Competitiveness of Vietnam’s Frozen or Processed Tuna Export Industry in The United States and Canada Markets

Le Thi Xoan1*, Nguyen Thi Anh2, and Huynh Thi Hong Trang3

1University of Economics and Law, National University of Ho Chi Minh City, Vietnam
2Vanhien University, Vietnam
3KhanhHoa University, Vietnam

E-mail: xoanlt20702@sdh.uel.edu.vn; anhnt2@vhu.edu.vn; Huynhthihongtrang@ukh.edu.vn

*Corresponding author details: Le Thi Xoan; ltxoan@hcmunre.edu.vn

ABSTRACT

Purpose: This study aims to assess the competitiveness of Vietnam’s frozen and processed tuna export industry (code 160414) in the US and Canada markets.

Design/methodology/approach: In this study we used the Revealed Comparative Advantage index (RCA), export market share (MS) and export prices on a comparative basis with 9 of the 10 largest tuna exporters, and based on the theory of absolute advantage and comparative advantage to assess the competitiveness of the fish export industry tuna in the US and Canada markets.

Findings: Research results show that the competitiveness of Vietnamese tuna in the US and Canada markets is quite high, second only to Thailand and is tending to increase.

Originality/value: The research's findings highlight the importance of enhancing product quality, catering to consumer demands in importing nations so that Vietnam's tuna export products are in line with import market preferences, and taking advantage of opportunities provided by the CPTPP agreement to benefit from preferential tariffs when exporting to Canada in order for Vietnam to increase competitiveness and increase export scale in these two markets. To boost the competitiveness of Vietnam's tuna export business, particularly for the US market, it is critical to have trade promotion solutions, extend trade cooperation to benefit from advantageous tariffs, and match the product needs of importing nations. The long-term objective for Vietnam’s tuna export sector must be for sustainable and effective development.

Keywords: competitiveness; export; Tuna; Vietnam; United States; Canada market

INTRODUCTION

In addition to being one of the top ten tuna exporters in the world, Vietnam now exports the most valuable seafood, which is tuna. According to data from the Vietnam Association of Seafood Exporters and Processors (VASEP), processed tuna (code 160414) accounted for more than 280 million USD of Vietnam’s 733 million USD total seafood export value in 2021, or 8.25% of all seafood exported from Vietnam. The General Department of Fisheries of Vietnam, however, claims that there are still numerous challenges facing Vietnam’s tuna export business at the moment, which lowers its competitiveness and results in production inefficiencies. The fishing business is seeing a rapid increase in catch, and the absence of strong supervision, small-scale, independent fishing, and the rising risk of tuna resource depletion pose serious threats to Vietnam’s tuna industry. According to research by Luu Van Huy (2016) and (Nguyen, 2018) Vietnam’s tuna export goods are still of poor quality, the advantages distributed to value chain players are inequitable, production is carried out on a small scale, and there is a lack of connection, which results in inefficiency. In addition, tuna fishing areas are distant from the beach due to tiny boats, antiquated fishing, and preservation technology, thus the quality of tuna after exploitation is greatly diminished when docked at the port and Vietnamese fishermen tend to be low-skilled, which makes it difficult for them to use industrial technology that is more recent.

In the term of export markets, Vietnam sells tuna to more than 50 nations, in which the US is the main market for this product, Canada was Vietnam’s fourth-largest export market in 2021. In addition, there is fierce rivalry in these two markets and stringent standards for the quality of imported tuna. The US and Canada currently import tuna from more than 30 nations and Thailand has been the main tuna import market of both markets for more than 15 years.

The competitiveness of the export business has historically piqued researchers’ methodological curiosity, and the number of studies on this subject has been growing quickly in recent years (Paul, 2021). However, there hasn’t been much study done in Vietnam on the subject of the export industry's competitiveness in general, particularly when it comes to tuna export. Due to the fact that the idea of competition is seen from a variety of angles, there are several methodologies that may be used to investigate this subject. Due to the fact that the idea of competition is seen from a variety of angles, there are several methodologies that may be used to investigate this subject.
Due to the current state of Vietnam’s tuna export industry, it is critical to accurately assess the production potential as well as take advantage of both internal resources and external opportunities in order to boost efficiency, increase competitiveness, and work toward the long-term sustainable growth of Vietnam’s tuna export sector. As a result, in this study, we evaluate the competitiveness of Vietnam’s tuna export industry in the US and Canada markets, which are the primary export markets in the Americas for products with the 160414 code for tuna, using the Revealed Comparative Advantage index (RCA), export market share (MS), and export price, as well as based on comparison with the strongest competitors in these two markets. From there, locate scientific and practical underpinnings to suggest ideas to enhance this significant economic sector of Vietnam’s future in terms of competitiveness, efficiency, and sustainable growth.

