Executive Director and Director of Research. ECES is also thankful for other ECES team members, who participated in the preparation of this project, and for the group of businessmen in each sector who provided the necessary information.

Abstract

This study aims to comprehensively assess both the formal and informal procedures associated with the import process of a specific set of products. In this analysis, ECES has employed the Business Process Analysis (BPA) Model issued by the UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT). Notably, this marks the first time in Egypt that a globally standardized modeling language has been used, enabling a comparative evaluation of Egypt's import processes on a global scale. Specifically, the study delves into the import process of palm oil, focusing on products categorized under HS Code 1511. This analysis covers document requirements, the time required to complete various procedures, and the involved entities. To gather these insights, ECES conducted interviews with different stakeholders for each specific product and reviewed pertinent regulations and studies. International experiences were also studied to benchmark Egypt's trade process against global standards and extract valuable lessons for enhancing the Egyptian trade process. The study comprises two main parts. Part I examines the current state of the detailed trade process pertaining to the reviewed products, labeled as the "As Is" situation. Part II presents scenarios for improving this process, the "To Be" scenario, along with recommended corrective actions based on stakeholders' input, international best practices, and ECES' analysis.

ملخص

تهدف هذه الدراسة إلى تحليل جميع الإجراءات الرسمية وغير الرسمية المتعلقة باستيراد بعض المنتجات المحددة، بما في ذلك المستندات المطلوبة ذات الصلة، والمدة التي تستغرقها الإجراءات (رسميا وفعليا)، والأطراف المعنية؛ حيث طبق المركز في دراسته للمنظومة الحالية نموذج توثيق الأعمال التجارية (BPA Model) الصادر عن منظمة الأمم المتحدة لتيسير التجارة (UN/CEFACT)، مستخدما، لأول مرة في مصر، لغة نمذجة موحدة عالميا بما يسمح بمقارنة الوضع في مصر مع باقي دول العالم. وتحديدا، تختص هذه الدراسة بتحليل إجراءات استيراد زيوت النخيل بالتركيز على منتجات رمز النظام المنسق HS Code 1511، بما في ذلك المستندات المطلوبة ذات الصلة، والمدة التي تستغرقها الإجراءات (رسميا وفعليا)، والأطراف المعنية؛ حيث يعتمد التحليل على مقابلات مع مختلف أصحاب المصلحة/ الأطراف المعنية بكل منتج، بالإضافة إلى مراجعة اللوائح والدراسات المختلفة ذات الصلة، ودراسة العديد من الخبرات الدولية من أجل مقارنة العمليات والإجراءات التجارية المتبعة في هذه الدول، مع تلك المتبعة في مصر، والاستفادة منها في تحسين الإجراءات ذات الصلة في مصر. وتتكون الدراسة من جزئين رئيسيين؛ حيث يستعرض الجزء الأول الوضع الحالي للإجراءات والعمليات التجارية المتعلقة بالمنتجات محل الدراسة، بينما يطرح الجزء الثاني بعض السيناريوهات المقترحة لتحسين الإجراءات، مع اقتراح حلول لها بناء على آراء الأطراف المعنية، وفي ضوء التجارب الدولية وتحليل الخبراء في المركز.

Import of Palm Oil (HS Code 1511)

Part I: "As Is" Situation

Introduction

This study focuses on analyzing trade processes of importing palm oil, using Business Process Analysis (BPA) approach. The analysis is divided into two main parts. Part I analyzes the "As Is" situation and consists of four sections: 1) overall description of the food and oils sector, including industry structure and challenges present; 2) The narrative for the production and trade processes in palm oil (HS Code 1511); 3) detailed documentation of import processes associated with the specific product of focus (HS Code: 1511); and 4) time procedure chart of palm oil imports to Egypt. Part II offers proposed scenarios for improving the process ("To Be" Scenario) and includes the methodology of preparing them.

1. Sector description - food industries and oils[1] Subsector

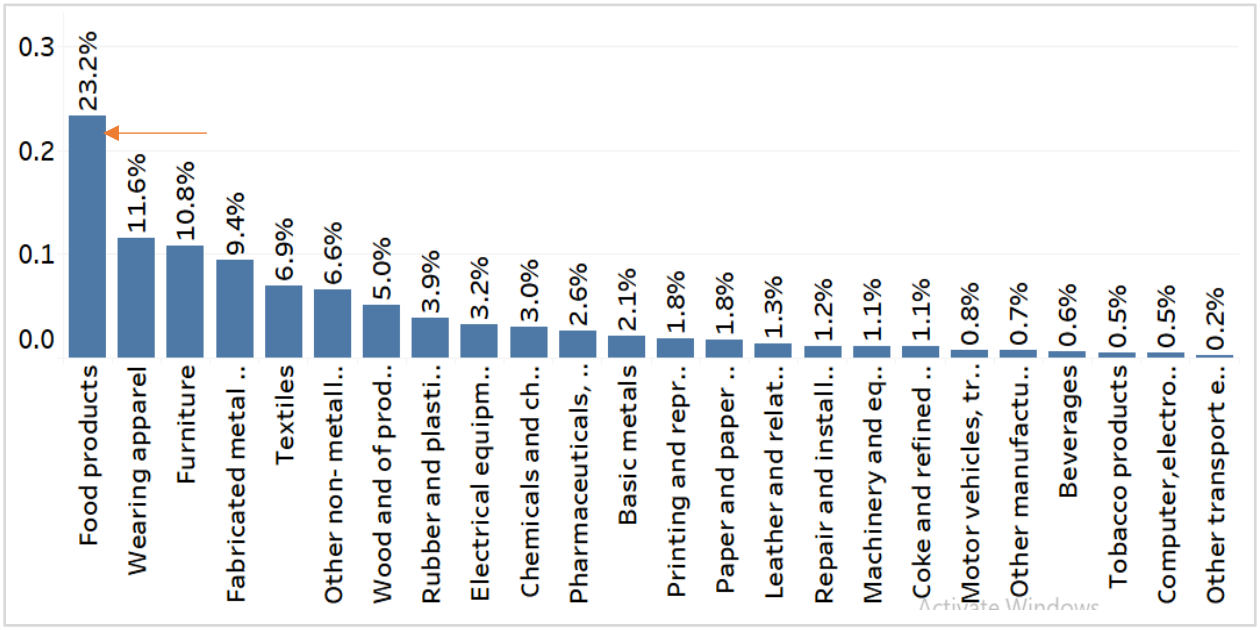
The description starts with a detailed overview of food industries as a whole and then proceeds with specific information about oils. This description includes the sector's latest available enterprise and employment distribution over all Egyptian governorates and what they imply, the sector's trade performance, and major challenges faced, particularly following the COVID-19 pandemic and recent global dynamics.

1.A The latest food industries' enterprise and employment distributions over all Egyptian governorates

The Food sector comes as the largest manufacturing industry in terms of number of workers out of a total of 24 other industries in 2019, as shown in (Figure 1.1). It accounts for 23.2 percent of total employment in manufacturing. This reflects the high employment capacity of this industry, being one of the most labor-intensive manufacturing industries. Males (around 95%) as in all manufacturing industries in Egypt dominate the sector (Figure 1.2).

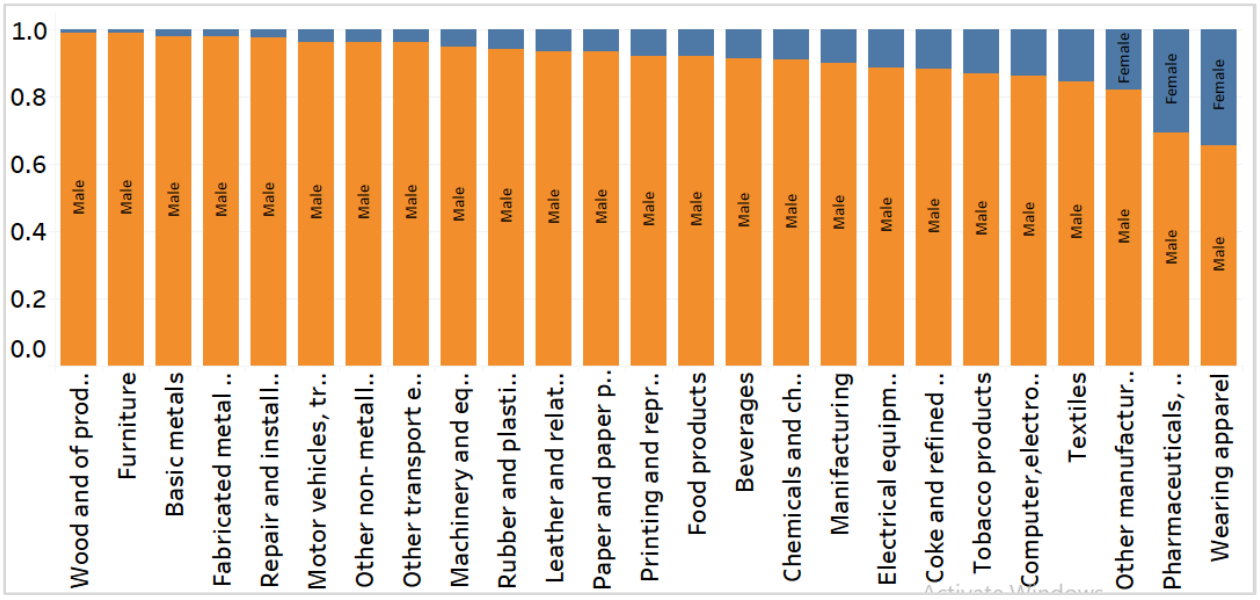
[1] Oils industry as defined by Trade Map are "animal and or vegetable fats and oils and their cleavage products" of HS code 15.

Figure 1.1. Ranking of manufacturing industries by % employment (2019)



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

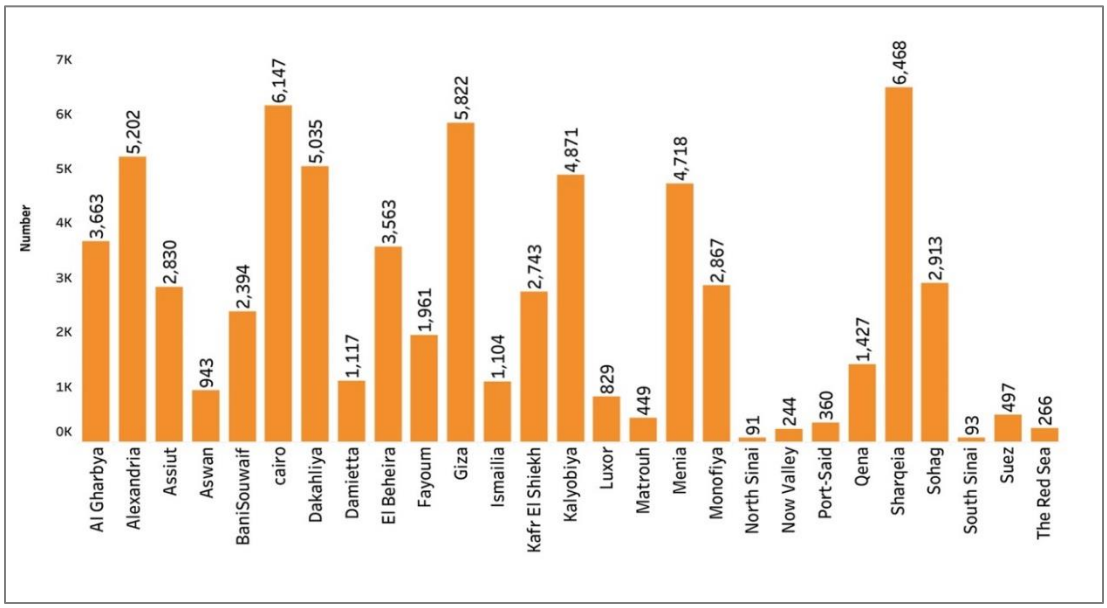
Figure 1.2. Distribution of manufacturing industries employment by gender (females in blue)



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

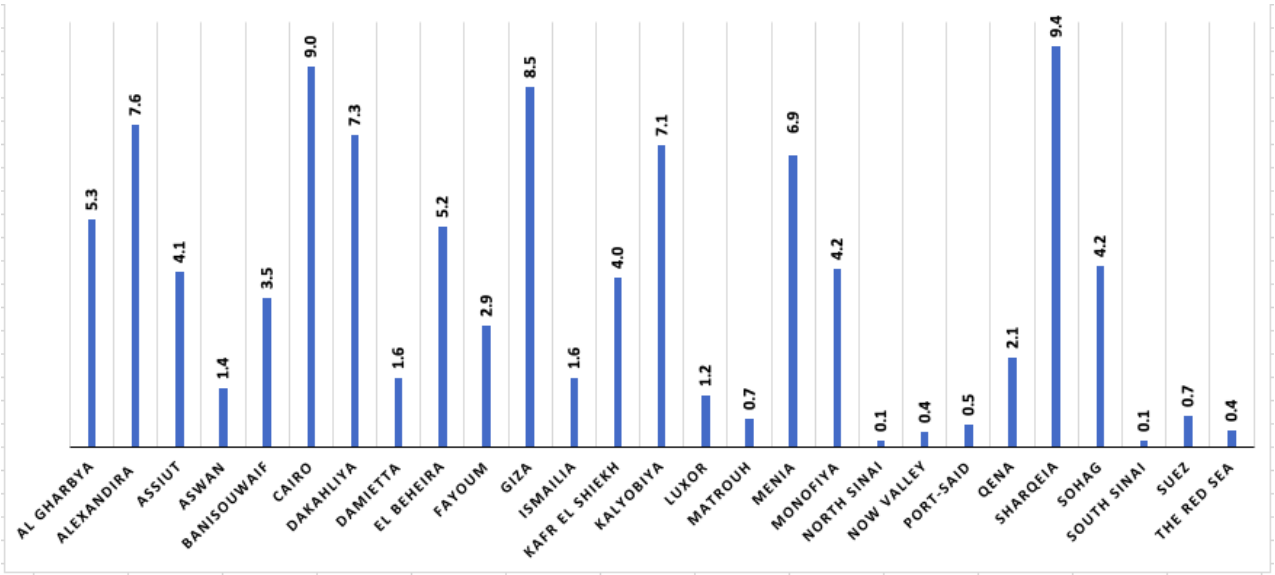
Figures 1.3&1.4 and 1.5&1.6 present the distribution of food industries enterprises and employment over all Egyptian governorates in number of establishments and number workers in each governorate, as well as percentage distribution of both variables. The total number of establishments in all 27 governorates is 68,617, with a total employment of 518,132. All figures clearly show that food industries exist in all governorates at one level or another with no individual governorate accounting for more than 10% of the total enterprises or about 13% of total employment. This means no observed concentration in any individual governorate. It is important to note that the distribution of workers, although showing an overall pattern similar to that of the enterprise distribution, shows clear bias towards urban governorates. Cairo, Giza and Alexandria combined account for 36.2% of total employment.

Figure 1.3. Total number of enterprises in the food industries per governorate



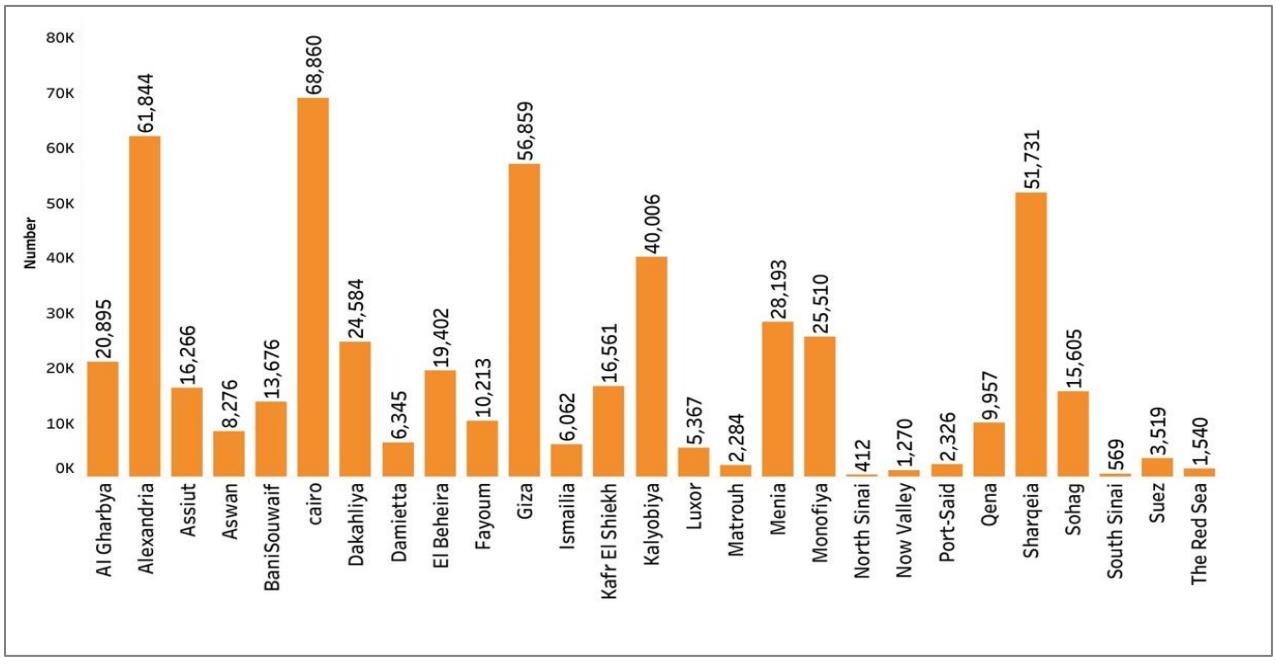
Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.4. Percentage distribution of food industries enterprises per governorate



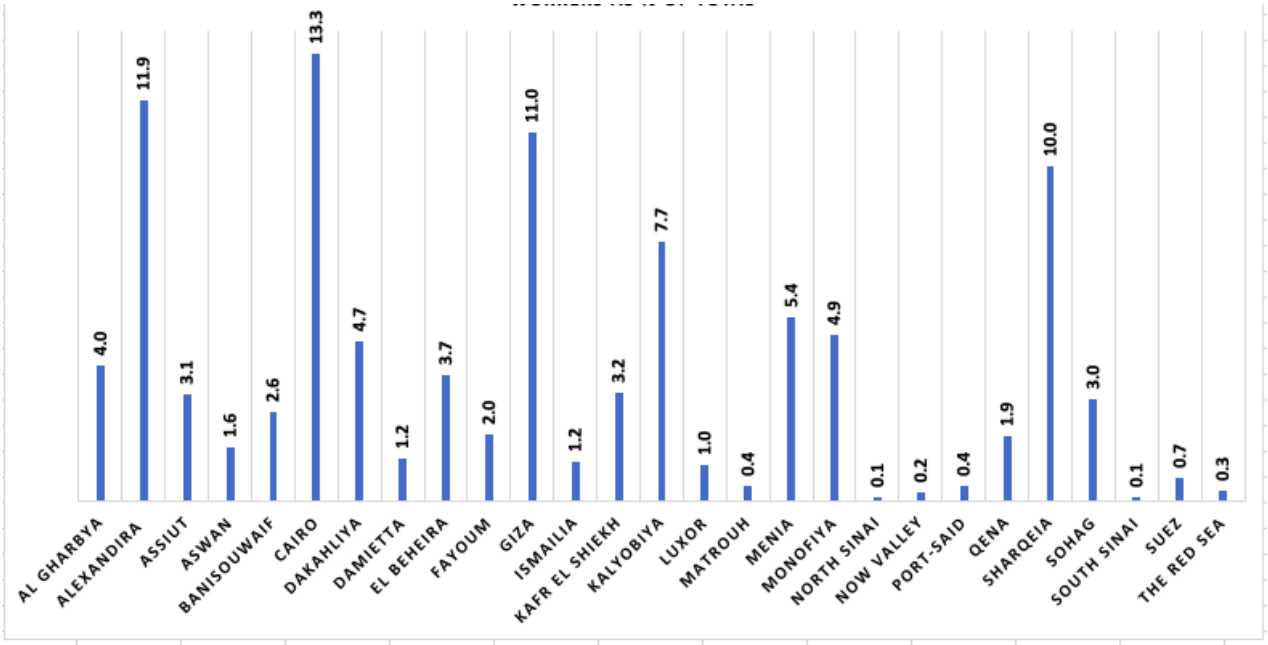
Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.5. Total number of employees in food industries per governorate



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.6. Percentage distribution of food industries employees per governorate



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Table 1.1(and subsequent pie charts) below divide governorates into four groups as per the level of concentration of enterprises and employment. Group A governorates account for 55.8% of total enterprises and 64% of total employment. The group consists of Sharqia (9.4%), Cairo (9.0%), Giza (8.5%), Alexandria (7.6%), Dakahliya (7.3%), Kaliyubia (7.1%) and Minia (6.9%). They are all Delta governorates except for Minia, belonging to Upper Egypt, and accounting for the lowest percentage among the group of top governorates. Group B accounts for lower concentration of food industries enterprises and employment (almost half), but concentration is still around the Delta region with four governorates. Group C, with even lower concentration of 14.3% of total enterprises and 11.5% of total employment is mostly located around Upper Egypt (Beni Suef (3.5%), Fayoum (2.9%), Qena (2.1%), Aswan (1.4%) and Luxor (1.2%)). Groups A, B and C combined account for 97% of total enterprises and total employment. Group D accounting for no more than 2.9% of total enterprises, 2.2% of total employment, and consists of all border governorates in addition to the red Sea, Suez, and Port Said.

The limited existence of food industries enterprises in groups (C) and (D) implies that there is room for the emergence of new enterprises in these governorates. This also coincides with the prevalence of poverty in these governorates, along with the high rate of women-headed households.

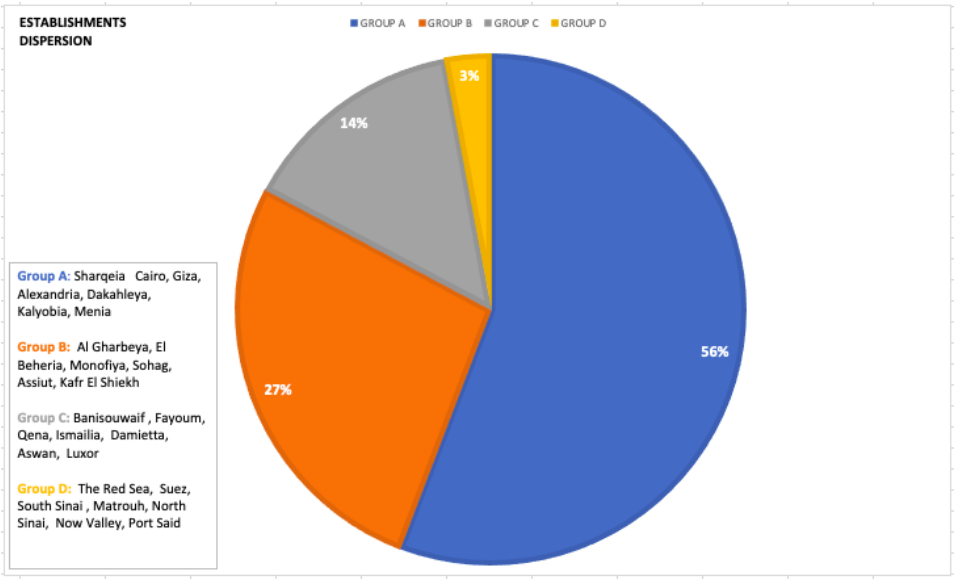
Similar analysis for various sub-sectors shows the same bias towards governorates in groups A and B, except for oils and grains that show a more even distribution, probably because these industries are more basic in nature and less capital intensive, which will be elaborated upon in the following section.

