

## Policy Paper

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### Policy Analysis on Regional Cooperation and Urban Development for the

### Guangxi Zhuang Autonomous Region Southwest Urban Development Project



For the Asian Development Bank

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## **ABBREVIATIONS**

<b>ADB</b>	<b>-Asian Development Bank</b>
<b>ASEAN-FTA</b>	<b>-Association of Southeast Asian Nations-Free Trade Area</b>
<b>CAFTA</b>	<b>-China ASEAN Free Trade Area</b>
<b>CBEZ</b>	<b>-Cross Border Economic Zone</b>
<b>CBTA</b>	<b>-Cross Border Transport Agreement</b>
<b>CTS</b>	<b>-Customs Transit System</b>
<b>CTDP</b>	<b>-Corridor Towns Development Project</b>
<b>ECF</b>	<b>-Economic Corridors Forum</b>
<b>GBGEDZ</b>	<b>-Guangxi Beibu Gulf Economic Development Zone</b>
<b>GDP</b>	<b>-Gross Domestic Product</b>
<b>GMS</b>	<b>-Greater Mekong Subregion</b>
<b>GZAR</b>	<b>-Guangxi Zhuang Autonomous Region</b>
<b>FEU</b>	<b>-Forty-foot Equivalent Units</b>
<b>NSEC</b>	<b>-North-South Economic Corridor</b>
<b>PBGECA</b>	<b>-Pan-Beibu Gulf Economic Cooperation Area</b>
<b>PPRDECA</b>	<b>-Pan-Pearl River Delta Economic Cooperation Area</b>
<b>PRC</b>	<b>-People's Republic of China</b>
<b>TEU</b>	<b>-Twenty-foot Equivalent Units</b>

## **TABLE OF CONTENTS**

### **EXECUTIVE SUMMARY**

- I. INTRODUCTION**
- II. GUANGXI AND REGIONAL COOPERATION**
- III. ADB SUPPORT FOR REGIONAL COOPERATION IN GUANGXI**
- IV. DETAILED ANALYSIS ON DEVELOPMENT OF ECONOMIC CORRIDORS**
- V. ADB PLANNED URBAN DEVELOPMENT INTERVENTIONS IN GUANGXI AND REGIONAL COOPERATION**
- VI. CONCLUSIONS AND RECOMMENDATIONS**

### **APPENDIX A**

## Supplementary Appendix C: Regional Cooperation

**Figure 1: Key North–South Economic Corridor  
Provinces/Areas and Growth/Border Nodes**



## Executive Summary

1. Regional trade growth is creating a dynamic relationship between Guangxi and the western region of the People's Republic of China (PRC) with their trading partners in the Association of Southeast Asian Nations (ASEAN). Mineral resources, agriculture products, intermediate and finished goods are crossing border gateways and through the Beibu Gulf faster than the southwestern Guangxi urban infrastructures can process. The trade is improving industries, employment and living standards. Total exports and imports increased at a compounded annual growth rate of 19.5 percent from 1997-2008 between Guangxi and ASEAN or from US \$472.9 million to US \$ 3.421 billion with exports well over 50 percent of the total trade. In order to grapple with the changes, several policy measures began through regional cooperation initiatives coupled with project interventions in order to increase the capacity of the regional infrastructures to cope with the trade growth.
2. A driving force behind regional cooperation and urban development is from the ASEAN-PRC Free Trade Area which will reduce tariffs to zero starting from 2010. Other policy initiatives are the Asian Development Bank's Greater Mekong Sub-region program that defines the North-East Economic Corridor (NSEC) as a means to improving regional infrastructures at key growth cities such as Fangchenggang, Chongzuo and Baise. The link between urban infrastructure development and regional cooperation is established in the context of transforming transport corridors into economic corridors.
3. At present, the level of urban and industrial development in Guangxi's key growth cities and at the border gateways to ASEAN on the Eastern sub-corridor is well below the PRC's more developed eastern and coastal regions as well as lower than developed country standards. There are two major sections of the Eastern sub-corridor: Nanning-Hanoi, Vietnam via Chongzuo on the Youyiguan expressway to the Pingxiang border town and the Nanning-Hanoi via Fanchenggang to the Dongxing border town. There is a third section evolving with Baise from its new expressways to Nanning and Longlin and to Longbang at the border with Vietnam. Each requires urban and border gateway development interventions to respond to the growing trade opportunities.
4. This report focuses on the regional cooperation policy initiatives and the proposed Guangxi Southwest Urban Development Project with ADB. In particular, it finds that corridor development is at a critical stage that requires urban road networks and environmental improvements to form a more efficient link to rural areas and the border gateways. The transformation from transport corridors to economic corridors will need the logistics level of corridor development by full implementation of the Cross Border Transport Agreement for truck crossings, data exchanges and the pilot projects.
5. Other key recommendations in the paper are:
  - Baise included in the NSEC and Guangxi Beibu Gulf Economic Zone policies
  - Technical assistance to enhance rural-urban-subregional value chain linkages
  - Training on corridor management, multimodalism and information systems
  - Coordinate Guangxi Southwest Urban Development Project and Vietnam Corridor Towns Development Project

