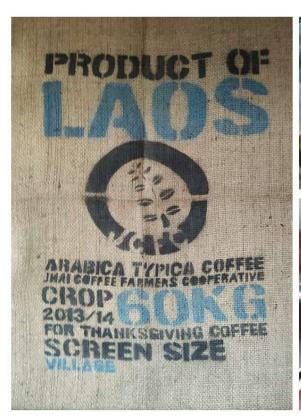






Leveraging export potential and tariff advantages to attract foreign direct investment into Lao PDR

Wood processing and coffee







International Trade Centre¹
22 February 2021

¹ This document has not been formally edited by the International Trade Centre.

Executive Summary

Foreign direct investment (FDI) flows to Lao PDR have grown strongly over the past decades. However, they declined in 2018-2019 and may continue to do so due to the global COVID-19 pandemic. This study uses trade data to identify products/sectors and investors² with opportunities to attract FDI, and provides investment promotion actors with arguments in favour of FDI in Lao PDR.

The study focuses on wood processing and coffee, two sectors that present important opportunities to diversify foreign investment in Lao PDR consistent with a sustainable development path. In addition, a short analysis highlights other sectors with potential to attract investment and increase diversification. The most important ones include vegetables and electronic equipment.

In the wood sector, Lao PDR has an export potential of \$804 million per year by 2024. The countries with the largest import potential of wood from Lao PDR include China (\$438 million), Viet Nam (\$226 million) and Thailand (\$58 million). Most of this potential concerns raw wood, the export of which is currently banned. Companies interested in serving the above-mentioned markets with wood from Lao PDR can, however, invest in the full wood value chain in the country and export processed wood products. Through Lao PDR's tariff advantages for such products, international investors could gain preferential access to markets in the region and increase their export potential to these markets considerably – by \$10.1 million to India and \$5.3 million to Malaysia.

In the coffee sectors, companies could invest in Lao PDR to exploit the country's untapped export potential of \$74 million. The most important opportunities for increasing exports exist in in Germany (\$24 million), Thailand (\$11 million) and Sweden (\$9 million). Furthermore, investors could benefit from Lao PDR's tariff advantages in regional markets to increase their export potential. For green beans, advantages are particularly high in India (additional export potential of \$40 million) and ASEAN (\$18 million in Viet Nam, \$13 million in Thailand). For roasted coffee, the most important export growth opportunities through tariff advantages exist in China (\$11 million) and ASEAN (\$6.5 million in the Philippines, \$5 million in Thailand).

The analysis in this report assumes that Lao PDR will graduate from LDC status and move to the next best alternative tariff regime available for each target market. For the products covered in this study, LDC preferences only have a small effect on investment opportunities driven by tariff advantages, as they are small or non-existent in important markets.

To be able to benefit from the opportunities identified in this report, the Lao government needs to ensure that the business and investment environment is attractive to potential investors. Among other aspects, it is key to ensure that rules and regulations around investment are adequate and transparent. Both government and private sector can use the findings of this report to target potential investors and business partners and promote the opportunities Lao PDR presents for them.

² Potential investors are generally *companies*, many of them multinationals with activities in different countries. Trade (and investment) data, on the other hand, is collected at the *country* level. The analysis of trade data allows to identify potential investors (companies) by their *country of activity*, not their country of origin. More detailed explanations are provided in the methodology.

Table of Contents

Executive Summary	2
Abbreviations	4
Overview of foreign direct investment in Lao PDR	5
Using trade and market access data to identify investment opportunities	8
Methodology	8
Export potential	8
Tariff advantages	9
Wood processing	10
Export potential	10
Tariff advantages	11
Zoom on selected countries of activity	13
Coffee	17
Export potential	17
Tariff advantages	18
Zoom on selected countries of activity	21
Additional sectors with investment potential	25
Access to resources	25
Tariff advantages	25
Recommendations for additional sectors with investment potential	26
Conclusion	27
Anney 1: Methodology	28

Abbreviations

ASEAN Association of Southeast Asian Nations

FDI Foreign Direct Investment

GTAP Global Trade Analysis Project

ITC International Trade Centre

UNCTAD United Nations Conference on Trade and Development

Overview of foreign direct investment in Lao PDR

Foreign direct investment (FDI) flows to Lao PDR increased almost nine-fold between 2009 (\$190 million) and 2017 (\$1,686 million). They dropped to \$1,320 million in 2018 and further to \$557 million in 2019, due to "diminishing investment in capital-intensive projects in power generation and mining". Data by the Lao Ministry of Planning and Investment on investments that had been *approved* in 2019 suggested a more positive trend for the future. However, FDI flows to ASEAN countries dropped by 31% in 2020, and analysis by the United Nations Conference on Trade and Development (UNCTAD) suggest that global FDI may only start recovering from the impact of the COVID-19 pandemic in 2022.

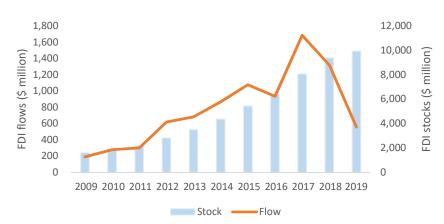


Figure 1: Foreign direct investment in Lao PDR

Source: ITC, using data from UNCTAD.

While overall FDI flows to ASEAN remained stable between 2017 and 2019, along with Lao PDR, Brunei Darussalam, Malaysia, Myanmar and the Philippines also experienced a reduction in inflows during this period. In Thailand, where 2018 inflows exceeded those of 2017, they dropped to a level even lower than 2017 in 2019.