THEORY AND LITERATURE REVIEW
According to Adam Smith, the reason why countries engage in trade is because the exporting nation’s product has a clear advantage over other nations’ products and is more affordable than the global average cost of production (Smith, 1776). Although this theory served as a foundation for the advancement of later theories of international trade, tracing their roots, there are limitations when it comes to simple assumptions, particularly the failure to address the question of whether a product does not have an absolute advantage over those of other nations. From there, the export scale may be increased much more. It is challenging to integrate both theories into the complicated reality of the present situations, despite the fact that both have limitations due to their basic underlying assumptions. However, these two ideas provided an explanation for the beginnings of international commerce, providing the groundwork for more theories on the topic. Additionally, this theory was used to determine a country’s export capacity or competitiveness in the export market. The scale of a country’s export sector is the most obvious indicator of the degree of absolute advantage or relative advantage it has over its rivals.

In 1958, Liesener relied on Ricardo’s theory of comparative advantage and came up with the idea of evaluating a product with comparative advantage through the analysis of its imports. Therefore, many subsequent studies have used export turnover indicators or export market share to evaluate renewable energy for the export industry of a nation (GALATI, 2012; Hidayat, 2015; Pascucci, 2018; Pratiwi, 2021; Supongpan Kuldiok et al., 2013; Wattanakul et al., 2021). Since 1965, Balassa had further refined this assessment and introduced the RCA comparative advantage index (Balassa, 1965) to date the RCA index has been used in most studies on the assessment of renewable energy for the export industry (Abdulkadir et al., 2020; Apridar, 2014; Fahmi, 2015; Kaimakoudi et al., 2014; Khalilqi et al., 2019; Mani & Yudha, 2021a; Yusuf et al., 2021).

The authors additionally employ a wide range of additional indicators and instruments to evaluate competitiveness, based on the objectives of the study as well as the features of other research phenomena. For instance, Greenaway and Milner contend that using RCA to measure competitiveness has limitations because it ignores the scale of domestic production and the volume of imports from abroad, even though the scale of domestic production is a key determinant of competitiveness (Greenaway, 1993). Therefore, some studies examine a nation’s domestic production capability to determine its level of competitiveness. Han & Wen, for instance, use the Trade Competitiveness Index (TC) to determine how likely a nation is to export net (Han, 2009). According to the classical competitive theory, keeping low selling prices while manufacturing at a cheap cost is one of the most successful ways to compete. Since then, several studies (Dhiman, 2019; Hillard, 2013; Kravis, 1971; McGuirk, 1986; Daulika, 2020) have employed comparisons of costs or export prices to evaluate competitiveness. According to the localization hypothesis, exporters may develop their own markets and rely less on external ones by doing things more efficiently rather than manufacturing themselves. This will help exporters save money on transaction costs. promotes competition (Fillis, 2001; Jones, 2005; Phillips McDougall, 1994; Whitelock, 2002), therefore, some studies use the TSR trade specialization rate (Hidayat, 2015; Mani & Yudha, 2021; Paluš et al., 2015); MI National Specialization Index (Sujová et al., 2015) to assess the competitiveness of the export industry. Neotechnology theory holds that the application of modern technology in production will increase capital productivity, thereby increasing competitiveness (Kumar, 1994), so production technology is also one of the criteria to evaluate the competitiveness of the export industry (Chadha, 2009; Sen, 2005).

