

Appendix

Detailed Summary of Industrial Studies

(1) Agriculture and food processing

(1-1) Promising scenarios

- High value added through ‘sixth industrialisation’
 - ✓ The key to increased purchasing power in the urban areas of Lao PDR is the active involvement of the agriculture sector in food processing (i.e. secondary industry) and distribution (i.e. tertiary industry).
- Efficient rice production through a ‘best practice package’
 - ✓ Investment in irrigation schemes brings the highest return as farmers can grow rice during the dry season.
 - ✓ Rice productivity can be increased by improved seeds and better usage of fertiliser.
- High-quality commercial crop production at local cooperatives
 - ✓ Lao PDR has a comparative advantage for high-quality production rather than low-cost mass production. To this end, the formation of local producers’ cooperatives is promising.
- Development of a new value chain
 - ✓ Lao PDR needs to develop a new value chain from agriculture to food processing (e.g. coffee and dairy products).

(1-2) Future challenges

- Capacity building to enhance technology
 - ✓ Lao PDR should encourage increased productivity of existing crops by disseminating best practice to enhance agricultural technologies and workforce skills (e.g. the establishment of agricultural technical colleges and high schools).
- Procurement of packaging
 - ✓ A packaging material industry is necessary for the food processing industry and other manufacturing industries.
- Cold chain
 - ✓ Cold chain logistics should be established for food distribution (e.g. vegetables and daily products) to sell products at high prices in neighbouring countries.
 - ✓ Lao PDR should follow suit and focus on securing domestic facilities with support from other countries that have developed the system (e.g. Thailand).

(2) Mining and energy

(2-1) Promising scenarios

- Mining and energy
 - ✓ Promoting electricity sales to Viet Nam and Cambodia in addition to Thailand in accordance with the initiatives of the ASEAN Power Grid is promising.
- Bioethanol production
 - ✓ Producing bioethanol can be a strategy that overcomes the dependence on imported petroleum products, which is a weakness of Lao PDR.
 - ✓ The government can take the two-step measure: (1) cultivation of energy crop (exported to Thailand and Viet Nam) and (2) construction of bioethanol plants (producers need to be recruited from Thailand).

(2-2) Future challenges

- Establishing a leading position at the ASEAN Power Grid
 - ✓ It is important for Lao PDR to keep communication with other leading countries to establish a leading position at the ASEAN Power Grid. It is necessary to look at the prospect of building sub-regional grids that connect to Viet Nam and Cambodia.
- Partnering with neighbouring countries in bioethanol production
 - ✓ It is desirable to propose a regional initiative regarding bioethanol production by involving Viet Nam (to work gradually on bioethanol introduction) and Cambodia (to produce the energy crop cassava).
- Establishing a subsidy system to guarantee the profitability of bioethanol
 - ✓ Subsidies to ethanol business operators for ensuring profitability and user benefits are essential when prices of gasoline and bioethanol are in close competition.

(3) Garment and other labour-intensive industries

(3-1) Promising scenarios

- Short-term prospects – targeting high value-added products with low seasonality
 - ✓ Compared to Viet Nam and Cambodia, Lao PDR does not have convenient maritime transport for the apparel industry, so that the products take time to reach the US, Japan, and European Union markets.
 - ✓ Work clothes and uniforms with low seasonality and Leavers lace with easy added value through appropriate planning and elaborate design can diminish Lao PDR's location disadvantage.

- Mid-term prospects – participation in the fast fashion supply chain for ASEAN nations
 - ✓ Entering the fast fashion supply chain and targeting middle-income ASEAN nations is a promising mid- to long-term strategy seeking ‘mass markets.’
- Other labour-intensive industries
 - ✓ There is sufficient profitability for labour intensive foreign companies with 200–300 workers.
 - ✓ The key is producing manufacturing items whose transportation costs are relatively low, such as medical devices and copper wire processing.

(3-2) Future challenges

- Issues for smooth distribution to Bangkok
 - ✓ The distribution infrastructure connected to Bangkok is considered a problem for smooth business operation.
 - ✓ Actual infrastructure issues are (1) the improvement of Route 13 (which connects Vientiane City with Vientiane Province), (2) the improvement of the process approval flow at customs, and (3) the introduction of mixed loading services that can induce lower logistics costs.
- Ensuring one-stop service at VITA Park
 - ✓ Strengthening the one-stop service at VITA Park will greatly benefit these relevant industries led by foreign private companies.

(4) Electric and electronic machinery

(4-1) Promising scenarios

- Focusing on electric and electronic devices
 - ✓ Taking into account its small workforce, it is beneficial for Lao PDR to produce electric and electronic devices that have a relatively short commodity cycle and a flexibly adjusted production volume (e.g. connectors such as LANs and USBs).

(4-2) Future challenges

- Improvement in distribution
 - ✓ Delivery of Lao-produced electronic components is costly because these products do not fill up an entire truckload and there is no regular delivery truck available that mixes these with other loads. Developing a regular distribution system is necessary.

(5) Transport equipment (automobiles and motorcycles)

(5-1) Promising scenarios

- Producing labour-intensive components
 - ✓ It is desirable that the automobile industry further incorporate labour-intensive products, such as cable harness and automobile seat covers.
 - ✓ Considering that the domestic motorcycle market is expected to expand, the motorcycle industry needs to incorporate labour-intensive products, such as motorcycle components (e.g. seats and instrument panel assemblies), aiming at exports and domestic markets.