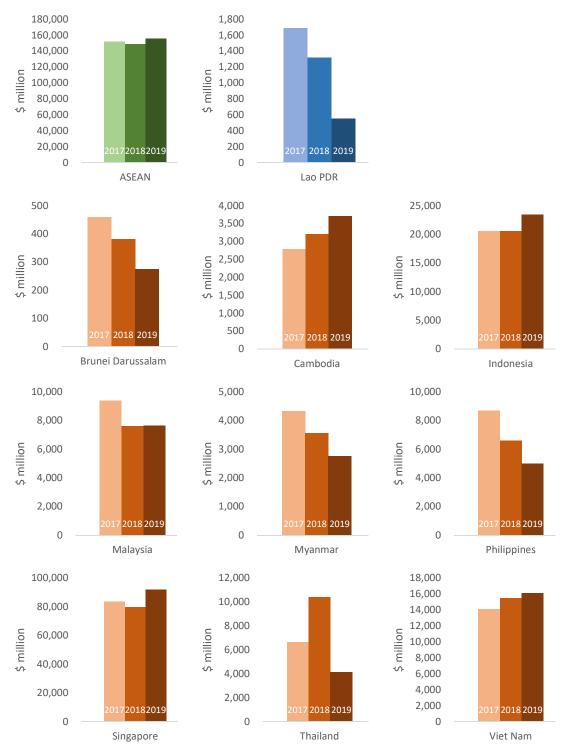
Between 2010 and 2019, the Lao Ministry of Planning and Investment approved investments of \$26 billion. 60% of these investments came from foreign and 40% from domestic sources. The top countries to invest in Lao PDR were China (52%), Viet Nam (16%) and Thailand (13%). The sectors receiving most foreign investment were electricity generation (36%), mining (27%) and service (15%), which together account for more than three quarters of total foreign investment in Lao PDR. The wood processing and coffee sectors provide opportunities to increase diversification of foreign investment in Lao PDR. ⁵

³ UNCTAD (2020): World Investment Report 2020. International Production Beyond The Pandemic.

⁴ UNCTAD (2021): Investment Trends Monitor, Issue 38, January 2021.

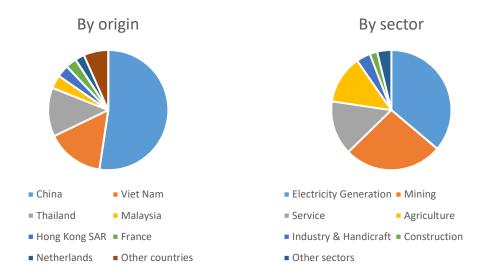
⁵ ITC (2019): Export Potential in Lao PDR. Processed Wood and Specialty Agriculture.

Figure 2: FDI flows received by ASEAN countries, 2017-19



Source: ITC, using data from UNCTAD.

Figure 2: FDI to Lao PDR approved, 2010-19



Source: ITC, using data from Lao Ministry of Planning and Investment.

Using trade and market access data to identify investment opportunities

Methodology

FDI data is only available at an aggregate level. Data exists for broadly defined sectors (e.g., agriculture), but not for more specific subsectors (e.g., coffee). In addition, data by country of origin is available for total FDI, but not for sector-level FDI.

To identify potential investment opportunities despite these constraints, this study uses data on international trade flows, which is available at a very disaggregate level (by product, exporter and importer). Trade data can provide information on two key sources of gains from foreign direct investment: **export potential** and **tariff advantages**.

Potential investors are generally *companies*, many of them multinationals with activities in different countries. Trade data, on the other hand, is collected at the *country* level. The analysis of trade data allows identifying potential investors (companies) by their *country of activity*. More precisely, trade data can help identify two sets of potential investors, motivated by different reasons.

First, companies exporting a product <u>to</u> a country X may be interested in investing in Lao PDR **if the untapped export potential of country X to Lao PDR in this product is high**. Second, companies exporting a product <u>from</u> country X may be interested in investing in Lao PDR **if Lao PDR has tariff advantages compared to X when accessing important third markets**.

Export potential

ITC's export potential methodology⁶ estimates potential trade values as of 2024 based on projected supply capacities in the exporting country, projected demand conditions in the target market and bilateral linkages between the two. This methodology is used to identify countries with a large potential to import products from Lao PDR over the coming years. Any gap between a country's potential to import from Lao PDR and its actual imports implies that there is untapped potential. Such opportunities to increase trade from Lao PDR to its partner countries can be seized by potential investors.

The existence of untapped export potential is thus an important argument that investment promotion actors can highlight to attract investment. In addition, information on export potential can provide guidance on sectors and/or companies to focus on. While in theory, companies from any country could seize export potential opportunities, companies that are already exporting to the target market may be more likely to do so. Investment promotion actors may therefore choose to focus their efforts on companies that export to markets in which Lao PDR has important export potential.

Untapped export potential can result from two sources: first, future economic growth in the exporting country and in the target market (dynamic, or growth-based export potential), and second, market frictions such as lacking information about the rules and regulations of the target market or difficulties to comply with them or to meet the (quality) preferences of its consumers (static, or friction-based export potential). International investors can help unlock both types of untapped potential: they often have the necessary knowledge and experience to overcome frictions (in particular if they already

⁶ For a more detailed discussion of Lao PDR's export potential, please refer to ITC (2019): Export Potential in Lao PDR. Processed Wood and Specialty Agriculture:

https://umbraco.exportpotential.intracen.org/media/1148/lao-report_final-draft.pdf. For further explanations and results, please refer to the ITC Export Potential Map at exportpotential.intracen.org.

export to the target market) and provide the necessary capital to increase production sufficiently to leverage the opportunities arising from economic growth.

Tariff advantages

Differences in tariffs to access foreign markets can be an important motivation to locate production for exports in a third country. Lao PDR could attract investment from companies that would gain better access to their markets if they exported from Lao PDR instead of their current production location(s).

Potential investors that could benefit from preferential market access by investing in Lao PDR are identified by a variant of the export potential methodology that accounts for tariff differences between Lao PDR and other exporting countries. The methodology identifies product-market combinations in which Lao PDR has a tariff advantage compared to other countries. It computes by how much companies exporting from other countries could increase their export potential by taking advantage of Lao PDR's more preferential market access conditions.

