EXISTING CONDITIONS AND FUTURE OPPORTUNITIES ON ROUTE 12 ECONOMIC CORRIDOR

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Abstract: This paper presents the survey of the Route 12 Economic Corridor (R12), the shortest international land route connecting Thailand, Lao PDR, Vietnam and Guangxi, China. After the opening of the 3rd Thai-Lao Friendship Bridge in November 2011, the R12 corridor will be completed and would be significantly used for logistics and tourism activities. This study includes the survey of existing route condition, as well as, route development plans from Thailand, Lao, and Vietnam. It was found that although the existing route could be used for logistics and tourist activities, many improvements of logistics and tourist facilities along the route would be needed to extend the opportunities of this economic corridor.

Key Words: Economic Corridor, Cross Border Transport, Trade Facilitation, International Route

1. INTRODUCTION

According to the map in Figure 1, Route 12 or R12 is a two-lane highway. It begins at Thakhek (A in Fig. 1), Muang Kammouane, Lao PDR, passing through Na Phao (Lao PDR) and Cha Lo (Vietnam) border checkpoint, and ends at Khe Ve intersection (B in Fig. 1) in Quang Binh province in Vietnam.

Although the route is relatively short and no urban areas are located along the way, the connections of Route 12 with main highways in Thailand (Highways No. 1, 2, and 22), Vietnam (Highway 5, 1A, 8 and Ngo Gia Tu Road), and China (Nanyou Expressway) would bring a long highway corridor, connecting several large cities from Bangkok (Thailand), Thakhek (Lao PDR), Vinh and Hanoi (Vietnam), and Nanning (Guangxi, China). This is considered to be the shortest (1,769 km) transportation route from Nanning to Bangkok. We will now call this longer route network “the R12 Economic Corridor”. There have been some logistics and tourism activities along this corridor; however, it is expected that this corridor will be popularly used once the construction of the 3rd Thai-Lao Friendship Bridge (crossing Mekong River) at Nakhon Phanom-Thakhek is completed in Dec 2011, along with the full implementation of Greater Mekong Subregion Cross-Border Transport Agreement (GMS CBTA) and ASEAN Agreement.
Due to the potential of this corridor, we conducted a survey trip on the whole corridor. The trip started from Nakhom Panom (Thai border), crossing Mekong River to Lao PDR at Thakhek (since the bridge was under construction), and renting a van from Thakhek to Hanoi. It was followed by a bus trip from Hanoi to Nanning. The trip was conducted in October 2010. It included the depth interviews of more than 50 people, both government agents, drivers, custom officers, tour guides, and businessmen in several countries along the route to investigate existing trade facilitation, to understand the obstacles of using this corridor for logistics and tourism purposes, and to recommend a policy in corridor improvement.

This paper will be organized as follows. First, the existing condition (in 2010) of this route will be described. International agreements as well as current development plans are presented next. Later, the summary of obstacles of using the route for logistics and tourism purposes are presented. It will be followed by the opportunities for trade and tourism on the route if the obstacles have been improved in the last section.

2. EXISTING CONDITIONS

To describe the conditions of R12 economic corridor, the corridor is separated into three sections as shown in Figure 2. Section 1 is between Nakhon Panom (Thailand) and at Na Phao border checkpoint. Section 2 is between Cha Lo border checkpoint to Hanoi. The last section is between Hanoi to Nanning. Note that the section between Bangkok to Nakhon Panom is omitted from this study since it is mostly a standard 4- to 6-lane paved highway links.
Section 1: Nakhon Panom (Thailand), Crossing Mekong River, Thakhek, Na Phao border checkpoint (Lao PDR)
Since the 3rd Thai-Lao Friendship Bridge was in construction, the crossing of Mekong River from Nakhon Panom (Thailand) to Thakhek (Lao PDR) must be through river-crossing ferry (for tourists) or motor raft (for trucks), see Figure 3. The location of the under-construction bridge is approximately 10 kms from these piers. It was expected that after the bridge is opened, all trucks will use the bridge; however, some tourists might use either an existing ferry or a new bridge.