Table 1.1. Food industries - Distribution of enterprises and employment per groups of governorates

Governorate Groups	Establishment Dispersion	Workers Dispersion
A: Sharqia, Cairo, Giza, Alexandria, Dakahliya, Kaliyubia, Minia	55.8%	64%
B: Al Gharbia, El Beheira, Monufia, Sohag, Asyut, Kafr el Sheikh	27%	21.9%
C: Beni Suef, Fayoum, Qena, Ismailia, Damietta, Aswan, Luxor	14.3%	11.5%
D: The Red Sea, Suez, South Sinai, Matruh, North Sinai, New Valley, Port Said	2.9%	2.2%

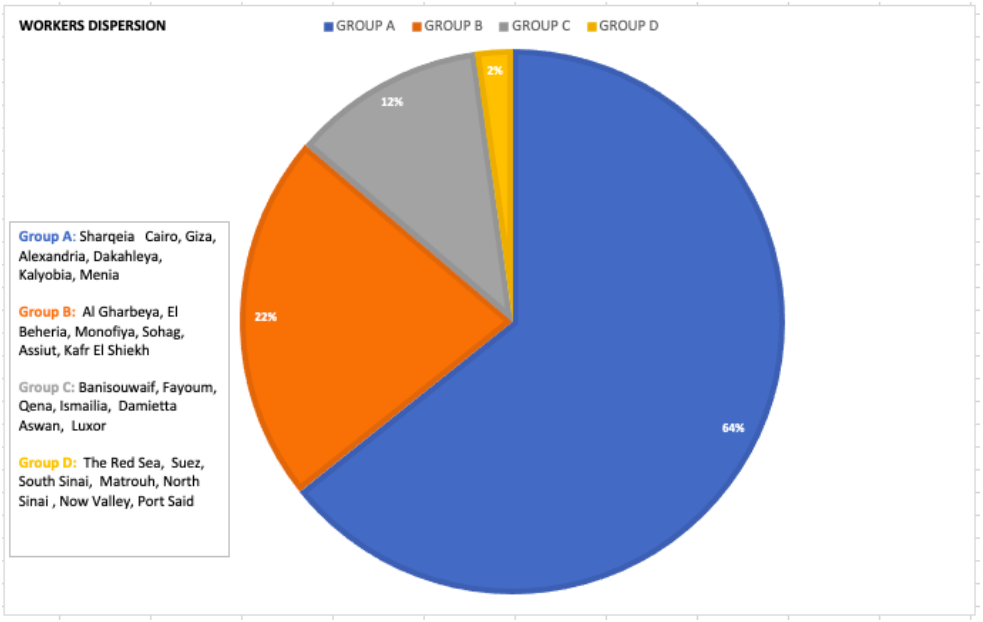
Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019)

Figure 1.7. Total food industries- establishments' dispersion



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019)

Figure 1.8. Total food industries - workers dispersion



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

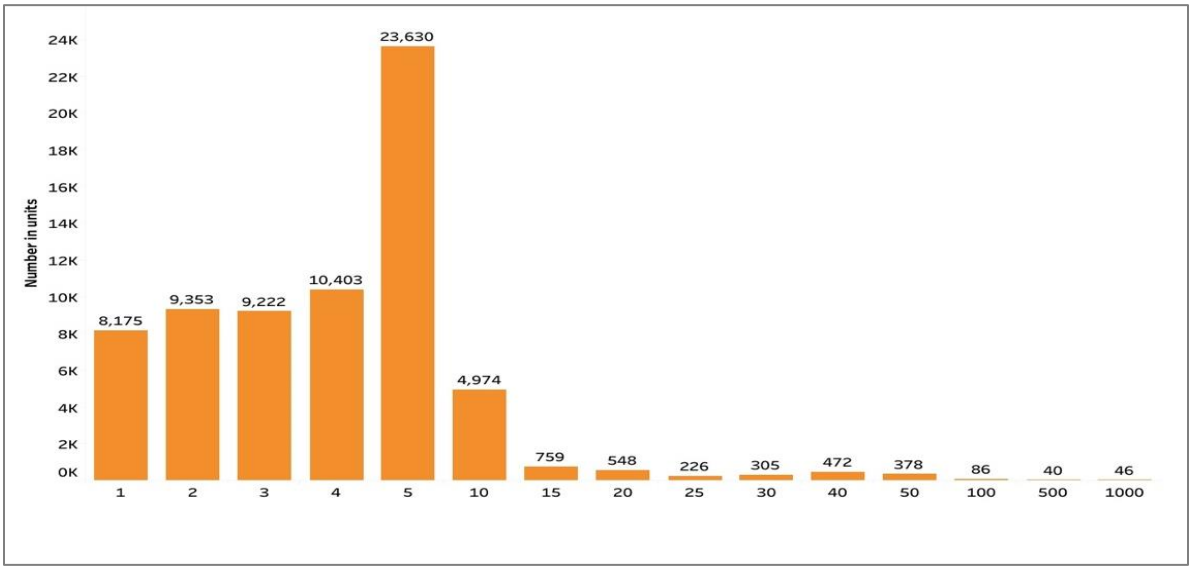
The size structure of enterprises measured by the number of workers

Figure 1.7 presents distribution of sector's enterprises by size, while Figure 1.8 shows the same distribution in percentage. The predominance of micro enterprises in the food

industries is obvious, as they account for 88.5% of total employment. Small enterprises account for no more than 10.5%, while medium and large enterprises account for a negligible percentage of 0.7% and 0.2% respectively of total employment. This implies two things: There is room for creating jobs in lower-income areas because enterprises are labor intensive with low investment requirements. It also implies that there is room for expansion of larger enterprises with employment beyond 100 workers. These would be more capital intensive but have the underlying potential for increasing skilled labor and creating clusters of smaller projects that typically emerge around big enterprises.

Figure 1.9. Distribution of sector's enterprises by size

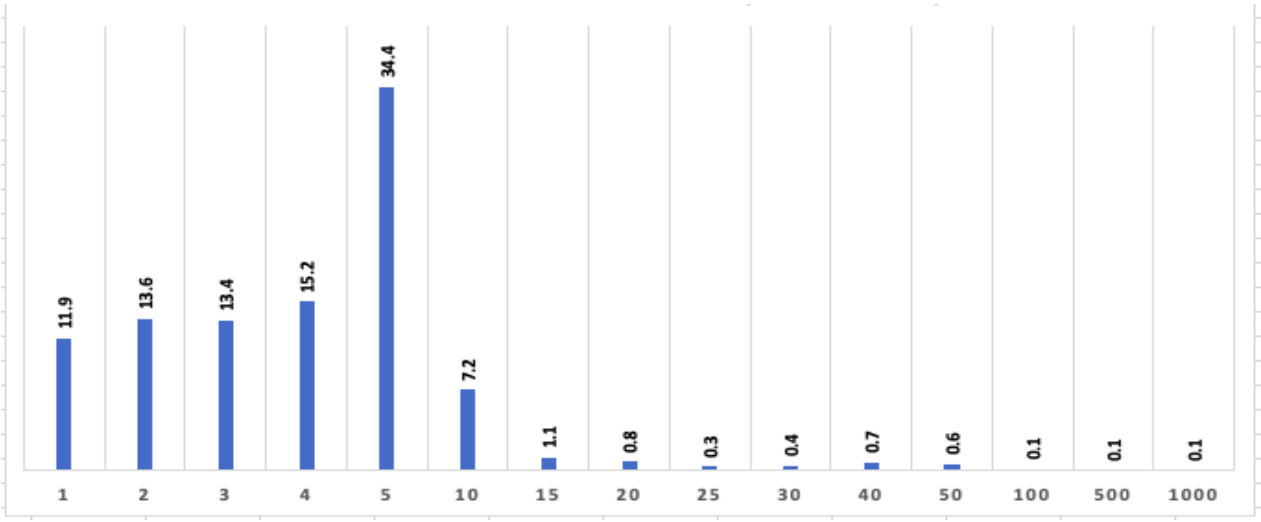
(Size measured in terms of number of workers)



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.10. Percentage distribution of sector's enterprises by size

(*Size measured in terms of percentage of workers*)

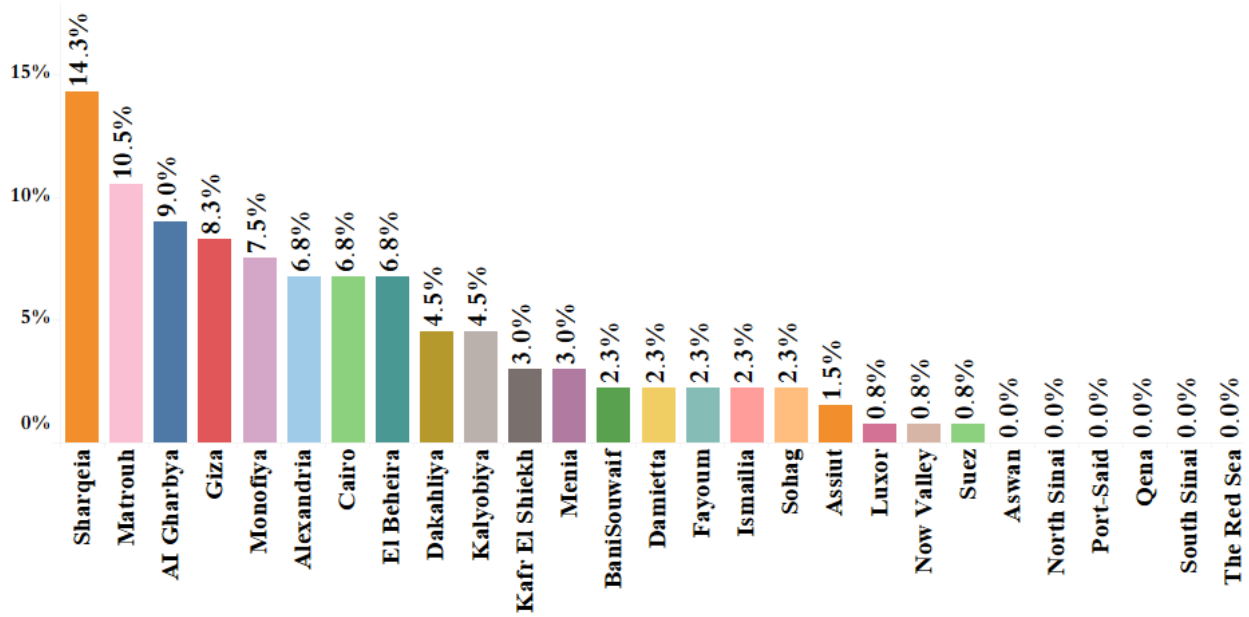


Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

1B. The oils subsector's enterprise and employment distributions over all Egyptian governorates

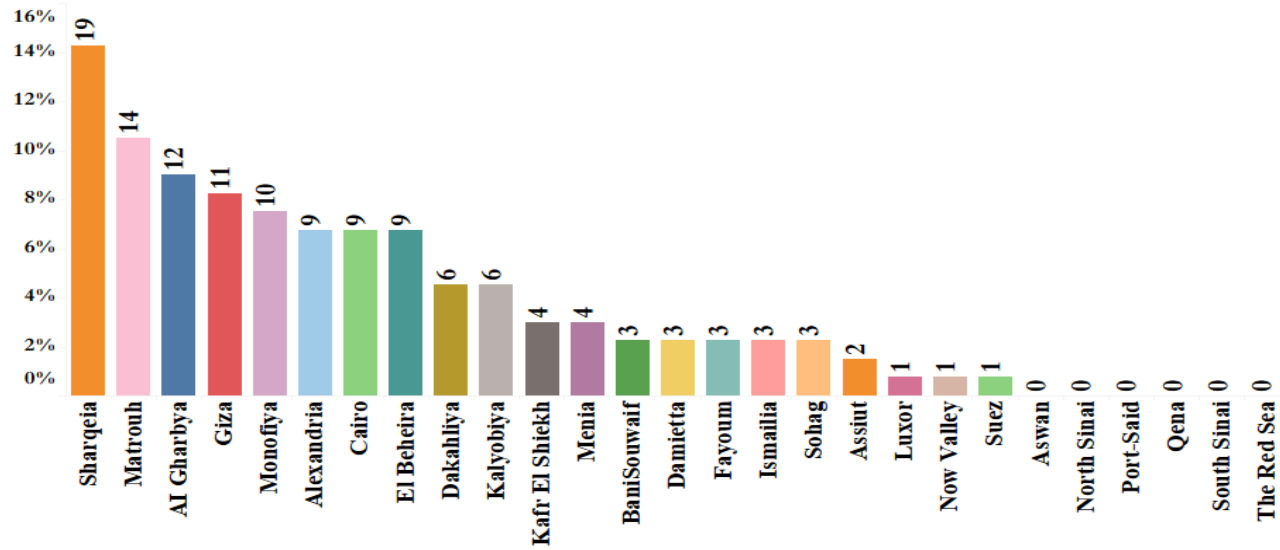
Figures 1.11&1.12 and 1.13&1.14 present the distribution of oils subsector enterprises and employment over all Egyptian governorates in number of establishments and number workers in each governorate as well as percentage distribution of both variables. The total number of establishments in all 27 governorates is 133, with a total employment of 8,081. All figures clearly show that oil industry exists in all governorates at one level or another with no individual governorate accounting for more than about 14% of the total enterprises or about 32% of total employment. This means there is no observed enterprise concentration in any individual governorate. However, it is important to note that the distribution of workers is not proportionate to that of the enterprise distribution, as the former shows clear bias towards three governorates: Alexandria, Sharkeya and Kalyoubiya combined account for 79.6% of total employment.

Figure 1.11. Percentage Distribution of oils subsector's enterprises per governorate



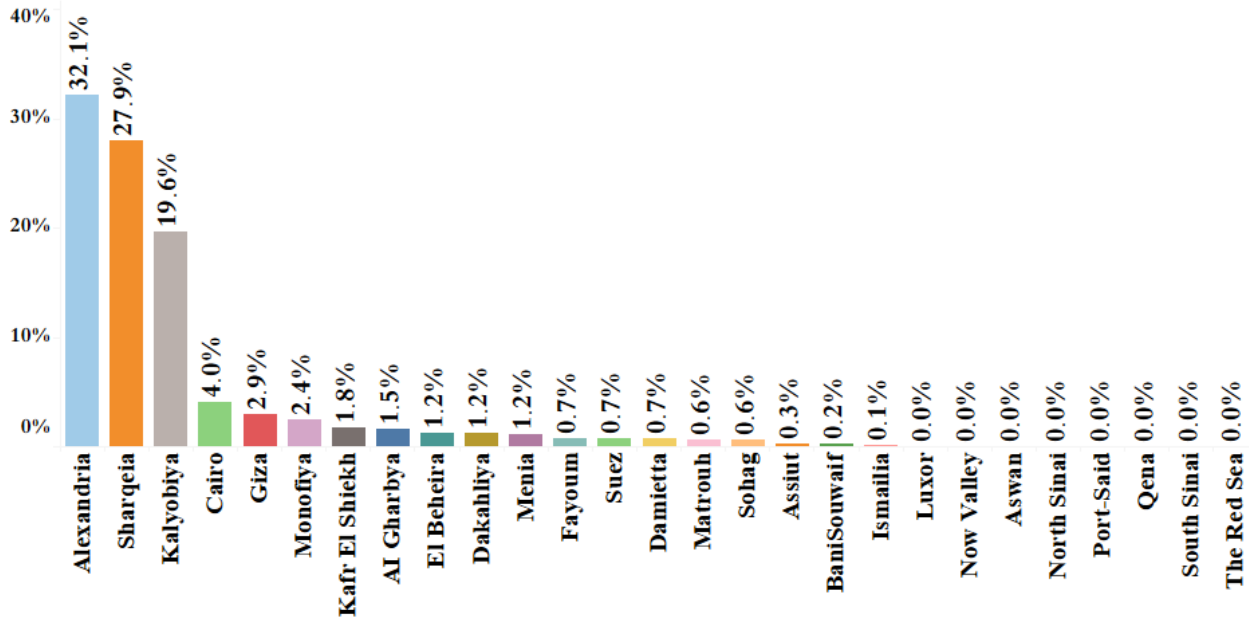
Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.12. Total number of oils subsector's enterprises



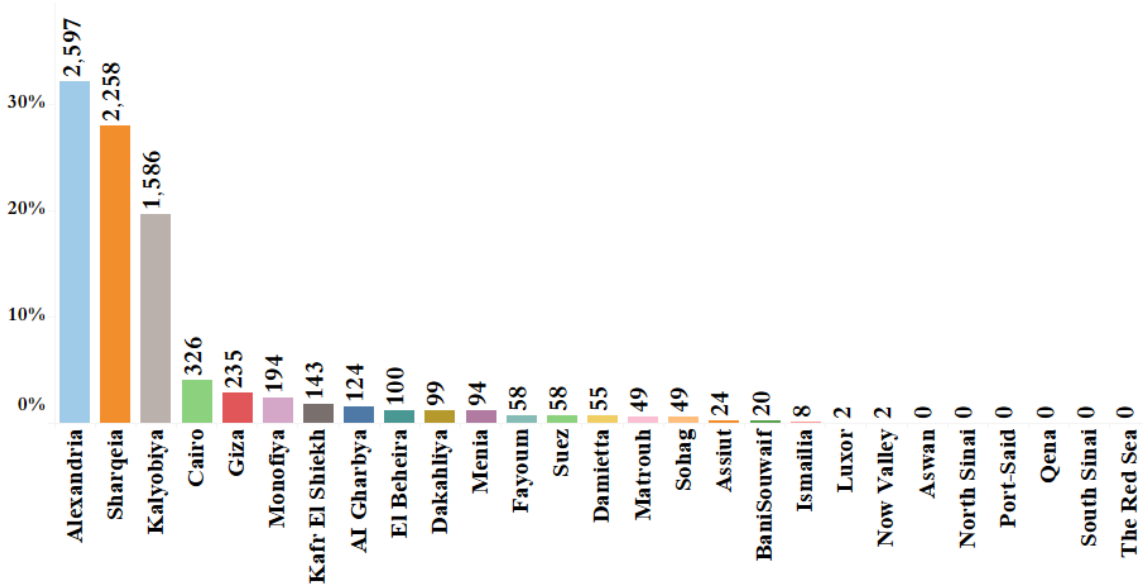
Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019)

Figure 1.13. Percentage distribution of oil subsector's workers per governorate



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.14. Total number of oil subsector's workers per governorate

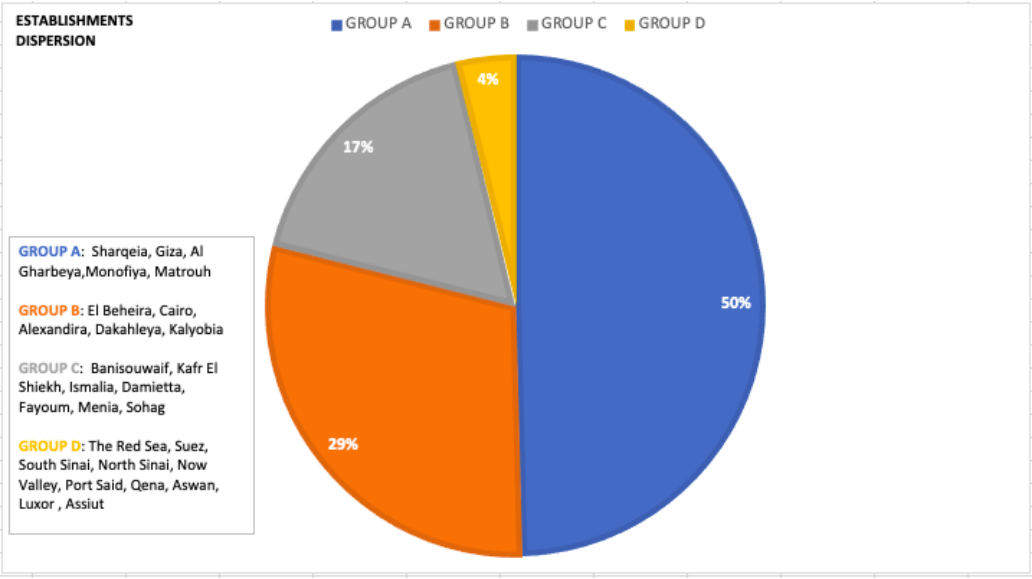


Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

The pie charts below divide governorates into four groups as per the level of concentration of enterprises and employment, as previously seen in the charts for the food industries as a whole. Group A governorates account for 50% of total enterprises and 36% of total employment. The group consists of Sharqia, Giza, Al Gharbeya, Monofia and Matrouh. Group B accounts for lower concentration of oil industries enterprises (29%) but higher concentration of employment (58%). Group C, with even lower concentration at 17% of total enterprises and 5% of total employment. Groups A, B and C combined account for 96% of total enterprises and 99% of total employment. Group D, accounting for no more than 4% of total enterprises and 1% of total employment, consists of all border governorates in addition to the red Sea, Suez, Port Said and four governorates from upper Egypt.

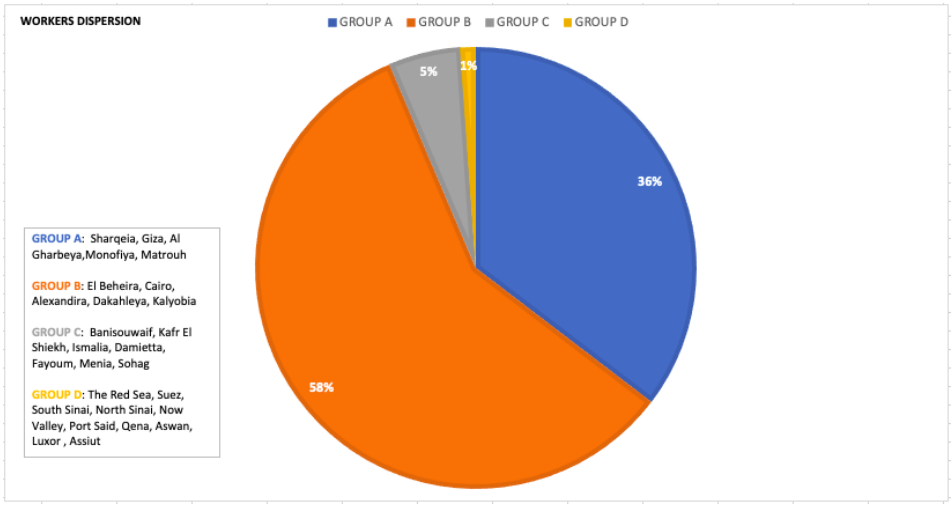
The limited existence of food industries enterprises in Group D implies that there is room for the emergence of new enterprises in these governorates.

Figure 1.15. Oils subsector - establishments dispersion



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

Figure 1.16. Oils subsector - workers Dispersion



Source: ECES's analysis of CAPMAS' latest statistics on manufacturing industries (2019).

1C. The trade performance of the food industries[2] sector with focus on oils

According to Table 1.2, the value of Egypt's imports of food products was $3.4 billion in 2021. The most important countries that Egypt imports from are: Indonesia, United States of America, Malaysia, Brazil, Thailand, New Zealand, Netherlands, Russian Federation, France, and Ireland.