The methodology adjusts these potential gains for Lao PDR's production capacity to ensure that the Lao economy can absorb the totality of the potential investments in each sector in the short to medium run.⁷ It should be noted that this final correction leads to conservative estimates. If, for example, only one company invests to export from Lao PDR instead of exporting from one other country, its investment could exceed the value that the methodology suggests (as Lao PDR would be able to absorb a higher inflow in the absence of competing investments).

Some tariff advantages enjoyed by Lao PDR stem from its status as a least developed country (LDC). Once the country graduates from LDC status, it will lose these preferences. This report assumes that Lao PDR will graduate from LDC status and move to the next best alternative tariff regime available on each target market (such as trade agreements or other preferential schemes, e.g. the Generalized System of Preferences). If Lao PDR does not graduate from LDC status, the benefits for potential investors will be slightly higher than the results presented here. However, for the products covered in this study, LDC preferences only have a small effect on investment opportunities driven by tariff advantages. Important markets (such as Malaysia) either do not offer LDC preferences, or their next best scheme offers the same or only marginally higher tariffs than the LDC preference scheme (such as Australia, New Zealand, or Thailand).

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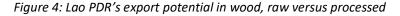
⁷ Technical details of the methodology are presented in annex 1.

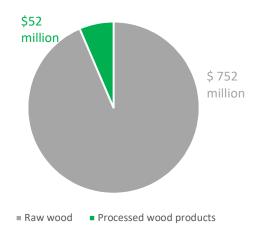
Wood processing

International demand for raw wood from Lao PDR has been high in the past, to the extent that unprocessed wood was harvested, illegally logged, and exported at unsustainable levels. Prime Minister Order No. 15 on 'Strengthening Strictness of Timber Harvest Management and Inspection, Timber Transport and Business', was the response by the Lao government, imposing an export ban on unprocessed, raw wood. Under these export restrictions, international companies cannot import unprocessed, raw wood from Lao PDR. In addition, investors cannot invest in wood processing alone, but are required to invest in the entire value chain starting with wood plantations.⁸

Export potential

Lao PDR has an export potential of \$804 million in wood per year by 2024. More than 93% of this export potential (\$752 million) is in raw wood, demonstrating a large demand for wood resources from Lao PDR. As the export of raw wood is currently banned, international investors interested in accessing this resource need to invest in the entire wood value chain (from the plantation to wood processing) in Lao PDR and export processed wood products.





Source: ITC. Results capture yearly export potential by 2024.

The market with the highest potential to import wood (raw and processed) from Lao PDR is China (\$438 million), followed by Viet Nam (\$226 million) and Thailand (\$58 million). Investing in wood plantation and processing in Lao PDR could be an attractive option for companies importing to those countries.

⁸ For details on investment conditions in the wood and coffee sector, please refer to the corresponding Sector Investment Profiles to be published under the ARISE Plus Lao PDR project (https://www.intracen.org/arise-plus-laos/).

China
Viet Nam
Thailand
Japan
India
Germany
United States of America

Figure 5: Export potential in wood, by market

50

100

150

200

250

\$ million

300

350

400

450

500

0

Tariff advantages

In addition to gaining access to resources, investors could benefit from Lao PDR's preferential access to regional markets and increase their export potential for processed wood products by \$31.3 million by investing and producing in Lao PDR. Companies exporting from China could increase their export potential by \$10.7 million by exporting from Lao PDR. Important gains could also be realized by companies exporting from the United States (\$2.8 million) and Germany (\$2.3 million).

China United States of America Germany Italy Canada Brazil **Russian Federation** Austria Poland France 0 2 4 6 8 10 12

Figure 6: Additional export potential through investing in Lao PDR's wood sector, by country of activity

Source: ITC. Results capture yearly export potential by 2024.

The product with the highest potential tariff-related gains for investors is "plywood, veneered panel & similar laminated wood" (\$6.3 million), followed by five products with potential gains between \$2.4 million and \$3.1 million.

\$ million

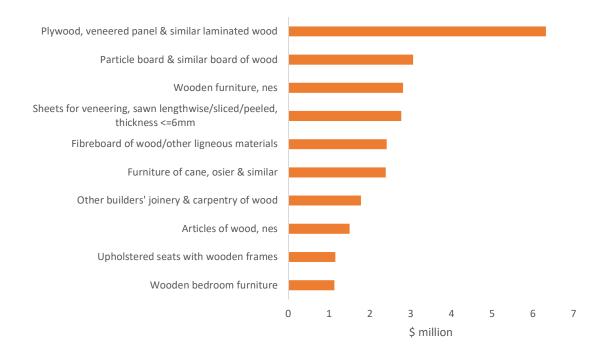


Figure 6: Additional export potential through investing in Lao PDR's wood sector, by product

Tariff advantages from producing in and exporting from Lao PDR mainly exist in Asian markets. India is the market to which the investors' export potential could increase the most (by \$10.1 million). This is due to the combination of India's large market and Lao PDR's significant tariff advantage in the country (11 percentage points, on average), which it enjoys thanks to the ASEAN-India free trade agreement. The second most important destination is Malaysia. While its market is smaller than that of India, imports from Lao PDR face 0% tariffs under the framework of the ASEAN free trade area, which results in an average tariff advantage of 19 percentage points. This advantage could allow investors to increase their export potential to Malaysia by \$5.3 million. Other markets in which Lao PDR's tariff advantages could benefit investors include Japan (ASEAN-Japan free trade agreement), Australia (ASEAN Australia New Zealand free trade agreement) and the Philippines (ASEAN).

