

## Executive Summary

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*Lao PDR at the Crossroads: Industrial Development Strategies 2016–2030* is an outcome of the research initiated upon the request of Khemmani Pholsena, Minister for Industry and Commerce. The Lao PDR government has been concerned that while economic growth has increased per capita income more than seven times from US\$235.2 to nearly US\$1,800 since 1991, it now encounters two serious challenges. Firstly, the growth has been based on a few sectors that are dependent on exhaustible mineral resources. The mining and energy industries hardly generate sufficient employment required for inclusive growth. In other words, the economic development of Lao PDR may not be necessarily robust. Secondly, development gaps have widened between and within regions in the country.

While the Lao PDR government attempts to formulate the 10-Year Development Strategy (2016–2025) and Vision 2030 (2016–2030) to address these two challenges, this study aims to provide potential inputs, from different perspectives, particularly to mid- and long-term comprehensive industrial development strategies. It also intends to include concrete policy recommendations that are likely to contribute to the further development and growth of Lao PDR and complement other initiatives led by donor countries and institutions, such as the Mekong Industrial Development Vision proposed by Japan. More specifically, the ultimate objective of this study is to pose policy measures that can turn the weakness of Lao PDR's (i.e. 'landlocked' location) into its strength (i.e. 'land-linked' location). As the Lao PDR economy develops, the implementation of such policies is strongly required. In this regard, the term 'crossroads' in the research title refers to when the country needs to make a significant decision regarding its future and where it is centrally located in the Mekong region. After the general introduction, Chapter 1 presents unique viewpoints based on connectivity and geography, and how they affect industrialisation and economic

development. They are analysed in the framework of ‘production networks’, ‘second unbundling’, and ‘new economic geography.’ In particular, the recognition of the three pillars of development strategies is important: forming an industrial cluster with existing industrial agglomeration (Tier 1) that can be divided into innovative Tier 1a and industrial Tier 1b, participating in production networks along with the second unbundling that enables to jump-start industrialisation mainly with machinery industries (Tier 2), and hooking up with global value chains on the first unbundling based on resource-based or labour-intensive industries. At present, whereas Tier 1 does not exist in Lao PDR, Tier 2 does in cities such as Vientiane. In order to rise to these development stages, elaborate industrial strategies should be laid out.

Chapter 2 outlines the issues of the forthcoming 8th Five Year Plan (2016–2020), 10-Year Development Strategy to 2025, and Vision 2030. Overall, these national-level approaches aim at preparing for a post least-developed country status. Productivity growth, consolidation of knowledge and skills, capitalisation of comparative advantages, acquisition and application of science and technology, and continuous diversification of economic activities constitute the central part of these official plans.

This chapter also claims that it is important for Lao PDR to further participate in production networks and form mid-sized agglomerations. To this end, reducing ‘service link costs’ (broadly defined as transportation costs) is critical since the modern industrial economy decentralises production blocks, which were previously integrated in a large domestic factory in locations equipped with comparative advantages. Although it is not always straightforward to reduce service link costs, both hard and soft infrastructure must be installed and efficiently operated to create mid-sized agglomerations. Moreover, as a way of addressing regional disparity, which is another major goal of official mid- and long-term development plans in Lao PDR, the importance of regional core cities in support of industrial estates and enhanced industries is also emphasised.

Chapters 3 and 4 deal with cross-cutting issues that are significant foundations for industrial development strategies. Since the issues mentioned in these chapters are

relevant to various policy fields and their implementation and results can be effective only if addressed integrally, it is desirable that they are deliberately adjusted with industrial development strategies from a macro viewpoint.

Chapter 3 points to policies that should be well coordinated: the interconnection between industrial promotion and international trade policies, hard and soft infrastructure development, human capital development, nurturing efficient financial sector, and transformation of the economic system from ‘resource curse’ to ‘resource bless.’ In particular, human resources are the key for industrial development of the country. Job-relevant skills can be enhanced through internship programmes and on-the-job-training currently provided by foreign companies in collaboration with local industrial training schools and supporting industries. Hence, Lao PDR can consider employing these human capital programmes based on initiatives that are concluded with donor countries (e.g. programmes formulated by AEM-METI Economic Industrial Cooperation Committee). Furthermore, this chapter points out that realising the high-level Regional Comprehensive Economic Partnership is expected to promote the efficient formation of supply chains throughout East Asia.

In addition, Chapter 4 deals with immediate policy issues, that is, extending major national electricity grids, expanding trade/investment relationship to beyond-immediate neighbours, mobilising manpower, managing trade deficit, and transitioning from tariffs to taxes. Lao PDR is required to immediately address these challenges at issue because they are highly likely to affect the sound economic environment of the country.