[2] HS Codes and Product Labels:

04 Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included

15 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes

16 Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates

17 Sugars and sugar confectionery

18 Cocoa and cocoa preparations

19 Preparations of cereals, flour, starch or milk; pastrycooks' products

20 Preparations of vegetables, fruit, nuts or other parts of plants

21 Miscellaneous edible preparations

22 Beverages, spirits and vinegar

23 Residues and waste from the food industries; prepared animal fodder

24 Tobacco and manufactured tobacco substitutes

As for exports, the value of Egypt's exports of food products was $2.5 billion in 2021. The most important countries that Egypt exports to are: Saudi Arabia, Jordan, Morocco, Libya, Sudan, State of Palestine, Syria, United Arab Emirates, Algeria, Yemen.

Table 1.2. The food industries sector's trade profile in 2021

Imported value in 2021 (in USD 000)	Share in Egypt's total imports in 2021 (%)	Share in Egypt's manufacturing imports in 2021 (%)	Exported value in 2021 (in USD 000)	Share in Egypt's total exports in 2021 (%)	Share in Egypt's manufacturing exports in 2021 (%)
3,358,466	4.6%	6.2%	2,543,880	6.3%	9.8%

Source: Calculated based on trade map data (2021).

Concerning the specific product of interest in this study HS Code 1511, Table 1-3 showing the specific trade performance of all products under HS code 15 category, clearly indicates that it alone accounts for 71.8% of total imports from the HS code 15 category and 28.5% of total food industries imports, and that this could be explained by the fact that palm oil is fully imported and not locally manufactured.

It is notable that some items have higher net export than import, such as soybean oil as it is not abundantly used on its own in Egypt but is rather used as one component of blended oil, and Egypt imports in greater quantities the soybeans (seeds) necessary for the manufacture of blended oil.

In general, Egyptian oil imports exceed its exports by a wide margin, as the trade balance of the HS code 15 category witnessed a deficit of around $1 US billion in 2021.

Table 1.3. Trade performance of HS Code 15 in food industries and positioning of HS Code 1511 (2021)

Code	Product label	Imported value in 2021 (in US USD 000)	Share % of total product (15) imports	Exported value in 2021 (in USD 000)	Share % of total product (15) exports	Trade balance 2021 (in USD 000)	Share % of total Food industries imports
'1501	Pig fat, incl. lard, and poultry fat, rendered or otherwise extracted (excluding lard stearin ...etc.)	55	0.004	86	0.0002	31	0.002
'1502	Fats of bovine animals, sheep, or goats (excluding oil and oleostearin)	6,411	0.48	n/a	0.0000	-6,411	0.19
'1504	Fats and oils and their fractions of fish or marine mammals, whether or not refined (excluding ...	2,798	0.21	n/a	0.0000	-2,798	0.08
'1505	Wool grease and fatty substances derived therefrom, incl. lanolin	270	0.02	274	0.0006	4	0.01
'1507	Soya-bean oil and its fractions, whether or not refined (excluding chemically modified)	53,301	3.99	246,131	0.54	192,830	1.59
'1508	Groundnut oil and its fractions, whether or not refined, but not chemically modified	1	0.0001	197	0.0004	196	0.00003
'1509	Olive oil and its fractions obtained from the fruit of the olive tree solely by mechanical ...	3,552	0.27	2,842	0.01	-710	0.11
'1510	Other oils and their fractions, obtained solely from olives, whether or not refined, but not ...	3,497	0.26	290	0.00	-3,207	0.10
'1511	Palm oil and its fractions, whether or not refined (excluding chemically modified)	957,790	71.78	31,448	0.07	-926,342	28.52

Code	Product label	Imported value in 2021 (in US USD 000)	Share % of total product (15) imports	Exported value in 2021 (in USD 000)	Share % of total product (15) exports	Trade balance 2021 (in USD 000)	Share % of total Food industries imports
'1512	Sunflower-seed, safflower or cotton-seed oil and fractions thereof, whether or not refined, ...	134,666	10.09	66,559	0.15	-68,107	4.01
'1513	"Coconut ","copra"", palm kernel or babassu oil and fractions thereof, whether or not refined, ...	41,823	3.13	67	0.0001	-41,756	1.25
'1514	Rape, colza or mustard oil and fractions thereof, whether or not refined, but not chemically ...	1,458	0.11	71	0.0002	-1387	0.04
'1515	Fixed vegetable fats and oils, incl. jojoba oil, and their fractions, whether or not refined, ...	50,134	3.76	22,066	0.05	-28,068	1.49
'1516	Animal or vegetable fats and oils and their fractions, partly or wholly hydrogenated, inter-esterified, ...	65,232	4.89	11,749	0.03	-53,483	1.94
'1517	Margarine, other edible mixtures or preparations of animal or vegetable fats or oils and edible ...	9,051	0.68	46,807	0.10	37,756	0.27
'1518	Animal or vegetable fats and oils and their fractions, boiled, oxidized, dehydrated, sulphurised, ...	3,511	0.26	26,500	0.06	22,989	0.10
'1520	Glycerol, crude; glycerol waters and glycerol lyes	658	0.05	212	0.0005	-446	0.02
'1521	Vegetable waxes, beeswax, other insect waxes and spermaceti, whether or not refined or coloured	141	0.01	274	0.0006	133	0.004

Code	Product label	Imported value in 2021 (in US USD 000)	Share % of total product (15) imports	Exported value in 2021 (in USD 000)	Share % of total product (15) exports	Trade balance 2021 (in USD 000)	Share % of total Food industries imports
'1522	Degras; residues resulting from the treatment of fatty substances or animal or vegetable waxes	19	0.001	74	0.0002	55	0.001
Total HS code 15		1,334,368		455,647		-878,721	

Source: Calculated based on trade map data (2021).

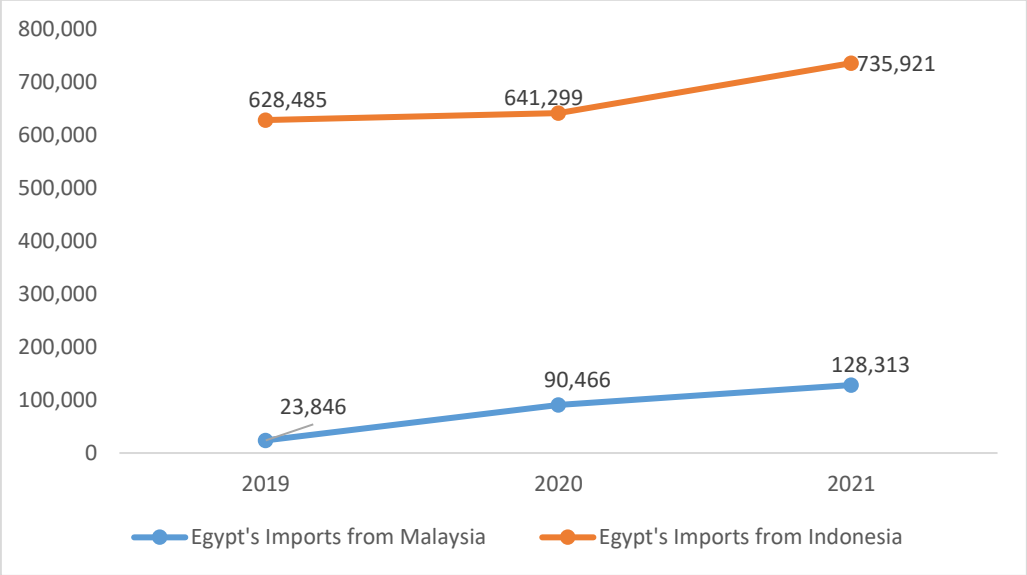
1D. Trade performance of oils subsector during and following COVID-19

Food industries are among the list of industries that ECES classified as industries that benefited from the crisis, which is the group of industries that witnessed great demand during the pandemic at least in the first stage. This was due to the spread of panic buying among citizens after the decision to suspend schooling.

The previous observation is quite obvious from the trade figures of Egypt's imports of palm oil from the two biggest exporters: Indonesia and Malaysia, as shown in the Figure 1-17 below.

Exports to both countries Malaysia and Indonesia witnessed a steady increase from 2019 to 2021. It is noticed that Malaysian exports to Egypt from palm oil increased in 2020 by a huge percentage of 279% compared to 2019 and 42% in 2021 compared to the previous year.

Figure 1.17. Egypt's imports from Malaysia and Indonesia from 2019 to 2021



Source: Calculated based on trade map data (2021).

2. The narrative analysis for the production and trade processes of (HS Code 1511)

Oils imported into Egypt are divided into three types[3]: 1) Palm oil (Egypt imports all its needs of palm oil and its derivatives), 2) Soybean oil (soybeans are imported, from which oil is then manufactured) and 3) Sunflower oil (mostly imported in the form of full bottles).

The palm oil market consists of about 100 companies, and is concentrated among four major players in the import market:

1. United Oil Processing & Detergents, Industrial Zone 2, 10th of Ramadan City
2. Savola Group, Al Hay as Sades, Nasr City
3. Arma, Industrial Zone 2, 10th of Ramadan City
4. IFFCO, Suez Industrial Zone

The first company, United Oil is the only Egyptian company, while the rest are foreign companies.

The rest of the enterprises in the field consist of small companies, mainly operating in the field of packaging.

[3] Annex 1: Overview on trade profile and local production of oils

In addition, three major companies operate in soybean oil production, namely:

1. Al-Magd Global for Extracting, Refining and Bottling of Vegetarian Oils, Quesna– Munofia governorate – Industrial Zone 2.
2. OILEX, Industrial Zone 1, Sadat City.
3. Alexandria Company For Vegetable Oils Extraction, New Borg El Arab City.Industrial Zone 4

Most of the companies operating in the edible oil industry are inland companies, with a few exceptions operating in the free zone. There are also a number of public sector companies operating in the oils subsector.

Palm oil has multiple uses. It is used in cooking and deep frying, because of its high burning point, up to 235 degrees Celsius. In addition, palm oil is frequently used in the manufacture of foods with a soft, texture, such as peanut butter and chocolate spread, since one of its properties is protecting other oils in it from separating from other compounds. It is used as an ingredient composing 20% of French fries, 5% of ice cream, and 75% in the production of margarine.

Regarding vegetable oils, to which palm oil belongs; Egypt imports 97% of its needs of oils and fats, with the sources of oils and fats are divided between fish, animal and vegetable fats. Vegetable oils and fats account for about 90% of total consumption.

Although Egypt cultivates palm trees, it chiefly relies on steady palm oil imports from Malaysia and Indonesia. It is worth noting that Malaysia and Indonesia comprise 84% of the world's production of palm oil, and maintain the largest areas approved for oil palm cultivation.

Several specific observations related to the production and trade processes of (HS Code 1511) in the case of Egypt need to be pointed out with a focus on private and inland enterprises as they constitute the majority of enterprises operating in palm oil.

Observation #1

The Food Authority has mandated a number of binding technical rules that determine the levels of permissible contaminants in food, which are the basis for laboratory examinations of food samples.

Being used to very little control, some Egyptian importers object to these newly imposed rules from the Food Safety Authority, even though they ensure the safety of their products.

Egyptian importers are of the mislead impression that these new rules cause delays in the clearance of their shipments, when actually the delays in clearance are due to other reasons that will be further explained in the following observations as mentioned.

Observation #2

There are implicit and explicit institutional conflicts between the different authorities involved in the import process of food products specifically, which ultimately come to Egyptian importer' detriment. On top of the list comes the conflict between the new company entitled the Egyptian Company for E-Commerce Technology (MTS) and the Food Safety Authority. MTS does not provide the Food Authority with access to detailed information on incoming and outgoing food shipments though it has the right for such basic trade information. No access means that the Food Authority cannot categorize imported products into a "whitelist" and "others".

The whitelist is supposed to distinguish products coming from trustworthy sources where food safety is not in question. Such products can be quickly released from customs with minimum inspection, while other products go through the full necessary inspection procedures to make sure food safety standards are respected. With no access to trade information through MTS, the Food Authority is forced to apply full procedures on all products because it cannot create a categorization system on micro scattered trade data.

Another example of conflict exists between the Food Safety Authority and the General Organization for Export and Import Control (GOEIC), the latter owns several labs in

strategic locations in ports but refuses to let the Food Authority operate them as authorized by the law. So, the Authority is forced to take samples for analysis to laboratories outside ports and this means a longer procedure.

Observation #3

The importing enterprise has to comply with Ministerial Decree No. (43/2016) concerning the modification of organizing rules of qualified factories registration to export their products to Egypt.; due to this new procedure (Decree 43 in 2016 & amendments in March 2022), which can cause serious shipment delays.

At another level, aside from resulting delays - especially in the case of decree 43 - lots of problems with a weakly digitized process become apparent; the whole process was seen as awkward by foreign suppliers leading many of them to stop supplying to Egypt. Finally, corruption emerged as a certain stage of the process involved the approval of the Minister of Industry or other departments in the same ministry, allowing employees in the ministry have a say in how quickly the process can be completed.

Observation #4

The Egyptian government has invested large sums of money in the electronic platform meant to link the various import authorities, but the system developed by MTS is more automation rather than complete digitalization, as it lacks a fully integrated system, which prolongs the duration of the processing and delays clearance. This means that each institution involved in the import process is still operating separately according to its own rules. As a result, the documents received by the NAFEZA platform are processed by each institution separately, despite NAFEZA being intended to allow user to conduct all the necessary dealings with all relevant institutions on a single integrated platform, and not separately in order to streamline the needed procedures; in reality, the result is that the time taken by such procedures is much longer than then before the platform was launched.

Observation #5

Malaysia imposes a high export tariff on its exports of crude palm oil products compared to what it imposed on its refined oil to encourage more downstream local investments and production of refined palm oil products. Therefore, Egyptian importers prefer to import

refined oil. However, palm oil is kept in the exporter's storage tanks at port for relatively long periods of time; all storage tanks are made of iron in order to reduce cost. Long-term preservation in iron tanks affects the quality of these oils, as they require reheating, which requires re-refining to reach acceptable standards. This imposes an additional cost on the importer (manufacturer) in addition to the high percentage of waste. On the other hand, the traders might supply oil without any refining processes in the local market which affects the quality of the offered oils.

Observation #6

Palm oil is imported into Egypt through two main channels. The first is large importing enterprise which imports the oil, takes it through industrial processing, and then puts it on the market directly or distribute it to small companies that carry out only bottling operations. This activity is concentrated in four major companies, namely, United Oils, Savola, Arma, and IFFCO. As for the second channel, through a trader, the oil is put directly into the local market without any manufacturing or refining operations for it, and in some cases without any bottling; this mainly occurs under the umbrella of informal activity, and most of these quantities are distributed to simple local food stores. This last type of oil does not compromise the safety level of the food, but on quality as it reduces shelf-life.

Observation #7

One of the most important obstacles faced by the process of importing oils into Egypt, including palm oil, is that palm oil is received at Adabiya port, specifically at berth No. 9 only, as it requires huge deep ships to transport it, which leads to delays in its clearance, especially when the oil reaches the port at the same time as the arrival of ships carrying chemicals to prevent the risks of explosion, especially after the explosion of the port of Beirut in Lebanon. The importer (enterprise or trader) is the one who bears the cost of this delay, as the fine could reach $140,000 per day for keeping the shipments waiting at the dock.

Observation #8

Last March, the Central Bank of Egypt issued a decision to stop dealing with cash against documents (CAD) in the implementation of all import operations, and to work instead with letters of credit (LC), a decision that caused confusion in the import market in Egypt.

This decision was applied to oils imported to Egypt for no more than one day, as thereafter, oils were excluded from this decision because they are essential goods.

In general, all oils are subject to the same import process, except for soybean oil, which enters in the blended oil industry, coming to Egypt in the form of seeds, and therefore is examined by both the Food Safety Authority in accordance with usual procedures for palm oil, in addition to an inspection of agricultural quarantine to ensure that the seeds do not harm the health of the plant, and do not negatively affect Egyptian agriculture.

As for sunflower oil, like palm oil, it is subject to the usual procedures of the Food Safety Authority.

Palm oil is also different from other food industries in terms of the designated unloading area. As mentioned above, it is unloaded only at the Adabiya port and specifically at berth No. 9, due to its shipping method, which entails large and deep containers and comes in bulk.

As for sunflower oil, it is imported packaged and comes in smaller quantities by default. As for other food industries, they can be unloaded from any designated area without being restricted to a specific port.

3. Detailed documentation of import processes associated with the specific product of focus (HS Code: 1511)

Figure 3.1 and Table 3.1 present a list of 14 core business processes that are typically carried out when importing Palm Oil (HS Code: 1511) into Egypt and a list of 11 organizations that an importer indirectly or directly deals with.

These core business processes are categorized into 3 process areas as per UN/CEFACT International Supply Chain Model:

- **Buy:** the conclusion of trade terms and the establishment of sales contract.

- **Ship:** the arrangement for cargo movement and the completion of necessary actions to meet regulatory requirements of both export and import countries.
- **Pay:** the claim for the payment, the payment for the purchased cargo and the local payment.

It should be noted that this documentation focuses only on inland enterprises big or small, as free zone enterprises are not subject to any of the processes discussed in this report. In fact, there are hardly any oil enterprises located in the free zone.

It should be also noted that the payment process is interlinked with the shipping process. In fact, concluding payment is required to be able to proceed with custom clearance and other subsequent business processes. Therefore, business processes regarding payment will be discussed at the beginning of the 'ship' process area. Also, any required prerequisites will be discussed in separate before discussing the 'buy' process area.

Two important notes: 1) The presentation of core processes of importation is preceded by a short but detailed presentation of how Egyptian importers get an import license for a food item. The reason it is presented is because it is a major precondition for importation that is often problematic to obtain. In such case, it will delay the beginning of the whole import process.

2) The import process at this point is subject to many changes to which importing enterprises are still adjusting. Depending on the problems they might face, certain changes to the system can be introduced. In this study, we accommodated the total process with its full details to date. New changes can still take place in the future. Up to the final delivery date of the study we'll continue to include changes as they emerge.

Figure 3.1. Use case diagram of business processes in palm oil importation to Egypt

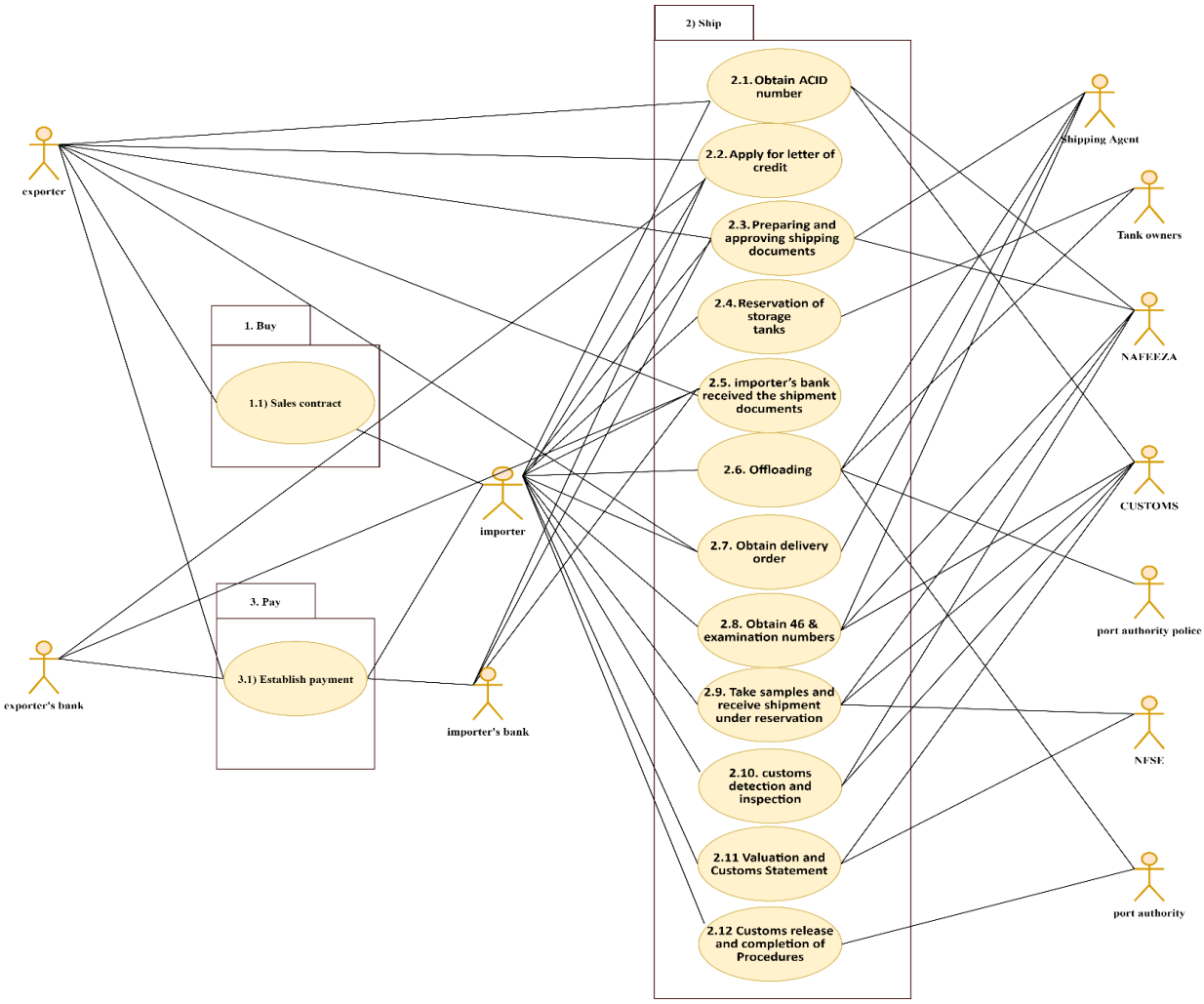


Table 3.1. Core business processes and stakeholders involved in palm oil import

Core Business Process \ Party	Importer	Egyptian Food Safety Authority	Port authority	MTS company (NAFEZA)	Shipping Agent	Customs	Port authority police	Exporter	Company owing tanks	Exporter' s Bank	Importer' s Bank
1. Buy											
1.1. Sales contract	X							X			
2. Ship											
2.1. Obtain ACID number	X			X		X		X			
2.2. Apply for letter of credit	X							X		X	X
2.3. Preparing and approving shipping documents	X			X	X			X			X
2.4. Reservation of storage tanks	X								X		
2.5. importer's bank received the shipment documents,	X							X		X	X
2.6. Offloading	X		X		X		X		X		
2.7. Obtain delivery order	X				X			X			
2.8. Obtain 46 & examination numbers	X			X	X	X					
2.9. Take samples and receive shipment under reservation	X	X		X		X					
2.10. customs detection and inspection	X			X		X					
2.11 Valuation and Customs Statement	X	X				X					
2.12 Customs release and completion of Procedures	X		X								
3. pay											
3.1 Conclude payment	X							X		X	X

3A. Pre-import requirements

In the case of importing for trading, obtaining an import license. In the case of importing for manufacturing, obtaining a production requirements card (needs card). The Export and Import Control Authority issues both the import license and the needs card.

1. Import license

It takes two days and is renewed every five years. It costs EGP 5000 (the total number of products is 21 according to the HS code). Adding a group of products costs EGP 1000 per group. Renewal fees are EGP 2000.

