Lao People’s Democratic Republic after LDC Graduation

New avenues for exports
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Lao People’s Democratic Republic could lose 7.3%, or $734 million, of exports when graduating from least developed country (LDC) status. The most affected sectors will be natural rubber and latex, paper products and apparel, with losses largely in Chinese and European markets.

To mitigate, the country can leverage trade promotion to unlock up to $1.4 billion in export potential in existing and new markets, now held back by non-tariff frictions – like rubber to Viet Nam and energy to Cambodia. Lao People’s Democratic Republic will also benefit from negotiating better post-graduation access to key markets and, generally, a more diversified trade structure.
Foreword

Instituted more than 50 years ago, the status of least developed country was always meant to be a temporary phase in the development of countries. Belonging to the LDC category can be instrumental to development, particularly through the duty-free, quota-free access granted by multiple markets. Graduation from this category comes as recognition of the development path travelled, but also brings new challenges.

Lao People’s Democratic Republic became an LDC in 1971. After remarkable progress in recent decades, with growth in per-capita income and improvements of human assets indicators, it was agreed in 2021 that the country would graduate from the LDC category by the end of 2026.

The usual challenges associated with graduation are now compounded by increasing climate change concerns, post-COVID recovery and a difficult geopolitical environment. It is therefore crucial that Lao People’s Democratic Republic leverage the extended five-year preparatory period to formulate and put in motion strategies that secure a smooth and sustainable transition out of the LDC category.

The International Trade Centre, together with its development partners, stands ready to support the efforts of Lao People’s Democratic Republic towards a successful graduation process. That is why we produced this study, which uncovers the effect of graduation-related tariff changes on Lao exports and identifies targeted strategies to counterbalance them.

I hope this study will be a useful input to ensure the sustainable and inclusive development of Lao People’s Democratic Republic post-graduation.

Pamela Coke-Hamilton
Executive Director
International Trade Centre
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Acronyms

Unless otherwise specified, all references to dollars ($) are to United States dollars.

APTA  Asia-Pacific Trade Agreement
ASEAN  Association of Southeast Asian Nations
EBA    Everything But Arms
EU     European Union
FTA    free trade agreement
GDP    gross domestic product
GSP    Generalized System of Preferences
ITC    International Trade Centre
LDC    least developed country
MFN    most favoured nation
WTO    World Trade Organization
Executive summary

The transition period for Lao People’s Democratic Republic to graduate out of LDC category was extended until 2026 in light of the COVID-19 pandemic. By then, the country will move from the unilateral tariff preferences for LDCs granted by 24 markets to the next-best available regime. As a result, the average tariff that Lao exporters face in these markets will increase to 4.1% from 0.3%, affecting their trade competitiveness.

Earlier estimates of the trade effects of removing LDC tariff preferences assumed that Lao People’s Democratic Republic would graduate by 2024 and were made under the impression of a different trade and trade policy landscape. This study provides fresh estimates for 2027, the year after graduation, taking into account the most recent global economic outlook and latest changes in the preferential trading schemes of Lao People’s Democratic Republic’s trade partners. It also outlines targeted strategies to mitigate the potential losses.

Post-graduation tariff increases could reduce Lao exports by 7.3%

Previous estimates that – like this study – assume full use of preferences suggest that removing LDC tariffs may reduce Lao exports in a range of 1.2% (International Trade Centre, 2020) to 4.9% (World Trade Organization, 2020a). Using more recent data, we find that projected 2027 exports could drop to $9.3 billion from $10 billion – a loss of $734 million, equivalent to 7.3% of total projected exports. The effective impact depends on the extent to which Lao exporters have been and will be able to take advantage of the preferential market access given to them pre- and post-graduation.

More than 70% of the reduction (or $581.3 million) is expected in the Chinese market, concentrated in seven items of the natural latex and rubber ($333 million), paper product ($159 million) and cereal product ($89 million) sectors. All these goods recently received duty-free, quota-free access to the Chinese market under the country’s unilateral LDC preference scheme, but face less generous tariff conditions under the China-Association of Southeast Asian Nations (ASEAN) free trade agreement (FTA) or the Asia-Pacific Trade Agreement (APTA) that will govern Lao trade with China post-graduation.

By moving from the Everything But Arms (EBA) scheme for LDCs to the Generalized System of Preferences (GSP) scheme for developing countries, Lao exports to the European Union (EU) are expected to decrease by $121.7 million, primarily in the apparel and footwear sectors. Additional markets with substantial losses include the United Kingdom ($11.4 million), Japan ($10.3 million) and Canada ($5.1 million).

Exports to Thailand, Lao People’s Democratic Republic’s most important market, will remain unaffected as the ASEAN-Australia-New Zealand FTA to which both countries are parties offers the same duty-free, quota-free market access as Thailand’s unilateral LDC scheme.

Targeted responses can counterbalance export losses

Targeted responses will be needed to ensure a smooth and sustainable transition out of LDC support measures. These include trade promotion to further penetrate markets where the graduation-related losses occur, shifting to new markets and products with untapped potential, or negotiating special tariff concessions for the most affected ones. This study presents suitable mitigation strategies for each sector and market where Lao People’s Democratic Republic may face a reduction of exports upon graduation.

- Trade promotion:

Market frictions, unrelated to tariffs, result in an underuse of Lao People’s Democratic Republic’s export potential. Targeted trade promotion enables companies to overcome these frictions and unlock this potential. This will help mitigate some of the losses resulting from graduation-related tariff changes.

Across all products, Lao People’s Democratic Republic has a combined unrealized export potential of $1.4 billion. Products that can expect to see graduation-related losses accumulate $819 million in unrealized potential, $46 million of which could be realized in the markets where the losses occur and $773 million in other markets. Removing frictions to tap into this potential could mitigate the estimated trade loss.
In the most-affected sectors, however, this strategy will only be able to balance out losses partially. While the Lao rice sector could mitigate the estimated $6.6 million reduction in exports to the EU by unlocking the $10.9 million potential in other markets, targeted trade promotion can only cover 36%–82% of the estimated losses in other products.

A shift of production capacity towards the sectors with high unrealized export potential – such as machinery, electricity or vegetables – may therefore be considered.

- Improved market access:

Improving market access conditions through new agreements or adherence to more preferential schemes may be the preferred option when the untapped potential in the same or alternative markets fails to cover the losses. For the seven products that account for more than 97% of the export reduction in the Chinese market, realizing the untapped potential across all markets would only partially cover the trade losses. The available room for further export growth of rubber products in Viet Nam ($55.8 million) and other markets ($61.1 million) could make up for merely 36% of the loss in China.

Besides efforts to overcome frictions in these markets to diversify exports, Lao People’s Democratic Republic may explore the possibility to negotiate special concessions for the most affected products under APTA, for instance.