RESEARCH METHODOLOGY
The Revealed Comparative Advantage index (RCA), export market share indicators, tuna export pricing, and a comparison with the strongest rivals in these two markets are used in this study to evaluate the competitiveness of the tuna export business, as below:

The Revealed Comparative Advantage index (RCA) is defined by (Balassa, 1965) as equation (1):

\[
RCA = \frac{\frac{X_{ij}}{X_{ij}}}{\frac{X_{iw}}{X_{w}}}
\]  

(1)

Where, \(X_{ij}\) is the export value of commodity i by country j; \(X_{ij}\) is the value of total export by country j; \(X_{iw}\) is the world exports value of commodity i; \(X_{w}\) is the value of total world export.

The market share indicator is defined by (Han, 2009) as equation (2):

\[
MS_i = \frac{X_{iw}}{X_{iw}} \times 100\%
\]  

(2)

Where, \(X_{iw}\) is the export value of commodity i by country j; \(X_{iw}\) is the world exports value of commodity i.

Next, we will establish export pricing for Vietnam and its main rivals in the US and Canada markets for comparison, along with a comparison of product quality, to evaluate how competitive Vietnam’s tuna export business is in terms of price in these two markets.

THE COMPETITIVENESS OF VIETNAMESE TUNA EXPORT INDUSTRY IN US AND CANADA MARKETS
Thailand was the biggest tuna exporter to the US and Canada markets from 2007 to 2021, with a total export value of 8,672,597 thousand USD and an average growth of 2.627% per year.
Ecuador came in second with a total export value of 1,315,611 thousand USD and an average growth of 6,472% per year. Vietnam is in third place with total exports worth 1,279,282 thousand USD, placing second only to Thailand’s total export value of 537,443 thousand USD.

This result showed that Vietnam’s tuna export industry was quite competitive in this market when maintaining export value as well as a relatively high export growth rate. In addition, Vietnam has been fourth among the top 10 exporters to these two countries in terms of annual export growth rate, trailing only Fiji with an average growth rate of 59,006%/year, Mexico in second with 13,685%/year, and Costa Rica in third with 13,617%/year.

**FIGURE 1:** The trade value of tuna of the 10 largest exporter in the US and Canada markets ($1000).

![Graph showing the trade value of tuna of the 10 largest exporter in the US and Canada markets.](image)

**FIGURE 2:** The Revealed Comparative Advantage index of the 10 largest exporter of tuna in the US and Canada markets.

![Graph showing the Revealed Comparative Advantage index of the 10 largest exporter of tuna in the US and Canada markets.](image)

**Source:** Author’s calculations based on ITC figures.

Figure 2 shows that Fiji has had the greatest comparative advantage since 2013. Fiji’s tuna exports to the US rose rapidly from $6,000 in 2011 to $2972,000 in 2012, and they continued to rise in the years that followed. Countries having a very high comparative advantage index in these two markets include Ecuador, Mauritius, Thailand, and others. In particular, Ecuador and Mauritius have had a sharp rise in their comparative advantage index in recent years. These two nations benefit from significant annual domestic tuna catches and advantages in manufacturing scale. In addition, the quality of their goods is improving and they are both very competitive in their respective markets.

Particularly, Mauritius has a competitive edge in terms of import tariffs because of the AGOA countries, which grants this nation preferential tariffs of 0%. The comparative advantage index has been also high for the Philippines and Thailand, two nations that benefit from abundant domestic tuna resources, a long-standing industry for processing and exporting tuna, and high-quality products. However, the RCA index has been gradually declining as a result of these two nations’ drastic cuts in exports since 2013 in order to recover their resources. In the period of 2007 - 2021, Vietnam had a strong comparative advantage index in the US and Canada markets but this index was also trending...
downward and may still do so in the near future since Vietnam must also lessen the intensity of local tuna exploitation. Moreover, Vietnam has a greater comparative advantage index than Spain, Mexico, and Costa Rica, and a lower index than the rest of the nations in the top 10 tuna exporters to these two markets (Figure 2).

Although Vietnam’s RCA tended to decline throughout the course of the study, it was always higher than 4, demonstrating that the country’s tuna export business has comparative advantages and is highly competitive in the US and Canada markets (Hinloopen & Van Marrewijk, 2000).

FIGURE 3: Export market share of the 10 largest exporters of tuna in the US and Canada markets (%).