(5-2) Future challenges

- A stable power supply
 - ✓ A stable power supply is necessary because momentary power outages and changes in voltage affect the quality of automobile components and lead to mechanical malfunction.
- Improved road conditions
 - ✓ Problems in repair and maintenance methods cause road conditions to deteriorate after the annual rainy season; bad roads may also damage automobile products.

(6) Tourism

(6-1) Promising scenarios

- Appealing 'key visuals' for core markets (Thailand, Viet Nam, and China)
 - ✓ In order to create regular repeat visitors and win new visitors, the tourism sector needs to clearly demonstrate the experiences, concepts, and tourist attractions in Lao PDR through 'key visuals.'
 - ✓ Lao PDR's key visuals could be 'a country where you can easily experience Buddhist ruins (regions), caverns and waterfalls (nature), and trekking (activity).'
- Attracting visitors from Japan, Korea, and China during the summer vacation season (July–August)
 - ✓ During the off season (April–October), to generate additional demand, the tourism sector should focus on July and August, when visitors to Thailand and Cambodia temporarily tend to increase.

(6-2) Future challenges

- Investigating the needs of travellers from different countries
 - ✓ The survey analysis of the needs of travellers periodically conducted in Lao PDR helps the tourism sector gauge customer needs by countries.

- Improving sanitation, etc.
 - ✓ Many toilets at tourist facilities are not sanitary, which gives travellers a bad impression.
- Relaxing the procedure to apply for a guided tour
 - ✓ Travellers are required to apply for a sightseeing permit in advance to tour Lao PDR with a guide. If this process is simplified or made more convenient, travel agencies can plan and offer more package tours.
- Developing the airline industry
 - ✓ The airline service should be upgraded to international standards (e.g. ensuring that airlines are certified of international standards and upgrading of airports).

(7) Finance (small and medium enterprises [SMEs])

(7-1) Promising scenarios

- Securing funds from international organisations
 - ✓ International donors and/or organisations seek to contribute to SME financing in Lao PDR, which is a critical element in developing a balanced economy.
 - ✓ Since 2014 the World Bank has enacted the SME Access to Finance Project, where local banks provide long-term credit to SMEs by utilising the primary funding sources that are made available by the World Bank ('two-step loan').
- Building the credit assessment capacity of commercial banks
 - ✓ It is crucial that commercial banks have an effective assessment capacity to promote SME financing.
 - ✓ One promising avenue is to receive technical assistance through intergovernmental relations. For example, the Government of Japan, in cooperation with the Japan Finance Corporation, has engaged in a technical cooperation for the Lao Development Bank.)
- Establishment of a domestic and region-wide credit guarantee system
 - ✓ Due to information asymmetry about the financial conditions of SMEs, private banks are reluctant to take substantial risks in SME finance. This hurdle induces private banks to keep capital adequacy ratio and reduce lending to SMEs.
 - ✓ Although it should be established with mid- and long-term vision, a domestic credit guarantee system in Lao PDR can potentially supplement fragile credit capability of SMEs and promote lending of private banks to SMEs.
 - ✓ A region-wide credit guarantee system enables SMEs with cross-border activity to have easier access to finance through a cross-border guarantee.
- SME capacity building
 - ✓ Since it is impossible for small enterprises to build their capacities individually, the Lao National Chamber of Commerce and Industry and provincial chambers of commerce and industry can provide capacity building programmes for SMEs.

- ✓ Concerning financial literacy, introductory brochures and websites are useful sources of knowledge for many SME managers and employees.

(7-2) Future challenges

- Managing SME finance risks in the banking sector
 - ✓ The expansion of SMEs could introduce risks and damage the capacity of Lao banks to compete with their foreign counterparts. It is a must to balance the stability of the Lao banking sector and promote SME financing.
- Providing incentives for bookkeeping in SMEs
 - ✓ Unless SMEs have the incentive to compile the documents properly, SME finance will not develop as a formal business activity.

(8) Transportation

(8-1) Promising scenarios

- Offering consolidation services (Savannakhet Logistics Hub)
 - ✓ Savannakhet is considered a suitable hub for aggregation of transportation services.
 - ✓ Savannakhet can be the target of aggregating, reshipping, and sending out all cargo from Lao PDR and neighbouring countries (i.e. hub-and-spoke method).
 - ✓ Shippers can reduce transportation costs by consolidating their cargo with the goods of other shippers based in Savannakhet rather than renting one container for each company.
- Using railways to reduce transportation costs (Vientiane Logistics Hub)
 - ✓ It is important to cut transportation costs for the Vientiane–Bangkok route. Reduced costs through railway transport will benefit shippers of both small and large cargoes.
 - ✓ Improvement of the Vientiane–Bangkok railway route is necessary.

(8-2) Future challenges

- Joint operation of the Savannakhet Logistics Hub by several private logistics companies
 - ✓ Joint operations of Savannakhet Logistics Hub by private companies are recommended to reduce the effects of the pressure on existing distribution services.
 - ✓ Strong leadership from Lao PDR's government is needed to reorganise the transportation industry.

- Joint operation of the Savannakhet Logistics Hub between the government and the people
 - ✓ The public and the private sectors should cooperate to realise consolidation services (like public infrastructure).
 - ✓ Hub operation and consolidation services can be operated through public–private partnership, and a structure for revenue compensation such as viability gap funding would be needed until the business gets on track.
- Improving customs
 - ✓ Savannakhet and Thanaleng are particularly important customs sites. Cooperation with the Thai government should be encouraged to broaden the Lao Bao–Densavan initiatives in these two customs sites.