

# Chapter 1

## Medium-and Long-Term Development Strategies

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# Chapter 1

## Medium- and Long-Term Development Strategies

### 1.1. Three-Tier Development Strategy

Traditional theories and practices of economic development can be broadly categorised into three groups according to what development is ascribed to. First, there is a large dominant literature in various contexts that emphasises factor accumulation as the way to achieve economic growth and development (Mankiw et al., 1990, 1995; Barro and Sala-i-Martin, 1995). Factors include a wide range of physical and human capital in the form of machinery, finance, knowledge, technology, and others. The second group sees systems or institutions as drivers of growth and development. The first and second groups are well established in the academic literature and widely applied by development practitioners (Lewis, 2000; Acemoglu et al., 2005). Location plays only a small role in these two groups with respect to theory and practice. According to these two strands of literature and their application, development can occur in any place, in any order, with the necessary factors accumulated and institutions installed.

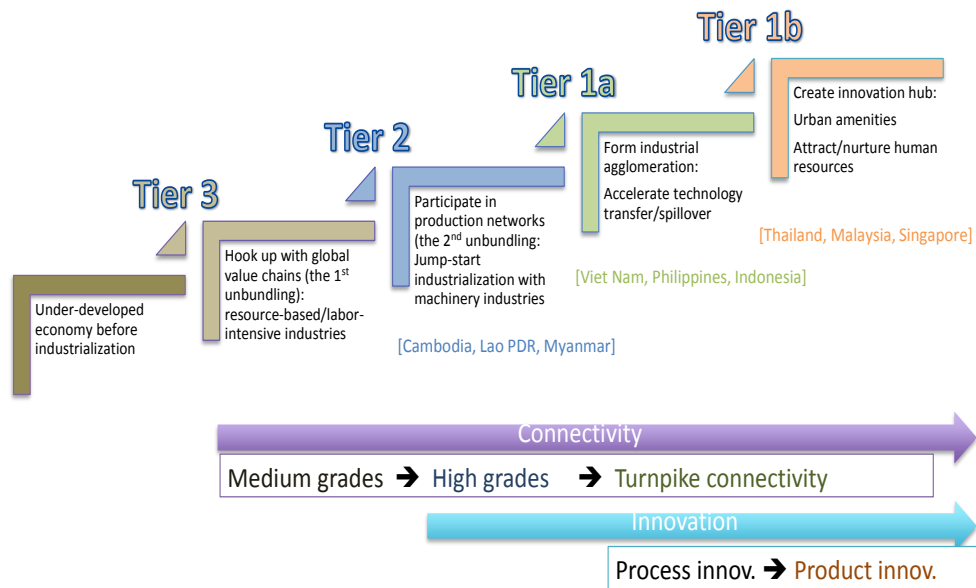
Historically, however, development has often come about quite differently. This is not to suggest development can occur without the necessary factors and institutions, but another factor seems to play a critical role (Easterly and Levine, 2001). Geography has emerged as the most plausible other factor (Krugman 1999; Henderson et al., 2001). Hence, a third group focuses on the effect of geography on development, through explicitly linking agglomeration of factors with economic development (Fujita et al., 2001). Such linkage can be found typically in cities that have seen strong visible growth and development. So far this particular idea has made relatively little progress in

mainstream development economics or with practitioners. Nonetheless, this third group, relying on the ‘new economic geography’ – which is the application of spatial thinking to international trade theory and general economic theory – regards cores and/or clusters in particular as the main engines of growth, and defines economic activities in surrounding peripheries in relation to the cores.

Association of Southeast Asian Nations (ASEAN) and developing East Asia have been the most advanced areas in terms of effectively utilising global value chains (GVCs) in their development strategies. Although people all over the world talk about GVCs nowadays, the most sophisticated way of taking advantage of GVCs for industrialisation is found in this region, and its mechanics have gradually been revealed in the literature of the new economic geography.