In the EU market, obtaining access to the more generous GSP+ scheme could reduce the trade loss in the apparel and footwear sectors. Should Lao People’s Democratic Republic manage to become eligible and make use of GSP+ preferences, its estimated total trade loss would fall to 6.4% from 7.3% of projected exports.

An evaluation of how feasible it may be for Lao People’s Democratic Republic to obtain special preferences in the Chinese or the EU market is beyond the scope of this paper.
Chapter 1
On the path to graduation

Lao People’s Democratic Republic was recommended for graduation from the least developed country (LDC) category during the triennial review held by the United Nations Committee for Development Policy in February 2021.\(^1\) In light of the COVID-19 pandemic, it was decided that the usual three-year preparatory period would be extended to five years. This means that Lao People’s Democratic Republic will continue to receive LDC-specific support until 2026.

Earlier studies by the International Trade Centre (ITC, 2020) and the World Trade Organization (WTO, 2020a) provided estimates on graduation-related trade losses assuming 2024 to be the country’s year of graduation and a trade and trade policy landscape that is different from today’s. It is necessary to account for recent changes in the economic growth prospects of Lao People’s Democratic Republic and its trade partners and in the tariff conditions they apply for an accurate understanding of the consequences of the loss of LDC preferences and to devise appropriate strategies to offset them.

In line with that goal, this study updates ITC’s (2020) partial equilibrium estimates of the impact of tariff changes on potential trade outcomes for Lao People’s Democratic Republic. Current trade is projected to its expected level in 2027 using forecasts of the gross domestic product (GDP) and population of all countries. Using projected rather than current exports is important as shifts towards markets with LDC schemes in place will have implications for the estimated trade changes. Likewise, we consider future changes in the country’s tariff advantages over competitors by including the 2027 rates available from the tariff reduction schedules of trade agreements that are in force.

The analysis identifies, at a detailed product and market level and for all partners, where losses are expected to be significant. For each case, the study outlines possible avenues to mitigate the impact: trade promotion to overcome remaining non-tariff frictions in the affected market or in alternative markets, or negotiation of enhanced market access conditions for the products that will face tariff changes.

This approach thus provides estimates of expected trade changes after graduation and concrete recommendations on actions to buffer the effects. Chapter 1 describes the tariff changes to be expected upon graduation and the likely evolution of Lao trade patterns until then. Chapter 2 examines the estimated effects of these changes on exports. Chapter 3 summarizes export growth opportunities and the impact of mitigatory approaches such as trade promotion in markets with or without tariff changes. Chapter 4 offers policy options.

How will tariffs change for Lao People’s Democratic Republic?

The first step in understanding how graduation can affect exports is to identify LDC-specific trade support benefiting Lao People’s Democratic Republic. Trade support for LDCs takes several forms, among them institutional, analytical and productive capacity support, as provided, for example, through the Enhanced Integrated Framework.

This study focuses on the effect of graduation on exports through a specific aspect of trade support for LDCs: preferential tariffs. It therefore starts by exploring what preferential tariffs Lao People’s Democratic Republic receives based on its current LDC status, what tariffs will presumably be after graduation considering existing

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\(^1\) The United Nations Committee for Development Policy recommends graduation from the LDC category based on certain criteria scores that are evaluated every three years. The criteria considered are gross national income per capita, the Human Assets Index and the Economic and Environmental Vulnerability Index. Countries that meet thresholds on any two of these indicators for two consecutive reviews, or alternatively more than double the gross national income threshold at two consecutive reviews, are recommended for graduation. Complementary country-specific information and the views of the government are also considered. Lao People’s Democratic Republic met the gross national income per capita and the Human Assets Index criteria in 2018 and was informed it would be considered for graduation in the triennial review of 2021.
trade agreements and, to the extent possible, whether Lao People’s Democratic Republic indeed uses its existing LDC tariff preferences.

**Post-graduation tariff regimes**

Lao exports face LDC-specific preferential tariffs in 24 markets. Once LDC support ends, the tariffs applied by those markets will revert to the next-best scheme.

Table 1 lists all markets that grant LDC preferences to Lao People’s Democratic Republic and groups them according to the type of regime they will apply after graduation: non-reciprocal preferential tariff schemes for developing countries, bilateral free trade agreements (FTAs), preferential tariffs under regional trade accords such as the Asia-Pacific Trade Agreement (APTA) or the Association of Southeast Asian Nations (ASEAN), and most favoured nation (MFN) tariffs.

### Table 1   Next-best tariff schemes in markets granting LDC preferences

<table>
<thead>
<tr>
<th>Generalized System of Preferences</th>
<th>Bilateral or regional free trade agreement</th>
<th>Most favoured nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>Australia*</td>
<td>Chile</td>
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<tr>
<td>Belarus</td>
<td>China</td>
<td>Iceland</td>
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<td>Canada</td>
<td>India</td>
<td>Montenegro</td>
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<tr>
<td>European Union</td>
<td>Japan*</td>
<td>Taipei, Chinese</td>
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<td>Kazakhstan</td>
<td>New Zealand*</td>
<td>Tajikistan</td>
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<td>Kyrgyzstan</td>
<td>Republic of Korea</td>
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<td>United Kingdom</td>
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*Note:* Countries with an * also have a Generalized System of Preferences (GSP) scheme in place.

**Source:** ITC staff illustration based on data from the ITC Market Access Map (2022).

Fourteen of the 24 markets granting LDC preferences to Lao People’s Democratic Republic have a non-reciprocal preferential tariff scheme that offers some tariff reductions to developing countries.

Seven have one or several FTAs that grant preferential market access to Lao People’s Democratic Republic. The ASEAN-Australia-New Zealand Free Trade Area that will govern future Lao trade with Australia, New Zealand and Thailand is the most generous alternative regime, offering duty-free, quota-free access for all products.

Three FTAs will be available for trade with China: the China-ASEAN FTA, APTA and the Regional Comprehensive Economic Partnership. Preferences under these regimes are less generous than those granted through China’s unilateral LDC scheme.

Only Chile, Iceland, Montenegro, Chinese Taipei and Tajikistan have no alternative preferential scheme in place for which Lao People’s Democratic Republic could qualify. Therefore, Lao exports to these markets will be subject to MFN tariffs following graduation.

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2 The European Union (EU) is considered as one market.

3 Lao People’s Democratic Republic has participated in China’s unilateral LDC scheme since 2021.
Some comments are in order regarding how these schemes are used in the analysis that follows.

First, the European Union’s non-reciprocal preferential tariff scheme for LDCs – the Everything But Arms (EBA) initiative – provides for a transition period of three years for graduating countries. During that time, Lao People’s Democratic Republic will continue to benefit from duty-free, quota-free market access to the EU. After that transition period, the country will be eligible for the EU’s Generalized Scheme of Preferences (GSP) for developing countries. For comparability purposes, our analysis assumes that Lao People’s Democratic Republic will move from EBA to GSP tariffs directly upon graduation.