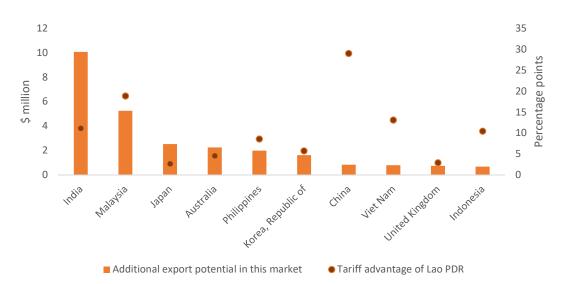


Figure 7: Additional export potential by investing in Lao PDR's wood sector and tariff advantage, by market

Zoom on selected countries of activity

This section provides a more detailed country-level analysis, considering two types of situations: First, situations in which companies importing wood from Lao PDR <u>to</u> specific countries (China, Viet Nam and Thailand) could exploit high untapped export potential. Second, situations in which companies exporting <u>from</u> specific countries (China, United States and Germany) could gain most export potential from moving production to Lao PDR thanks to tariff advantages.

China, Viet Nam and Thailand all have a large potential for importing wood from Lao PDR, and have historically focused on importing raw wood. The current restrictions on raw wood exports from Lao PDR may provide an incentive for companies importing to these countries to invest in wood plantations and processing in the country. Countries with import potential for both raw wood and processed wood products include the United States and Germany.

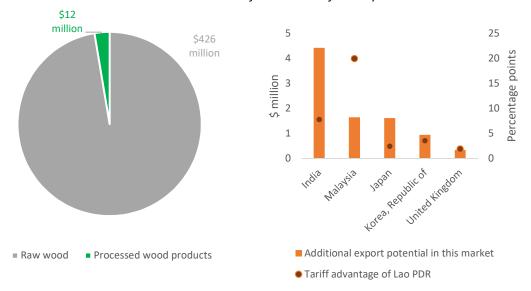
For companies exporting from China, the potential tariff advantages from exporting from Lao PDR may appear small; however, due to the size of China's wood sector, the possible gains are still significant in absolute terms. As ASEAN member states, Viet Nam and Thailand will enjoy the same tariff conditions as Lao PDR in the most important target markets once Lao PDR graduates from LDC status. Therefore, companies exporting from those countries cannot use investment in Lao PDR as a means to improve market access. Companies exporting from the United States and Germany could increase their export potential to several markets in the Asia-Pacific region significantly by exporting from Lao PDR and benefitting from its tariff advantages.

China

China has the potential to import \$438 million of wood and wood products from Lao PDR per year by 2024. 97% of this import potential concerns raw wood that cannot be exported from Lao PDR at the moment. To access this resource despite the current export restrictions, companies that historically imported raw wood to China for processing in China can now invest in Lao PDR to plant wood, process it locally, and export processed wood products to China or to third markets.

By investing in Lao PDR, companies currently exporting from China could take advantage of Lao PDR's preferential access to several important markets, in particular in Asia. Processing wood in Lao PDR would allow such companies to increase their export potential to India by \$4.4 million thanks to the importance of this market and Lao PDR's tariff advantage of about 8 percentage points over China. Other destination markets with potential for tariff gains by exporting from Lao PDR instead of China include Malaysia and Japan.

Figure 8a: China's import potential from Lao Figure 8b. Additional export potential by exporting PDR from Lao PDR for companies active in China



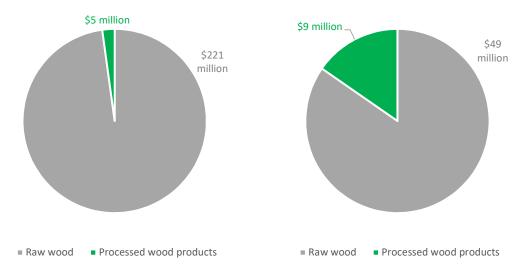
Source: ITC. Results capture yearly export/import potential by 2024.

Viet Nam and Thailand

Viet Nam has the potential to import \$226 million of wood and wood products from Lao PDR per year by 2024, 98% of which pertaining to raw wood. For Thailand, import potential amounts to \$58 million. Accessing this resource despite the current export restrictions forms an important motivation for investment by companies that historically imported wood to Viet Nam and Thailand. Companies exporting from those countries cannot improve access to important export markets via investing in Lao PDR, as Lao PDR will face the same tariffs as Viet Nam and Thailand once it graduates from LDC status.

Figure 9: Viet Nam's import potential from Lao PDR

Figure 10: Thailand's import potential from Lao PDR



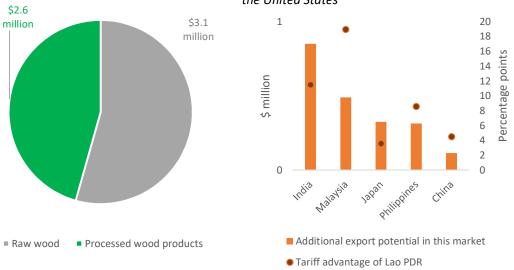
United States

Raw wood accounts for about half (54%) of the \$5.6 million import potential the United States hold for Lao wood per year by 2024. Gaining access to wood, whether raw or processed, could therefore be a motivation for companies importing to the United States to invest in Lao PDR.

Companies exporting from the US could invest to leverage Lao PDR's preferential access to several important Asian markets. The Indian market, for example, offers Lao PDR a tariff advantage of 11.5 percentage points over the United States, which investors could use to increase their export potential by \$850,000. Other destination markets with potential for companies currently exporting from the United States include Malaysia and Japan.

Figure 11a: The United States' import potential from Lao PDR

Figure 11b. Additional export potential by exporting from Lao PDR for companies active in the United States



Source: ITC. Results capture yearly export/import potential by 2024.

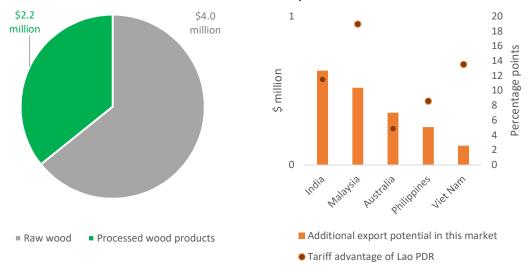
Germany

Germany has the potential to import \$6.2 million of wood and wood products from Lao PDR per year by 2024, with 64% raw wood. To access this resource despite the current export restrictions, companies importing wood to Germany can invest in the wood value chain in Lao PDR and export processed wood products from there.