## I. Introduction

6. Regional economic cooperation programs are necessary to accelerate urban and industrial development. Regional economic cooperation initiatives are highlighted in the urban development master plan of Guangxi Zhuang Autonomous Region (GZAR) and in the urban planning of the southwest border cities of Fangchenggang, Chongzuo and Baise. The basis for regional cooperation is formed by constructing modern urban infrastructure of roads and municipal improvements for the required linkages from rural to urban to regional economic growth opportunities. These urban infrastructure improvements are located in growth centers along economic corridors.

7. The People's Republic of China (PRC) and the Asian Development Bank (ADB) started a number of sub-national and sub-regional strategies and programs for improving regional cooperation along major economic corridors. The sub-regional strategies are the ADB's Greater Mekong Sub-regional (GMS) economic corridors and the PRC's maritime Pan-Beibu Gulf Economic Cooperation Area (PBGECA) and both of these sub-regional organizations constitute the "two wings" of the "axis" formed by the Nanning-Singapore Economic Corridor. The Pan Pearl River Delta Economic Cooperation Area (PPRDECA) is the sub-national organization of the PRC. The ASEAN plus China Free Trade Area (FTA) is another institutional framework dedicated to improving infrastructure, trade logistics and lowering tariffs for the growing trade and investment flows in the region. There are numerous programs and projects at the local, regional and bilateral levels to implement the objectives of these regional cooperation organizations. Finally, there is the overarching program of the Western Development Strategy that directs central government support for the region.

8. The Greater Mekong Sub-region program began under ADB leadership in 1992 and upholds four strategic pillars.<sup>1</sup> In 1998, ADB instituted the economic corridor approach to increase economic development among the six sub-regional countries of the PRC, Vietnam, Thailand, Cambodia, Lao People's Democratic Republic and Myanmar. There are three priority projects under the economic corridor approach. The first is the development of the North-South Economic Corridor (NSEC) which involves Guangxi with the Eastern Sub-corridor from Nanning-Hanoi, Vietnam via Chongzuo to the Youyi Pass at the Vietnam border or from Nanning- Fangchenggang-Dongxing-Mong Cai, Vietnam-Haiphong to Hanoi.<sup>2</sup> The aim is to transform the transport corridors into economic corridors by promoting growth cities and towns along the corridors as well as on border crossings gateways that will be connecting less developed rural areas by urban road networks and in effect attract more investments for more trade and regional integration.

