



Export Procedure for Frozen Cooked Tuna (*Thunnus* sp.) Loin

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ABSTRACT

This study aims to analyze the export procedure of cooked frozen tuna loin (*Thunnus* sp.) at PT LSS Banyuwangi, a tuna product that is highly sought after in international markets. The research method used includes observation, interviews, and documentation to collect primary and secondary data. The results show that the export procedure of cooked frozen tuna loin involves several stages, from production preparation to shipment to international consumers. This process includes quality inspection, health and food safety certification, packaging, and transportation using a cold chain system to maintain product freshness. This study also discusses the required documents, such as export permits, health certificates, and regulatory documents from the destination country. Therefore, to improve export efficiency and success, companies need to ensure that each stage of the procedure is carried out correctly and in accordance with international standards to ensure that the product reaches consumers with the best quality.

Keyword:

Export Procedure, Cooked Frozen Tuna Loin, Cold Chain, Health Certification, Export Documents, Product Quality.

INTRODUCTION

As a marine resource possessing substantial economic significance, tuna occupies a pivotal position in national and global markets (Huda et al., 2011; Sotelo et al., 2018). In Indonesia, tuna constitutes a critical component of the marine fisheries subsector and has contributed considerably to the nation's foreign exchange revenues. The tuna present in Indonesian maritime regions is categorized into two primary classifications, large and small, with their distribution being

profoundly affected by the aquatic environment's thermal conditions and bathymetric characteristics (Syamsuddin et al., 2024; Yati et al., 2024).

The global appetite for tuna is persistently rising, catalyzing substantial growth within the tuna industry. Indonesia, acknowledged for its prominent tuna output, has considerable prospects to amplify its presence in the global marketplace, including fresh, frozen, and canned tuna varieties (Hartanto, 2021;

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Khan et al., 2024). Japan consumes the freshest tuna, whereas the canned variety is mostly shipped to the United States and European Union. In contrast, tuna sourced from community fisheries is primarily directed towards fulfilling domestic consumption requirements.

The Ministry of Marine Affairs and Fisheries (2018) indicates that tuna falls under a category of marine fish comprising multiple species of the Scombridae family, mainly within the *Thunnus* genus. Compared to the common white flesh of many fish, tuna is distinct in that its flesh can appear from pink to dark red. This particular shade can be explained by the heightened amounts of myoglobin in the muscle tissues of tuna when set against other fish varieties. Certain larger species of tuna, such as the bluefin tuna, can remarkably elevate their blood temperature beyond that of the surrounding water through muscular activity. This physiological adaptation enables them to inhabit colder aquatic environments and to thrive under diverse ecological conditions.

Wainwright & Lauder (2020) describes the tuna fish as having a vivid blue color on the top and a more subdued color underneath. The anatomical structure of the tuna fish resembles that of a torpedo, characterized by an elongated, cylindrical body adorned with diminutive scales. Typically, the length of tuna fish ranges from 40 to 200 centimeters, with a mass varying between 3 to 130 kilograms. The flesh of the tuna presents a spectrum of colors from pink to deep red. This phenomenon can be attributed to the elevated concentration of myoglobin found in tuna musculature relative to other fish species (Hongji et al., 2021).

In the view of Meidutė-Kavaliauskienė & Činčikaitė (2023), exportation is interpreted as the undertaking of transacting the sale of merchandise and services from the customs territory, compliant with

prevailing legal structures and provisions. The customs territory encompasses the entirety of a nation's geographic area, within which import and export duties are imposed on all commodities that traverse the boundaries of this territory, except designated regions that are explicitly classified (by statute) as areas excluded from the customs territory. A nation's exports typically comprise goods and services manufactured within its domestic confines. Yet, it is achievable for a state to participate in the commerce of imported merchandise or to enable the re-export of particular items initially received.

Given the context above, the present research comprehensively analyzes the export protocols for frozen-cooked tuna loins at PT LSS. This study aims to elucidate the various stages and procedural methodologies employed throughout the exportation process of frozen-cooked tuna loins.

RESEARCH METHODS

The methodologies employed in this investigation encompass both survey and internship approaches. The survey approach is implemented to acquire primary data via direct observation and field interviews, aligning with the study's objectives. Conversely, the internship approach constitutes a practical learning endeavor to enhance skills and experience that are transferable to future professional endeavors.