Second, Lao People’s Democratic Republic could also eventually qualify for the EU’s extended, more generous GSP system, GSP+. To do so, the country would have to fulfil the vulnerability criteria, reflecting a non-diversified economy and low import shares into the EU, and implement 27 international conventions on labour rights, human rights, environment protection and good governance. The analysis that follows considers the GSP scenario. A potential move to GSP+ will be discussed as an option to seek better market access.

Third, whenever more than one preference scheme is applicable, our analysis assumes that Lao exporters make full use of the most favourable one for a given export product, regardless of differences in the rules of origin.

Lastly, the analysis considers the tariff levels that will be available in 2027. This is done using all tariff schedules already negotiated. Likewise, we project exports to 2027.

Based on the assumptions outlined above, the average trade-weighted tariff in markets with LDC preference schemes will rise to 4.1%. The increase will vary widely between sectors, as shown in Figure 1. While many sectors will only experience increases smaller than one percentage point, others will see steep rises in the tariffs they face. That is, for example, the case of the vegetal products sector, with an increase of 46 percentage points in average applied tariffs.

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4 As part of the ongoing GSP review, the extension of the smooth transition out of EBA to five years is being considered.
5 To be granted EU GSP preferences, a country must be classified below the ‘upper middle income’ category of the World Bank and not benefit from other preferential market access schemes to the EU.
6 The United Nations Department for Economic and Social Affairs (2020) reports that Lao People’s Democratic Republic ‘meets the vulnerability criteria but had not, at the time of writing, ratified three of the required International Labour Organization (ILO) Conventions. For a country to be eligible, in addition to having ratified the conventions, the most recent conclusions of the monitoring bodies of those conventions must not have identified serious failure by the country to effectively implement them.’
7 Upon exiting the European Union, the United Kingdom implemented its own GSP system, similar to the one of the EU with three categories: LDC countries, general framework and enhanced framework. The eligibility criteria for each category are also similar. See https://www.gov.uk/government/publications/trading-with-developing-nations.
8 As Lao People’s Democratic Republic will graduate at the end of 2026, any effects on tariffs – and subsequently on exports – will materialize in 2027 at the earliest. See additional details on methodology and data in Appendix I.
Utilization rate of preferences

The loss of LDC status and subsequent tariff increases can only have a negative impact on Lao exports if tariff preferences are currently being used. Recent evidence presented by the WTO suggests there is a high rate of underuse of preferences for LDCs across all sectors, especially for landlocked LDCs.¹⁰

It is difficult to verify if this is the case for Lao People’s Democratic Republic, due to the lack of detailed data available on the use of LDC preferences from some of the country’s main partners. For selected partners, information is available through the WTO’s Integrated Database, according to which the total utilization rate of preferences ranged from 36.7% to 81.9% in 2016–2020.

Data by country show a wide range of utilization rates, from exports to the EU and the United Kingdom, Japan and Canada at 69% or more throughout the period, to Norway with fluctuations between 15% in 2016 to 100% in 2017, and Australia and Switzerland, where the available preferences are used for less than one-fifth of all eligible exports. Note that information from the other LDC preference-granting partners is not available.

The WTO’s LDC Group analysed preference utilization under China’s non-reciprocal LDC scheme for other beneficiaries. It found that for three-quarters of the traded tariff lines, between 0% and 25% of these countries’ exports to China benefited from the scheme’s preferences. Among China’s top LDC trade partners, only Bangladesh had a utilization rate of 45%. If Lao People’s Democratic Republic reaches similar rates as other beneficiaries of China’s unilateral LDC scheme, the loss of preferences may in reality only concern a small portion of the country’s exports.

Figure 2 EU, British, Japanese and Canadian LDC preferences used often

Note: Data for Norway are only available in 2016, 2017 and 2019.
Source: ITC staff calculations based on data from the World Trade Organization’s integrated database.

While preference use varies significantly between partners and across years, it is consistently high for the EU market and seems generally rather low for the Chinese market, two main export destinations of Lao People’s Democratic Republic. This suggests that the loss of LDC status in 2026 and subsequent tariff increases will indeed have a negative impact on Lao exports to the EU, but may have limited consequences on exports to China. Assuming full utilization of preferences for all schemes implies that the calculated trade losses associated with tariff changes are upper-bound estimates.

Rules of origin

Graduation from LDC status implies a change in tariffs and in the rules of origin with which graduating countries must comply to be eligible for preferential treatment. More stringent rules of origin often lead to lower utilization rates of preferences.

The alternative regimes listed in Table 1 may be associated with both higher tariffs and stricter rules of origin. For example, the India-ASEAN free trade agreement requires 35% local value addition for footwear, instead of the 30% required under Indian LDC preferences. Similarly, the 30% local value-addition requirement under the EBA initiative becomes a 50% requirement under GSP and GSP+.

In many cases, the apparel sector must meet additional transformation conditions to qualify for preferences, e.g. in the case of the EU’s GSP, ‘double transformation’ will become necessary.11

Tougher rules of origin post-graduation are likely to reinforce the negative impact of tariff increases on Lao exports. As rules of origin changes are not considered in our analysis, we assume full utilization also of the next-best preferential schemes, implying that the calculated trade losses associated with tariff changes will be lower-bound estimates.

10 The results of the analysis are summarized in WTO (2020b): Committee on Rules of Origin: Minutes of the Meeting of 17–18 October 2019.
To sum up, while the assumption of a full use of current LDC preferences means the trade implications could in reality be more limited than estimated, the abstraction from rules of origin changes – and thus the assumption of full use of the next-best preferences available to Lao People’s Democratic Republic post-graduation – means the trade implications could be even greater than our estimates suggest.

Who are Lao People’s Democratic Republic’s main trade partners?

Lao exports are concentrated in just a few markets. Between 2017 and 2021, more than 70% were destined for Thailand and China, both of which grant LDCs preferential market access. While the ASEAN-Australia-New Zealand Free Trade Area continues to give Lao exporters duty-free, quota-free access to the Thai market, the alternative regimes available for trade with China offer fewer and less beneficial preferential tariffs rates. Any further concentration of exports in markets with tariff changes risks exposing Lao People’s Democratic Republic to additional trade losses following graduation.

We project the country’s current trade to 2027 using the expected growth rates of GDP and population of all countries, the responsiveness of import demand to GDP per capita and population growth, and pre-graduation 2027 tariff rates. Details on the methodology and data used can be found in Appendix 1.