Chapter 5 discusses how to promote industrial estates in Lao PDR as a substantial driver of economic growth. Among the various sectors, manufacturing industries tend to contribute to the balanced development of a developing country, including neighbours such as Thailand.

While industries are largely classified into agriculture, mining, manufacturing, and service, they all face an insufficient, small domestic market in the case of developing countries. Turning one’s eyes onto international markets including advanced

economies should provide a prospect for industrial promotion. However, agriculture, mining, and the service industries cannot benefit from international markets in terms of both returns and job creation. More specifically, the agriculture industry can create many jobs but generate low returns; this is the opposite for the mining industry. The service industry generally finds it difficult to enter international markets due to the lack of competitiveness. Thus, the manufacturing industry is the most promising in that it can enjoy both high returns and large job creation. Hence, exports by manufacturing based in industrial estates are essential for rapid growth, or ‘take-off’, of the Lao PDR economy.

By surveying the experience of neighbouring countries Thailand, Viet Nam, and Cambodia, Chapter 5 finds that industrial estates have played a key role in establishing an ‘industrial cluster’ that is critically essential for realising the industrialisation and economic development of developing countries. It also probes in detail the positive and negative results of industrial estate development induced by these countries. Concretely, industrial estates in Thailand mostly have been accumulating around Bangkok, and that is why Thailand has succeeded in forming a significant industrial cluster there. But at the same time, such accumulation of industrial estates results in excessive concentration in Bangkok, and thereby regional development disparity. With regard to Viet Nam, while industrial estates have successfully formed industrial clusters in Hanoi and Ho Chi Minh City, most of them in unfavourable locations suffer from low occupancy, thus failing to expand industrial clusters nationwide. For Lao PDR, the case of Cambodia would serve as a useful reference. The government selection of industrial estates around Phnom Penh, Thailand and Viet Nam border areas, and near seaports has enabled industrial estates in Cambodia to gradually establish industrial clusters that bring about well-balanced development without inappropriate resource distribution in spite of many challenges.

In Lao PDR, industrial clusters are in the midst of emerging. However, the problem is that operational industrial estates are quite limited among 11 SEZs (special economic zone and specific economic zone). Of urgent necessity is to vitalise industrial estates in Lao PDR so that they can grow into industrial clusters. To achieve this objective,

Chapter 5 presents concrete policy recommendations as follows:

- Population and existing economic activities
  - ✓ Given the small population and supporting industries of the country, industrial estates have to be located in relatively big cities of several hundred thousand people.
- Access to larger industrial clusters beyond the borders
  - ✓ The country has to be integrated with the agglomeration in Bangkok, which will constitute Lao PDR's prime industrial core. Lao PDR is highly likely to receive the largest benefit from developing industrial estates that are close to the bridges over the Mekong River.
  - ✓ To look for a competitive edge against Koh Kong and Poipet SEZs in Cambodia, Lao PDR needs to improve the business circumstances especially in shortening travel time to Bangkok and reducing logistic costs by (1) extending the business hours of customs clearance, (2) simplifying customs procedures, and (3) launching the mixed loading services.
  - ✓ To benefit from the agglomeration in Hanoi in the long term, Lao PDR needs to improve the road infrastructure between Thakhek and Hanoi.
- Start-up funding for infrastructure
  - ✓ To assure essential hard and soft infrastructure, such as electricity, transportation, and management offices in the initial development of industrial estates, policymakers are required to continue negotiating with donor countries.

Chapter 6 presents industrial studies focusing on eight economic industrial sectors: (1) agriculture and food processing, (2) mining and energy, (3) garment and other labour-intensive industries, (4) electric and electronic machinery, (5) transport equipment (automobiles and motorcycles), (6) tourism, (7) finance (small and medium enterprises [SMEs]), and (8) transportation. It is important to note that these industries can be categorised into three layers. First, the mining and energy, finance (SMEs), and

transportation industries are the foundation of economic activities. Second, the agriculture and food processing and tourism industries can be a tool of balanced development including rural areas, which corresponds to Tier 3 as mentioned in Chapter 1. Third, the garment and other labour-intensive industries (Tier 2), electric and electronic machinery industry, and transport equipment industry (Tier 1) can be drivers of accelerated economic growth led by exports. In particular, the transportation industry, in conjunction with industrial estates (SEZs) development, should be prioritised so that other industrial sectors can grow.

Chapter 6 shows that fundamental industrial strategies should be based on both drivers: productivity improvement of agriculture and job creation in other sectors through industrial promotion policies utilising a labour shift from the agriculture industry. This is expected to benefit the economy of Lao PDR because the productivity gap between the agriculture and manufacturing industries generates a huge potential to improve total productivity.