9. Guangxi is in a central location in the maritime "wing" of the Pan-Beibu Gulf Economic Cooperation Area (PBGECA) to link the South China Economic Cooperation Rim and Southwest China Economic Cooperation Rim markets to those of the ASEAN Economic Cooperation Rim in sub-regional cooperation. The objective of the PBGECA is to assist in accelerating construction of infrastructure in transport, environmental protection, information technology and tourism for greater ASEAN-PRC economic integration. The PRC

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<sup>1</sup> (i) strengthening connectivity and facilitating cross-border movement and tourism; (ii) integrating national markets to promote economic efficiency and private sector development; (iii) addressing health and other social, economic and capacity-building issues associated with sub-regional links; and (iv) managing the environment and shared natural resources to help ensure sustainable development and conservation of natural resources.

<sup>2</sup> NSEC has a Central sub-corridor linking Kunming, Yunnan-Hekou-Hanoi-Haiphong and a Western sub-corridor linking Kunming-Myanmar-Lao-Thailand. The other two corridors are East-West and Southern Economic Corridors.

government began the PBGECA in 2006 and is allocating US \$3.2 billion in loans for rail, road and port networks.

10. The PBGEC Forum gathers leaders from China and ASEAN to discuss cooperation in building the new economic growth pole of China and ASEAN with PBGEC serving as the intergovernmental cooperation mechanism. In January, 2008, the Ministry of Commerce of China and Guangxi's People's Government started a Chinese Expert Group on PBGEC to correspond with the Greater Mekong Sub-regional Economic Cooperation or the other "wing" of the "2 wings-one axis" of Nanning-Singapore Economic Corridor or the China-ASEAN Free Trade Area.

11. The Nanning-Singapore Corridor will bolster regional cooperation since the overland road and rail routes will connect the two cities in 1 or 2 days by a linear distance of only 2, 500 kilometers via Vietnam, Laos, Thailand and Malaysia. Markets will be linked from South China to ASEAN countries and Indochina including Cambodia once the railways and roads become fully operational. This axis of economic development will be flanked by the overland and maritime regional cooperation programs of the GMS and PBG, respectively.

12. The PPRDECA meets each year since 2006 in a forum and trade fair to discuss major issues and sign contracts for infrastructure and trade for joint development. The 9 + 2 regional organization is comprised of the following provinces: Guangxi, Yunnan, Guizhou, Sichuan, Hainan, Guangdong, Fujian, Jiangxi and Hunan as well as Hong Kong and Macao special administrative regions. The 5<sup>th</sup> PPRD Forum and Fair in Nanning in June, 2009 discussed: PPRD and ASEAN cooperation to accelerate the construction of a trans-regional and international traffic networks of roads, railways, waterways and air routes and negotiate to establish a multi-functional information network.

13. Guangxi is a pivotal participant in the PPRDECA, especially with multimodal significance, for the planning and construction of expressways connecting Vietnam, Guangdong and Yunnan; the port of Fangchenggang, Qinzhou, Beihai and Shibuling; inland waterways of the Youjiang in Baise to Guangdong and Hong Kong and for the Zuojiang in Chongzuo; railways new and renovated to Vietnam, Guangdong, Hunan, Yunnan and airports for domestic and southeast Asia routes. The 5<sup>th</sup> PPRD Forum resulted in cooperation for over 600 contracts worth US \$32 billion (226 billion CNY) in manufacturing industry, agriculture, and trade & logistics services. Since the first PPRD forum there were 14,000 projects worth US \$234 billion. Finally, the PPRDECA is instrumental in furthering the central governments preferential policies of western development for Guangxi and 11 other less developed provinces as well as the policies on coastal open door; open door and minority self-government.

14. The Association of Southeast Asian Nations (ASEAN) is the major force in Guangxi's regional economic cooperation as indicated by the PRC trade increasing (Table 1) as tariffs are reduced to zero by 2010, especially for unprocessed agriculture products for Brunei, Indonesia, Myanmar, Malaysia, Philippines, Singapore and Thailand with China and by 2015 for Vietnam, Cambodia and Lao PDR with China under the ASEAN-PRC Free Trade Area.