[Graph showing market share]

In these two markets, Vietnam is now the second-largest tuna exporter (after Thailand), and it is showing signs of expanding its market share (Figure 3). (Porter, 1985) points out that "competition is gaining market share". As a result, Vietnam’s tuna export business is extremely competitive in these two countries, as evidenced by its position as the second-largest exporter and growing market share. Vietnam’s proportion of the global market for tuna exports is considerably lower than that of Thailand. Currently, Thailand is still the dominant tuna exporter in the US and Canada markets. However, in recent years, Thailand’s tuna export industry has also gradually decreased market share due to the fierce competition of many strong competitors such as Vietnam, Ecuador, Indonesia, and Mexico. In addition, Thailand’s domestic tuna resources has been gradually depleting, forcing this country to cut mining output, leading to a reduction in the scale of the processing and export industry since 2013.

In terms of export prices, Vietnam has relatively high export prices compared to its greatest rivals in these two markets, and these prices tend to rise more quickly than those of its rivals. Since 2021, Vietnam’s tuna export prices have been only lower than those of Fiji, Mauritius, and Costa Rica.

According to the tuna processing and exporting association of Vietnam, Vietnam’s tuna exports find it challenging to compete on price with regional rivals like the Philippines, Thailand, and Indonesia in the US and Canada markets, claims the tuna processing and exporting organization of Vietnam.

However, the export price strongly relies on the quality of the product, the high export price does not entirely demonstrate that Vietnam’s tuna exports are uncompetitive or that the selling price is a weakness. In recent years, Vietnam’s tuna exports have improved significantly in terms of quality, from gradually applying modern technology to the exploitation and preservation of tuna such as fish preservation by nanotechnology, gelatinous stone technology, along with the use of modern seafood processing technology to keep up with the world and help Vietnam improve the quality of export products. Compared to competitors such as the Philippines, Indonesia, Mexico, Vietnam has higher export prices, larger market shares and faster export growth rate. These show that Vietnam’s tuna export industry is more competitive than these countries in the US and Canada markets.

FIGURE 4: Export prices of the 10 largest tuna exporting countries in the market US and Canada (thousand USD/ton).

[Graph showing export prices]