Companies exporting from Germany could benefit from Lao PDR's preferential access to several important markets, in particular in Asia. Processing wood in Lao PDR would allow these companies to increase their export potential to countries such as India (\$630,000 additional export potential, Malaysia (\$520,000) and Australia (\$350,000).

Figure 12a: Germany's import potential from Figure 12b. Additional export potential by Lao PDR

exporting from Lao PDR for companies active in Germany



Source: ITC. Results capture yearly export/import potential by 2024.

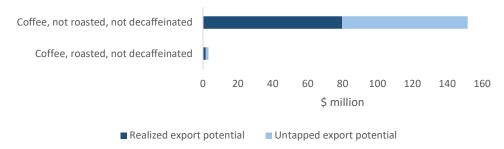
Coffee

In the coffee sector, international investors can invest in the production of both green beans (unroasted coffee) and roasted coffee. Ownership of international investors in coffee processing plants is currently restricted to 25%. Over the last years, the demand for green beans from Lao PDR has been very high, while exports of roasted coffee still represent a small share of the country's overall coffee exports.

Export potential

Lao PDR has an export potential of \$155 million in coffee per year by 2024. \$74 million of this export potential is currently untapped, which means that Lao PDR has the potential to double its coffee exports over the next years. Investments to increase production will be necessary to leverage the growth-related part of the export potential. This presents an opportunity for international investors. At present, export potential exists almost exclusively in green coffee beans (unroasted coffee), implying that there is a large demand to access Lao PDR's resources and that local processing capacities are currently still limited. It is possible that export potential in roasted coffee will increase if the restrictions on foreign investment in coffee processing that have been in place during the last years are eased to allow for a more important participation of international investors.

Figure 13: Lao PDR's export potential in coffee, by product



Source: ITC. Results capture yearly export potential by 2024.

The market with the highest untapped export potential for coffee from Lao PDR is Germany (\$24 million), followed by Thailand (\$11 million) and Sweden (\$9 million). The top-10 markets include many developed countries, indicating that multinational companies source the green beans from Lao PDR for roasting elsewhere.

⁹ Regulation 1063, which contains this restriction, is currently under discussion to be revised or possibly removed.

¹⁰ Foreign investment in coffee processing is currently only possible in joint investments with domestic investors and limited to 25% of the total capital.

Germany Thailand Sweden United States of America United Kingdom Canada Italy Denmark Australia Netherlands 0 5 20 25 10 15

Figure 14: Lao PDR's untapped export potential in coffee, by market

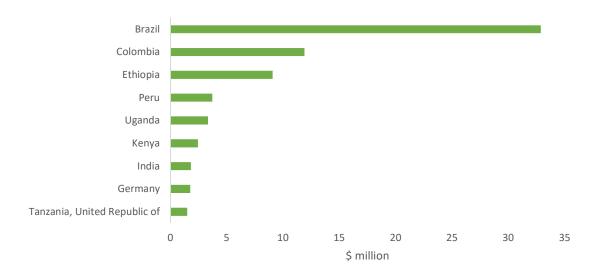
Tariff advantages

Green beans

Potential investors could increase their export potential in green coffee beans coffee by \$85 million per year by producing green beans in Lao PDR and exporting from there to destinations in which Lao PDR has a tariff advantage over other exporters. The highest potential gains from exporting green beans from Lao PDR can be obtained by companies currently exporting from Brazil (\$33 million), Colombia (\$12 million) and Ethiopia (\$9 million).

\$ million

Figure 15: Additional export potential through exporting green beans from Lao PDR, by country of activity

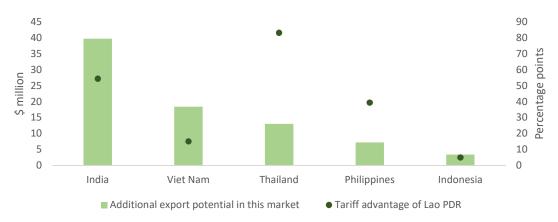


Source: ITC. Results capture yearly export potential by 2024.

Lao PDR has a tariff advantage over major exporters of green beans in several important Asian markets. India is the top market in terms of potential gains for investors. Due to the large size of the Indian market and Lao PDR's average tariff advantage of 54 percentage points, investors can increase their export potential in roasted coffee to India by \$40 million if they use Lao PDR as a production and export hub. Lao PDR's large tariff advantage stems from the ASEAN-India free trade agreement, which includes preferential access for coffee that is not roasted and not decaffeinated and LDC preferences, in which India offers a 0% tariff for coffee that is not roasted but decaffeinated.

Other markets with important potential gains include the Viet Nam (\$18 million) and Thailand (\$13 million) and other ASEAN countries in which Lao PDR benefits from duty-free market access.

Figure 16: Additional export potential through investing in green beans in Lao PDR and tariff advantage, by market

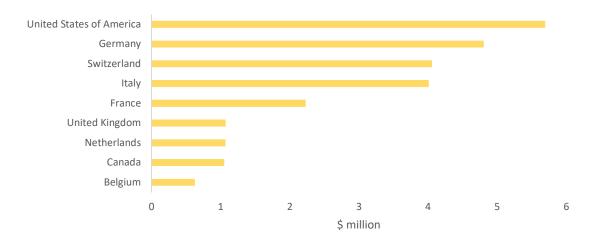


Source: ITC. Results capture yearly export potential by 2024.