15. However, Guangxi's port of Fangchenggang indicated that infrastructure construction of roads and railways will be needed to handle increasing trade flows through Guangxi. At present, goods are held in port storage (many in uncovered areas) beyond the port's capacity since road and rail capacities are not adequate. As a result, enterprises are limited in their reliance on the port's services to meet their growing trade and can not increase their production until the port expands and the port can not expand until more roads

are constructed. Fangchenggang, Beihai and Qinzhou ports are addressing the capacity issue and related ports' services by merging to form a group and built an industrial park in Nanning with refrigerated capacity that is now lacking in Fangchenggang for perishable goods.

**Table 1: China-ASEAN Import/Export Trade 1994-2007**

Year	I/E Value	Export Value	Import Value	Difference
1994	\$13.2 billion	\$6.379 billion	\$6.830 billion	\$0.451 billion
1995	20.369	10.474	9.8	.366
1996	21.159	10.310	10.849	.997
1997	25.156	12.700	12.456	.301
1998	23.644	11.035	12.609	1.640
1999	27.202	12.275	14.927	2.701
2000	35.922	17.341	22.181	4.840
2001	41.615	18.385	23.229	4.844
2002	54.766	23.568	31.195	7.629
2003	78.25	30.93	47.33	16.4
2004	105.88	42.90	62.98	20.08
2005	130.37	55.37	75.00	19.63
2006	160.84	71.31	89.53	18.22
2007	202.54	94.179	108.369	14.190

Source: China-ASEAN Yearbook 2008, Guangxi Social Sciences Institute, pg. 159.

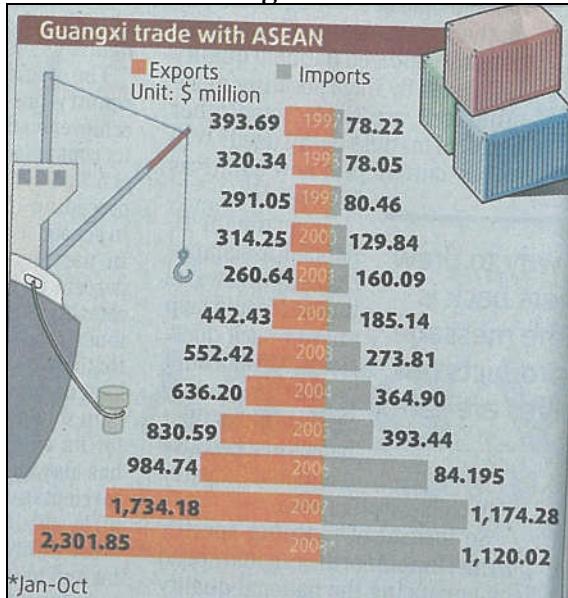
16. Regional cooperation is not limited to the “two wings-one axis”, the PPRD or the ASEAN-China FTA frameworks. There is also emphasis on speeding-up Sino-Vietnam cooperation in transport for Nanning-Hanoi-Ho Chi Minh highways and Indochina Peninsula Railway lines. The framework is: “Two Corridors and One Ring:” Kunming-Lao Cai-Hanoi-Haiphong and Nanning-Lang Son-Hanoi-Haiphong corridors with the Guangxi Beibu Gulf Ring.

17. Guangxi is and will continue to be China’s primary beneficiary of the ASEAN-PRC FTA. Guangxi’s participation in the ASEAN coupled with ADB’s assistance to construct the 179.2 kilometer expressway from Nanning to the Pingxiang-Vietnam border (Youyiguan) via Chongzuo provides measurable regional economic cooperation opportunities along the corridor. There are border traders and processing industries importing raw materials for finished products of traditional Chinese medicine and mahogany furniture targeted for ASEAN markets. The border town of Puzhai, north of Vietnam in Pingxiang, has a resident population of only 3,000, yet attracts thousands of business persons each day from all over China. In 2007, trade volume was US \$510 million, a 27 percent increase over 2006. ASEAN is the biggest trade partner for Guangxi with 2007 trade volume of US \$2.9 billion or more than one-third of Guangxi’s total foreign trade.<sup>3</sup> Guangxi joined the GMS in 1994 and the new expressway of 2005 increased total traffic volume 24 percent to 5.1 million in 2007 and 18 percent to 6.2 million in 2008 for regional traffic flows of passengers, cargo and tourists and the national highway serves villages and towns between Nanning and the border.<sup>4</sup>