Documents required in accordance with the provisions of Law No. 7 of 2017 include:

a) Registration application form signed by the person concerned or the authorized representative in front of the competent employee or signed by the representative

b) Official copy of the company's contract or the company's articles of incorporation, and amendments made to it, as registered, publicized and recorded in the commercial register, indicating that 51 percent of the capital is owned by Egyptians - the import activity - the paid-up capital is not less than two million pounds.

c) Recent official copy of the commercial register.

d) Copy of the tax card and presenting the original for viewing, and a certified copy of the tax statement for the previous year showing that the annual turnover of the company is not less than 5 million pounds

e) Original certificate of importing in the name of one of the general and limited partners or those responsible for imports as issued by the Foreign Trade Training Center at the Ministry of Industry and Trade.

f) Receipt of depositing the insurance value, amounting to EGP 50,000 (for individuals), and up to EGP 200,000 (for companies) in the treasury of the Authority, or a letter from the bank stating that the amount has been deposited in the Authority's account

2. Production requirements card (needs card):

Issued by the Export and Import Control Authority (it takes one day and is renewed every five years). Issuance is free.

Documents required by law:

a. Registration application form signed by whoever has the right to administer

b. Industrial record/license if the project is industrial

c. Recent official copy of the commercial register

d. Copy of the ID card

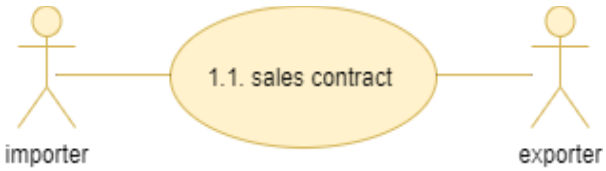
3. Letter to the General Investment Authority if the company is affiliated to it
4. Obtaining an import permit from the Food Safety Authority (costs EGP 20,000, renewed yearly)
5. Obtaining a customs procedures certificate (transaction number) from customs (costs EGP 50)
6. Establishing an account for the importing company on the NAFEZA website with the registration of the person who has the right to sign electronically (E-token)
7. Subscribing to the electronic signature service and obtaining the right to use the electronic signature through one of the companies (Egypt Clearing House or SNS). The cost ranges from EGP 700 to EGP 1000.
8. Preparing a statement of foreign exporters in the importer's import operations (tax registration number - trade name of the exporter - trademark)
9. Register an account for the company exporting to Egypt on the CargoX platform
10. Registering an account for the accredited customs brokers to the NAFEZA and obtaining the electronic signature

(Steps 8 through 10 can take a long time depending on how easy it is for the exporting company representative to push the paperwork approval in the Ministry of Trade and Industry)

3B. Process area 1: Buy

Core business process area 1.1: conclude sales contract

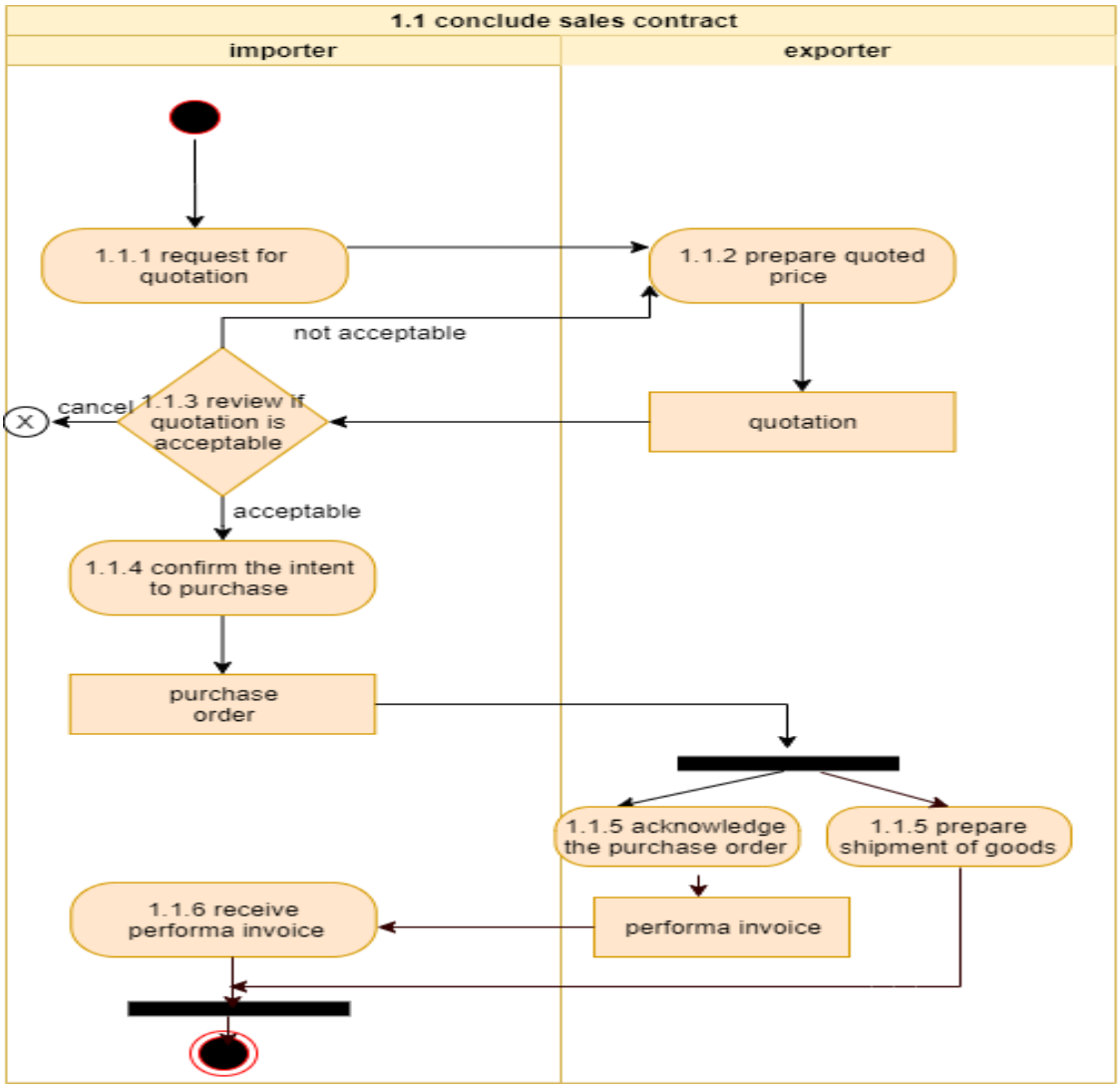
Figure 3.2. "Conclude sales contract" use case diagram



"Sales contract "is the first core business process under "Buy" process area. The use case diagram in Figure 3.2 suggests that this core business process requires the participation of:

- Importer
- Exporter

Figure 3.3. “Conclude Sales contract” activity diagram

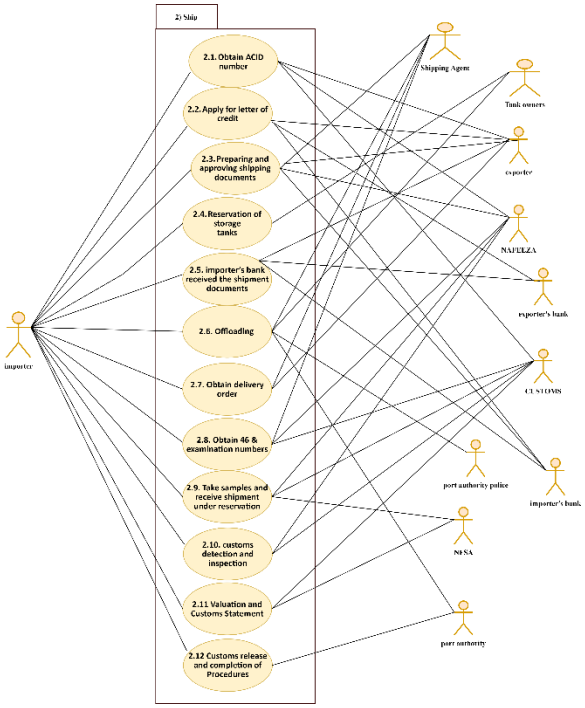


Name of process area	**1. Buy**
Name of business process	***1.1 Conclude sale contract***
Related laws, rules, and Regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments.
Process participant	• Importer • Exporter
Input and criteria to enter/ begin the business process	• Importer has a list of potential palm oil sellers. • Importer already registered at GOEIC
Activities and associated documentary requirements	1.1.1 Importer requests a quotation from potential exporters. 1.1.2 Exporter prepares the quotation (price and sales terms). 1.1.3 Importer reviews the quotation and determines if the quoted price and sales terms are acceptable. If the quoted price and sales terms are not acceptable, importer negotiates with the exporter about revising the quoted price and/or sales terms. 1.1.4 If the quoted price and sales terms are acceptable, importer confirms the purchase of goods with a purchase order. 1.1.5 Exporter acknowledges the receipt of the purchase order and confirms that the palm oil will be delivered according to the agreed price and sales terms by sending the importer a proforma invoice. In addition, the exporter prepares the delivery of goods. 1.1.6 Importer receives the proforma invoice.
Output criteria to exit the business process	• Exporter and importer agreed on the price and contract terms and have concluded the sales contract. • Based on the purchase order, the exporter starts to prepare for the export of goods
Average time required to complete this business process	1 day

4C. Process area 2: Ship

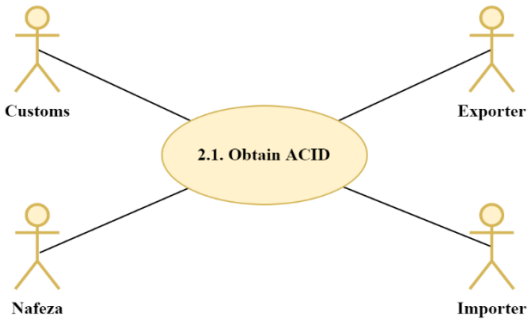
In the context of palm oil import to Egypt, ship process area consists of 12 core business processes. As shown in Figure 3.4, these core business processes deal with both transport and regulatory requirements. They involve the arrangement for cargo movement as well as the completion of customs formalities and necessary actions to meet palm oil import requirements imposed by government agencies from Egypt.

Figure 3.4. Use case diagram of core business processes in ship process area



Core business process area 2.1: Obtain ACID number

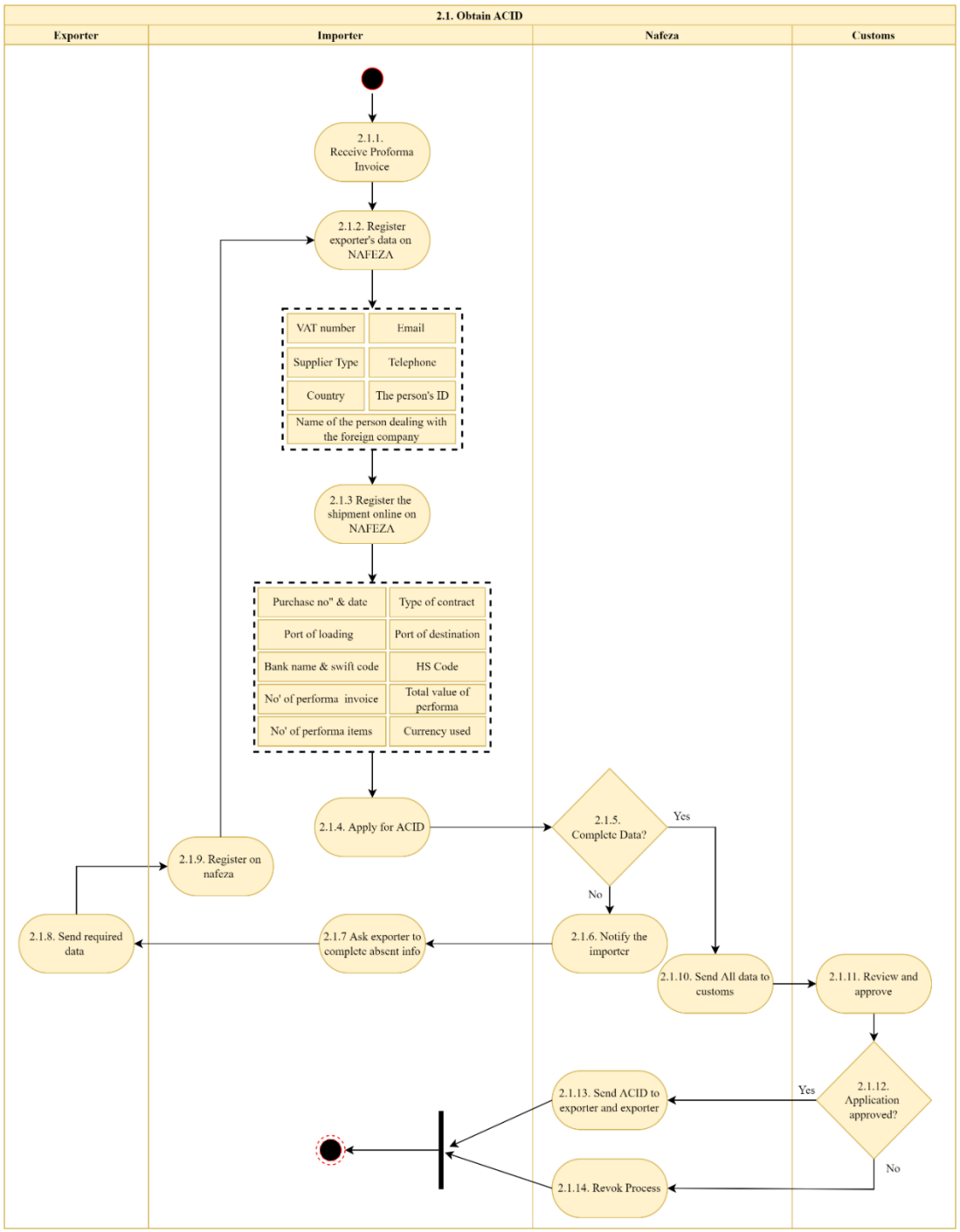
Figure 3.5. "Obtain ACID number" use-case diagram



The use case diagram shown in Figure 35 suggests that "Obtain the ACID number" process requires the participation of:

- Importer
- NAFEZA platform
- Exporter
- Customs

Figure 3.6. “Obtain the ACID number from NAFEZA” activity diagram



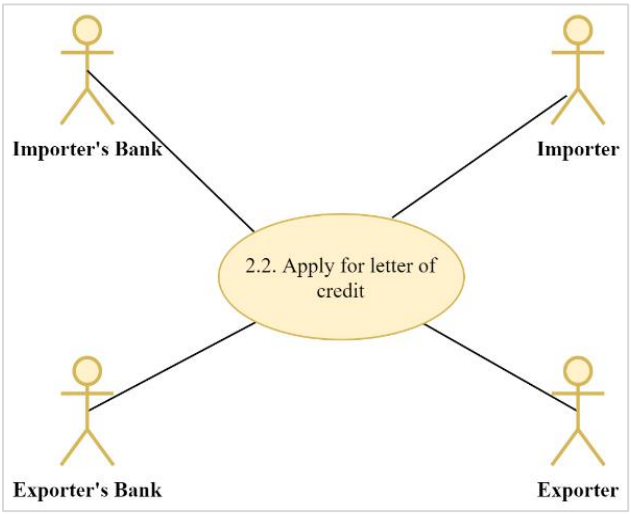
Name of process area	**2. Ship**
Name of business process	***2.1. Obtaining a preliminary tariff number for the shipment through NAFEZA system (ACID). It became obligatory only in October 2021***
Related laws, rules, and regulations	• Customs Law No. 207 of 2020 and its executive regulations issued by Minister of Finance Decision No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Circular No. 31 of 2021 regarding the customs manual for import and export rules, issued in August 2021 • Ministry of Finance Decision No. 38 of 2021 regarding Advance Cargo Information system (ACI) • Decision of the Minister of Finance No. 328 of 2021 amending some provisions of decision No. 38 of 2021 • Ministry of Finance Decision No. 490 of 2021 • Decision of the Minister of Trade and Industry No. 992 of 2015 regarding the rules governing the registration of factories qualified to export their products to the Arab Republic of Egypt • Decision of the Minister of Trade and Industry No. 43 of 2016 regarding amending the rules governing the registration of factories qualified to export their products to the Arab Republic of Egypt • Decision of the Minister of Finance No. 40 of 2017 regarding implementation of the customs' single administrative document (SAD) • Circular No. 29 of 2021 regarding obtaining a food import license as a basic import document • Law of the Central Bank, the Banking System and Money • Law No. 194 of 2020 promulgating the Central Bank and Banking System Law • Procedures Circular No. 11 of 2021 regarding the procedures followed under the ACI system • Decision No. 7 of 2022 regarding the approval of import documents (invoice - certificate of origin) submitted electronically or on paper.
Process participant	• Importer

	• NAFEZA
Input and criteria to enter/ begin the business process	• Importer already has an account on NAFEZA • Importer is already licensed by GOEIC and have a valid tax and commercial register. • The company exporting to Egypt is already registered on the CargoX platform
Activities and associated documentary requirements	2.1.1. The importer receives the Proforma-Invoice from the exporter after the final purchase order is sent to him. 2.1.2. The importer on the NAFEZA platform records all required exporter data, which includes (VAT number, supplier type if distributor or exporter), supplier country, name of the person dealing with the foreign company, the person's ID number, telephone, e-mail). 2.1.3. The importer records all data on the shipment itself, which includes (purchase number and date, type of contract, port of loading, port of entry, bank name and SWIFT code, initial invoice number and date, number of invoice items, customs item, total value of invoice, value of each item, and the currency used). 2.1.4. The Egyptian importer apply for ACID on NAFEZA 2.1.5. NAFEZA checks whether the data is complete or not? 2.1.6. If the data is not complete, NAFEZA will notify the importer that some data is missing 2.1.7. The importer should then ask the exporter for the missing information 2.1.8. The exporter sends required data/information to the importer 2.1.9. The importer uses the data sent by the exporter to register on NAFEZA again 2.1.10. One the data is complete, NAFEZA sends all the data to customs for security Clarence. 2.1.11. Customs receive the data via NAFEZA and do the checkup 2.1.12. Customs decide whether the application approved or not. 2.1.13. If the application approved, NAFEZA will send ACID to both the importer and the exporter 2.1.14. If the application was rejected, NAFEZA will revoke the process.
Output criteria to exit the business process	ACID Number

Average time required to complete this business process	2 days (48 Hours)

Core business process area 2.2: Apply for letter of credit

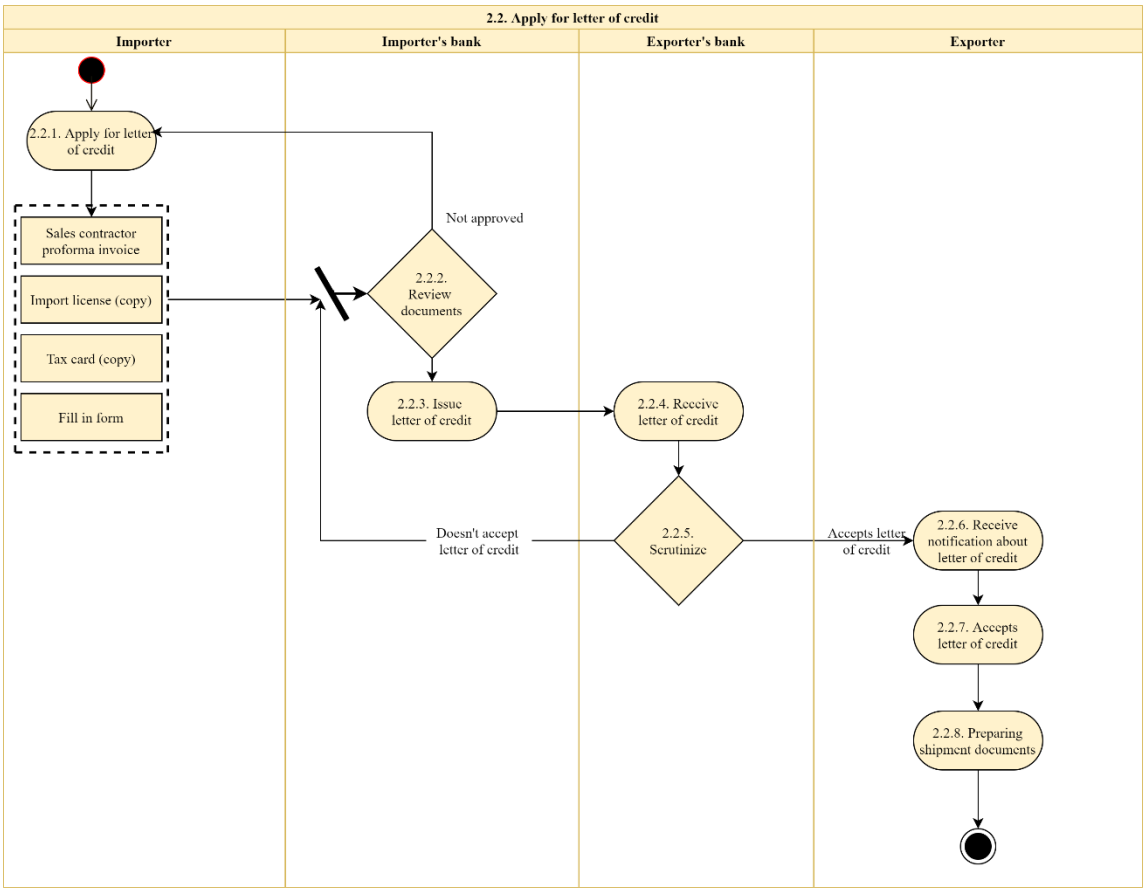
Figure 3.7. "Apply for letter of credit" use case diagram



The use case diagram shown in Figure 3.7 suggests that "apply for letter of credit" process requires the participation of:

- Importer
- Importer's bank
- Exporter
- Exporter's bank

Figure 3.8. “Apply for letter of credit” activity diagram

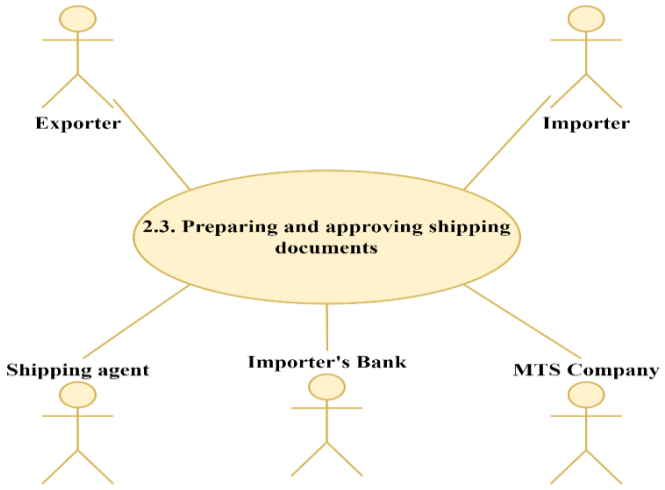


Name of process area	**2.ship**
Name of business process	**2.2 apply for letter of credit**
Related laws, rules, and regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law of the Central Bank, the Banking System and Money 2004 • Law No. 194 of 2020 promulgating the Central Bank and Banking System Law • Letter of the Central Bank issued in February 2022 and the e-mail issued to banks on February 21 and its updated version in March 2022 • Central Bank circular dated 6 June 2022 regarding updating the response to banks' inquiries regarding documentary credits • Procedures circular No. 6 of 2022 that each client notifies the Authority in writing of any changes to the registration data • Import circular No. 32 of 2019 regarding Form 4 (cases of not requesting it, and receipt of payment of administrative expenses)
Process participant	• Importer • Exporter • Importer's Bank • Exporter's Bank
Input and criteria to enter/ begin the business process	• Sales contract has already been concluded
Activities and associated documentary requirements	2.2.1. The importer applies for a letter of credit (LC) at the importer's bank and provides all required documents (Application form – Tax card – Copy of the import license – Sales contact) 2.2.2. The importer's bank reviews all documents submitted and evaluates the importer's credit status. If the application is not approved, the bank asks the importer to re-apply for LC. 2.2.3. If the application approved, the importer's bank approves the application, issues a letter of credit and sends it to the exporter's bank (advisory bank). 2.2.4. The exporter's bank receives the letter of credit from the importer's bank

	2.2.5. The exporter's bank and reviews all terms and conditions. If LC is not accepted, exporter's bank notifies the importer's bank with the result. 2.2.6. If LC is accepted, the exporter receives notification of the letter of credit. 2.2.7. The exporter accepts letter of credit 2.2.8. The exporter starts the preparation of shipment documents
Output criteria to exit the business process	LC has been already opened
Average time required to complete this business process	Steps to apply and approve documents (1 – 3 months) depending on the size of the importing enterprise. The bigger the enterprise the faster the process.