CADP (2010) and CADP 2.0 (2015) by ERIA proposes development strategies based on three tiers of development stages – Tier 1, Tier 2, and Tier 3 – which are categorised by different levels of participation in GVCs (Figure 1). Starting from an underdeveloped economy, in Tier 3 hooking up with GVCs with slow but secure connectivity occurs. This is an international industrial linkage – for example, in a relatively simplistic operation in the garment industry in which materials are imported once every two weeks, labour-intensive work produces baby clothes, and finished products are exported to the United States once every two to three weeks. Monetary transport costs as well as reliable connections are important here though logistics links may not be very sensitive. In Richard Baldwin’s terminology, this is ‘the first unbundling’ (Baldwin, 2011). We can see similar operations, directly or indirectly linking with GVCs, in agriculture, mining, tourism, and other industries. In the case of Lao PDR, some rural areas still have room for developing Tier 3-type connectivity to improve the life of rural people and initiate industrialisation.

Figure 1.1. Three-Tier Development Strategy



Source: ERIA.

In Tier 2 a country or a region starts participating in production networks, also referred to as ‘the second unbundling’. This is a more sophisticated type of participating in GVCs, in which the connectivity between production blocs is fast, precise, and synchronised. A typical example is production networks in machinery industries where production blocs are placed in countries at different stages and take advantage of different location advantages with low service link costs. In other words, agglomeration forces for a core to attract economic activities and dispersion forces for a periphery to invite activities are utilised in the effort to reduce transport costs between the core and the periphery. Lao PDR has recently started such operations at the Thai border, which can be interpreted as the initiation of Tier 2-type utilisation of GVCs.

Tier 1 is a more sophisticated step to take advantage of GVCs. This tier is further divided into Tier 1a and Tier 1b. In Tier 1a, which is tightly connected with production networks, industrial agglomeration is formed while deepening inter-firm division of labour in geographical proximity. At this stage, local firms can have opportunities to participate in production chains organised by multinationals, enjoy technology transfer and spillover, and enhance productivity through process innovation. Because

of its relatively small population, Lao PDR may not need a full-size industrial agglomeration such as the Bangkok Metropolitan Area, but can eventually form a mid-sized one that will be an intersection of connectivity in the Mekong Subregion. At Tier 1b an innovation hub to develop product innovation is created. In addition to accumulating research and development (R&D), urban amenities to attract highly educated people are essential in this tier.

The objective of the three-tier development strategy is to make practitioners more familiar with the theory advocated by the third group of development literature by conceptualising the types of their participation in GVCs. Regions and industries in Lao PDR have good potential to develop their participation in GVCs and achieve balanced economic development. While some regions and industries should continue to make efforts to hook up with GVCs (Tier 3), the current priority must be to participate in production networks more tightly (Tier 2). At the same time, we can start planning the formation of mid-sized industrial agglomeration (Tier 1a). The higher the tier, the more sophisticated the connectivity that is required. Our development strategy must be planned and implemented in the particular geographical setting.

### **1.2. Key Elements: Geography and Connectivity**

Geography and connectivity play a critical role in the three-tier development strategy. This is because the strategies discuss geographical cluster development associated with real world connectivity. Although it is seldom mentioned, development of Lao PDR since the 1990s has been largely influenced by geography and connectivity with its neighbouring countries. On the one hand, both development and stagnation during the 1990s were the result of deepening, as well as being overly dependent on, the relationship with the world economy via Thailand. On the other hand, recovery and high growth since the 2000s, including economic resilience to the global crisis that broke out in 2009, were the result of increased trade and investment with Viet Nam and China, in addition to Thailand.