Roasted coffee

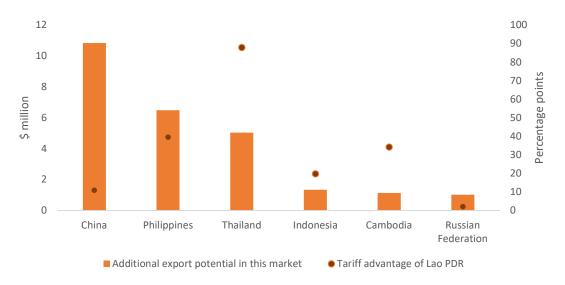
Potential investors could increase their export potential in roasted coffee by \$28 million per year by producing roasted coffee in Lao PDR and exporting from there. The highest potential gains from exporting roasted coffee in Lao PDR can be obtained by companies currently exporting from the United States, Germany, Switzerland and Italy – some of the world's top exporters of roasted coffee. By investing in Lao PDR, companies currently exporting from the United States could increase their export potential in roasted coffee by \$5.7 million, those exporting from Germany by \$4.8 million, and those exporting from Switzerland and Italy by about \$4 million each. In practice, the ability of investors to leverage these opportunities is currently restricted by the limitation on foreign ownership in coffee processing.

Figure 17: Additional export potential through exporting roasted coffee from Lao PDR, by country of activity



Lao PDR has a tariff advantage over major exporters of roasted coffee in several important markets, especially in Asia. China is the top market in terms of potential gains for investors. Due to the large size of the Chinese market and Lao PDR's average tariff advantage of 11 percentage points thanks to the ASEAN-China free trade agreement, investors can increase their export potential in roasted coffee to China by \$11 million if they use Lao PDR as a production and export hub. Other markets with important potential gains include the Philippines (\$6.5 million) and Thailand (\$5 million) and other ASEAN countries in which Lao PDR benefits from duty-free market access.

Figure 18: Additional export potential through investing in roasted coffee in Lao PDR and tariff advantage, by market



Source: ITC. Results capture yearly export potential by 2024.

Zoom on selected countries of activity

This section provides a more detailed country-level analysis, considering two types of situations: First, situations in which companies importing unroasted coffee from Lao PDR to specific countries (Germany, Thailand and Sweden) could exploit high untapped export potential. Second, situations in which companies exporting roasted coffee from specific countries (United States, Germany, Switzerland and Italy) could gain most export potential from moving production to Lao PDR thanks to tariff advantages.

Germany, Thailand, Sweden, the United States and Italy, and to a lesser extent also Switzerland, have an important potential to import green coffee beans from Lao PDR. The current potential of these countries to import roasted coffee from Lao PDR remains very limited in comparison, mainly due to the low supply capacity. Some of the potential investors import green beans to roast them domestically and export the final coffee product to markets worldwide, including in Asia. Companies currently exporting roasted coffee from Germany, the United States, Italy and Switzerland could benefit from Lao PDR's preferential access to several Asian markets by roasting coffee in the country. This would increase these companies' export potential, especially to China, Thailand and the Philippines. Companies exporting from Thailand would not benefit from additional tariff advantages to important markets for its coffee exports when producing in Lao PDR. For companies exporting from Sweden, advantages would be small due to their overall limited export potential for coffee in Asia.

Germany

Germany has the potential to import \$30 million of green beans from Lao PDR per year by 2024. More than three quarters of this potential (\$24 million) is still untapped. Companies may invest in the production of green beans in Lao PDR to meet the demand of coffee processors in Germany.

Yet, they could also invest into roasting capacities in Lao PDR and benefit from the country's tariff advantages when exporting to third countries. This could boost their export potential in roasted coffee by \$4.8 million. To China alone, \$2.7 million in export potential could be gained thanks to Lao PDR's tariff advantage of 10 percentage points over Germany. Other destination markets with potential gains for investors into the Lao roasted coffee sector include the Philippines and Thailand.

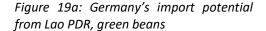
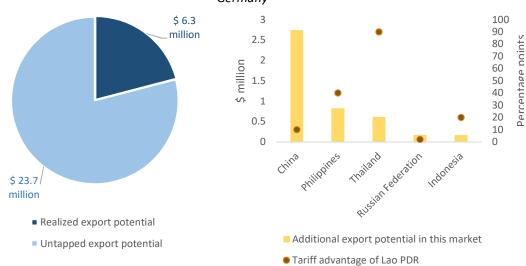


Figure 19a: Germany's import potential Figure 19b. Additional export potential by exporting roasted coffee from Lao PDR for companies active in Germany



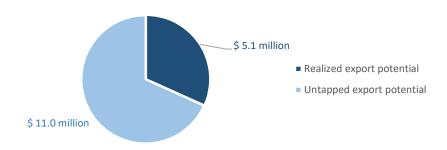
Source: ITC. Results capture yearly export/import potential by 2024.

Thailand

Thailand's import potential of green beans from Lao PDR amounts to \$16 million per year by 2024, out of which 68% is still untapped. To satisfy the demand, companies importing to Thailand could invest in coffee production in Lao PDR.

Tariff advantages do not play a role for companies exporting roasted coffee from Thailand, as both countries enjoy the same tariff conditions on important markets.

Figure 20: Thailand's import potential from Lao PDR, green beans

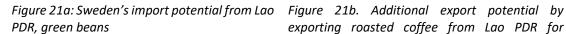


Source: ITC. Results capture yearly import potential by 2024.

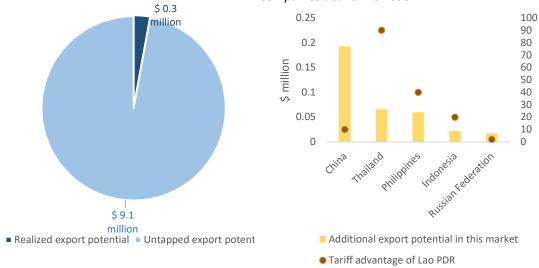
Sweden

Virtually all of Sweden's potential to import green beans from Lao PDR (\$9.1 million per year by 2024) is still untapped, resulting in a strong motivation for companies to invest in the production of green beans in Lao PDR to ensure access to this resource for imports to Sweden.