Fig. 3 Border Crossing from Nakhon Panom in Thailand to Thakhek in Lao PDR

Fig. 4 shows the road condition between Thakhek to Na Phao (140 km). The road is a two-lane paved highway with narrow shoulders on both sides. Generally, the pavement condition is good but driving on this section must be very careful since cattle and rocks might be found on the traveled way. Most are plain with great views of mountain complex; nevertheless, the last 20-km to Na Phao is an uphill area with sharp curves. Through the route, there were no logistics and tourist facilities such as rest area, standard gas station, standard hotel, distribution centers, restaurants and stores. Most drivers on the route are local with full knowledge of route. Normally, vehicles can simply cross the border from Na Phao to Cha Lo due to short distance. However, the road condition between two borders was in lack of maintenance, it is full of potholes with sharp curve. We found that the Vietnam customs and immigration area in Cha Lo is large with a wide yard for goods distribution. In contrast, the similar facilities were not found on Na Phao side. The travel time from Thakhek to Na Phao was 2 hours.

Fig. 4 Road Conditions from Thakhek to Na Phao border checkpoint in Lao PDR

Section 2: Cha Lo border checkpoint to Hanoi (Vietnam)
The distance from Cha Lo to Hanoi in Vietnam is 503 kms. It can be separated into three subsections; i.e., 1) from Cha Lo to Khe Ve intersection (end of Route 12); 2) from Khe Ve to Vinh (Route AH15); and 3) from Vinh to Hanoi (Route 1A). The total travel time from Cha Lo to Hanoi could be 8-12 hours depending on traffic.

The Route 12 from Cha Lo to Khe Ve (in Figure 5) is a two-lane highway with good pavement condition. However, since it is in a downhill area. There were plenty of rockslides
and some cattle on the highway. No facilities (e.g., gas station, vehicle maintenance shops, restaurants, hotels, etc) for tourists or truck drivers were found on the way.

Asian Highway No.15 between Khe Ve to Vinh (in Figure 6) is mostly a two-lane highway with good pavement condition. It is widening to four-lane divided highway in the urban area. This portion is still in a downhill area with lots of cattle on the road. A local gas station and hospital were found on this 115-km distance.

Highway 1A from Vinh to Hanoi in Vietnam is a standard 2-lane(rural)/ 4-lane(urban) highway with smooth pavement. However, driving on this route requires special skills since there are lots of bicycles and motorcycles. The speed limit in the urban area is only 25-45 km/hr, while 50-80 km/hr in the rural area. Driving on this highway is slow due to heavy traffic jam, pedestrians and cattle on the road. The exception is the last 57km to Hanoi, which is a long 4-lane divided expressway with 80-100 km/hr speed limit. Generally, this part has many facilities (gas station, hotels, restaurants, etc) provided for tourists and truck drivers. However, four toll collections were on this portion.

Section 3: Hanoi to Huu Ngai checkpoint (Vietnam) and Youyi Guan checkpoint to Nanning (Guangxi, China)

Highway 1A from Hanoi to Huu Ngai checkpoint (180 km, 3 hrs) in Vietnam mostly is a standard two-lane highway. The terrain is mostly flat with few mountainous zones near Lang Son. The traffic is light. Most of them are trucks, private cars, motorcycles, and tour buses. Facilities for tourists and truck drivers were found along the way. Huu Ngai checkpoint area has distribution center and many buildings for customs and immigration. The road in China
from Youyi Guan to Nanning (200 km, 3 hrs) is Nanyou Expressway. The expressway is in a very good condition. Rest areas, gas stations, and shops are found every 50 km. In addition, the emergency call box was found along the way. The roadways from Hanoi to Nanning are shown in Fig. 8 below.

![Fig. 8 Road Conditions from Hanoi, Vietnam to Nanning, Guangxi, China](image)

### 3. GMS AGREEMENTS AND CURRENT DEVELOPMENT PLAN

The Asian Development Bank (ADB) supported Greater Mekong Subregion (GMS) Economic Cooperation program. This program started in 1992 by the six nations, i.e., Thailand, Myanmar, Lao PDR, Cambodia, Vietnam, and Southern China. The GMS has four objectives: 1) support the trade, investment, agriculture, and service sector among the region; 2) increase jobs and elevate the GMS residents’ quality of life; 3) Promote and Collaborate technology and education among member nations, as well as, sharing natural resources effectively; and 4) increase the capability and enhance the economic opportunity of GMS countries in world market.

The collaborations within GMS have nine areas including transportation and tourism. 3 of 11 GMS development projects are related to economic corridors. These corridors are East-West Economic Corridor (R9), North-South Economic Corridor (R3A/R3B/R5), and Southern Economic Corridor (R1/R10). In these projects, ADB funds the development of roadways to facilitate trade and tourism activities. Note that R12 is not a part of these projects since it is a short-cut route lying in the northeastern direction between Thailand and Hanoi.