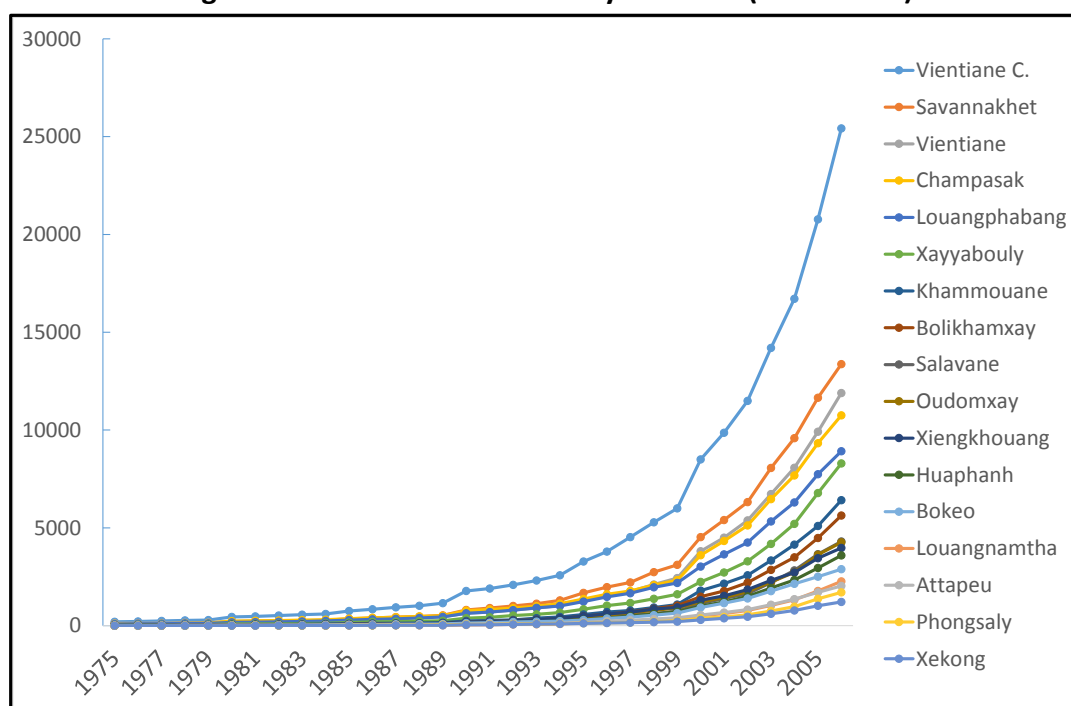
But for countries surrounded by rivers and mountains such as Lao PDR, connectivity does not work well without any infrastructure. More concretely, many hard and soft infrastructure should be put in place to enhance connectivity with neighbouring countries. The five friendship (international) Mekong bridges were completed between 1994 and 2015 to provide land linkage between many provinces in Lao PDR with Thailand and Myanmar. Several roads have been constructed and upgraded since the 1990s to better link Lao PDR to the East (Viet Nam) and to the North (China) despite mostly mountainous territory. As an example of soft infrastructure, systems such as border pass and truck passport were introduced when the First Mekong Friendship Bridge was opened in 1994 to facilitate the movement of people and economic activities across the border. In addition, bilateral trade agreements reducing tariffs by half on goods from Viet Nam and profound simplification of customs clearance on goods from China were introduced in the early 2000s. This in effect kick-started trade and investment between Lao PDR and its long-term political allies.

Ironically, the reason geography and connectivity play a critical role in the development of Lao PDR is in fact its location. Lao PDR shares its borders with five larger countries that have much bigger populations. All its 16 provinces and its capital share borders with at least one neighbouring country. Nine provinces share borders with two neighbouring countries. As a result, most of Lao PDR's provinces are physically closer to cities or regions in neighbouring countries than to its major local urban areas including the capital city, Vientiane. Hence, development in any part of Lao PDR has to take the external context into consideration.

Since the 1990s, connectivity with larger and often economically more advanced neighbours brought about larger economic impacts than before. Figure 1.2 depicts the number of accumulated firms located in each province between 1975 and 2006, which is aggregated from the economic census of 2006 (Ministry of Planning and Investment, 2010). Naturally, this figure excludes firms that disappeared before the economic

census. Except for former capital Louangphabang, the top nine regions, which managed to attract and generate a large number of firms, are connected to Thailand via the Mekong Bridge or through the Mekong River.