Source: Author’s calculations based on ITC figures.
TABLE 1: Capacity and fishing gear (units) of Vietnamese tuna fishing vessels.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Longline/Handline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-89</td>
<td>156</td>
<td>173</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>87</td>
<td>174</td>
<td>23</td>
</tr>
<tr>
<td>90-149</td>
<td>142</td>
<td>518</td>
<td>169</td>
<td>22</td>
<td>8</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>244</td>
<td>1,007</td>
<td>11</td>
</tr>
<tr>
<td>150-249</td>
<td>531</td>
<td>742</td>
<td>399</td>
<td>201</td>
<td>85</td>
<td>89</td>
<td>73</td>
<td>70</td>
<td>45</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>250-399</td>
<td>240</td>
<td>270</td>
<td>647</td>
<td>687</td>
<td>418</td>
<td>407</td>
<td>391</td>
<td>395</td>
<td>323</td>
<td>115</td>
<td>263</td>
</tr>
<tr>
<td>&gt;400</td>
<td>33</td>
<td>69</td>
<td>505</td>
<td>735</td>
<td>1,111</td>
<td>1,184</td>
<td>1,455</td>
<td>1,804</td>
<td>2,549</td>
<td>1,617</td>
<td>2,678</td>
</tr>
<tr>
<td>Total</td>
<td>1,102</td>
<td>1,772</td>
<td>1,729</td>
<td>1,645</td>
<td>1,623</td>
<td>1,689</td>
<td>1,924</td>
<td>2,277</td>
<td>3,248</td>
<td>2,921</td>
<td>3,004</td>
</tr>
<tr>
<td>Gillnet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-89</td>
<td>627</td>
<td>605</td>
<td>212</td>
<td>133</td>
<td>125</td>
<td>94</td>
<td>81</td>
<td>56</td>
<td>317</td>
<td>541</td>
<td>238</td>
</tr>
<tr>
<td>90-149</td>
<td>261</td>
<td>200</td>
<td>307</td>
<td>60</td>
<td>60</td>
<td>53</td>
<td>48</td>
<td>47</td>
<td>301</td>
<td>463</td>
<td>61</td>
</tr>
<tr>
<td>150-249</td>
<td>184</td>
<td>174</td>
<td>175</td>
<td>86</td>
<td>93</td>
<td>85</td>
<td>67</td>
<td>56</td>
<td>71</td>
<td>32</td>
<td>59</td>
</tr>
<tr>
<td>250-399</td>
<td>216</td>
<td>204</td>
<td>132</td>
<td>199</td>
<td>281</td>
<td>273</td>
<td>271</td>
<td>197</td>
<td>297</td>
<td>144</td>
<td>186</td>
</tr>
<tr>
<td>&gt;400</td>
<td>24</td>
<td>21</td>
<td>72</td>
<td>261</td>
<td>414</td>
<td>498</td>
<td>594</td>
<td>662</td>
<td>1,170</td>
<td>641</td>
<td>881</td>
</tr>
<tr>
<td>Total</td>
<td>1,312</td>
<td>1,204</td>
<td>898</td>
<td>739</td>
<td>973</td>
<td>1,003</td>
<td>1,061</td>
<td>1,018</td>
<td>2,156</td>
<td>1,821</td>
<td>1,425</td>
</tr>
<tr>
<td>Purse seine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-89</td>
<td>134</td>
<td>136</td>
<td>131</td>
<td>79</td>
<td>64</td>
<td>59</td>
<td>64</td>
<td>78</td>
<td>81</td>
<td>353</td>
<td>108</td>
</tr>
<tr>
<td>90-149</td>
<td>184</td>
<td>194</td>
<td>118</td>
<td>90</td>
<td>73</td>
<td>58</td>
<td>66</td>
<td>81</td>
<td>185</td>
<td>569</td>
<td>178</td>
</tr>
<tr>
<td>150-249</td>
<td>44</td>
<td>56</td>
<td>114</td>
<td>154</td>
<td>138</td>
<td>127</td>
<td>120</td>
<td>147</td>
<td>186</td>
<td>69</td>
<td>291</td>
</tr>
<tr>
<td>250-399</td>
<td>233</td>
<td>206</td>
<td>242</td>
<td>513</td>
<td>456</td>
<td>404</td>
<td>350</td>
<td>423</td>
<td>483</td>
<td>373</td>
<td>420</td>
</tr>
<tr>
<td>&gt;400</td>
<td>20</td>
<td>0</td>
<td>409</td>
<td>750</td>
<td>730</td>
<td>811</td>
<td>893</td>
<td>1,043</td>
<td>1,349</td>
<td>1,333</td>
<td>1,662</td>
</tr>
<tr>
<td>Total</td>
<td>615</td>
<td>592</td>
<td>1,014</td>
<td>1,586</td>
<td>1,461</td>
<td>1,459</td>
<td>1,493</td>
<td>1,772</td>
<td>2,284</td>
<td>2,697</td>
<td>2,659</td>
</tr>
</tbody>
</table>

Source: Viet Nam Fisheries Department.

FIGURE 5: Tuna fishing capacity by fishing gear (tons/vessel).

In general, Vietnam’s tuna export business has an advantage over rivals in that it possesses sizable annual domestic tuna reserves. Vietnam extracted an average of 82,836 tons each year from 2007 to 2021. Fishing boats have greatly improved, moving away from tiny, outdated, and inefficient boats and toward larger, more capable boats (table 1). Additionally, there is a plentiful supply of inexpensive local labor.

Additionally, Vietnam has one of the largest capacities for processing and exporting seafood in the world. With the help of cutting-edge processing technology, the quality of the products exported, including tuna in particular and seafood in general, is gradually improving to meet the demands of customers in importing nations. Due to the CPTPP agreement, Vietnam will no longer be subject to import taxes on tuna beginning in 2019.

Source: Viet Nam Fisheries Department.
This presents an excellent chance to grow tuna exports to Canada in the future.