The GMS members have agreements to facilitate the movement of people and goods within the region for regional growth. The agreement began with building transportation infrastructure connecting the region. In addition, they agreed to reduce cross border transport obstacles by simplifying and harmonizing legislation, regulations, procedures, and requirements relating to the cross-border transport, and promoting multimodal transport. GMS Cross-Border Transport Agreement (CBTA) includes details of practice such as custom procedures, road traffic regulation, driving permits, etc.

Due to GMS CBTA, each country has improved the R12 corridor as follows. Thai government has collaborated with Lao government to build the 3rd Thai-Lao Friendship Bridge between Nakhon Panom and Thakhek. This bridge was studied since 2001 as a part of Asian Highway No. 15 connecting Udon Thani, Nakhon Panom, and Vinh. The location of the bridge is between Hom Village (8 km north of central Nakhon Panom) and Vern Tai Village (13 km north of Thakhek). The bridge construction project includes the development of border gates and roadway connection, as well as, the traffic changeover area (due to opposite driving direction between Thailand and Lao). The bridge connects Highway 212 in Thailand and Highway 13 in Lao as shown in Figure 9. The total project cost is about 58 millions USD.
Besides the bridge, the Nakhon Panom customs has a plan to build a single-window and single-stop inspection (SSI) to facilitate cross border trade and logistics in the future. Also, a new bypass (from Highway 22 to bridge location) is being planned to reduce traffic congestion within the Muang Nakhon Panom. In addition, a government budget is being requested for building a new logistics center, a show-trade building, and information center in the area near the bridge. However, these are not expected to be completed within 3 years after the Bridge’s grand opening in November 2011.

Lao PDR’s central and Kammouane governments have requested some budget from ADB and Thailand to develop the east area of the bridge, as well as, widen the Highway 13 between the bridge to Thakhek from two to four lanes. They plan to widen the whole Route 12 from Thakhek to Na Phao. However, these plans are still in negotiation with funder and have no conclusion as of now.

Vietnam has a plan to widen a roadway from Cha Lo to Highway 1A. However, since the road is on the mountain, it is difficult and costly to expand. Flooding and mudslide also damage the road during the rainy season. Additionally, Vietnam has collaborated with Lao government to build a joint-venture company for expanding the Vung Ang deep-water Port in Ha Tien. This port could be directly connected with R12 for logistics activities in Vietnam, Lao, and northeast Thailand. Regarding the Highway 1A, the most important highway in Vietnam, the government has a plan to widen the road and/or building a parallel expressway to reduce traffic congestion and expedite traffic flows.

From the survey, there are many development plans to improve the R12 economic corridor. However, it has been noted that these plans are still in paper and any construction beyond the bridge is unlikely to be finished before 2015 or later. Therefore, R12 users might encounter several obstacles when they use it in the forthcoming years.
3. MAIN OBSTACLES ON R12 ECONOMIC CORRIDOR

Although the existing R12 Corridor can handle some logistics and tourism activities, there are still obstacles that needed to be improved to enhance these activities:

For logistics activity, a logistics center is needed at Nakhon Panom and Thakhek (Thailand-Lao border). At Thakhek, the customs building is needed to be upgraded to handle more logistics activities. In addition, from Thakhek to Na Phao, no trade facilities (gas station, vehicle maintenance station, rest area, and call box) were found on the way. The driving on this area is difficult due to cattle walking alongside of road. At Na Phao border, the custom procedure is pretty slow and the road condition is poor due to mountains. From Cha Lo to Khe Ve, driving on the way is dangerous due to cattle and pedestrians along the road. In addition, all signs are in Vietnamese, which is difficult for foreign drivers.

For tourism activity, more accommodations are needed at Nakhon Panom area. In addition, immigration procedures at Thakhek, Na Phao, and Cha Lo would be improved to expedite the process. No standard medical centers, restaurants, shops, tourist information center were found between Thakhek and Vinh.

4. FUTURE OPPORTUNITIES ON R12 ECONOMIC CORRIDOR

If all obstacles are improved in the future, R12 could yield some opportunities as follows:

Logistics Activities
After the opening of the new Mekong Bridge, the logistics activities between Thailand’s Northeastern region and Thakhek would be significantly improved. However, since no tax incentives has currently been offered on R12, comparing with R9 (East-West Economic Corridor). Therefore, the increase in logistics activity on the route might not be as high as expected.