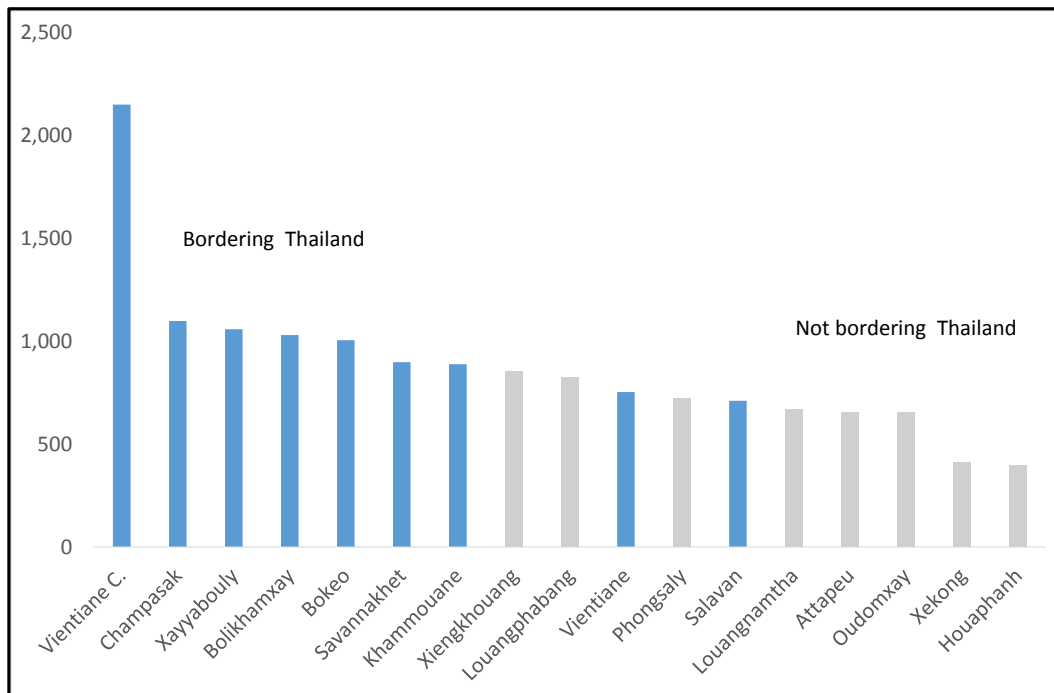
**Figure 1.2. Accumulated Firms by Province (1975–2006)**



Source: Compiled by authors based on Economic Census (2006).

The number of located firms almost corresponds to the disparity of average per capita income among provinces (Figure 1.3). Per capita gross regional product (GRP) in Vientiane Capital, is about twice as high as that of the second largest province, Savannakhet. Provinces bordering Thailand tend to be better off economically (Figure 1.3). Viet Nam and China's per capita gross domestic product (GDP) were only about a sixth and a half that of Thailand in 2005, respectively; therefore, connectivity with Thailand was expected to entail larger economic impacts. However, note that China's per capita GDP surpassed Thailand's in 2011 and that the gap between Viet Nam's per capita GDP and that of Thailand narrowed from about a sixth in 2005 to about a third in 2014. It is easy to see how connectivity with neighbouring countries could result in greater benefits for Lao PDR than in the past.

**Figure 1.3. Per Capita Gross Regional Products (US\$, 2010)**



Notes: Grey (lighter) colour is province without border with Thailand.  
 Source: Ministry of Planning and Investment, Lao PDR (2011).

**1.3. Potential Growth Opportunity**

Medium- and long-term development challenges for Lao PDR are (i) sustaining high growth currently driven by exhaustible mineral resources and hydro energy with profound environmental impacts, and (ii) addressing widening regional disparity. The three-tier development strategy attempts to address both these challenges at the same time. Through detailed case studies (Chapters 5 and 6) and geographical simulation (Chapter 7), this study attempts to identify potential cluster development, potential connectivity, and potential segmentation of production networks for Lao PDR.