Figure 3 shows the expected evolution of Lao exports to markets where tariffs will change and to those where they will remain the same. Lao exports are expected to grow from $6.1 billion to $10 billion before graduation. While exports to markets where tariffs will change are projected to rise 89%, exports to those with unchanged tariffs will rise only 48%. This implies an increasing exposure to tariff changes: if tariffs changed today 39% of Lao People’s Democratic Republic’s current exports would be affected, but 45% will be affected when tariffs change in 2027.

Lao exports to China are expected to more than double, lifting the share of the country’s total exports that is destined to China from 29% to 37%. Exports to Viet Nam will grow at a similar pace, increasing the share of this market from 9% to 11%. All other markets, including Thailand, will become relatively less important for Lao exporters.

Figure 3 Exports grow faster to markets with LDC preference schemes

Current exports: $6.1 billion
- Countries without tariff changes (61%)
- Countries with tariff changes (39%)

Projected exports: $10 billion
- Countries without tariff changes (55%)
- Countries with tariff changes (45%)

Note: The size of the rectangles is proportionate to Lao People’s Democratic Republic’s export values.
Source: ITC staff calculations based on data from the ITC Market Analysis Tools (2022).
Chapter 2
The effect of tariff changes on trade

We use a partial equilibrium model to estimate the size of the effect by partner and product, considering all possible partners and all products exported consistently. We apply the graduation-induced tariff changes to the situation of trade and market access in 2027.

Trade projections follow the method explained in the previous section. Tariff projections assume that, upon graduation, exports from the Lao People’s Democratic Republic that had LDC preferences will receive the next-best alternative tariff available. For all other countries, we reflect the tariff situation in 2027 by integrating information from tariff reduction schedules of agreements that are now in force.

To compute the model, we use trade and tariff data coming from the ITC Trade Map and Market Access Map databases, respectively, as well as GDP forecasts from the International Monetary Fund’s October 2022 World Economic Outlook, population projections from the World Bank’s World Development Indicators database and other sources. Details on the methodology and data used can be found in Appendix I.

Results show that Lao People’s Democratic Republic would export $10 billion in 2027 if it retained LDC status, but only $9.3 billion if the country moved to the next-best alternative tariff – a loss of $734 million. The estimated loss represents 7.3% of total projected exports.

Figure 4 shows the results by LDC preference-granting market. More than 70% of the losses are expected in trade with China, Lao People’s Democratic Republic’s second most important market after Thailand. This implies a reduction of the projected exports to this market by 16%, or $581 million. Although the loss in EU markets is smaller, at $122 million, it corresponds to a bigger share of the country’s projected bilateral exports, i.e. 34%. Almost $40 million of this loss occurs in the German market. Projected exports to other trade partners with LDC preferences will suffer comparably small losses aggregating to $31 million.

Figure 4 Losses in the Chinese market will be highest

Source: ITC staff calculations based on data from the ITC Market Analysis Tools (2022).

12 Annual exports were $6.1 billion on average over 2017–2021.
More than 90% of the projected losses will likely be concentrated in the natural latex and rubber, paper product, apparel, cereal and footwear sectors (Figure 5). The losses in the natural rubber and latex, paper product and cereal sectors will be almost entirely in the Chinese market, while most of the losses in the apparel and footwear sectors are in EU markets. Although the reduction represents a moderate share of exports forecast for 2027 for some sectors – paper products, for example (21%) – the loss is sizeable for others, notably natural rubber and latex (83%) and cereals (89%).

The large expected loss in exports to China results from (i) the growing importance of the market for Lao exporters (see Figure 3), (ii) a Chinese LDC preference scheme that covers some of the most important Lao export products and (iii) an important increase in tariffs for these products post-graduation.

China’s LDC preference scheme, first introduced in 2001, has expanded its coverage in recent years. Lao People’s Democratic Republic gained access to China’s LDC scheme in 2021. Over the past two years, exporters therefore benefited from duty-free, quota-free access to the Chinese market for certain goods that receive less generous preferences under the APTA or China-ASEAN agreements.

Some 97% of the export reduction expected for the Chinese market concentrates in only seven products: natural rubber and latex (with four product codes), paper goods (two product codes) and maize (Figure 6). All these items are on China’s sensitive list for the China-ASEAN FTA and are either excluded from or face higher preferential tariffs under APTA. Losses will be largest in ‘natural rubber in primary forms/flat shapes (non-smoked)’, where exports are expected to grow to $255 million before graduation and where the post-graduation tariff will be 17%.

Note: The figure shows the sectors with the largest losses, up to 90% of total losses.
Source: ITC staff calculations based on data from the ITC Market Analysis Tools (2022).
The sizeable losses in the Chinese market drive up Lao People’s Democratic Republic’s total estimated loss to 7.3% of projected exports. Previous studies did not find a comparable trade loss, mostly because Lao People’s Democratic Republic did not have access to China’s unilateral LDC preferences when these studies were produced.

ITC (2020) estimated the loss to be 1.2% of projected Lao exports, with a minor reduction of exports to China due to small differences between the LDC and the standard preferences granted under APTA. WTO (2020a) presents estimates in the range of 1.5%–4.9%, where the latter assumes, like this study, a full use of preferences. The authors did not have access to any preferential tariff data for China, however, and so assumed the application of MFN tariffs in this market.

One important note of caution should be considered: due to the lack of detailed and recent data on preference utilization rates, this study assumes a full use of the available preferences. Chapter 1 showed that utilization rates vary considerably across years and trade partners. For China in particular, an analysis by the WTO’s LDC Group suggests that other LDCs in the past were able to take limited advantage of the country’s non-reciprocal tariff preferences.

Should this also be the case for Lao People’s Democratic Republic, the effective consequences of the tariff increase may be more moderate than under the assumption of full preference utilization.
Chapter 3
Mitigation strategies

Expected export losses after Lao People’s Democratic Republic is no longer an LDC could be offset through several mitigation or adaptation strategies. These include using trade promotion to tackle hurdles that prevent the realization of export potential in markets where graduation implies trade losses or in alternative markets. Lao People’s Democratic Republic may also pursue better market access conditions, for instance, by trying to qualify for the EU’s GSP+ preferences or to negotiate special concessions for the most affected products under the China-ASEAN agreement.

Unlocking export potential

ITC’s export potential methodology identifies growth opportunities for exports. Export potential estimates are based on three pillars: (i) the current and projected supply capacity of Lao People’s Democratic Republic for any given product, (ii) the current and projected demand for that product in a given target market, as well as the market access conditions for Lao People’s Democratic Republic in terms of future relative tariffs and transportation costs, and (iii) the overall ease of trade between Lao People’s Democratic Republic and each target market.