For logistics activities between Thailand and northern Vietnam, R12 has better road condition than R8, and shorter than R9. It would likely be a replacement of R8 for trucks. The total time for land transport on R12 is only 1-2 days, comparing with 6-7 days for sea transport. Therefore, it would be suitable for perishable goods to transport on this route. Nevertheless, due to the imbalance of trade activities between Thailand and Vietnam, the transportation cost by road would still be double or triple of sea transport. Another logistics activity on this route is the shipment of goods between Northeastern Thailand/Kamphaeng Phet, Lao PDR and Vung Ang Port for sea transport in Vietnam. However, the Vung Ang Port is in the development state and there is no international ship using the port as of now.

For logistics activities between Thailand and Nanning, Guangxi, R12 could be used for fast shipment of perishable goods. However, the amount of trade is likely to be insignificant due to a very long driving distance (3-4 days) and crossing three borders. So far, all fruits exported from Thailand to Nanning, Guangxi are transported by sea from Laemchabang port in Thailand, embarked at Hong Kong or Guangzhou port, and shipped by truck or train to Guangxi. Although it takes a few more days, the sea transport is much less expensive than land transport.
Tourism activities
It is expected that after the opening of the Bridge, more tourists and Thakhek residents would come to Nakhon Panom more frequently since they can easily cross the river without a risky and time-consuming ferry. It would encourage trade activities between Nakhon Panom and Thakhek. Now, Thakhek residents are in difficult to travel, buy a product, and visit a medical center in Nakhon Panom. Also, Nakhon Panom and Thai tourists would more likely to visit Thakhek for cultural and sightseeing purposes.

In spite of lack of historical attractions, R12 offers a pure, beautiful scenario for tourists who are interested in nature. It is full of undisturbed mountains, canals, and forest. Camping and hiking activities might be developed on the route.

The R12 would be one of major tourist spots for cultural experiences. Since R12 is a short international route, tour operators could offer a cultural package tour of three countries (Thailand-Lao-Vietnam) in a day. This would suit for adventurous tourists who like a multicultural experience with reasonable price. This kind of package is now offered on R9, but it might be shifted to R12 due to more beautiful scenario and shorter distance to Hanoi.

Note that R12 is not currently yet a comfortable route for tourists since it lacks several important facilities. It has no gas stations, vehicle maintenance shops, tourist information centers, hospitals, restaurants, and hotels in several areas. A tour on the route might be pleasant and successful if the tour leader has sufficient experiences. The traveler and/or driver on the route could encounter possible life-threaten emergencies especially if the vehicle is run out of gas/broke down, a tour member is sick, etc.

5. RECOMMENDATIONS TO IMPROVE R12 ECONOMIC CORRIDOR

The recommendations to improve logistics and tourism activities on R12 economic corridor are divided into three parts: Thailand, Lao PDR, and Vietnam as follows:

Thailand
The main problem in Thailand is mostly about infrastructure for logistics activity, such as, warehouse, rest area, and traffic congestion at the border gate. These problems would be solved by the collaboration between the government agents and private business. First, before the completion of bridge construction, the Ministry of Transport (Department of Highways), Ministry of Commerce (Department of Foreign Trade), Ministry of Finance (Department of Customs), Ministry of Tourism and Sports, and Province Governor would come together to develop a management plan for the Bridge area and build a new customs building to serve higher traffic volumes. Secondly, the private companies in Nakhon Panom would help the government agents to build supportive infrastructures for logistics and tourism activities on the corridor such as gas station, warehouse, rest area, etc.

Lao PDR
Major problems in Lao PDR are both customs and road infrastructure due to lack of development fund. It is important that Thailand and foreign countries would need to support the building of crucial infrastructure such as new customs buildings and a connection roadway between the bridge and Thakhek. In addition, Thai government would support the collaboration of Thai-Lao business partners to invest in basic infrastructures such as gas
station, hotels, restaurants, etc. Local business agents (Chambers of Commerce in Nakhon Panom and Kammouane) would be incorporated to develop tourism business between two cities. Lastly, a complaint center would be built as a mediator agent to help international truck drivers and tourists on the corridor if any problem occurs.

**Vietnam**

The major problem in Vietnam is about driving condition along the route. Vietnam government would need to show traffic signs and direction signs in English languages for facilitate international drivers. In addition, it is proposed that Vietnam would need to build some basic facilities for drivers and travelers such as gas stations, medical centers, vehicle maintenance shops, tourist shops/info center near the border town. A complaint center is also required to solve problems that might occur along the way. Lastly, since driving in Vietnam is very difficult of foreign drivers, it is proposed that logistics and tourism activities within Vietnam would be done by Vietnamese only.

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