<sup>3</sup> “Riding on both Sides for Success,” Qian Yanfeng and Huo Yan, *China Daily*, December 11, 2008, p.7.

<sup>4</sup> “Gateway to the South,” North South Economic Corridor, Guangxi, *Corridor Chronicles, Profiles of Cross Border Activities in the Greater Mekong Subregion*, ADB, December, 2008, p. 8.

**Table 2: Guangxi-ASEAN Trade**



Source: *China Daily*, December 11, 2008  
(Guangxi government)

**Table 3: Border Trade of Pingxiang Farmers**

	1992	2001	2002	2003	2004	2005	2006	2007
Trade	\$94.1	\$182.3	\$269.5	\$275.4	\$287.7	\$477.9	\$589.7	\$839.7
Per Capita	\$62	\$238	\$270	\$275	\$288	\$293	\$317	\$458

Source: *China Daily*, December 11, 2008/Guangxi government, trade: US\$ millions, 6.8CY

18. Other notable development achievements from Guangxi's involvement in ASEAN, GMS and PBGEC are:

- China-ASEAN Free Trade Area Pingxiang Logistics Park-to handle 10 million tons per year to be completed in 3 phases by 2010.
- Dongxing Frontier Cooperative Zone and since 1994 the annual China-Vietnam Frontier Commodity Fair for buyers worldwide.
- Baise-China, Longbang-Vietnam, Chaling; Sino-Vietnam Border Economic Cooperation Agreement, 2007 (Appendix A)
- Guangxi Beibu Gulf International Port Group to integrate port assets of Fangchenggang, Qinzhou, Beihai and Guangxi Railway Holdings as of February, 2007 to reach total handling capacity of 100 million tons by 2010 and 300 million tons by 2015. Also instituted the Guangxi Beibu Gulf Development Investment Co.,Ltd. to construct basic infrastructure in the coastal area into a new PRC growth pole.
- Since 2008, when the Guangxi Beibu Gulf Economic Zone began, gross domestic product increased over 16 percent for three straight years. BGEZ accounts for less than one-fifth of Guangxi's total area and less than one-fourth of Guangxi's population, while its GDP accounts for one-third of the total.

- Implementation of key industrial projects in the Guangxi Beibu Gulf Economic Zone Development Scheme: three thermal power plants; Qinzhou oil refinery; Qinzhou pulp & paper; Beihai Industrial Park; Fangchenggang iron & steel project of 10 million tons capacity and a nuclear power project.
- Key infrastructure projects to better connect the Guangxi to ASEAN: Nanning-Guangzhou railway; Hunan-Guangxi railway; Nanning-Qinzhou railway; Chongzuo-Qinzhou expressway; Qinzhou Free Trade Port Area; Nanning International Logistics Base.

## **II. Guangxi and Regional Cooperation**

19. Guangxi is the only western province with both land and sea corridors to southeast Asia markets and more importantly is less developed than China's other coastal areas. Guangxi's strategic location and involvement in regional cooperation programs is on the level of national importance of the PRC's other growth poles of the Pan Pearl River Delta, the Yangtze River Delta and the Bohai Rim. The State Council of China raised the importance of Guangxi to the region by defining the Guangxi Beibu Gulf Economic Development Zone (GBGEDZ) in the 11<sup>th</sup> Five-Year Plan and in January, 2008 approved a Master Plan of 2006-2010. GBGEDZ has a population of 12.4 million across 42,500 square kilometers of land and 130,000 square kilometers of sea and a coast line of 1,595 square kilometers. Development strategies by the national, provincial and border cities all depend on the accelerated development of the GBGEDZ.