After reviewing the status quo, and previous and current Lao PDR industrial policies, Chapter 6 illustrates promising scenarios and raises future challenges in individual industries. What follows briefly (Box) summarises these scenarios and challenges (see Appendix for details).

Lastly, Chapter 7 conducts a geographical simulation analysis based on previous discussions about possible policy measures. The economic impact is evaluated by the difference in gross regional product per capita between the baseline and alternative scenarios in 2030. Naturally, the more effective policies are implemented, the greater economic gain is anticipated. The alternative scenario that incorporates all possible policy measures assumes (1) development in industrial estates (SEZs), (2) border facilitation, and (3) reduction of non-tariff barriers. In that case, we can expect large benefits not only for cities but also for rural areas, and the economic impact can be amplified through the combination of the aforementioned policies (1) to (3). Therefore, from the perspective of an economic model enhancing connectivity in all respects and

## Box

| Sector  | Scenarios  | Challenges   |
|---|--|--|
| (1) Agriculture and food processing                   | <ul style="list-style-type: none"> <li>● High value addition through 'sixth industrialisation'</li> <li>● Efficient rice production through a 'best practice' package</li> <li>● High-quality commercial crop production at local cooperatives</li> <li>● Establishment of a new value chain (e.g. dairy products)</li> </ul>  | <ul style="list-style-type: none"> <li>● Capacity building in farming technology</li> <li>● Procuring packaging materials</li> <li>● Improving cold chains</li> </ul>  |
| (2) Mining and energy                                 | <ul style="list-style-type: none"> <li>● Expansion of regional power interchange</li> <li>● Promotion of bioethanol production</li> </ul>  | <ul style="list-style-type: none"> <li>● Establishing a leading position at the ASEAN Power Grid</li> <li>● Partnering with neighbouring countries</li> <li>● Establishing a subsidy system to guarantee the profitability of bioethanol</li> </ul>  |
| (3) Garment and other labour-intensive industries     | <p>Garment industry</p> <ul style="list-style-type: none"> <li>● Production of high value-added products with low seasonality</li> <li>● Participation in the fast fashion supply chain for ASEAN nations</li> </ul> <p>Other labour-intensive industries</p> <ul style="list-style-type: none"> <li>● Production using a large amount of low-cost labour and electricity, such as copper wire, casting, and moulding</li> <li>● Production of high value-added light products, such as medical devices</li> </ul> | <ul style="list-style-type: none"> <li>● Ensuring smooth transport to Bangkok</li> <li>● Ensuring one-stop service at VITA Park</li> </ul>   |
| (4) Electric and electronic machinery                 | <ul style="list-style-type: none"> <li>● Production of electronic components with a relatively short commodity cycle and with a flexibly adjusted production volume, such as connectors (LANs, USBs, etc.) and their cables</li> </ul>   | <ul style="list-style-type: none"> <li>● Improving distribution</li> </ul>   |
| (5) Transport equipment (automobiles and motorcycles) | <ul style="list-style-type: none"> <li>● Production and exportation to Thailand of labour-intensive components, such as cable harness and automobile seat covers</li> </ul>  | <ul style="list-style-type: none"> <li>● Stabilising power supply</li> <li>● Improving road conditions</li> </ul>  |
| (6) Tourism   | <ul style="list-style-type: none"> <li>● Promotion of 'key visuals' for core markets (Thailand, Viet Nam, and China)</li> <li>● Attraction of visitors from Japan, Korea, and China during the summer vacation season (July–August)</li> </ul>   | <ul style="list-style-type: none"> <li>● Investigating the needs of travellers from different countries</li> <li>● Improving sanitation, etc.</li> <li>● Relaxing the procedure for applying for a guided tour.</li> </ul>   |
| (7) Finance   | <ul style="list-style-type: none"> <li>● Utilisation of funds from international organisations</li> <li>● Capacity building of commercial banks in credit assessment</li> <li>● Establishment of a domestic and region-wide credit guarantee system</li> <li>● Capacity building of SMEs</li> </ul>  | <ul style="list-style-type: none"> <li>● Managing SME finance risks in the banking sector</li> <li>● Providing incentives for book-keeping in SMEs</li> </ul>  |
| (8) Transportation                                    | <ul style="list-style-type: none"> <li>● Launch of consolidation services (Savannakhet Logistics Hub)</li> <li>● Utilisation of railways to reduce transportation costs (Vientiane Logistics Hub)</li> </ul>   | <ul style="list-style-type: none"> <li>● Arranging joint operation of the Savannakhet Logistics Hub by several private logistics companies</li> <li>● Arranging joint operation of the Savannakhet Logistics Hub between the government and the people</li> <li>● Improving customs</li> </ul> |

developing industrial estates in tandem with industrial promotion policies can resolve the challenges Lao PDR encounters; that is, it will be able to achieve robust economic development and narrow the development gap.