For each regularly exported product, we calculate potential export values for 2027, in dollar terms, to any given market, for the post-graduation scenario in which Lao People’s Democratic Republic moves to the next-best alternative tariff. We compare the post-graduation export potential to the post-graduation projected exports to identify untapped export potential after graduation.13

Untapped export potential may be realized through targeted trade promotion – for example, by helping firms overcome non-tariff measures, comply with rules of origin or meet consumer preferences in the target market. To determine whether such efforts could mitigate the losses, and whether they should focus on the affected market or alternative ones, we contrast the expected losses for each product cluster with their untapped potential in that market and in alternative markets.14

Figure 7 compares the total estimated trade losses (first bar) with the remaining export potential across affected (second bar) and all product clusters (third bar). It shows that trade promotion efforts to fully unlock Lao People’s Democratic Republic export potential across all product clusters could give rise to $1.4 billion in additional exports – thus more than the estimated trade loss of $734 million.

Unlocking the remaining export potential of the affected product clusters in the markets where the losses occur can help offset $46 million, or 6% of the graduation-induced export reduction. Other markets that import these goods have space to boost exports by $773 million should trade promotion help remove non-tariff frictions.

13 See additional details on the methodology in Appendix 1 and in Decreux and Spies (2016). Note that untapped potential estimates differ from Export Potential Map (2023) because the comparison is made with projected post-graduation exports.
14 Comparing losses to untapped potential at the product cluster instead of the product level assumes a certain flexibility of exporters to shift production capacity to similar goods of the same cluster that are less affected by tariff changes or have more trade potential to explore in the affected or in alternative markets. A correspondence of products and product clusters for those that are listed in Table 2 is available in Appendix II.
Figure 7  Realizing the export potential of all goods and markets could offset expected losses

<table>
<thead>
<tr>
<th></th>
<th>Total losses</th>
<th>Total untapped potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>In affected clusters</td>
<td>$733.5 million</td>
<td>$1.4 billion</td>
</tr>
<tr>
<td>In other markets</td>
<td>$772.6 million</td>
<td>$772.6 million</td>
</tr>
<tr>
<td>In affected markets</td>
<td>$45.8 million</td>
<td>$45.8 million</td>
</tr>
</tbody>
</table>

**Note:** Comparison is made at the product cluster level to account for a certain flexibility producers may have to shift production capacity from affected to non-affected products that are similar.

**Source:** ITC staff calculations based on data from the ITC Market Analysis Tools (2022).

Although Figure 7 suggests trade promotion to be an effective tool to mitigate losses, it is important to note that most of the untapped potential is in product clusters that will experience no or only small losses below $1 million. Table 2 lists the product clusters and markets likely to face the largest losses and maps them to the corresponding untapped potential in the same or other markets.
### Table 2 Adaptation strategies to counter major export losses

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Product cluster</th>
<th>Markets</th>
<th>Export losses ($ thousands)</th>
<th>Untapped export potential ($ thousands)</th>
<th>Top markets with untapped export potential ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apparel</strong></td>
<td>Cotton</td>
<td>All countries</td>
<td>24,719</td>
<td>16,438</td>
<td>Japan (4.1), United States (2.7), China (1.9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EU</td>
<td>22,072</td>
<td>2,758</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada</td>
<td>1,504</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man-made fibres</td>
<td>All countries</td>
<td>15,711</td>
<td>12,901</td>
<td>Japan (3.7), China (3), United States (1.3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EU</td>
<td>13,406</td>
<td>1,750</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>United Kingdom</td>
<td>1,420</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Synthetic fibres</td>
<td>All countries</td>
<td>32,317</td>
<td>18,756</td>
<td>Japan (4.6), China (4), United States (3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EU</td>
<td>28,821</td>
<td>1,313</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>United Kingdom</td>
<td>2,563</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Textile materials</td>
<td>All countries</td>
<td>8,483</td>
<td>4,027</td>
<td>Japan (1.1), China (0.7), United States (0.3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EU</td>
<td>7,746</td>
<td>717</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other products</td>
<td>All countries</td>
<td>1,588</td>
<td>4,855</td>
<td>China (1.1), Japan (0.8), Thailand (0.2)</td>
</tr>
<tr>
<td><strong>Cereals (except wheat &amp; rice)</strong></td>
<td>Cereals, except wheat</td>
<td>All countries</td>
<td>8,483</td>
<td>34,334</td>
<td>Thailand (25.4), Japan (2.8), Cambodia (1.8)</td>
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<tr>
<td></td>
<td></td>
<td>China</td>
<td>72,328</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rubber/plastic soles</td>
<td>All countries</td>
<td>5,293</td>
<td>3,191</td>
<td>China (1.3), Japan (0.5), Thailand (0.1)</td>
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<tr>
<td></td>
<td></td>
<td>EU</td>
<td>4,071</td>
<td>510</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rubber/plastic/leather soles and leather uppers</td>
<td>All countries</td>
<td>27,376</td>
<td>11,660</td>
<td>China (5.6), Thailand (1), Mexico (0.7)</td>
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<tr>
<td></td>
<td></td>
<td>EU</td>
<td>11,935</td>
<td>3,340</td>
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<tr>
<td></td>
<td></td>
<td>Japan</td>
<td>10,042</td>
<td>0</td>
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<tr>
<td></td>
<td></td>
<td>United Kingdom</td>
<td>3,866</td>
<td>84</td>
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<tr>
<td></td>
<td></td>
<td>Canada</td>
<td>1,363</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural latex &amp; rubber</td>
<td>Natural rubber</td>
<td>All countries</td>
<td>322,838</td>
<td>116,913</td>
</tr>
<tr>
<td></td>
<td></td>
<td>China</td>
<td>322,838</td>
<td>1,977</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rice</td>
<td>All countries</td>
<td>6,602</td>
<td>10,881</td>
<td>Viet Nam (6.3), Philippines (1), Japan (0.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European Union</td>
<td>6,460</td>
<td>359</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raw cane or beet</td>
<td>All countries</td>
<td>24,834</td>
<td>10,699</td>
<td>Indonesia (8.6), Japan (0.5), Republic of Korea (0.4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European Union</td>
<td>17,329</td>
<td>35</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>China</td>
<td>7,287</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refined cane or beet</td>
<td>All countries</td>
<td>5,178</td>
<td>2,398</td>
<td>Cambodia (1.1), Indonesia (0.2), Philippines (0.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>European Union</td>
<td>4,532</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other products</td>
<td>All countries</td>
<td>25</td>
<td>1,973</td>
<td>Viet Nam (0.7), Japan (0.3), Philippines (0.2)</td>
</tr>
<tr>
<td></td>
<td>Synthetic textile fabric</td>
<td>Woven of polyester/polyamide/acrylic staples</td>
<td>All countries</td>
<td>1,325</td>
<td>566</td>
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<td></td>
<td></td>
<td>Türkiye</td>
<td>1,298</td>
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<td></td>
<td>Other sectors</td>
<td>All affected products</td>
<td>All countries</td>
<td>3,099</td>
<td>China (410.4), Viet Nam (29.5), Japan (19)</td>
</tr>
</tbody>
</table>

**Note:** Only product clusters with remaining export potential are listed. Lao People’s Democratic Republic recorded exports of the two paper products with losses in the Chinese market only in one year. To calculate export potential, at least three years of continuous exports are required (see Appendix I). For a correspondence between products and product clusters, see Appendix II.