Primary data were acquired directly from authentic sources via interviews and field observations. The objective was to gather information about frozen-cooked tuna loin processing procedures at PT LSS (Sugiyono, 2019). Secondary data were sourced from indirect channels, including corporate documents, daily reports, and additional references that substantiate the research (Sugiyono, 2019).

Data were acquired using three principal methodologies: observation, interviews, and documentation. During the

observational phase, a direct examination was conducted on the production process of frozen cooked tuna loins, focusing on the procurement of raw materials at PT LSS (Sugiyono, 2019). Moreover, the interview process was executed through questions and answers with pertinent stakeholders, employing a questionnaire to elicit more comprehensive insights. Additionally, the documentation method encompasses gathering data in the form of records, reports, and visual materials that substantiate the research (Sugiyono, 2019). The amassed data were analyzed systematically, categorized, and organized to yield coherent and comprehensible conclusions.

RESULTS AND DISCUSSION

Export Procedure

Export procedures encompass a systematic series of actions that an exporter must undertake, commencing with the preparation of their merchandise and culminating in the loading of the goods onto the vessel at the designated port of loading in compliance with relevant governmental regulations and customs about international trade (Utama & Muthmainah, 2019). The export procedures implemented at PT LSS encompass the comprehensive workflow initiated upon receiving export orders, followed by the preparation of goods, the processing of requisite documentation, and, ultimately, the dispatch of goods to foreign destinations. This procedural framework facilitates the seamless exportation of goods, ensuring adherence to legal mandates and conformity with established international standards.

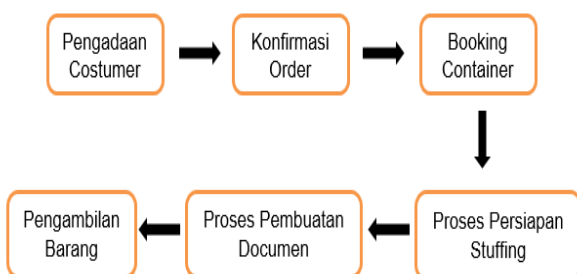


Figure 1. Export procedure chart at PT LSS

Pengadaan Customer

The acquisition of customers constitutes a pivotal preliminary phase in the exportation procedure, which is primarily concerned with identifying and securing prospective clientele within international markets. This endeavor commences with collecting data about potential customers who align with the PT LSS market. Such information may be sourced through various channels, including online resources, interactions with peers from different organizations, and established business networks. After identifying potential customers, an introductory communication process is conducted through electronic mail, WhatsApp, or Line. Moreover, product specifications from PT LSS are dispatched to these customers for their consideration. Should the customer respond with feedback on the product specifications, the subsequent phase entails the bidding or negotiation process.

Upon the transmission and subsequent affirmation of the offer by the customer, the subsequent action entails the generation of a Purchase Order (PO) by the customer, which serves as a reference point for PT LSS. Following establishing an agreement between PT LSS and the customer, a sales contract will be formulated as a continuation of the PO. As articulated by Indonesia, I. B. (2015), a Sales Contract constitutes a document or correspondence of agreement between the seller and the buyer, emerging from the negotiation process. This document encapsulates numerous critical elements, including customer identification, customer domicile, and the ultimate destination for delivery. Furthermore, it encompasses a product description, quantity of orders, pricing of goods, total transaction value, and the method of shipment.

The Sales Contract encompasses comprehensive shipping particulars, which

comprise the destination, details of the recipient, and the established shipping timetable. The stipulations regarding payment are thoroughly elucidated, detailing the documentation requisite for the customer to facilitate the clearance procedure in the destination jurisdiction. Furthermore, the document incorporates pertinent information concerning PT LSS's banking coordinates pertinent to the payment process, specifications for product labeling and temperature controls, along with a designated section for mutual endorsement between the seller and the buyer. Through the utilization of the Sales Contract, the entirety of the export procedure is rendered significantly more organized and transparent for both involved parties.