Core business process area 2.3: Preparing and approving shipping documents

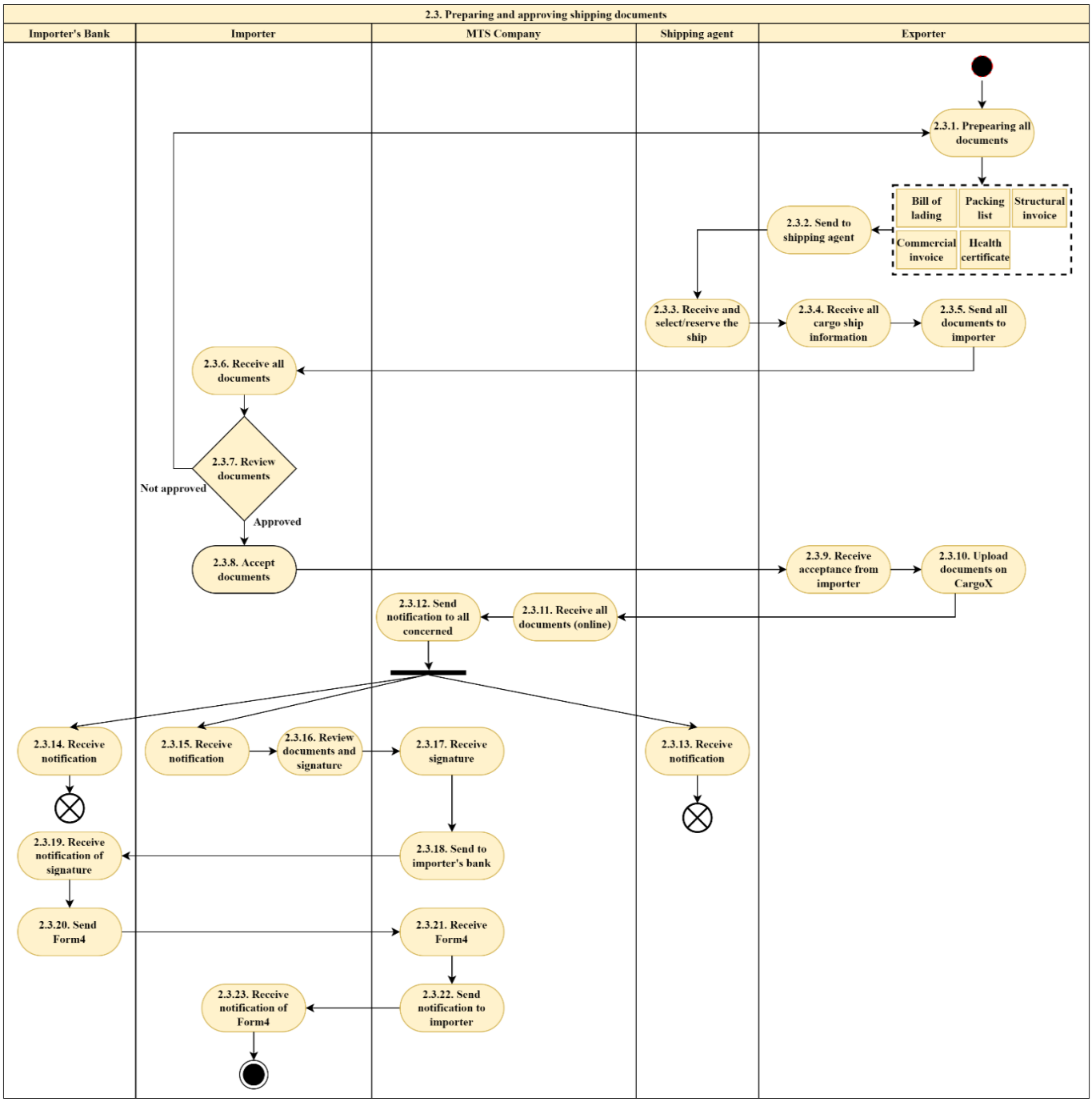
Figure 3.9. "Preparing and approving shipping documents" use case diagram



The use case diagram shown in Figure 3.9 suggests that "Preparing and approving shipping documents" process requires the participation of:

- Importer
- Exporter
- Shipping Agent
- importer's bank
- MTS company

Figure 3.10. “Preparing and approving shipping documents” activity diagram

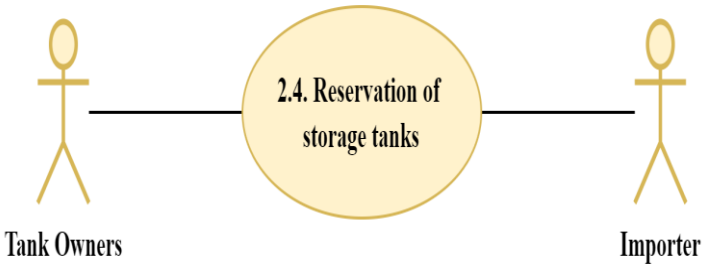


Name of process area	**2. Ship**
Name of business process	***2.3. Preparing and approving shipping documents***
Related laws, rules, and Regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Customs Law No. 207 of 2020 and its executive regulations issued by Minister of Finance decision No. 430 of 2021 and their amendments • Law of the Central Bank, the Banking System and Money 2004 • Law No. 194 of 2020 promulgating the Central Bank and Banking System Law • Letter of the Central Bank issued in February 2022 and the e-mail issued to banks on February 21 and its updated version in March 2022 • Central Bank circular dated 6 June 2022 regarding updating the response to banks' inquiries regarding documentary credits • Import Circular No. 32 of 2019 regarding Form 4 (cases of not requesting it, and receipt of payment of administrative expenses)
Process participant	• Exporter • Importer • Importer's Bank • MTS Company • Shipping Agent
Input and criteria to enter/ begin the business process	• Importer obtained ACID Number and sent it to the exporter to put it on all documents
Activities and associated documentary requirements	2.3.1. The exporter (supplier) prepares all documents for shipment including: bill of lading, packaging list, analysis certificate, structural invoice, analysis certificates 2.3.2. The exporter sends all the documents to the shipping agent 2.3.3. The shipping agent receives documents and make the reservation 2.3.4. The exporter receives all cargo/ship information 2.3.5. The exporter sends all documents to the importer including the shipping details such as vessel name and number, arrival dates, as well as the documents until the terms are settled. 2.3.6. The importer receives the documents

	2.3.7. The importer reviews the documents, if not approved they will inform the exporter to re-prepare the documents 2.3.8. If approved, the importer will acknowledge the acceptance of all documents. 2.3.9. The exporter receives acceptance from the importer 2.3.10. The exporter uploads all documents on the CargoX platform, which is linked to the NAFEZA platform 2.3.11. NAFEZA receives all documents 2.3.12. NAFEZA notifies all concerned partners that the documents are well received 2.3.13. Shipping agent receives notification that the documents is well received 2.3.14. Importer's bank receives notification that the documents is well received 2.3.15. The importer receives notification that the documents is well received 2.3.16. The importer accesses the NAFEZA site, reviews the documents and places the electronic signature on them. 2.3.17. NAFEZA receives the signature of the importer 2.3.18. NAFEZA send documents to the bank 2.3.19. The bank is notified, and the importer awaits the bank's approval to sign. 2.3.20. The bank approves and sends the shipment Form 4 on the NAFEZA platform (recent procedure) 2.3.21. The NAFEZA receives Form 4 2.3.22. The NAFEZA send a notification to importer that form 4 is received 2.3.23. The importer acknowledges notification
Output criteria to exit the business process	Approved shipping documents
Average time required to complete this business process	3 days

Core business process area 2.4: Reservation of storage tanks

Figure 3.11. "Reservation of storage tanks "diagram

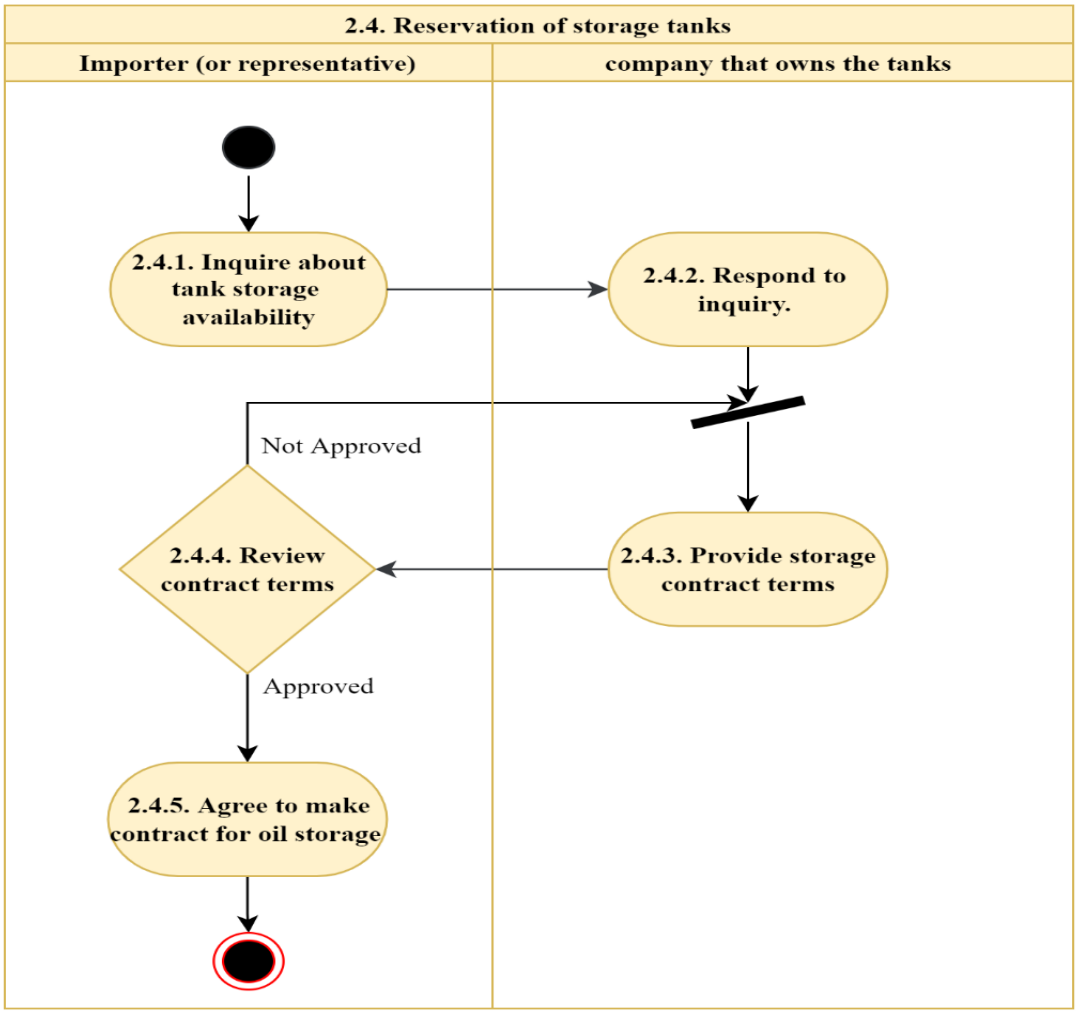


The use case diagram shown in Figure 3.11 suggests that "Reservation of storage tanks" process requires the participation of:

•Importer

•Tank owners

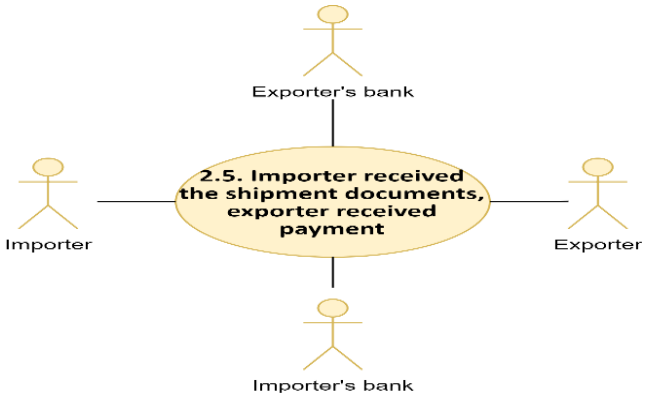
Figure 3.12. “Reservation of storage tanks” activity diagram



Name of process area	**2. Ship**
Name of business process	***2.4 Reservation of storage tanks***
Related laws, rules, and regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Decision No. 800 of 2016 promulgating a regulation governing the conduct of activities and works related to maritime transport and cost of their use
Process participant	• Importer • Tank owner
Input and criteria to enter/ begin the business process	
Activities and associated documentary requirements	2.4.1. The importer (in the absence of their own tanks) enquires about the availability of storage tanks 2.4.2. Companies responsible for the tanks (tank owners) respond by putting forth available tanks and their locations. 2.4.3. Tank owners send the terms of storage contracts to the importer. 2.4.4. The importer reviews the terms of the contract. If the terms of the contract do not meet the requirements of the importer, they negotiate again with the company 2.4.5. If the terms of the storage contract meet the requirements of the importer, the importer signs the contract.
Output criteria to exit the business process	Tanks has been reserved
Average time required to complete this business process	1 Day

Core business process area 2.5: Importer received the shipment documents, exporter received payment

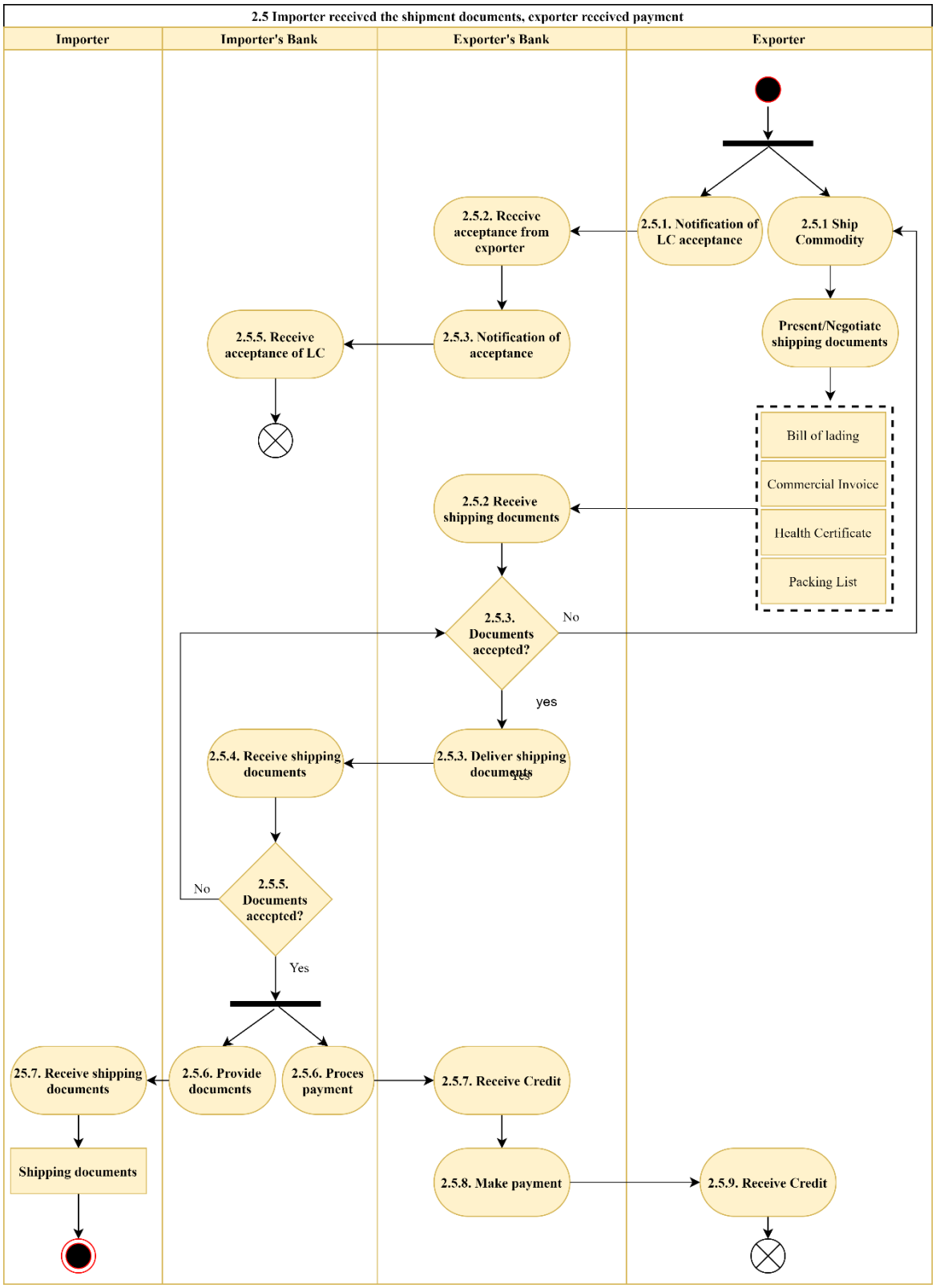
Figure 3.13. "Importer received the shipment documents, exporter received payment" use case diagram



The use case diagram shown in Figure 3.13 suggests that "apply for letter of credit" process requires the participation of:

- Importer
- Importer's bank
- Exporter
- Exporter's bank

Figure 3.14. "Importer received the shipment documents, exporter received payment documents" activity diagram



Name of process area	**2. Ship**
Name of business process	***2.5. Importer received the shipment documents, exporter received payment***
Related laws, rules, and Regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law of the Central Bank, Banking System and Money 2004 • Law No. 194 of 2020 promulgating the Central Bank and Banking System Law • Letter of the Central Bank issued in February 2022 and the email issued to banks on February 21 and its updated version in March 2022 regarding documentary credits • Central Bank circular dated June 6, 2022, regarding updating the response to banks' inquiries regarding documentary credits
Process participant	• Importer • Importer's bank • Exporter • Exporter's bank
Input and criteria to enter/ begin the business process	LC has been already opened
Activities and associated documentary requirements	2.5.1. • Exporter notifies the acceptance of LC to exporter's bank • The exporter reviews the terms and conditions. If the exporter believes that the importer can meet all the terms and conditions, the goods are sent. The exporter then sends shipping documents to the exporter's bank. 2.5.2. • The exporter's bank receives acceptance of the letter of credit from the exporter and checks the shipping documents in exchange for the letter of credit. • The exporter's bank receives shipping documents from the exporter and reviews the shipping documents. 2.5.3. • If the documents meet the terms and conditions of the letter of credit, the bank sends the shipping documents to the importer's bank. • The exporter's bank gives notification of acceptance to importer's bank 2.5.4. The importer's bank receives shipping documents. 2.5.5. • The importer's bank receives and inspects shipping documents. If the documents meet the terms of the letter of credit, they are released to the importer. • The importer's bank receives acceptance of the letter of credit.

	2.5.6. • The importer's bank pays to the exporter's bank (credit). • The importer's bank provides shipping documents to the importer. 2.5.7. The exporter's bank receives payment notice (credit) from the importer's bank. 2.5.8. The exporter's bank transfers the payment to the exporter. 2.5.9. The exporter receives payments from it.
Output criteria to exit the business process	• Importer received documents • Exporter received payment
Average time required to complete this business process	1-3 months depending on the size of the importing enterprise; the bigger the enterprise, the faster the process

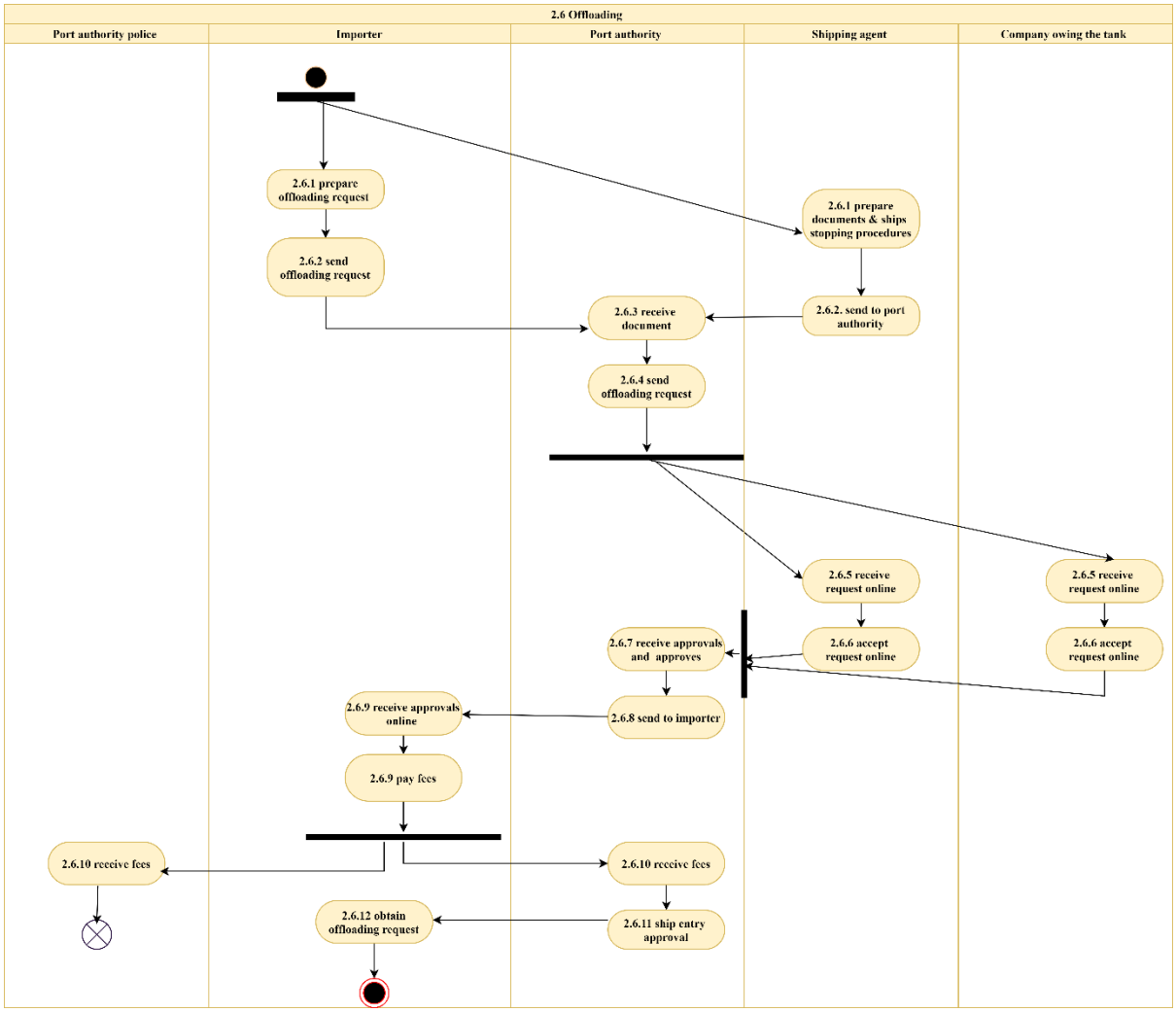
Core business process area 2.6: Offloading