**Source:** ITC staff calculations based on data from the ITC Market Analysis Tools (2022).
Trade promotion in the affected markets

The untapped export potential in a given market and product cluster is never sufficient to fully mitigate the expected graduation-related export losses. In the footwear with rubber or plastic soles and the cotton apparel clusters, targeted trade promotion in the affected markets could help unlock enough exports to offset 19% and 17% of the expected losses, respectively.

Exports of footwear with rubber or plastic soles to the European Union are projected to drop by $4.1 million, but have $510,000 in untapped export potential in EU markets. Losses are split between two products,15 with 58% of the untapped potential concentrating in ‘Footwear, rubber/plastic soles & textile uppers, n.e.s.’ (product code 640419).

Exports of cotton apparel to the European Union are likely to decline by $22.1 million, with many products affected.16 However, the cluster has an untapped export potential of $2.8 million in the EU – more than half of it in ‘Men’s underpants & briefs of cotton, knit/crochet’ (product code 610711). Many cotton apparel products also face losses in the Canadian market aggregating to $1.5 million for the whole cluster. Addressing non-tariff frictions in the Canadian market would allow for a minimal increase in exports of $120,000, mainly in ‘Jerseys & similar of cotton, knit/crochet’ (product code 611020).

Trade promotion in other markets

In other cases, the post-graduation export potential in the affected market will already be largely realized. Trade promotion efforts may thus look beyond the affected market and focus on alternative markets.

In the rice sector, for instance, the expected losses of $6.6 million (98% of which are in the EU), could be offset by unlocking exports worth $10.9 million potential in other markets, currently hindered by frictions. The vast majority of this untapped potential lies in the Vietnamese market ($6.3 million).

Other product clusters with losses above $1 million offer room for partial compensation only.

Natural rubber exports are set to decline by $322.8 million following graduation-related tariff changes on the Chinese market.17 Lao exporters could realize another $116.9 million in exports to other markets, however, with the help of targeted trade advisory. Almost half of these growth opportunities are in the Vietnamese market.

For maize, with a projected loss in exports to China of $72.3 million, mitigation possibilities exist in Thailand ($25.4 million), Japan ($2.8 million) and Cambodia ($1.8 million).

Losses for apparel made of synthetic fibres exported to the EU are forecast at $28.8 million, with 84% of this decline originating in ‘Men’s trousers & shorts of synthetic fibres’ (product code 620343). While limited room for export growth still exists in the EU ($1.3 million), most untapped potential is in the Japanese ($4.6 million) and Chinese ($4 million) markets.

Finally, raw cane and beet sugar exports are expected to drop by $24.8 million, with $17.3 million projected for the EU and $7.3 million for the Chinese market. Partial compensation would require tackling frictions and unlock the remaining potential in Indonesia ($8.6 million), Japan ($452,000) and the Republic of Korea ($391,000).

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15 Footwear, rubber/plastic soles & textile uppers, n.e.s. (product code 640419, -$2.4 million) and other footwear, rubber/plastic soles & uppers (product code 6402XX, -$1.7 million).
16 Thirteen products, the largest ones being T-shirts & vests of cotton, knit/crochet (610910, -$5.5 million), men’s underpants & briefs of cotton, knit/crochet (610711, -$4 million), Men’s trousers & shorts of cotton (620342, -$3.8 million) and men’s shirts of cotton (620520, -$2.8 million).
17 Natural rubber in primary forms/flat shapes (non-smoked) (product code 400129, -$221.9 million), natural rubber latex (product code 400110, -$57.3 million) and technically specified natural rubber (product code 400122, -$43.7 million).
Trade promotion in other sectors

The product clusters with losses exceeding $1 million have a combined untapped potential of $249 million, whereas those that will likely face small losses below $1 million feature a $569 million export growth potential. Across all sectors, affected or not by graduation, Lao People’s Democratic Republic has room to boost its exports by $1.4 billion (Figure 7). This suggests that trade promotion, together with a shift of production capacity towards less-affected product clusters, could also be a promising strategy for the country in its efforts to prepare for graduation.

Figure 8 shows that most of the untapped potential is in the machinery, electricity sector ($423 million) and the vegetable ($312 million) sector. Trade promotion efforts to unlock the potential of these two sectors alone could generate exports that exceed the total trade loss associated with tariff changes. Note, however, that much of this growth potential is in markets that are already among Lao People’s Democratic Republic’s main export destinations, such as China. A shift of production capacity towards these sectors could therefore reinforce the geographic concentration of Lao exports.

Figure 8 Most unrealized potential lies in the machinery, electricity and vegetable sectors

Note: The figure shows all sectors with an untapped export potential above $100 million.
Source: ITC staff calculations based on data from the ITC Export Potential Map (2022).

Market access

Improving market access conditions through new agreements or adherence to more preferential schemes may be an alternative to production capacity shifts in cases where there is limited untapped export potential.

The EU’s GSP+ scheme

By moving from the European Union’s EBA scheme for LDCs to the GSP scheme for developing countries, Lao exports to EU markets would decline by $122 million, or 34% of projected exports. The absolute loss will be largest on the German market, where exports are expected to drop by $40 million. Exports to Malta and Bulgaria will face the largest relative loss, with about 90% of projected bilateral exports for 2027 affected by the tariff change.

The EU gives graduating countries the possibility to apply for its more generous GSP+ scheme, a special arrangement that is linked to good governance and sustainability development. If Lao People’s Democratic Republic became eligible for GSP+ preferences, losses in exports to the EU would drop from $122 million to less than $29 million.
Figure 9 highlights the potential of GSP+ preferences to curtail graduation-related trade losses in specific sectors. GSP+ grants duty-free status to 66% of EU tariff lines, benefitting some of the products most affected by LDC graduation – goods in the apparel and footwear sectors. Other affected sectors, such as sugar and rice, would not benefit.

Figure 9  GSP+ would benefit apparel and footwear exports to the EU

While total export losses upon LDC graduation were estimated at $734 million, or 7.3% of projected exports for 2027, the impact would narrow to $641 million (6.4% of projected exports) if Lao People’s Democratic Republic was able to become eligible and make use of GSP+ for its exports to EU markets after graduation.

Note, however, that admission to the scheme may be challenging for Lao People’s Democratic Republic, according to the United Nations Department for Economic and Social Affairs (2020). While the country meets the vulnerability criteria of GSP+, ratification of certain international labour conventions is still pending.