Order confirmation

Upon the establishment of an agreement between PT LSS and the Customer, as evidenced by the execution of the sales contract, the subsequent procedure entails notifying the production team to initiate preparations for the product in accordance with the specifications outlined in the confirmation of goods, which is facilitated through the dissemination of the sales contract attachment. Additionally, it is imperative to inform the Quality Control team to compile the requisite documentation as delineated in the sales contract.

Booking Container

Reserving space within a shipping container constitutes a pivotal phase in the exportation process. PT Lautindo Sinergy Sejahtera (PT LSS) procures containers via shipping companies or international shipping service providers. The initial steps in this procedure commence upon the fulfillment of the stock of goods by the quantity agreed upon with the purchaser. Two predominant shipping methodologies are frequently employed, specifically Free On Board (FOB) and Cost and Freight (CNF). In the FOB methodology, the

financial responsibility for shipping expenses falls upon the customer, thus necessitating that the container reservation process be conducted by the customer, who typically designates an agent to facilitate the ordering and manifesting processes. Conversely, in the CNF methodology, the exporter bears the responsibility for shipping expenses to the destination port, which encompasses processing export permits, taxes, and loading fees.

The subsequent phase involves the generation of the Shipping Instruction, which encompasses a comprehensive delineation of the merchandise, including its quantity, net weight, loading date, and anticipated arrival time of the container. This document further enumerates the container specifications that have garnered approval from PT LSS regarding the interior and exterior of the container. Following the creation of the Shipping Instructions, the forwarding entity will facilitate the processing of the container requisition to the shipping enterprise. Upon the affirmation of the order, the forwarding entity retrieves the container from the shipping depot. It meticulously documents the condition of the container through photographic evidence before its dispatch to PT LSS.

The concluding phase involves the transportation of the container to PT LSS for the purpose of the loading or stuffing operation, which is accompanied by a waybill serving as evidence of delivery. Through this method, the export process can move forward without issues and stay aligned with the pertinent regulations.

Stuffing Preparation Process

The export division shall generate a Sales Order (SO), which constitutes a formal document encapsulating an order placed by a customer, thereby signaling that the stuffing process is to be initiated. Subsequently, this document is directed to the warehouse division to facilitate goods

preparation. The Sales Order form encompasses various critical details, including customer information, Sales Contract number, and stuffing date, serving as a notification to the warehouse personnel to prepare the goods by the established schedule. Furthermore, this document delineates the product name, product code, and the quantity of goods designated for loading during the stuffing procedure.

Subsequent to the establishment of the Sales Order, the subsequent procedure involves the formulation of a Goods Request Form. This document functions as an official alert indicating the necessity for a product sample to facilitate the issuance of a Health Certificate, which is a certification for export conferred by the Fish Quarantine and Fisheries Product Quality and Safety Control Center (BKIPM). This certification asserts that fishery products are deemed secure and appropriate for human consumption. The Goods Request Form is directed to the warehouse and encapsulates details such as the item code, item designation, quantity, unit of measure, and weight of the requested sample.

Upon the completion of the Goods Request form, this document is subsequently forwarded to the warehouse division for additional processing. Also, the packing procedure will be conducted by the warehouse crew while being monitored by the Quality Control (QC) team to make sure that the goods are enclosed following the established criteria. Following the conclusion of the stuffing process, the warehouse team will generate a delivery note that includes specifics regarding the quantity of goods dispatched. By employing this methodology, each stage of the export process can be executed in a methodical and comprehensively documented fashion.

Export Document Creation Process

Generating export documentation within the export procedure at PT Lautindo

Sinergy Sejahtera (PT LSS) encompasses several critical phases. At the outset, the Exim team is responsible for producing the primary document that includes an invoice, packing list, Health Certificate (HC), plus a request for a draft Bill of Lading (B/L) and Certificate of Origin (COO) to be forwarded to the buyer through the freight forwarder or a different third party. An invoice serves as a transactional document delineating the payment amount required from the importer and functions as a reference for the finance and accounting departments of the organization. The packing list comprises detailed information regarding product descriptions, quantities, weights, fish lots, and packaging specifications. In the meantime, the Health Certificate, which BKIPM issues, is designed to guarantee the safety of fishery products and is valid exclusively for a singular export transaction.