If they invested in roasting coffee in Lao PDR, companies currently exporting from Sweden could benefit from the Lao PDR's tariff advantages and increase their export potential by \$380,000. The most important market in this regard is China (\$190,000 additional export potential), followed by Thailand and the Philippines.



exporting roasted coffee from Lao PDR for companies active in Sweden



Source: ITC. Results capture yearly export/import potential by 2024.

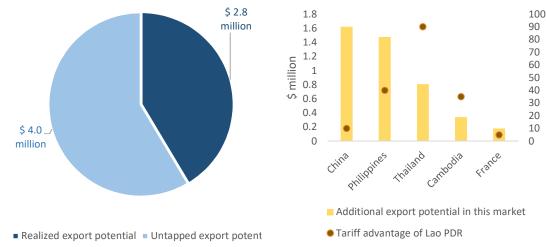
United States

The United States could import \$6.8 million of green beans from Lao PDR per year by 2024. While \$2.8 million of this import potential is already realized, \$4 million remain untapped. Investing in coffee production in Lao PDR could allow companies importing to the United States to access this resource.

As Lao PDR has tariff advantages for roasted coffee in several Asian and other markets, investing in coffee roasting in the country and exporting to third markets could further increase the export potential of companies currently exporting from the United States by \$5 million. The markets with the highest opportunities to increase exports through this channel are China (\$1.6 million) and the Philippines (\$1.5 million).

Figure 22a: The United States' import potential Figure 22b. Additional export potential by from Lao PDR, green beans

exporting roasted coffee from Lao PDR for companies active in the United States



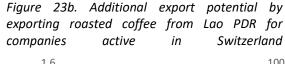
Source: ITC. Results capture yearly export/import potential by 2024.

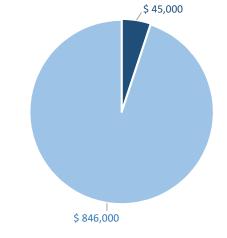
Switzerland

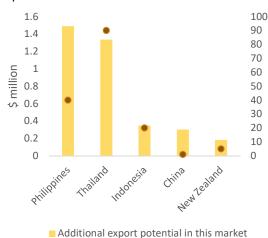
Switzerland's potential to import green beans from Lao PDR (\$800,000 per year by 2024) is almost fully untapped, providing an investment opportunity for companies importing to Switzerland in order to access resources.

More importantly, companies currently exporting from Switzerland could invest in producing roasted coffee and export directly from Lao PDR to benefit from its tariff advantages. This would allow them increase their export potential by more than \$4 million – with the Philippine and Thai market alone accounting for \$1.5 million and \$1.3 million, respectively.

Figure 23a: Switzerland's import potential from Lao PDR, green beans







Realized export potential
 Untapped export potent

Tariff advantage of Lao PDR

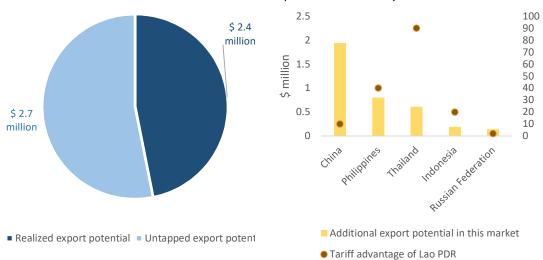
Source: ITC. Results capture yearly export/import potential by 2024.

Only about half of Italy's import potential of \$5.1 million per year by 2024 is already exploited, leaving room for investments into the production of green beans in Lao PDR by companies importing to Italy.

Thanks to Lao PDR's tariff advantages, the export potential of companies exporting from Italy could be boosted by \$4 million by roasting in Lao PDR and serving Asian and other markets from there. Export potential to China alone could increase by almost \$2 million. Other markets with potential for exports of roasted coffee from Lao PDR include the Philippines and Thailand.

Figure 24a: Italy's import potential from Lao Figure 24b. Additional export potential by PDR, green beans

exporting roasted coffee from Lao PDR for companies active in Italy



Source: ITC. Results capture yearly export/import potential by 2024.

Additional sectors with investment potential

Access to resources

The sector in which Lao PDR has the highest export potential is mineral products and electrical energy (\$2.3 billion per year by 2024), followed by wood and processed wood products (\$804 million) and metals (\$803 million). About half of the export potential in these sectors is still untapped. In the fourth and fifth rank in terms of total export potential are vegetables (\$403 million) and electronic equipment (\$348 million). In these sectors, about 75% of export potential is still untapped, which implies that they present particularly important opportunities for export growth.

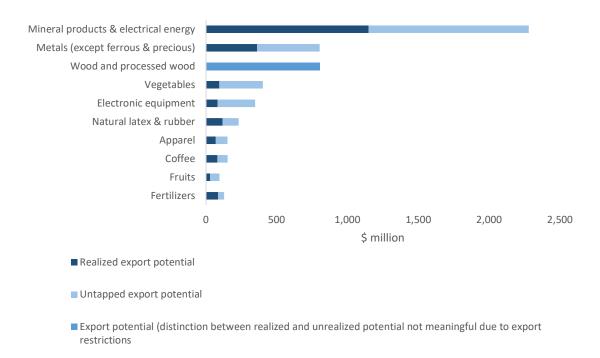


Figure 25: Export potential of Lao PDR, by sector

Source: ITC. Results capture yearly export potential by 2024.

Tariff advantages

The sectors in which companies could increase their export potential the most by producing in Lao PDR and taking advantage of its preferential access to certain markets are metals (\$865 million) and mineral products & electrical energy (\$774 million). They are followed by electronic equipment (\$266 million), vegetables (\$217 million) and apparel (\$212 million).