Along with its advantages, Vietnam’s tuna export business is now plagued by a number of disadvantages, the largest of which is the threat of overfishing and resource depletion. While the number of operating vessels is rising quickly (table 1), their capacities are also rising but their productivity is generally declining (figure 4). Weak, outdated infrastructure makes it difficult to develop and carry out duties related to fisheries logistics; low skill levels among fishermen make it challenging to use current technologies in production. While this is going on, Vietnam’s tuna fishing sector still primarily makes use of tiny, independently running, unconnected boats, as well as traditional techniques of tuna exploitation and preservation. Each sea voyage takes a long time (often more than 20 days), which causes the quality of the tuna to significantly decline when the ship reaches the port after fishing. Additionally, the Vietnam Tuna Association states that the high yearly absenteeism rate among workers makes it difficult to retain a consistent labor source over the long term, which is both a benefit and a challenge for tuna processing and exporting firms. While there are increasingly stringent regulations on products in the import market, particularly in the US market, there are others such as the “dolphin safety” label requirement as well as other standards on food hygiene and product provenance. Despite being Vietnam’s biggest tuna export market, the US imposes relatively high import duties on Vietnamese tuna with the 160414 code, with an average tax rate of over 10%. Along with many other exporting nations, the US imposes this duty on nations in the region around Vietnam, including Thailand, Indonesia, and the Philippines. On the US market, several exporting nations like Colombia and South Korea benefit from favourable import tax rates, respectively 3.5% and 7% for oil-soaked tuna products; 1.2% and 2.5% for pickled tuna. Along with the least developed nations like the Solomon Islands, Vanuatu, Tuvalu, Samoa, and Kiribati, Mexico and Peru are also free from tariffs. Due to its free trade agreement with the US, Singapore is likewise immune from tariffs, while Mauritius is tax-free as a result of the African Growth and Opportunity Act (AGOA). In accordance with the GSP and CBI countries, as well as the CAFTA trade agreement between Costa Rica and the United States, the country is free from US tariffs. Due to its CPTPP agreement, Vietnam has been exempt from import taxes for items with the 160414 code on the Canadian market since 2019. As a result, Vietnam has various opportunities to boost its tuna exports to Canada in the future.

CONCLUSION

The competitiveness assessment’s findings demonstrate how competitive the Vietnamese tuna export business is in the US and Canada markets. Vietnam was the second-largest tuna exporter in the period 2007-2021, and it is steadily expanding its market share. Moreover, Vietnam’s strength is that it benefits from a sizable domestic tuna harvest each year, has one of the largest processing and export capacities in the world, and has steadily improved product quality to meet market demands. Vietnam’s tuna export business is far smaller than Thailand’s, which is the country’s main rival in these two markets, although Thailand’s market share is declining while Vietnam’s is progressively rising. Due to the CPTPP agreement’s exemption from import taxes, Vietnam offers several opportunities for export development, particularly to the Canadian market, although Thailand and Canada do not yet have any official trade agreements.

Despite having numerous advantages, Vietnam’s tuna export business today confronts several shortcomings and obstacles, the largest of which being the threat of local resource depletion and a shortage of raw materials for processing and export. Additionally, issues including a lackluster infrastructure, outdated tuna preservation and fishing technologies, and a poor worker force are also major drawbacks. A growing nation like Vietnam, which is also a laggard, now finds it difficult to fulfill the numerous tight standards on imported products in the US and Canada markets and needs a strategy to progressively overcome shortcomings.

In the future, Vietnam must continue to have a steady local tuna supply to support exports in order to increase its competitiveness. Vietnam also needs to establish large-scale fisheries in place of traditional and antiquated fishing and preservation techniques, as well as upgrade tuna fishing and preservation technologies. In order to assist the growth of fisheries, Vietnam must also raise investment, improve the infrastructure for the fishing industry, and establish favorable circumstances for fishing and processing for the tuna export business in particular as well as fisheries generally. The management of fisheries, especially illicit fishing, requires answers from the authorities in charge of managing fisheries. In order to generate incentives for parties to expand production capacity, particularly on the side of fishermen, actors involved in the tuna value chain must short-term align their interests. Therefore, long-term efficiency improvements and an emphasis on sustainability are both necessary for Vietnam’s tuna export business to become more competitive. To do this, it is required to reduce the level of domestic exploitation, particularly the requirement to rigorously manage the fishing season and the amount of fish that may be taken. Focusing on food hygiene and safety, workplace safety, as well as meeting other import market criteria, such as rules on the label “dolphin safety” when exporting to the US market, is important while processing and exporting.

REFERENCES