Upon the completion of the stuffing operation, the warehouse personnel will generate a Comprehensive Packing List along with a container loading schematic to be forwarded to the purchaser. This document encompasses details regarding the nature of the product, quantity, weight, date code, and specifications pertinent to the goods being dispatched. Furthermore, PT LSS must possess a Processing Eligibility Certificate (SKP), a prerequisite for Fish Processing Units (UPI), by the stipulations set forth by the Ministry of Maritime Affairs and Fisheries. The issuance of the SKP is conducted through an online framework that involves various stages, including account registration, application submission, oversight by the Director General of PDSPKP, and systematic audits occurring every six months to two years, contingent upon the SKP classification of the entity.

The subsequent phase involves the submission of the Export Goods Notification (PEB), a requisite customs

document that exporters must present before the goods enter the loading zone. The PEB is facilitated through the engagement of an intermediary (PPJK), and upon receiving approval, the exporter will acquire an Export Service Note (NPE), which is essential for the entry of goods into the customs jurisdiction. Moreover, the organization must secure a Bill of Lading (B/L), a formal document released by the shipping agency that acts as evidence of the goods' shipment to the chosen country. The Bill of Lading encompasses critical details such as the identity of the sender (shipper), the recipient (consignee), a description of the goods, net weight, and gross weight, as well as the shipping method (FOB or CNF).

Furthermore, having a Certificate of Analysis (COA) is compulsory, assembled by the Quality Control (QC) section, that features a detailed outline of the product and the results from quality inspections to guarantee that the product satisfies international regulations. The COA may also be utilized to facilitate the acquisition of concessions or exemptions on import duties within the host nation. Lastly, the Industry and Trade Service conferred a Certificate of Origin (COO) at the Regency, City, or Provincial level (Disperindag). The issuance of the COO is executed through an online platform via the Disperindag website, necessitating the upload of various documents including invoices, packing lists, Export Approval Letters (PEBs), and Bills of Lading. Through these meticulously organized procedures, PT LSS guarantees that the exportation process is conducted in accordance with the relevant legal provisions and regulations.

Conditions in the Export Process

The agreement for export and import serves as a structured accord between two parties, which can be a business entity or an individual, known as the exporter and the importer, to partake in a contractual deal for the trading and obtaining

products, Rori, J.C. (2020). The quality control of the final product encompasses four distinct categories, specifically microbiological, organoleptic, chemical, and temperature monitoring assessments. The ultimate quality of the product is a decisive factor in determining its readiness for exportation. To ascertain the quality of the final product at PT LSS, one must consult the company's established quality guidelines. This procedure guarantees that the product is adequately prepared for export and conforms to the requisite standards from the raw materials to the final product's quality.

Health safety checks through microbiological analysis are executed to ascertain that frozen cooked tuna loin products are acceptable for human consumption and free from dangerous microorganisms, such as *E. coli*, *Salmonella* spp., and *S. aureus*. The company executes this analysis in collaboration with an external laboratory.

Organoleptic evaluation employs human sensory perception to evaluate the quality of products, including attributes such as hue, aroma, tactile characteristics, and visual presentation. This assessment is crucial for identifying any impairment or degradation in product quality.

Analyses of chemicals are executed to gauge a range of chemical factors, including histamine content, moisture percentages, sodium levels, and the existence of toxic materials such as mercury, cadmium, lead, and arsenic. The objective is to ascertain that the product complies with established safety and quality benchmarks.

Temperature surveillance is imperative to guarantee that frozen cooked tuna loin products consistently adhere to the designated temperature of -20°C during the entire operational continuum, from acquiring raw materials to the point preceding exportation. This procedure is essential for preserving product integrity

and mitigating the risk of quality degradation.

CONCLUSION

The Standard Operating Procedure (SOP) concerning Product Operational Standards, as instituted by PT LSS in its export operations, aligns with overarching export regulations, commencing with the identification of prospective customers and subsequent negotiations, followed by the issuance of a Purchase Order (PO) from the customer post the execution of a sales contract. Once the goods are deemed ready for export, communication is established with the shipping entity to facilitate the transportation of the goods, and essential export documentation—including invoices, packing lists, and requisite certificates—is meticulously prepared. The documents above are dispatched, and the export procedure is subsequently executed. Essential documentation required for export encompasses invoices, packing lists, Health Certificates (HC), fisheries certificates (SKP), Export Notification of Goods (PEB), Bills of Lading (BL), Certificates of Origin (COO), and Certificates of Analysis (COA), thereby enabling PT LSS to conduct its export activities seamlessly and without encountering substantial impediments.