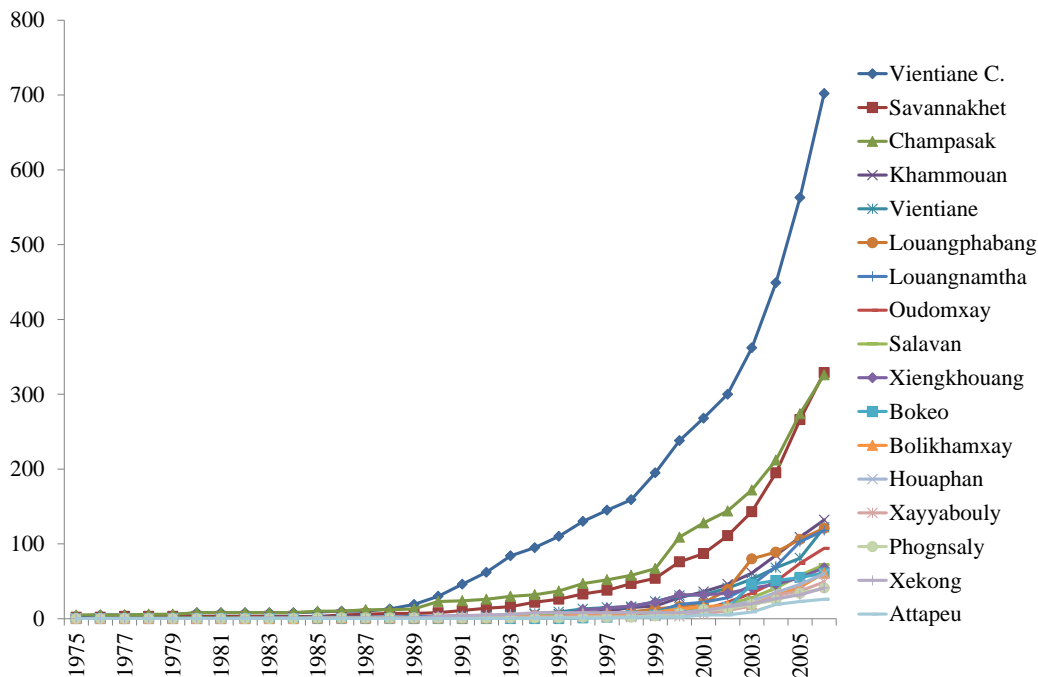
*Potential Cluster Development*

Why can clusters bring higher growth? Actually, clustering manufacturing industries is regarded as one way to achieve sustainable high growth. Ideally, the market decides where and what type of clusters should be formed and developed. But there are some reasons to believe that there is room for policy intervention and planning. First, cluster development, of whatever tiers, requires enormous amounts of infrastructure



development, which is extremely difficult without public financial involvement. Second, most expansion and development of cities have occurred adjacent to existing cities, which means that existing paths matter. It is therefore logical, or even effective, for the government to focus selectively on existing clusters.

**Figure 1.4. Number of Accumulated Foreign Related Firms by Province**



Source: Compiled by authors based on Economic Census (2006) by National Statistical Center.

Figure 1.4 clearly shows that when it comes to levels of foreign direct investment (FDI), which is one important indicator of the degree of participation in production networks, Vientiane Capital, Savannakhet, and Champasak stood out. Any potential development in Tiers 1, 2, and 3 in Lao PDR should include these regions. The first expected outcome of this report is to identify the potential cluster development in Lao PDR, through detailed case studies, which pay more attention to geography and connectivity, as well as through quantitative analyses using a geographical simulation model.

#### *Potential Connectivity*

Connectivity with, but not limited to, larger and richer neighbouring countries has had a very positive impact on Lao PDR since the 1990s. Nevertheless, current connectivity is still far from optimal, for example, when compared with ASEAN front runners

Singapore and Malaysia, not to mention integrated economies in other parts of the world. Connectivity in Lao PDR is mostly realised via border gates. As a consequence, hard and soft infrastructure that facilitate flows of goods, investment, and people through border gates largely define the degree of connectivity. Lao PDR has recently started single-window immigration and customs clearance at some borders with Viet Nam after several years of trial implementations. Expansion to other border gates is planned at the national level.

Using geographical simulation, this report aims to show quantitatively how increasing connectivity through the implementation of the single-window system can be expected to accelerate economic growth in Lao PDR. In addition to the theoretical analyses, it will also assess what kind of hard and soft infrastructure are needed to increase connectivity.

#### *Potential Segments of Production Network to Participate*

The benefits of participation in production networks, particularly in the globalised world, are well documented both in theory and practice. In accordance with this finding, the important thing for Lao PDR is to have a substantial involvement with production networks. However, it is impossible and impractical for Lao PDR, its cities, regions, and clusters to participate in all kinds of production networks so Lao PDR needs to identify potential locations and segments of production networks to join. Trade data provides important information about the potential segments of production networks with which Lao PDR can engage. Through analyses of trade statistics and industrial studies (Chapter 6), this report is able to suggest potential industrial segments and production networks in which the country may wish to participate.

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