Negotiating special concessions on the Chinese market

The next-best tariffs available post-graduation under the APTA and the China-ASEAN FTA are less generous than what was offered to Lao exporters after the country’s admission to China’s LDC scheme in 2021. One option therefore may be to concentrate trade efforts beyond the products that will suffer the most from tariff changes, so that exports of these items will grow less than anticipated by the model.

Another route may be to try to obtain special concessions for these goods under existing trade agreements. More developed APTA members, including China, have already given concessions to less developed members for certain products. For example, the Republic of Korea has defined a list of 943 items for which it grants Lao exporters specifically tariff cuts that go beyond the preferences it grants to all APTA members. 18

This study cannot predict whether it will be possible for Lao People’s Democratic Republic to negotiate country-specific concessions with China that include some of the most affected products.

Source: ITC staff calculations based on data from the ITC Market Analysis Tools (2022).

Chapter 4
Policy options

The partial equilibrium analysis used in this report shows that Lao People’s Democratic Republic can expect to lose $734 million in export revenues in 2027 due to LDC graduation tariff changes. This represents 7.3% of projected exports for that year – concentrated in specific markets and sectors. Targeted responses are the best way forward to mitigate these losses.

• Trade promotion could mitigate trade losses

Targeted trade promotion to address remaining bottlenecks and fully unlock the potential in markets where the losses occur or in alternative markets would mitigate some of the graduation-related export losses in most sectors. For example, in the rice sector, addressing frictions in the Vietnamese and other markets could unlock enough export potential to offset the expected reduction in exports to the EU. Other product clusters with major losses have the untapped potential to balance out between 36% and 82% of the estimated losses.

Most of Lao People’s Democratic Republic’s untapped potential is either in clusters that are only mildly or not at all affected by graduation-related tariff changes. Shifting production capacity to these goods will allow the mitigation of losses, but also bears the risk of reinforcing the concentration of the country’s exports on few markets only.

• Seeking better market access would avoid trade losses

Trade losses in key export destinations such as the EU and China could be avoided if Lao People’s Democratic Republic had access to more preferential tariff rates after graduation. The European Union’s GSP+ would reduce losses in the EU market to $29 million from $122 million. Special concessions for the most affected products under APTA, for example, could help avoid the estimated $581 million loss in the Chinese market. However, the challenges to obtain access to special preferences, whether on the EU or on the Chinese market, could be substantial.

• A more diversified export structure could reduce vulnerabilities to policy changes and economic shocks

Lao People’s Democratic Republic’s exposure to graduation-related tariff changes is linked to its highly concentrated export structure. Until 2014, the country’s export basket was more diversified than that of other LDCs on average. However, while most LDCs subsequently began to successfully export more and more value-added products, the Lao trade structure remained largely unchanged.

With 70% of exports destined for just two countries, Lao People’s Democratic Republic also lags behind most other LDCs in terms of market diversification. These patterns imply that tariff changes for some products and in some markets leave the country with very few options to offset the losses.

In the short run, a smooth and sustainable transition out of the LDC category will require Lao People’s Democratic Republic to use trade promotion and unlock remaining export potential in its traditional export products and markets. In the long run, the country, with the support of the international aid-for-trade community, must work to make itself more resilient to trade policy and other economic shocks by diversifying its export structure.
Appendices

Appendix I  Methodology

Effect of graduation

We have customized and applied a partial equilibrium model to assess the trade impact of tariff changes to Lao People’s Democratic Republic, based on the following assumptions:

1) The elasticity of supply is infinite and returns to scale are constant: every country can supply an unlimited quantity of the products it now exports, at current prices.\textsuperscript{19}

2) The global elasticity of import demand for a product is equal to one.

3) Products from different foreign suppliers are substitutable with a constant elasticity of substitution (Armington assumption).

4) Preferential tariffs are fully used.\textsuperscript{20}

The trade and tariff values in the model are projected to 2027. We project trade by (i) forecasting country \( i \)’s share in market \( j \) for a given product \( k \) (ProjMS\(_{ijk} \)) using country \( i \)’s GDP growth rate relative to the GDP growth rate of its competitors and (ii) evaluating how import demand of product \( k \) in market \( j \) (ProjM\(_{jk} \)) will develop based on its elasticity to market \( j \)’s expected growth rates of GDP and population, and expected tariff changes.\textsuperscript{21} We define

\[
X_{ijk} = \text{ProjMS}_{ijk} \times \text{ProjM}_{jk}
\]

where

- \( X_{ijk} \): projected exports of \( k \) from \( i \) to \( j \);
- \( \text{ProjMS}_{ijk} \): projected market share of \( i \) in \( j \)’s imports of \( k \);
- \( \text{ProjM}_{jk} \): projected demand of \( j \) for \( k \).

Tariff projections assume that Lao People’s Democratic Republic will move to the next-best alternative tariff that is available following graduation (Table 1). For all other countries, we reflect the tariff situation in 2027 by integrating information from tariff reduction schedules of agreements that are currently in force.

First, tariff changes reduce Lao People’s Democratic Republic’s market share by

\[
\left( \frac{1 + t_{LDC}}{1 + t_{\text{grad}}} \right)^{\sigma}
\]

Then, the sum of market shares in a given market is normalized to one. This ensures that the first order conditions of the demand by origin optimization are met.

\textsuperscript{19} Exporters in Lao People’s Democratic Republic will not reduce their prices in response to lower demand for their products.

\textsuperscript{20} Note that stricter rules of origin may apply under the alternative tariff regimes, which could prevent Lao exporters from accessing preferential tariffs.

\textsuperscript{21} The elasticity of import demand to population is assumed to be equal to 1. The elasticity of import demand to GDP per capita is estimated, see Decreux and Spies (2016). We increase the import demand by the factor \( \frac{1 + t_{\text{current}}}{1 + t_{\text{projected}}} \), where \( t \) is the average tariff applied by a market to all suppliers weighted by their market shares, to account for future tariff reductions under trade agreements that are currently being implemented.
Based on old and new market shares, average tariffs with and without graduation are computed. Overall import demand is reduced by:

\[
\frac{1 + \bar{\tau}_{LDC}}{1 + \bar{\tau}_{grad}}
\]

where \( \bar{\tau} \) is the average tariff applied by a market to all suppliers weighted by their market shares.\(^{22}\) This simple procedure leads to the same result as analytically solving the partial equilibrium model described above.

**Calculation of untapped trade potential**

ITC has established a methodology to calculate potential trade values based on a country’s potential share in a given market and the market’s projected demand,

\[
EPI_{ijk} = MS_{ijk}^{EPI} \times ProjM_{jk}
\]

with

\[
MS_{ijk}^{EPI} = ProjMS_{ik} \times Ease_{ij} \times MAccess_{ijk}
\]

The potential market share of country \( i \) in product \( k \) and market \( j \) combines information of \( i \)’s world market share of \( k \), the ease of trade between \( i \) and \( j \), and market access. \( ProjMS_{ik} \) is projected based on the growth rate of \( i \) relative to its competitors. \( ProjM_{jk} \) is projected based on the elasticity of import demand for \( k \) to \( j \)’s expected growth rate and expected tariff changes.