REFERENCES

- Hartanto, T. R. (2021). Export Competitiveness of Indonesian Tunas-Skipjack Tunas-Eastern Littles Tunas in The United States of America's Market. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 24(2), 227–235. <https://doi.org/10.17844/jphpi.v24i2.36075>
- Hongji, H., Liuxiong, X., Cheng, Z., Xuefang, W., Rong, W., Wenbin, Z., Yingliang, Z., & Xiaojun, C. (2021). Biology Comparison of Bigeye Tuna (*thunnus Obesus*) Between the South and North in the Eastern Pacific Ocean. *Journal of Fishery Sciences of China*, 28(2), 222–230. <https://doi.org/10.3724/SP.J.1118.2020.20152>
- Huda, N., Rosma, A., & Wan Nadiah, W. A. (2011). The Tuna Fishing Industry: A New Outlook on Fish Protein Hydrolysates. *Comprehensive Reviews in Food Science and Food Safety*, 10(4), 195–207. <https://doi.org/10.1111/j.1541-4337.2011.00155.x>
- Khan, A. M. A., Jiang, M.-G., Yang, X.-Q., Apriliani, I. M., Purba, N. P., Wiryawan, B., Taurusman, A. A., & Pasaribu, B. (2024). Illegal fishing threatens the sustainability of future tuna commodities in Indonesia. *Marine Policy*, 159. <https://doi.org/10.1016/j.marpol.2023.105936>
- Meidutė-Kavaliauskienė, I., & Činčikaitė, R. (2023). Optimization of Customs Processes for Improving Cooperation Between Third-Party Logistics Companies. In *Lecture Notes in Intelligent Transportation and Infrastructure: Vol. Part F1379* (pp. 528–538). https://doi.org/10.1007/978-3-031-25863-3_50
- Sotelo, C. G., Velasco, A., Perez-Martin, R. I., Kappel, K., Schröder, U., Verrez-Bagnis, V., Jérôme, M., Mendes, R., Silva, H., Mariani, S., & Griffiths, A. (2018). Tuna labels matter in Europe: Mislabelling rates in different tuna products. *PLoS ONE*, 13(5). <https://doi.org/10.1371/journal.pone.0196641>
- Sugiyono, P. (2019). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&D dan Penelitian Pendidikan)*(A. Nuryanto. Alfabeta.
- Syamsuddin, M. L., Subiyanto, S., Bratasena, T., Syamsudin, F., Purba, N. P., Nurul Ihsan, Y., Puspita, A. R., Zainuddin, M., & Nofrita, N. (2024). Satellite-derived prediction on habitat modelling of skipjack tuna (*Katsuwonus pelamis*) in the Makassar Strait, Indonesia. *Geocarto International*, 39(1). <https://doi.org/10.1080/10106049.2024.2408281>
- Utama, D. P., & Muthmainah, R. (2019). Evaluasi Prosedur Kegiatan Ekspor

Pada PT Bintang Asia Usaha. *Journal of Applied Business Administration*, 3(2), 296–305.

Wainwright, D. K., & Lauder, G. V. (2020). Tunas as a high-performance fish platform for inspiring the next generation of autonomous underwater vehicles. *Bioinspiration and Biomimetics*, 15(3). <https://doi.org/10.1088/1748-3190/ab75f7>

Yati, E., Sadiyah, L., Satria, F., Alabia, I. D., Sulma, S., Prayogo, T., Marpaung, S., Harsa, H., Kushardono, D., Lumban-Gaol, J., Budiarto, A., Efendi, D. S., & Patmiarsih, S. (2024). Spatial distribution models for the four commercial tuna in the sea of maritime continent using multi-sensor remote sensing and maximum entropy. *Marine Environmental Research*, 198. <https://doi.org/10.1016/j.marenvres.2024.106540>