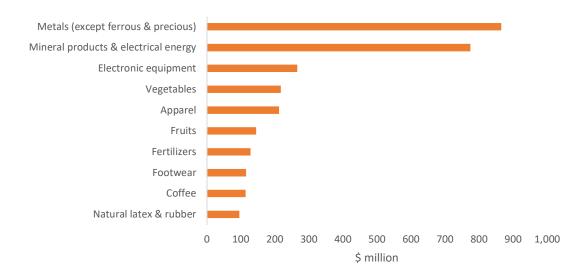


Figure 26: Additional export potential through investing in Lao PDR, by sector

Recommendations for additional sectors with investment potential

Besides wood processing and coffee, the top sectors combining untapped export potential and the opportunity for investors to benefit from Lao PDR's tariff advantages include metals, mineral products & electrical energy, electronic equipment and vegetables. Mining and electrical energy have dominated FDI inflows over the last decade, absorbing more than 60% of total FDI. Vegetables and electronic equipment may therefore provide the opportunity to attract important investments while at the same time diversifying the economy in a sustainable way and creating more employment opportunities than the capital intensive industries in which FDI concentrates at present.

Conclusion

In Lao PDR, investments are concentrated in infrastructure, mining and electricity: these sectors alone account for more than 75% of approved foreign investments between 2010 and 2019. At the same time, foreign investment in this period originated from only a few countries, with more than 75% coming from China, Viet Nam and Thailand. Inward FDI grew strongly until 2018, but started decreasing then and may remain weak due to the global COVID-19 pandemic.

This study aims to support investment promotion actors identifying promising products/sectors and investors and to provide them with a number of arguments in favour of FDI in Lao PDR, focusing on the wood processing and coffee sector. For this purpose, ITC has developed a methodology to spot investment opportunities relying on trade data. FDI data is usually available either by broad sector or by country of origin. This makes it impossible to infer sector-specific investment opportunities by country of origin. Trade data, which is available at a more detailed level, helps provide critical insights on the attractiveness to invest in a given sector for investors with activities in certain countries. Both government and private sector can use these insights to target potential investors and business partners and promote the opportunities Lao PDR presents for them.

Demand for wood from Lao PDR has historically been high, and the country has an export potential of more than \$800 million per year, with the most important markets being China, Viet Nama and Thailand. While Lao PDR mainly exported raw wood in the past, current export regulations do not allow this anymore. To access wood from Lao, investors need to invest in the entire value chain from wood plantations to the final processed wood product. In additional to exploiting existing export potential of Lao PDR, foreign investors can increase their own export potential by using Lao PDR as a basis for production and exports and benefit from the country's tariff advantages. This allows them to improve their market access to important regional markets, most importantly India and Malaysia.

In the coffee sector, international investors can take advantage of Lao PDR's large untapped export potential (\$74 million) in markets around the world, including Germany, Thailand, Sweden and others. For green beans (unroasted coffee) from Lao PDR, the country's tariff advantages may allow companies to increase their export potential to regional markets, in particular India and ASEAN. While international ownership of coffee processing plants is still restricted, tariff advantages present incentives to roast coffee in Lao PDR to serve regional markets, most importantly China and ASEAN.

In addition to the detailed analysis of the focus sectors, a short analysis highlights other sectors with potential to attract investment and increase diversification. The most important ones include vegetables and electronic equipment. The sectors with the highest untapped export potential and opportunities to leverage Lao PDR's tariff advantages are metals and mineral products & electrical energy. As FDI is already highly concentrated in these capital intensive sectors, active investment promotion efforts may focus on further sectors with important opportunities to encourage diversification and sustainability of economic growth. The most important such sectors are vegetables and electronic equipment.

In sum, the processed wood and coffee sector offer opportunities for companies to invest in Lao PDR and use it as a base to access other markets, in the region and beyond. To leverage these opportunities and attract investment, the Lao government needs to ensure that rules and regulations around investment are appropriate and transparent, and that the business environment is attractive for potential investors.

Annex 1: Methodology

This annex describes the methodology to identify potential investors that could benefit from a tariff advantage by producing in Lao PDR to export to markets to which Lao PDR has preferential access. $IPI_{i,j,k}$, the investment potential indicator, captures by how much investors currently exporting from country i could increase their export potential of good k by investing in receiving country j to produce there and then export to market l.

 $IPI_{i,j,k}$ considers all markets for which the tariff for exports of k from Lao PDR is smaller than the tariff for exports from i ($l|t_{i,l,k}>t_{j,l,k}$). It computes the change in the investor's export potential ($EPI_{i,l,k}$) if the investor faced the tariff applied to Lao PDR instead of the tariff applied to i (tariff correction factor). The fact that the distance between Lao PDR and the target market is not the same as the distance between i and the target market, and that distance plays a role for export potential in certain goods, is accounted for by the distance correction factor. Finally, investment potential is normalized such that total investment potential in each sector equals Lao PDR's export potential in this sector. This production capacity correction factor aims to ensure that, if all investments were to occur in the same year, the Lao economy would be able to absorb them.

$$\begin{split} IPI_{i,j,k} &= \sum_{l \in \{l | t_{i,l,k} > t_{j,l,k}\}} EPI_{i,l,k} \left[\left(\frac{1 + t_{i,l,k}}{1 + t_{j,l,k}} \right)^{\sigma_k} - 1 \right] \times \frac{Distance \ Advantage_{j,l,k}}{Distance \ Advantage_{i,l,k}} \\ &\times \frac{EPI_{j,world,s}}{\sum_{k \in s} \sum_{l} EPI_{i,l,k} \times \left(\frac{1 + t_{i,l,k}}{1 + t_{j,l,k}} \right)^{\sigma_k}} \times \frac{Distance \ Advantage_{j,l,k}}{Distance \ Advantage_{i,l,k}} \end{split}$$

- i origin country (country from which the investing company is currently exporting)
- *j* destination country (country receiving investment here: Lao PDR)
- l third market (all other countries), such that $t_{i,l,k} > t_{i,l,k}$
- k product
- s sector
- ullet $t_{i,l,k}$ tariff
- σ_k substitution elasticity (from GTAP)
- Tariff correction factor
- Distance advantage correction factor
- Production capacity correction factor
- IPI Investment potential indicator