Figure 3.15. "Offloading" use case diagram

The use case diagram shown in Figure3.15 suggests that "Offloading" process requires the participation of:

- Importer
- Port authority
- Port authority police
- Shipping agent
- Company owing the tank

Figure 3.16. “Offloading” activity diagram

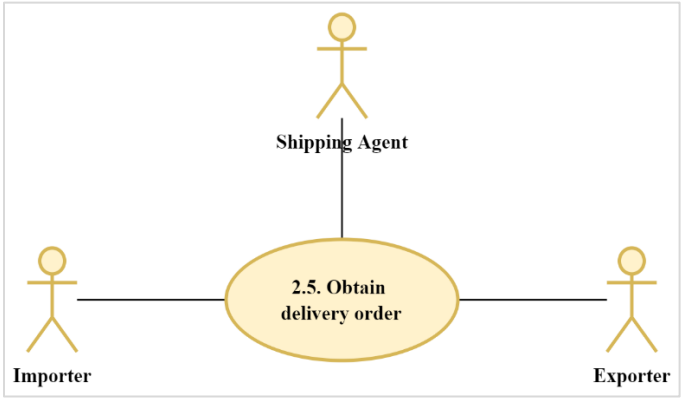


Name of process area	**2. Ship**
Name of business process	***2.6 Offloading***
Related laws, rules, and Regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Resolution No. 770 of 2005 and their amendments • Decision No. 800 of 2016 issuing a regulation governing the conduct of activities and works related to maritime transport and cost of their use • Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance decision No. 430 of 2021 and their amendments
Process participant	• Importer • Port authority • Port authority police • Shipping agent • Company owing the tank
Input and criteria to enter/ begin the business process	
Activities and associated documentary requirements	2.6.1. • The importer or (customs clearing agent) processes an offloading order about 7 to 10 days before the shipment arrives (the average cost is EGP 25 per ton). • The shipping agent also prepares the procedures and manifest data and upload it online on NAFEZA at least 48 hours before the arrival of the shipment 2.6.2. • The shipping agent submits a request to the Port Authority for anchor the ship on the quay • The importer or customs clearing agent sends the offloading request to the port authority 2.6.3. Port Authority receive documents and offloading request 2.6.4. Port Authority send to the responsible authorities for approval (the company owning the tank and shipping agent). 2.6.5. Each of these entities receives request from port authority 2.6.6. Each of these entities sends their approval to port authority 2.6.7. Port Authority receives approvals, and approves also 2.6.8. Port Authority send approvals to importer 2.6.9. The importer receives approvals and pays the required payment to the Port Authority& the Port Authority police

	2.6.10. The Port Authority& the Port Authority police receive payment and issue receipts 2.6.11. • The port authority officer issues approval for the entry of the vessel and the vessel enters the pier 9 at The Port of Adabiya **(refer to observation #7)** • The quarantine officer boards the vessel, performs a visual inspection of the oil, and issues a permit for approval of the vehicle (CROLEST). 2.6.12. Importer obtains the obtains approval for the offloading request and offloading begins
Output criteria to exit the business process	The importer obtains approval for the offloading request
Average time required to complete this business process	1 day (It would take longer if there are many ships or chemical ships on the berth)

Core business process area 2.7: Obtain delivery order

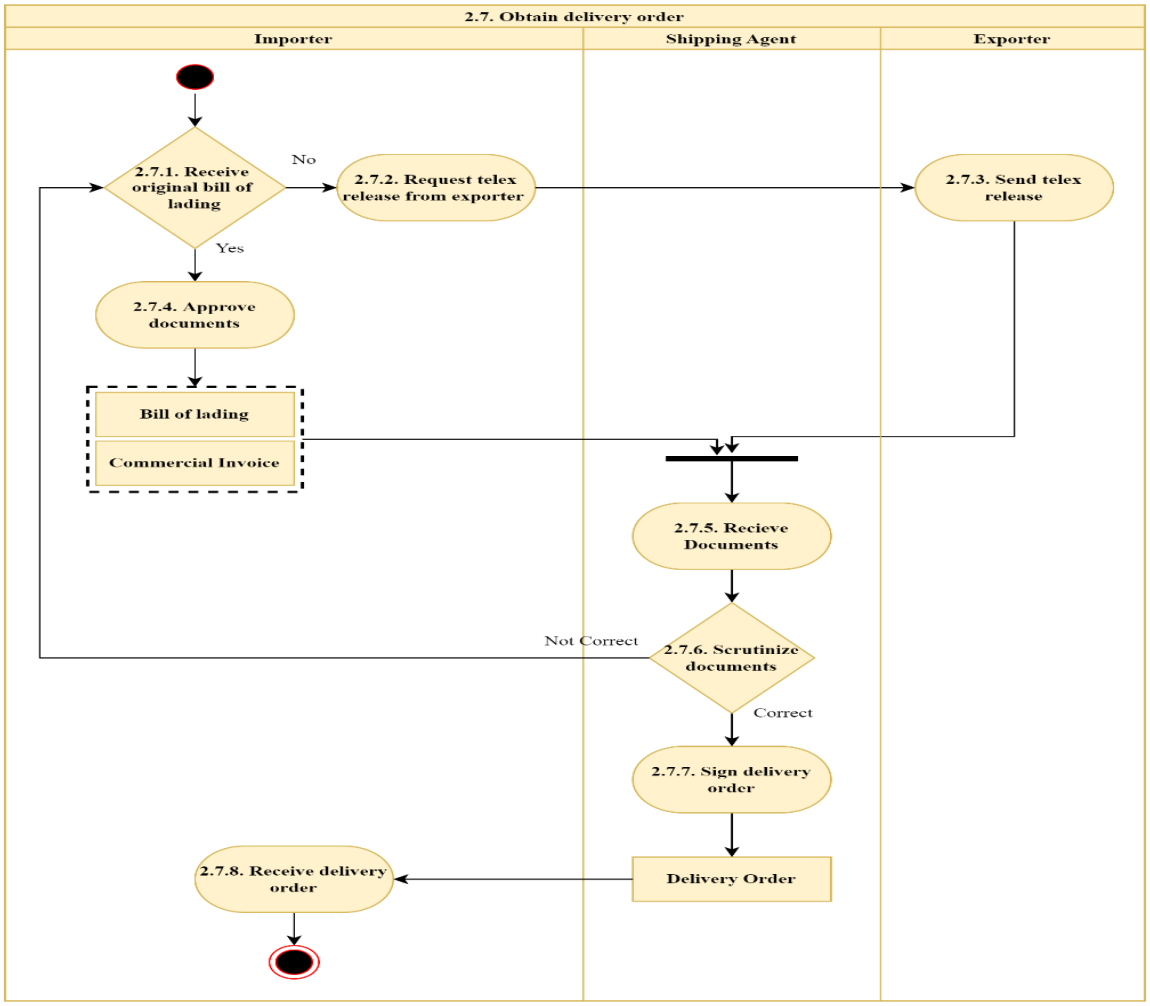
Figure 3.17. "Obtain delivery order" use case diagram



The use case diagram shown in Figure 3.17 suggests that "Obtain delivery order" process requires the participation of:

- Importer
- Exporter
- Shipping Agent

Figure 3.18. “Obtain delivery order” activity diagram



Name of process area	**2. Ship**
Name of business process	***2.7. Obtain delivery order***
Related laws, rules, and Regulations	• Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendment. • Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance decision No. 430 of 2021 and their amendments
Process participant	• Importer • Shipping agent • Exporter
Input and criteria to enter/begin the business process	Importer has the bill of lading or the telex release
Activities and associated documentary requirements	2.7.1. Has the bank delivered the documents to the importer on time? 2.7.2. If the bank has not delivered the documents to the importer on time, the requests TELEX RELEASE from the exporter via email. 2.7.3. The exporter sends Telex Release to the shipping agent. 2.7.4. If the bank delivered the documents to the importer on time, the importer approves the documents and uses the original copy of the bill of lading along with the commercial invoice to apply for the delivery order. 2.7.5. The shipping agent receives either the original copy of the bill of lading or the telex release. 2.7.6. The shipping agent reviews the documents, if they are not acceptable the importer has to start all over again 2.7.7. If the documents have been accepted, the shipping agent signs the delivery order 2.7.8. The importer collects the delivery order
Output criteria to exit the business process	Delivery order
Average time required to complete this business process	1 day (Depends on the steps above)

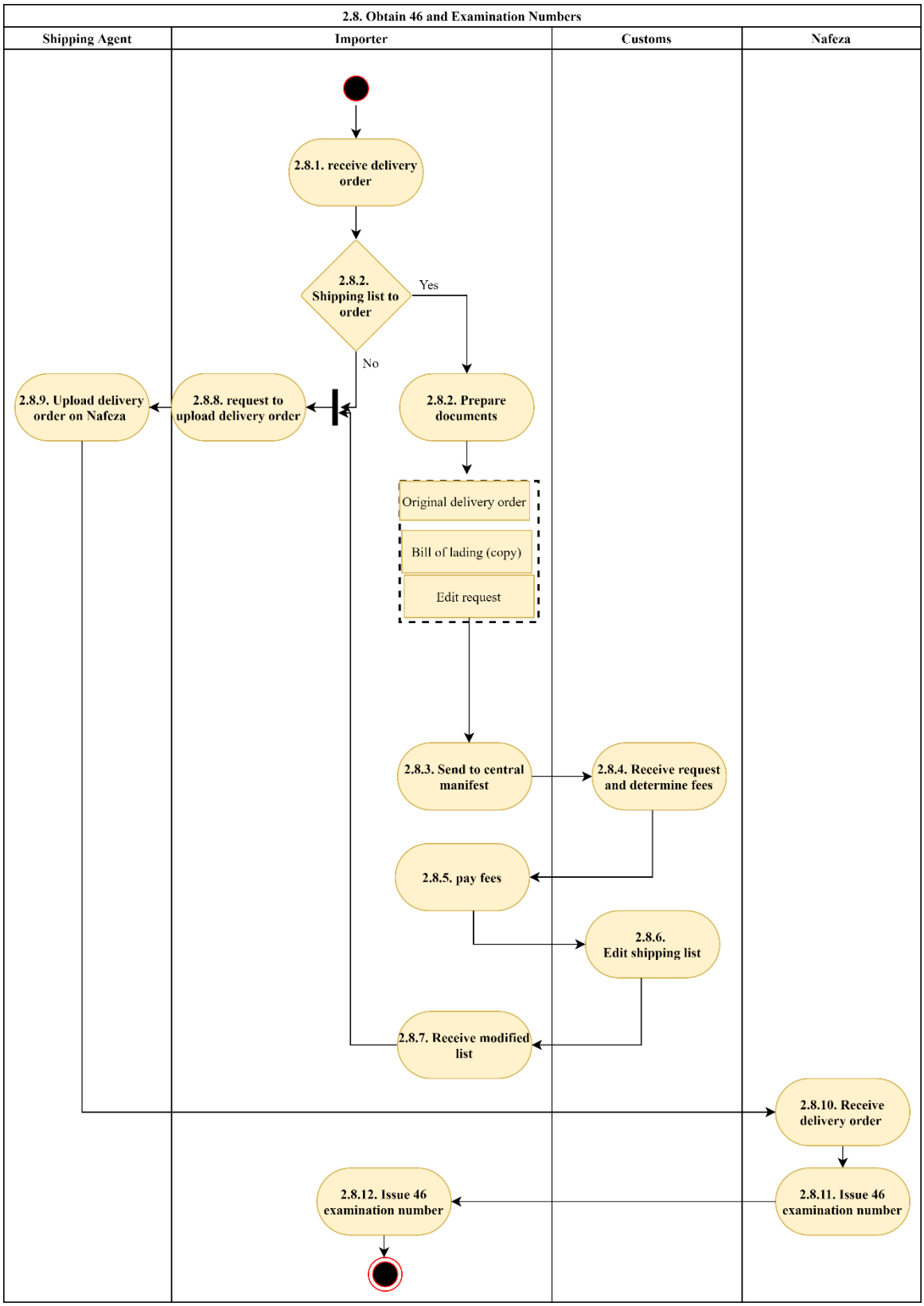
Core business process area 2.8: Obtain 46 & examination numbers

Figure 3.19. "Obtain 46 & examination numbers" use case diagram

The use case diagram shown in Figure 3.19 suggests that "Obtain 46 & examination numbers" process requires the participation of:

- Importer
- Customs
- Shipping Agent
- NAFEZA platform

Figure 3.20. “Obtain 46 & examination numbers” activity diagram

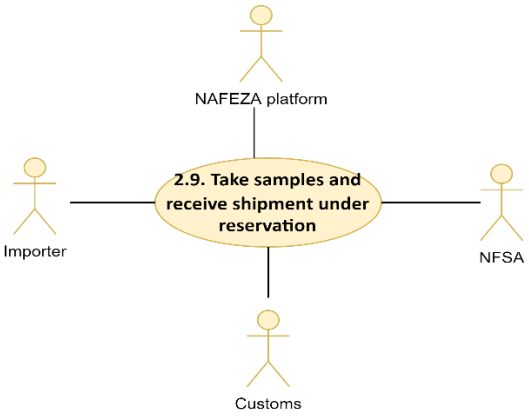


Name of process area	**2. Ship**
Name of business process	***2.8. Obtain 46 & examination numbers***
Related laws, rules, and regulations	• Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance Decision No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law of the National Food Safety Authority No. 1 of 2017 • Executive Regulations No. 412 of 2019 (Article 15 - Article 16) • The Authority's Board of Directors Decision No. 7 of 2020 • Relevant Decisions (524 of 2000 - 728 of 2000) • Decision No. 13 of 2020 regarding the maximum permissible limits of veterinary medicine residuals in food • Decision No. 4 of 2020 regarding additives authorized for use in food • Decision No. 1 of 2021 regarding the binding technical rules for food microbiological standards • Decision No. 6 of 2021 regarding the maximum permissible limits for pesticide residues in and on food products of plant and animal origin • Decision No. 6 of 2022 regarding the maximum permissible limits for chemical pollutants in food • Decision No. 7 of 2020 regarding the risk-based control of food imports • Reminder procedures circular No. 36 of 2020 regarding the analysis of some materials to verify their type or specifications • Joint control circular - import No. 46 and export No. 15 of 2021 regarding the presentation of food imports, imported or exported by free zones, to the National Food Safety Authority • Prime Minister's Decision No. 412 of 2019 regarding the exclusive competence of the National Food Safety Authority to inspect food imports according to the definition of food • Decision No. 102 of 2022 regarding the obligation to produce in accordance with Egyptian standards • Decision No. 999 of 2017 regarding crude vegetable oils

Process participant	• Importer • Customs • Shipping Agent • NAFEZA platform
Input and criteria to enter/ begin the business process	Importer already received the delivery order
Activities and associated documentary requirements	2.8.1. Importer or customs clearing agent receives delivery order 2.8.2. If the shipping list is "To order," Importer or customs clearing agent prepares documents like (original delivery order, bill of lading (copy), edit request) 2.8.3. Importer or customs clearing agent submits central manifest at the customs authority to modify the shipping list 2.8.4. Central manifest receives request and determine the fees 2.8.5. Importer or customs clearing agent is notified to pay fees 2.8.6. Central manifest edits shipping list 2.8.7. Importer or customs clearing agent receives modified list 2.8.8. Importer or customs clearing agent ask shipping agent to upload delivery order on NAFEZA (online) 2.8.9. shipping agent upload delivery order 2.8.10. NAFEZA receives delivery order 2.8.11. NAFEZA issue 46 & examinations numbers 2.8.12. Importer receives 46 & examinations numbers
Output criteria to exit the business process	• 46 Number • Examination number
Average time required to complete this business process	1 day

Core business process area 2.9: Take samples and receive shipment under reservation

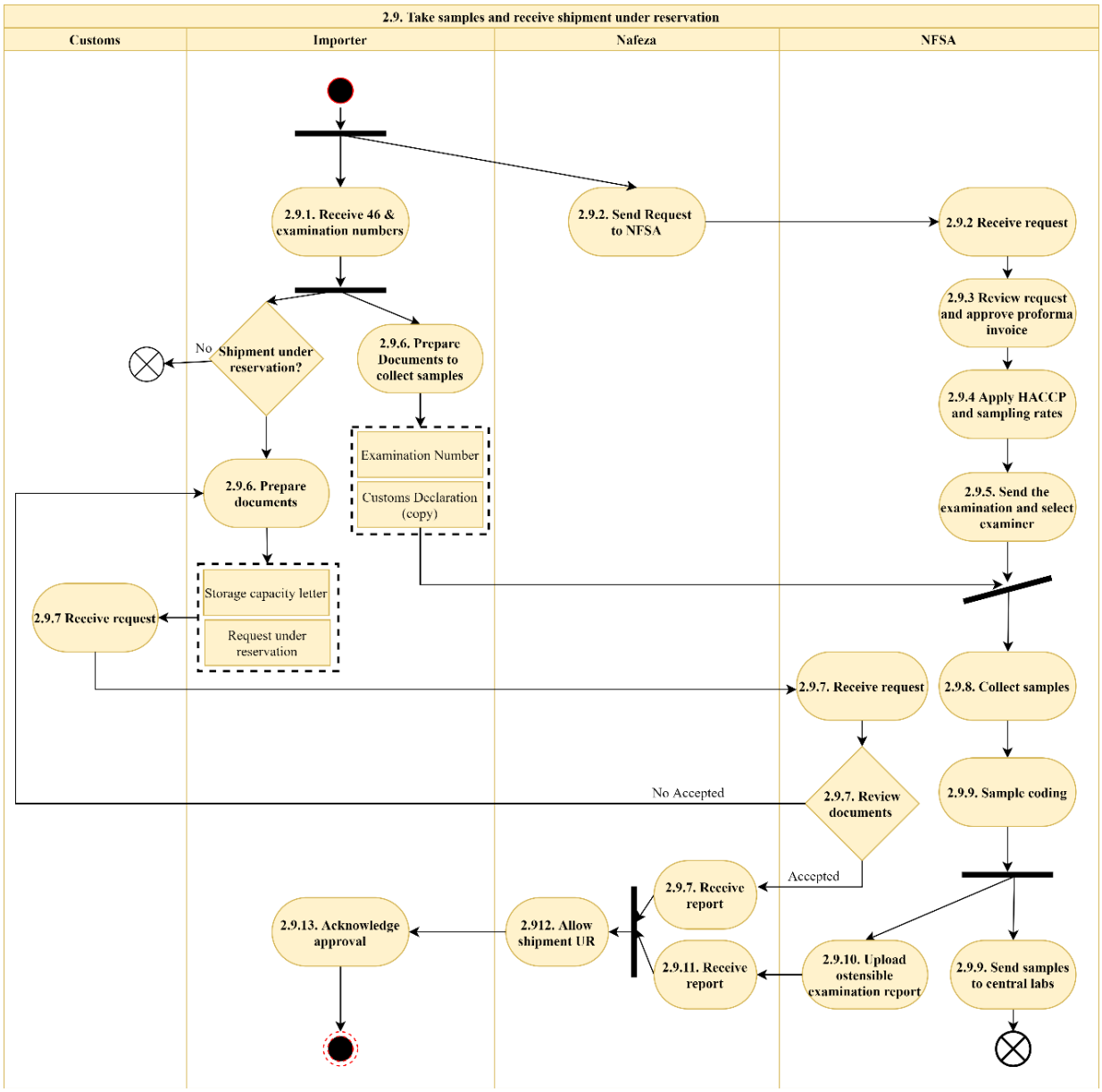
Figure 3.21. "Take samples and receive shipment under reservation" use case diagram



The use case diagram shown in Figure 3.21 suggests that "Take samples and receive shipment under reservation" process requires the participation of:

- Importer
- NFSA
- Customs
- NAFEZA

Figure 3.22. “Take samples and receive shipment under reservation” activity diagram



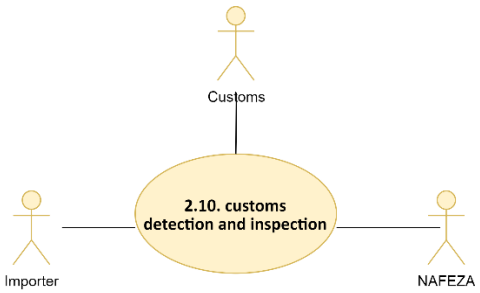
Name of process area	**2. Ship**
Name of business process	***2.9. Take samples and receive shipment under reservation***
Related laws, rules, and regulations	• Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance Decision No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law of the National Food Safety Authority No. 1 of 2017 • Executive Regulations No. 412 of 2019 (Article 15 - Article 16) • The Authority's Board of Directors Decision No. 7 of 2020 • Relevant Decisions (524 of 2000 - 728 of 2000) • Decision No. 13 of 2020 regarding the maximum permissible limits of veterinary medicine residuals in food • Decision No. 4 of 2020 regarding additives authorized for use in food • Decision No. 1 of 2021 regarding the binding technical rules for food microbiological standards • Decision No. 6 of 2021 regarding the maximum permissible limits for pesticide residues in and on food products of plant and animal origin • Decision No. 6 of 2022 regarding the maximum permissible limits for chemical pollutants in food • Decision No. 7 of 2020 regarding the risk-based control of food imports • Reminder procedures circular No. 36 of 2020 regarding the analysis of some materials to verify their type or specifications • Joint control circular - import No. 46 and export No. 15 of 2021 regarding the presentation of food imports, imported or exported by free zones, to the National Food Safety Authority • Prime Minister's Decision No. 412 of 2019 regarding the exclusive competence of the National Food Safety Authority to inspect food imports according to the definition of food • Decision No. 102 of 2022 regarding the obligation to produce in accordance with Egyptian standards • Decision No. 999 of 2017 regarding crude vegetable oils

Process participant	• Importer • NFSA • Customs • NAFEZA
Input and criteria to enter/ begin the business process	Importer already has 46 number and examination number
Activities and associated documentary requirements	2.9.1. The importer or clearing agent receives the number 46 as well as the examination number through the NAFEZA platform 2.9.2. The Egyptian Food Safety Authority receives an incoming examination request and all shipment documents through the MTS NAFEZA platform 2.9.3. The Authority reviews the application and authorizes the initial invoice 2.9.4. The Authority determines the system of sample analysis (HACCP), the testing facility, and quantity for withdrawal. 2.9.5. The Authority sends the date of examination, and examiners are determined. 2.9.6. • Importer prepares documents to collect samples (number of examination and copy of customs declaration) • Importer also prepares documents. In the event that they wish to withdraw the shipment before the result of the analysis of the Food Safety Authority, they submit an application to the authority with a guarantee of transportation and storage in custody, as well as a letter of storage capacity 2.9.7. • Importer send request of storage in the custody to customs& customs send it to NFSA • NFSA receives request (online) and accept it After making sure that the required documents are completed 2.9.8. • The Food Safety Authority withdraws samples for analysis • The importer or customs clearing agent begins the process of withdrawing samples