Any gap between potential and actual trade indicates room for export growth.\(^{23}\) In the case of Lao People’s Democratic Republic, the gap we considered is between potential exports after graduation and projected exports after graduation. We call this gap post-graduation untapped export potential.

Contrasting the post-graduation untapped export potential with the projected export losses at the sector and market level helps Lao People’s Democratic Republic set priorities – either on the negotiation of better tariff regimes or on trade promotion, in affected markets or in alternative ones.

**Data**

The model uses trade and tariff data from the ITC Trade Map and Market Access Map databases, respectively. For trade projections, we use an arithmetic average of direct and mirror flows when both countries are estimated to be reliable reporters of their trade statistics (or when neither is reliable, but both report a trade flow for the same given product).\(^{24}\) When only one of the trade partners is reliable, this country’s reported trade flow is retained. For the calculation of export potential, we use a geometric average of reliable direct and mirror flows.

To reduce the impact of outliers, a weighted average of 2017–2021 data is calculated with a higher weight given to years that are more recent. Products are only retained if they have been exported by Lao People’s Democratic Republic over the past three years and imported by the market over the past five years. Import demand and Lao People’s Democratic Republic’s exports in current United States dollars are projected to 2027 using the International Monetary Fund’s October 2022 GDP forecasts and an estimation of import demand elasticities.

Two sets of tariffs feed into the calculations: the first corresponds to tariffs during the observation period (2017–2021), while the second corresponds to tariffs during the projection period (2027). Elasticities of substitution are taken from the Global Trade Analysis Project database and the Centre d’études prospectives et d’informations internationals.

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\(^{22}\) The indices \( LDC \) and \( \text{grad} \) refer to the specific situation of Lao People’s Democratic Republic in 2027.

\(^{23}\) Please refer to Decreux and Spies (2016) for a detailed description of the method.

\(^{24}\) An earlier version of the reliability assessment is described in Decreux and Spies (2016).
## Correspondence table

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<thead>
<tr>
<th>Sector</th>
<th>Product cluster</th>
<th>Product code</th>
<th>Product description</th>
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<tbody>
<tr>
<td>Apparel</td>
<td>Apparel made of cotton</td>
<td>610342</td>
<td>Men's trousers &amp; shorts of cotton, knit/crochet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>610462</td>
<td>Women's trousers &amp; shorts of cotton, knit/crochet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>610510</td>
<td>Men's shirts of cotton, knit/crochet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>610610</td>
<td>Women's blouses &amp; shirts of cotton, knit/crochet</td>
</tr>
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<td>610711</td>
<td>Men's underpants &amp; briefs of cotton, knit/crochet</td>
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<td>Women's briefs &amp; panties of cotton, knit/crochet</td>
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<td>T-shirts &amp; vests of cotton, knit/crochet</td>
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<td>611020</td>
<td>Jerseys &amp; similar of cotton, knit/crochet</td>
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<td></td>
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<td>620342</td>
<td>Men's trousers &amp; shorts of cotton</td>
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<td>Women's trousers &amp; shorts of cotton</td>
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<td></td>
<td></td>
<td>620520</td>
<td>Men's shirts of cotton</td>
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<td>620630</td>
<td>Women's blouses &amp; shirts of cotton</td>
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<tr>
<td>Apparel</td>
<td>Apparel made of man-made</td>
<td>610130</td>
<td>Overcoats, capes &amp; similar of man-made fibres, for men/boys, knit/crocheted</td>
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<tr>
<td></td>
<td>fibres</td>
<td>610230</td>
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<td>620193</td>
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<td>620213</td>
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<td>621133</td>
<td>Men's garments, n.e.s. of man-made fibres</td>
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<td>621143</td>
<td>Women's other garments, n.e.s. of man-made fibres</td>
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<td>Apparel</td>
<td>Apparel made of synthetic</td>
<td>610343</td>
<td>Men's trousers &amp; shorts of synthetic fibres, knit/crochet</td>
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<tr>
<td></td>
<td>fibres</td>
<td>610463</td>
<td>Women's trousers &amp; shorts of synthetic fibres, knit/crochet</td>
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<td>Men's suits of synthetic fibres</td>
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<td>620333</td>
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<td>620343</td>
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<td>620433</td>
<td>Women's jackets of synthetic fibres</td>
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<td>610469</td>
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<td>610990</td>
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<td>Product description</td>
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<td>Cereals (except wheat &amp; rice)</td>
<td>Cereals, except wheat</td>
<td>100590</td>
<td>Maize (excl seed for sowing)</td>
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<tr>
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<td>Cereals n.e.s.</td>
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<td>Footwear, rubber/plastic soles</td>
<td>640419</td>
<td>Footwear, rubber/plastic soles &amp; textile uppers, n.e.s.</td>
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<tr>
<td></td>
<td></td>
<td>6402XX</td>
<td>Other footwear, rubber/plastic soles &amp; uppers</td>
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<tr>
<td></td>
<td>Footwear, rubber/plastic/leather soles &amp;</td>
<td>640340</td>
<td>Footwear, protective metal toecap, rubber/plastic/leather soles &amp; leather uppers</td>
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<tr>
<td></td>
<td>leather uppers</td>
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<td>Footwear, rubber/plastic soles &amp; leather uppers, n.e.s.</td>
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<td>Natural latex &amp; rubber</td>
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<td>400110</td>
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<td></td>
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<td>400122</td>
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<td>400129</td>
<td>Natural rubber in primary forms/flat shapes (non-smoked)</td>
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<tr>
<td>Rice</td>
<td>Rice</td>
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<td>Rice in the husk</td>
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<td></td>
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<td>Husked or brown rice</td>
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<td>Semi-milled or wholly milled rice</td>
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<td>100640</td>
<td>Broken rice</td>
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<td>Raw cane/beet sugar</td>
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<td>Raw cane sugar</td>
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<td>Refined cane or beet sugar</td>
<td>170199</td>
<td>Cane or beet sugar &amp; chemically pure sucrose</td>
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<td>Synthetic textile fabric</td>
<td>Woven fabrics of polyester/polyamide/acrylic</td>
<td>551311</td>
<td>Plain wovens, &lt;85% polyester staples, with cotton,&lt;=170g/m²</td>
</tr>
</tbody>
</table>
References


United Nations Department for Economic and Social Affairs (2020). ‘Ex ante assessment of the impacts of the graduation of Lao PDR from the category of Least Developed Countries (LDCs).’ Mimeo.