	2.9.9. The Authority's officer encodes the samples and sends them to its central laboratories. (Refer to observation #2) 2.9.10. The Authority's examiner makes a visual inspection report and uploads it on NAFEZA 2.9.11. NAFEZA receives report 2.9.12. NAFEZA issues approval to withdraw under reservation 2.9.13. Importer in notified
Output criteria to exit the business process	Importer completed the regulatory requirements to receive shipment under reservation
Average time required to complete this business process	1 day

Core business process area 2.10: Customs detection and inspection

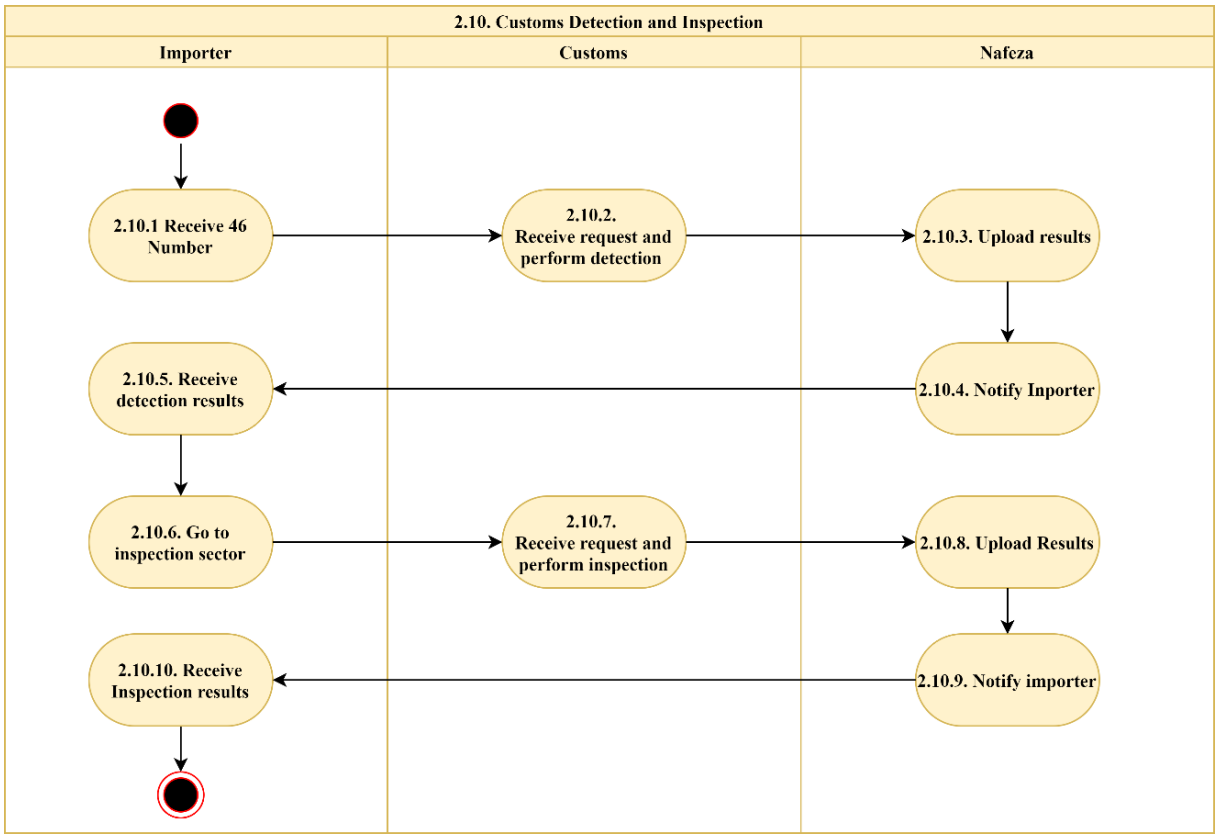
Figure 3.23. "customs detection and inspection" use case diagram



The use case diagram shown in Figure 3.23 suggests that the "customs detection and inspection" process requires the participation of:

- Importer
- NAFEZA
- Customs

Figure 3.24. "*Customs detection and inspection*" activity diagram

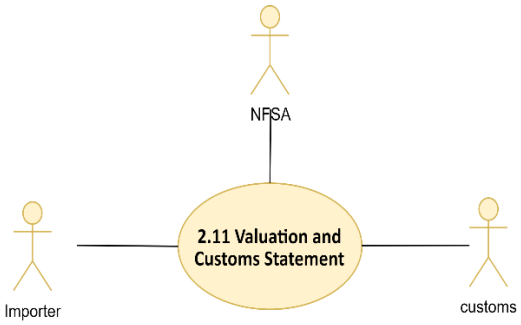


Name of process area	**2. Ship**
Name of business process	***2.10. Customs detection and inspection***
Related laws, rules, and regulations	• Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance Decision No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law of the National Food Safety Authority No. 1 of 2017 • Executive Regulations No. 412 of 2019 (Article 15 - Article 16) • The Authority's Board of Directors Decision No. 7 of 2020 • Relevant Decisions (524 of 2000 - 728 of 2000) • Decision No. 13 of 2020 regarding the maximum permissible limits of veterinary medicine residuals in food • Decision No. 4 of 2020 regarding additives authorized for use in food • Decision No. 1 of 2021 regarding the binding technical rules for food microbiological standards • Decision No. 6 of 2021 regarding the maximum permissible limits for pesticide residues in and on food products of plant and animal origin • Decision No. 6 of 2022 regarding the maximum permissible limits for chemical pollutants in food • Decision No. 7 of 2020 regarding the risk-based control of food imports • Reminder procedures circular No. 36 of 2020 regarding the analysis of some materials to verify their type or specifications • Joint control circular - import No. 46 and export No. 15 of 2021 regarding the presentation of food imports, imported or exported by free zones, to the National Food Safety Authority • Prime Minister's Decision No. 412 of 2019 regarding the exclusive competence of the National Food Safety Authority to inspect food imports according to the definition of food • Decision No. 102 of 2022 regarding the obligation to produce in accordance with Egyptian standards • Decision No. 999 of 2017 regarding crude vegetable oils

Process participant	• Importer • NAFEZA • Customs
Input and criteria to enter/ begin the business process	Samples have already been drawn
Activities and associated documentary requirements	2.10.1. Importer receives number 46 to begin the customs clearance procedures 2.10.2. • The importer or customs clearing agent presents the shipment to the customs inspection officer to analyze and verify the goods • The officer of detection receives request and performs detection 2.10.3. The officer uploads the result on the NAFEZA platform 2.10.4. NAFEZA notifies importer 2.10.5. Importer receives the results of detection 2.10.6. Importer begins the procedures of the inspection to determine the type of good and customs classification of the shipment. 2.10.7. The inspector receive request and perform inspection 2.10.8. The inspector uploads the result on the NAFEZA platform 2.10.9. NAFEZA notifies importer 2.10.10. Importer receives the results of inspection
Output criteria to exit the business process	Inspected goods
Average time required to complete this business process	1 day

Core business process area 2.11: Valuation and Customs Statement

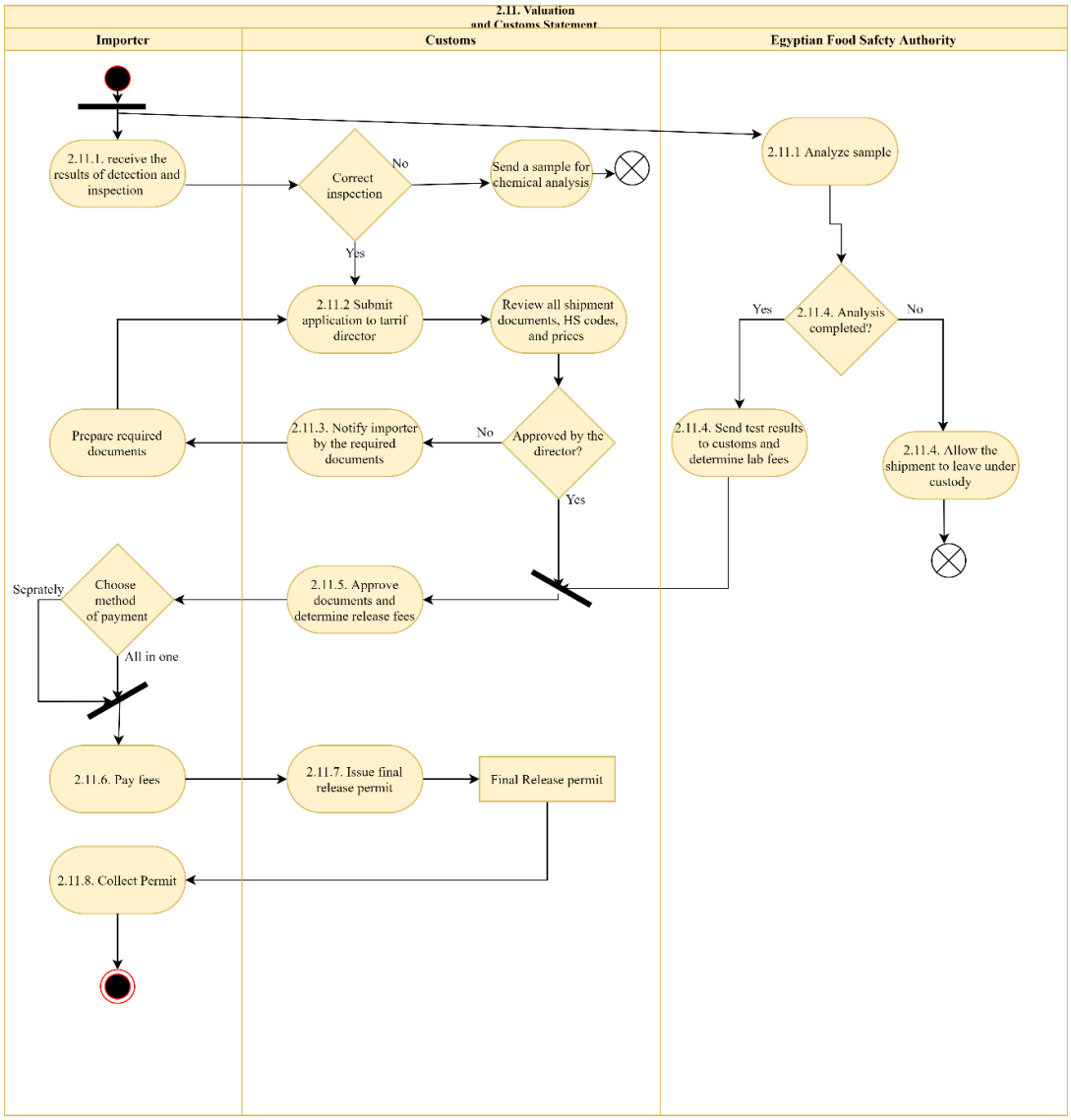
Figure 3.25. "Valuation and customs statement" use case diagram



The use case diagram shown in Figure 3.25 suggests that "Valuation and Customs Statement" process requires the participation of:

- Importer
- NFSA
- Customs

Figure 3.26. "Valuation and customs statement" activity diagram



Name of process area	**2. Ship**
Name of business process	***2.11. Valuation and customs statement***
Related laws, rules, and regulations	• Customs Law No. 207 of 2020 and its executive regulations promulgated by Minister of Finance Decision No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Law No. 67 of 2016 promulgating the Value Added Tax Law and its executive regulations issued by the Minister of Finance Decision No. 66 of 2017 • Procedures Circular No. 4 of 2022 reminding of the procedures of Circular 43 of 2020 regarding valuation procedures under MTS • Procedures Circular No. 7 of 2021 regarding the competencies of the sampling appraiser by inspection and x-rays -- the competencies of the documentary appraiser, etc. • Import Circular No. 26 of 2019 regarding raising the value recognized by the concerned person on the customs certificate over the value of Form 4
Process participant	• Importer • NFSA • Customs
Input and criteria to enter/ begin the business process	Detection and inspection have been completed
Activities and associated documentary requirements	2.11.1. • Importer receives the results of detection and inspections, as does the tariff manager. • If the inspection is incompatible a sample is sent to the chemistry department for examination • Also, analysis by the Food Safety Authority continue at their central laboratories 2.11.2. Tariff Manager reviews all documents and makes sure that all import restrictions are met, and reviews prices to make sure of them

	2.11.3. If there are problems with the documents, the importer is notified 2.11.4. • In the event of arrival of the Food Safety Authority results, the importer receives a final match report and presents the results and the amount required in the customs statement • In case of no result received from the Food Safety Authority, the importer receives a match report under custody 2.11.5. The tariff manager approves the documents and sets the fees required for release which include (customs duties (exempted in the case of oil), value added tax of (5%) because it is a classified commodity, with commercial and industrial revenue of 1%, and NAFEZA fees at EGP 1780). 2.11.6. • The importer or customs clearing agent pays the required amount and shows the payment status on the NAFEZA platform • If the importer chooses the one form to pay, all the amounts to be collected will appear in a standard form that appears to the importer on the NAFEZA platform. • If another system is selected, two customs and regulatory invoices are shown. 2.11.7. Customs receives the amount and uploads the payment status to a NAFEZA platform, and a release permit is issued. 2.11.8. After the payment process is completed, the importer or clearing agent can print the customs statement and customs clearance on the NAFEZA platform.
Output criteria to exit the business process	Customs statement
Average time required to complete this business process	• Average 1 day (customs clearance agents are still operating just as before, only with automated procedures (not digitized)). Each approving authority at the other end is still following its own separate procedures/approval process without integration with others. • The results of the Egyptian Food Safety Authority analysis may take up to 13 working days

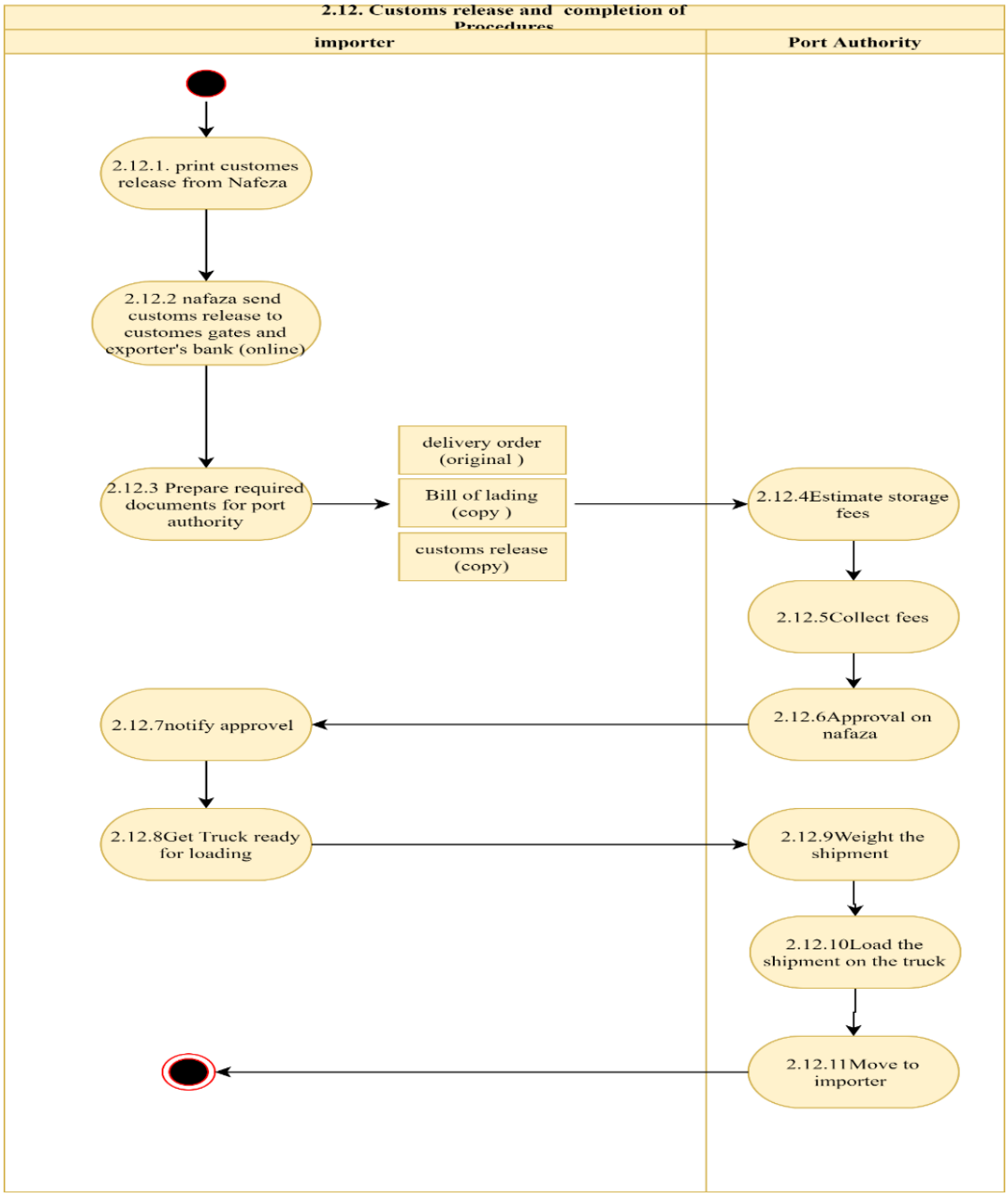
Core business process area 2.12: Customs release and completion of Procedures

Figure 3.27. "Customs release and completion of Procedures" use case diagram

The use case diagram shown in Figure 3.27 suggests that "Customs release and completion of Procedures" process requires the participation of:

- Importer
- Port authority

Figure 3.28. “Customs release and completion of Procedures” activity diagram



Name of process area	**2. Ship**
Name of business process	***2.12. Customs release and completion of Procedures***
Related laws, rules, and Regulations	• Customs Law No. 207 of 2020 and its executive regulations issued by Minister of Finance Decree No. 430 of 2021 and their amendments • Law No. 118 of 1975 promulgating the Import and Export Law and its executive regulations issued by Ministerial Decision No. 770 of 2005 and their amendments • Decision of the Minister of Finance No. 367 of 2021 regarding prior customs clearance procedures • Procedures Circular No. 8 of 2021 regarding procedures of the specific tariff manager after completion of the appraisal process and turning the declaration "into approved and under payment" • Reminder Procedures Circular No. 2 of 2021 regarding the documents to be submitted for the release of imported and exported goods • Procedures Circular No. 23 of 2020 regarding prior release • Procedures Circular No. 5 of 2018 regarding the existence of six customs release tracks • Decision No. 25 of 2022 regarding the release of perishable goods for which no documentary credit has been opened, with the submission of a letter of guarantee or cash deposit for the value of the released goods • Import Circular No. 22 of 2020 regarding goods released under custody and not withdrawn from ports within 72 hours • Decision of the Minister of Trade and Industry No. 776 of 2019 regarding the importer's obligation to transport and store these goods under custody and supervision of the competent regulatory authorities within 72 hours of passing the external inspection, provided that they are not disposed of until the result of the final inspection appears, and a certificate of conformity is brought. • Decision of the Ministry of Industry to allow customs to exceed the increase on the final invoices by no more than 5 percent • Law No. 73 of 2019 promulgating a law establishing an authority for regulating internal and international land transport
Process participant	• The port authority • The importer
Input and criteria to enter/ begin the business process	All customs fees have already been paid

Activities and associated documentary requirements	2.12.1. After the payment process is completed, the importer can print the customs statement and customs release on the NAFEZA platform. 2.12.2. Customs clearance is sent to the customs gate, the importer's bank, and the archive of the custom. By NAFEZA 2.12.3. The importer delivers to the port authority the following (an original document of the delivery permit, a copy of the bill of lading and a copy of the customs release document). 2.12.4. The Authority appraises the storage fees at (EGP 1/per day/per ton + 14% added value). 2.12.5. Fees are collected by the port authority. 2.12.6. After paying the authority's fees the importer is given exchange approval on the NAFEZA platform. 2.12.7. The importer is notified of approval. 2.12.8. The importer can enter their trucks to load the shipment through the customs release number. 2.12.9. The shipment is weighed before exiting the customs gate (EGP 1 per ton). 2.12.10. The shipment is cleared from customs and transported to the importer's facilities. 2.12.11. The shipment will be moved to the importer warehouse.
Output criteria to exit the business process	The exit of the goods from the port and the arrival of the goods to the warehouse.
Average time required to complete this business process	1 day (The results of the Egyptian Food Safety Authority analysis may take up to 13 working days, but it is possible for the importer to withdraw the shipment to their factory, but they cannot perform any operations on it until they obtain a positive NFSA sample.

3C. Process area 3: Pay

(Already concluded in shipment)

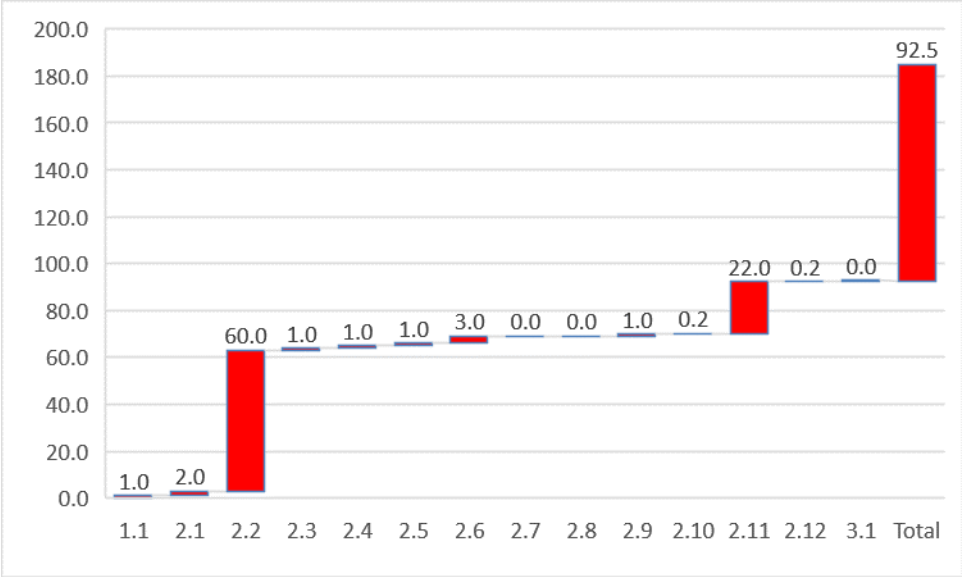
3C.1. Conclude payment

Once each party (buyer and seller) has fulfilled its commitments (seller: sending the shipping documents; buyer: making the payment), the pay-process is considered completed. Since the money and document transfers are across two countries, it can take up to 45 days. Payment for the palm oil is concluded in process 2.2 & 2.5 "Letter of Credit". Therefore, no extra graph is drawn for the pay-process.

4. Time Procedure Chart of Palm Oil imports to Egypt

Figure 4.1 presents a time-procedure chart listing core business processes that are required to be carried out to import Palm Oil into Egypt. The time procedure chart suggests that it takes, on average, 93 days for the importing enterprise to fulfill commercial and regulatory requirements of 14 palm oil business processes. Figure 4.1 also shows that only 2 business processes consume 89 percent (82 days) of the time required to import palm oil into Egypt. The 82 days are divided as follows: (core process 2.2) Apply for letter of credit; 60 working days and (core process 2.9) Take samples and receive shipment under reservation 22 working days.

Figure 4.1. Time procedure chart for palm oil imports



Part II: "To Be" Scenario

1- The Methodology of dealing with the "To Be" scenarios

The "To Be" scenario starts with identification of key problem areas followed by suggestions of corrective solutions based on stakeholders' opinions, international experiences and ECES's analysis and expertise.

Many key observations need to be made here before getting into the details of analysis of the specific product:

1- Even though the Customs Authority looks like it is the core of all bottlenecks associated with the importation process, the fact of the matter is that the Customs Authority is the interface window with several other organizations such as port authorities, many inspection organizations (around 38), among others. All deficiencies or weaknesses in these organizations are reflected in Egyptian importer dealings with Customs. As a matter of fact, the slowest junction determines the pace of the entire import process.

2- The interface system "NAFEZA" itself has numerous deficiencies in its original design and implementation, as it does not achieve the full depth integration of processes that was originally promised, and which leads to the maximum efficiency needed. Instead, the system is expanding horizontally to additional organizations. This is complicating problems and adding unnecessary layers of bureaucracy.

3- The above does not negate the fact that the Customs Authority needs serious reform and complete digitization. The fact that "documentation cycle" in Egypt is slower than "product cycle," is clearly unlike the norm in the entire world.

4- There are significant differences in costs and procedures between different ports even for the same product. This problem means no proper estimation of duration or costs for the import process as a whole, not to mention heavy traffic on ports with "easier" procedures.

5- Serious focus on solving all bottlenecks associated with import processes is needed to take full priority because it is the real heart of all problems regarding trade process. In fact, solving it is a precondition for exportation itself, raising competitiveness and improving business environment.

6- Governmental orientation needs to be changed drastically from targeting “import prohibition” to “export promotion” because both targets have the same positive effect on foreign exchange.

7- Both targets will not be achieved unless there is trust in the private sector. The perception and belief by authorities that the private sector is corrupt until proven otherwise needs to be reversed to a belief that corrupt behavior is rare and cannot be the basis upon which all policies, and surveillance actions are decided.

8- A sizable portion of all problems associated with trade processes is linked primarily to the Ministry of Finance with its different departments and a secondary responsibility falling on the Ministry of Trade and Industry. The core of these problems lies in the fact that the Ministry of Finance has “collection of Money” as its main objective. Furthermore, the limited coordination between the Ministry of Finance and the Ministry of Trade and Industry, deepens the misconception and misunderstanding of the industrial and export development objectives.

9- As per the best practices, increasing efficiency and transparency of the import process is dynamic in nature. It means that it requires continuous institutionalized involvement of and consultation with different stakeholders, especially the private sector, not to mention the high flexibility in preparation of strategies, implementation mechanisms and regular monitoring and evaluation.

The detailed methodology is as follows:

Analyzing the business process for importing Palm Oil and its Fractions revealed several bottlenecks. Those bottlenecks arise due to a problem either in the design of the system itself, or in the implementation of the system and finally the lack of relevant policy action as clarified in Table 1 below.

Table 1. Definition of different types of problems

Nature of the Problem	Definition
Failure in system design	When the system fails to achieve the objective due to inadequate planning, missing elements, adopting partial solutions, or system adopted is not consistent with what is adopted internationally.

Failure in system implementation	When the system fails to achieve the objective due to problems related to poor management, employees' resistance, lack of human capabilities to implement the new system
Lack of relevant policy action	The problem has not been addressed by appropriate policy action, even though the system design and system implementation exist

The following table proposes a list of corrective actions to each of these bottlenecks and the expected impact. Corrective actions are classified by the timeframe of implementation, with immediate actions denoted by the letter (I), short term (2-5 month) actions denoted by the letter (S) and medium-term actions denoted by the letter (M) (6 months-year). The time-frame is intentionally short because the problems are very urgent to address. Several immediate measures are meant to reduce the extent of the problem until deeper corrective actions are adopted.

These proposed corrective actions fall into two categories as follows:

- Category (A): First-best solutions, which are radical changes based on international experiences
- Category (B): Second-best solutions, which are improvements of the existing system

Both categories are included in our analysis to make sure that the "To Be" scenario is realistic and viable.

Several international experiences have been studied with respect to problems related to system design and system implementation. Reference is made in the table 2 to the relevant international experience. Following is the table of the modified business process. Charts are in a separate document due to different paper size.

2. Detailed table for the modified trade process (To Be)

Table2. Proposed corrective actions in the business process of importing palm oil and its fraction (HS1511)

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
					Process of import	**Others**
Pre-requisites						
	- Importation of palm oil requires multi-staged registration procedures with several organizations (namely NFSA, GOEIC, IDA, GAFI and Customs Authority). - Although most of documents are almost the same, there is not enough coordination among the three organizations - IDA, in particular, is a major bottleneck regarding industrial licenses. - The information about time, fees, documents, and procedures required is not necessarily available in an	Failure in System design and implementation	Türkiye and Gulf countries	- Complete digitization of all services related to trade process on NAFEZA platform. So, users can apply electronically through one online user-friendly platform (S) - All information regarding documents, time, fees should be available on the internet in a timely, updated format, and in a binding manner all (I). - IDA must implement law 15 / 2017 for easy	- Speed up pre-requisites for import processes and remove duplicate document submission	- Improve the overall business environment, which will eventually lead to a rise in investment, production, and exports

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	updated format on their websites. - Failure to renew any pre-requisite documents will stop the import process at any stage.			issuance of industrial licenses, especially for low-risk activities (I) - There is a need to improve capabilities of IDA employees to be able to provide efficient services to the business community in a professional way. (S) **Radical Change (M):** - Expand vertical and horizontal digitization for all business services: trade, licensing, land finance, etc. So, users can apply electronically through one online user-friendly platform		
	- Suppliers to Egypt face several difficulties regarding	Wrong policy action	No other country applies such procedures	- Cancellation of Decree 43 altogether, since there is no	Widen the suppliers base for Egyptian imports	Improve Egypt's image in the trade world and avoid

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	MTI Decree No 43 /2016 that involves: - lack of transparency and ambiguity in GOIEC registration procedures, long procedure duration, and costly informal payments.			benefit from applying it to any of the parties involved		reciprocal acts by other countries against Egyptian products.
1. Buy						
Trade steps of relevance to production						
2. Ship						
2.1 Obtain ACID number	- Since October 2021, the Advance Cargo Information system (ACI) is applied. Egyptian importers face several problems: - System is not user-friendly	Failure in System design and implementation	UAE, Brazil	- Improve system design to overcome the current challenges. (I) - To be user-friendly	- Facilitation of obtaining ACID number, decrease duration through	- Improve cross border trading and increase the efficiency of trade

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	- Unnecessary details are needed for the registration process - The system accepts original documents only - Any change of information / correction is not allowed, such as changing bank details or ports. - Weak technological infrastructure interrupts the registration process - Any small mistake in the registration process requires re-submission of all data. - The system cannot automatically fill the detailed required data from the documents uploaded. - Users of the system are not informed of periodic changes in a timely manner			- Remove unnecessary details for registration - To accept changes and edits - To accept photocopies - Strengthen the technological infrastructure to make sure the system is working efficiently - Developing the system to fill automatically the detailed required data from uploaded documents. - Proper and timely communication with users on the latest changes in relevant	increasing system efficiency and eliminating step No. 2.1.3 (Figure 6-4). - Minimize human intervention across the registration process and reduce errors - Egyptian importer will get ACID number along with their risk category and all details regarding the import process including risk	procedures, time… etc. - Maximum efficiency of trade process will be achieved

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
				procedures legislation, fees. etc., - Radical Change (M) - Use 4th revolution technologies, especially artificial intelligence (AI), machine learning (ML) and big data (BD) to intelligently: - distinguish original from copies - classify products according to their level of risk - Determine the following proper actions regarding Customs inspection and sampling percentage and frequency for each	factors for their product, upcoming steps across Customs procedures - Finally, importer can predict the time and cost for the whole import process.	

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
				category based on two criteria: 1. The product risk predetermined factor based on an algorithm 2. Credibility of Egyptian importers. - categorize importers as per their historical behavior based on their credibility and correctness of all previous procedures into red, yellow, and green. - Identify a different process as per category (green is the fastest one)		
	- The ACI system was implemented, with neither proper involvement of relevant stockholders nor a	Lack of a proper policy action		- Institutionalize the continuous involvement of different stakeholders	- Remove bottlenecks which are	

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	testing phase to improve the system upon receiving feedback from users.	Failure in system implementation		in designing the system and its implementation mechanism, and dynamic changes needed	causing problems	
2.2. Apply for letter of credit	- Applying for LC requires submitting almost the same documents that were uploaded on NAFEZA. - Shortage in foreign currency plus CBE March Decree resulted in long durations to issue LCs. - It resulted in raising the prices of Palm oil and its fractions locally - Although palm oil and its fractions as raw materials are exempted from the CBE decree; all partners across the supply chain are still subject to the decree, so they face	Wrong policy action	Central bank directs intervention in B2B relation does not exist worldwide	- Cancel the CBE decree completely (as announced by CBE, this is expected to take place by December 2022) (I) - The banking system needs to give a higher priority to quickly cover for importing intermediate products (I) - Involvement issuing LC on NAFEZA platform	- Fast issuance of letter of credit and import process, especially for intermediate inputs - Decrease inflexible tendencies at all levels in the entire chain - Remove redundant resubmission	- Solve production problems and remove disruption of the whole supply chain - Maintain Egypt's share in foreign markets depending on palm oil, such as food industries and keep up

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	many problems that disrupt the manufacture of a lot of food industries.			- Establish institutional mechanism for involvement of and consultation with different stakeholders in economic policy process (S)	of same documents	with competitors
2.3. Preparing and approving shipping documents	- As per the ACI system, the foreign supplier must upload all documents related to the shipping transaction on the CargoX platform, which is linked to the NAFEZA platform. - Suppliers claim that registration on CargoX is complicated, since it is not user-friendly, requires much detailed information, and high costs of around $165 per transaction - Enforcing suppliers to register on CargoX only is considered	Failure in system design & system implementation	Government direct intervention in B2B relationship does not exist in the world	- It is necessary to allow any digital corridor services other than CargoX to be used by foreign suppliers. (I) - Revisiting the cost of registering on CargoX. - Form 4 is automatically issued through NAFEZA	- Facilitate preparing and approving shipping documents	- Expand the supplier base for Egypt

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	as Government interference into the B2B relation. - Usually, form 4 is issued manually					
2.6. Offloading	- All procedures related to offloading are done totally outside the NAFEZA platform - There is a lack of transparency regarding procedures, duration, cost for offloading process, especially that they are not unified across all Egyptian ports.	Failure in system design and implementation		- Cancel separate application by having it take place automatically on NAFEZA. (I) **Radical Change (M)** - Completely digitizing the whole import process implies automatically applying for offloading - Adding fees to the unified invoice paid at final release.	- Facilitate offloading process, increase transparency regarding the procedures, duration, and cost - Minimize human intervention	- Facilitate another part of the import process that activates trade and increases Egypt's competitive ness.
2.8. Obtain 46 & examination numbers	- Egyptian importers must pay additional costs to the Central Manifest to modify any item in the main import documents	Failure in system design & system implementation		- Increase transparency of obtaining number 46 and related costs	- Facilitate obtaining number 46 Without	- Reduce the informal fees

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	- Actual costs are determined through negotiation with employees. - Egyptian importers often faces mandatory modification due to simple technical problems in the NAFEZA Platform. - (For example, the number of the container cell contains 19 digits, while NAFEZA allows for only 9 digits)			paid by Egyptian importers (I) - Improving the NAFEZA system to eliminate technical problems (I) - Modifying the Manifest can take place directly through NAFEZA platform (I) - Radical Change (M) - Complete digitization of the whole import process implies reviewing the importance of this step altogether so it may be canceled if there is no need for it or convert it to be fully automatically implemented.	exaggerated costs borne by Egyptian importers	- Speed the import process and increase the efficiency and transparency

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
				- Adding the fees to final unified invoice paid at the final release.		
2.9. Take samples	- There is usually miscommunication between the NAFEZA platform and the National Food Safety Authority (NFSA), so the latter are not necessarily receiving inspection requests. - The importer cannot predict the time taken to get the inspection results of samples - The determined date may be delayed if port is crowded (such as in case of Adabiya port) - It takes a long time to get results from NFSA due to: - NFSA usually not having a representative in each port, so samples are inspected in Cairo	Failure in system design & implementation		- Developing the NAFEZA platform to be well linked with all inspection authorities so they properly receive the inspection requests. (I) - To set a timeframe regarding the steps of sample inspection by NFSA (I) - Fees paid electronically to NFSA (I)	- Speed sampling process and decrease its time	- Increase the efficiency and transparency of taking samples and hence the release process

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	- Importer must pay fees in Cairo					
	- The Egyptian Customs and inspection authorities inspect each shipment even if it comes from the same supplier and imported by the same Egyptian importers - The risk assessment system mentioned in new Custom law is not implemented, and there are no clear criteria on which risk is assessed	Failure in System design and implementation	- Countries apply various risk management systems for imports - USA and Canada use a scoring system with a scale from 1 to 10 - Türkiye applies different colored tracks	- There is a need to specify the criteria on which risk will be assessed. (I) - Egyptian Customs in coordination with different inspection authorities should apply the risk assessment system that has been mentioned in the new Customs law to easily categorize what products should be inspected and what should not. (S)		- Facilitate another part of the import process that activates trade and increases Egypt's competitive ness.

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
			based on risk of imports			
			Most countries all over the world	Radical Change (M) - Using 4IR technologies in the complete digitization of the whole import process implies that the system will automatically: - Classify products according to their risk - Determine the following proper actions regarding Customs inspection and sampling percentage and frequency for each category based on two criteria:	- Minimize the human intervention in sampling process - Cancel the direct relation between the Egyptian importer and inspections authority (cancel step 2.9.6 of AS-IS scenario and all related steps - Minimize the duration and	

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
				1. The product risk predetermined factor based on an algorithm 2. Creditability of Egyptian importers. - one inspection window in each port receives the inspection request automatically - Egyptian importers can trace their transaction step by step through their account - All fees will be paid electronically in one user-friendly platform	cost of inspection - Add all fees to the unified invoice paid at final release	
2.10 Customs detection and inspection	- In case of disagreement between the Egyptian importer and the Customs Authority regarding HS code,	Failure in system design & system implementation		- To set time-frame regarding the duration of solving	- Speed up the detection and inspection process	- Increase the efficiency and transparency

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	the debate will be raised to the Chemistry Administration. It might take 15-20 days or more to resolve the problem, in addition to the Egyptian importer bearing the costs of inspection, transportation, and additional storage costs. - The Chemistry Administration is the only entity authorized to do so, and usually has multiple disputes awaiting resolution.			disputes for product code. (I) - Improve the procedure of the Chemistry Administration to speed the process of solving disputes. (I)		of the release process
	Customs detection usually takes place in the absence of using 4IR technologies		UAE Brazil	**Radical Change (M)** - Using 4IR technology to digitize and automate as much of the import process as possible. - The following are proper actions regarding Customs	- Increase efficiency and transparency of inspection and detection - Decrease load on Customs - Minimize human intervention	- Facilitate another part of the import process that activates trade and increases Egypt's

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
				inspection according to the risk category of product and importer	- For green products, the importer will shift to step 2.10.1 in AS-IS scenario and all steps before this step will be canceled	competitive ness.
2.11 Valuation and Customs Statement	- In case of approval on the samples the results will be uploaded on the NAFEZA platform, and the appraisal stage begins. - The appraisal stage is not necessarily held in the arrival port and as such might take a longer time. - There is a lack of transparency regarding all the fees paid by the Egyptian importer as the unified	Failure in system design and implementation	In most international experience, it is determined intelligently.	- It is necessary that the appraisal stage is conducted in the port of arrival, to save time and benefit from the experience of port employees regarding the commodities (I) - Linking the NAFEZA platform with all relevant authorities and	- Speed valuation and release process - Increase transparency regarding the aggregated fees paid by Egyptian importer	- Facilitate another part of the import process that activates trade and increases Egypt's competitive ness.

Business Process Area	Bottleneck	Nature of the Problem	Relevant International Experience	Proposed Solution	Impact	
	invoice is not comprehensive. It excludes other fees such as fees of port authority and shipping agent.			entities electronically, so that Egyptian importer pays all fees once electronically. (I)		
				Radical Change (M) - Using 4IR technologies in the complete digitization of the whole import process implies that the system will automatically determine the total fees that should be paid electronically in one user-friendly platform	Increase efficiency and transparency of Customs valuation	

Finally, it should be stressed, that a dialogue with importers should be done on a regular basis, this is in addition to a consultation process with the importers before implementing any new policy, with a feedback mechanism on the implementation. It is also very important to consider the capabilities of implementing government agencies before putting any policy into action. This will lead to rebuilding trust between government and importers, and save efforts and time wasted with a definite positive impact on the business environment.

In conclusion, the time required to complete the business process for importing **palm oil** products will be reduced from currently 92.5 days (including indirect time) to just 24.95 days in the second-best scenario, and to 13.27 days in the first-best scenario as highlighted in charts (1), (2), (3) and table (3).

Figure 1. Palm oil – time chart, "As Is" situation

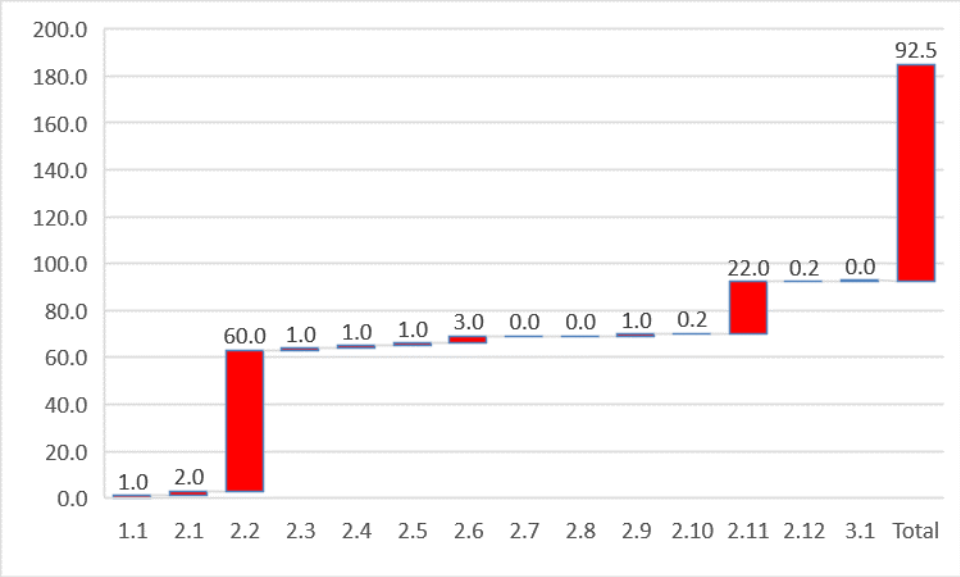


Figure 2. Palm oil – time chart, "To Be" scenario (second best)

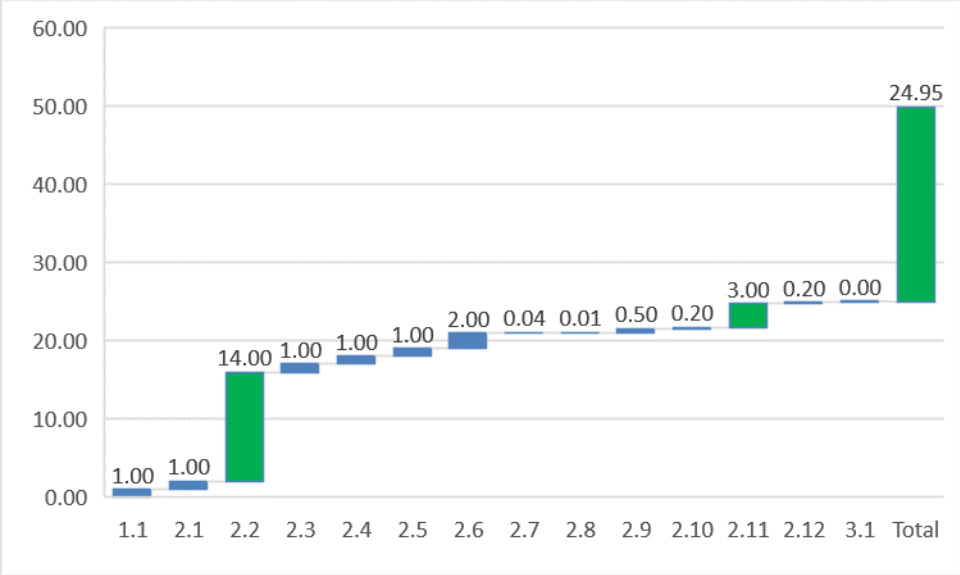


Figure 3. Palm oil – time chart, "To Be" scenario (first best)

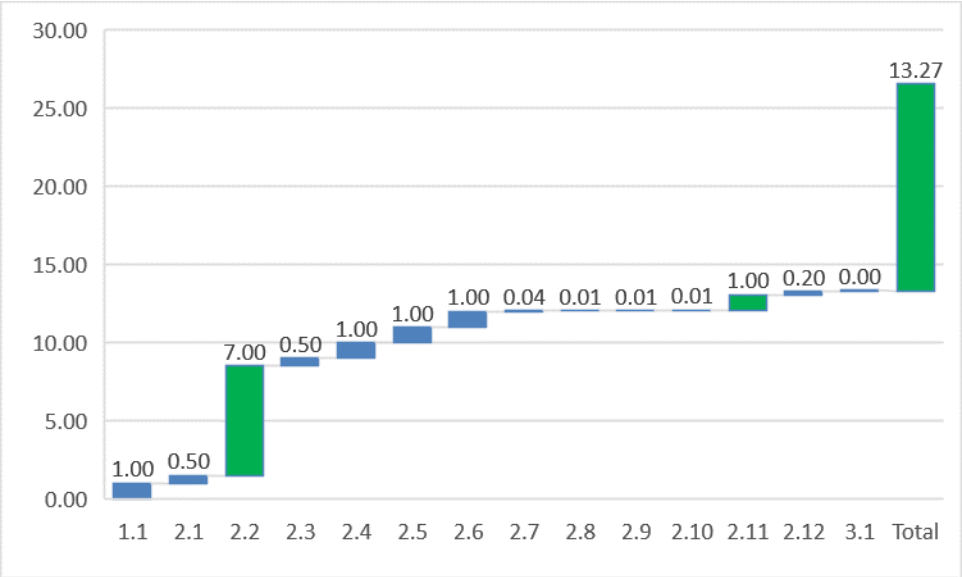


Table 3. Palm oil – timetable, first best vs second best scenario

Process Area	ID	Business Process	AS IS	TO BE (second best)	TO BE (first best)
Buy	1.1	Sales contract	1.00	1.00	1.00
Ship	2.1	Obtain ACID number	2.00	1.00	0.50
	2.2	Apply for letter of credit	60.00	14.00	7.00
	2.3	Preparing and approving shipping documents	1.00	1.00	0.50
	2.4	Reservation of storage tanks	1.00	1.00	1.00
	2.5	importer's bank received the shipment documents,	1.00	1.00	1.00
	2.6	Offloading	3.00	2.00	1.00
	2.7	Obtain delivery order	0.04	0.04	0.04
	2.8	Obtain 46 & examination numbers	0.01	0.01	0.01
	2.9	Take samples and receive shipment under reservation	1.00	0.50	0.01
	2.10	Customs detection and inspection	0.20	0.20	0.01
	2.11	Valuation and Customs Statement	22.00	3.00	1.00
	2.12	Customs release and completion of Procedures	0.20	0.20	0.20
Pay	3.1	Conclude payment	0.00	0.00	0.00
	Total		92.45	24.95	13.27