20. The neighboring southwest provinces of Guizhou and Yunnan are landlocked and depend on reliable transport infrastructure connecting their economic output to PRC intra-regional and to regional international markets of southeast Asia. Guangxi's construction of railway and road networks is supported by the regional cooperation programs of the ASEAN-PRC FTA, the GBGEDZ and the GMS. Presently, Fangchenggang port and its evolving infrastructure of connecting rail and road networks to the southwest provinces are vital to Guizhou and Yunnan. Fangchenggang has two weekly trains from Guizhou and Yunnan laden with mining resources and these trains return to these two provinces with chemicals.

21. The Guangxi Beibu Gulf Economic Development Plan of January, 2008 outlines goals to upgrade the urban, rural, industrial and agricultural areas of Guangxi to those of the national average over the next few years. The goals will be achieved by promoting Guangxi's numerous economic development zones at the borders, seaports, and inland for greater commercial activities. Also, there is emphasis on promoting the productive capacities of rice, livestock, sugar cane, subtropical fruits in the rural areas as well as industrial development of border export processing and by connecting markets with modern transport and logistics systems.

22. The urban development master plans of Guangxi and of the city governments stress the strategic and operational importance of achieving higher levels of urbanization, industrialization and transport network integration (roads, railways, ports, waterways, corridors) in order to fully participate and benefit from the regional economic cooperation programs. The master plans and strategies of the governments and regional cooperation organizations are in the early stages of articulation. However, clear foundations are illustrated in all the plans in order to handle the growing economic activities and to cope with the stresses placed on the inadequate infrastructure and systems.

23. Fangchenggang, Chongzuo and Baise each have pillar primary industries with upstream and downstream secondary and tertiary (service) industries to fully integrate their economies into regional economic cooperation. The plans are based on improved urban

infrastructures of roads and municipal projects and outline the stages of higher levels of urbanization that will absorb labor populations for the growing urban and rural industries over the next five and ten years. Iron and steel is Fangchenggang's primary industry and grain, oil (food), chemicals and energy are also prominent to industrial and urban development. Sugar cane and agriculture processing are lead industries in Chongzuo that will be the catalyst to greater regional economic cooperation. The aluminum industry supported by abundant bauxite resources is a pillar industry in Baise with many opportunities for secondary and tertiary industrial development in the near term. Each city plans or already constructed industrial parks with coordinated road networks to national highways and expressways to accommodate the industrial and residential urban growth and each city has very detailed plans to participate in tourism (tertiary) activities to the benefit of regional economic cooperation. In addition, the border agreements for cooperation and construction of facilities are also structured to fully integrate Guangxi's borders with Vietnam and ASEAN markets in a staged and well paced approach as international trade increases.

### **III. ADB Support for Regional Cooperation in Guangxi**

24. The GMS Framework is a ten year plan endorsed by the six GMS leaders at the first summit in 2002. The framework's objective is to achieve the central focus of ADB's purpose of reducing poverty by developing the economies without damaging the environment. The objective is implemented around the framework's strategic components of: (i) strengthening infrastructure connectivity and facilitating cross-border movement and tourism; (ii) integrating national markets to promote economic efficiency and private sector development to improve competitiveness; (iii) develop human resources and skill competencies; (iv) protect the environment and promote sustainable use of the subregion's shared natural resources.<sup>5</sup> These components are consistent with ADB's Regional Cooperation and Integration Strategy, especially pillar 1: regional and subregional economic cooperation programs (cross-border infrastructure and related software) of lending programs (physical infrastructure) and pillar 2: trade and investment cooperation and integration of non-lending programs (trade facilitation).<sup>6</sup>

25. Regional cooperation and integration is possible by connecting the infrastructure for a seamless flow of goods, people and capital across borders and within the GMS region. ADB project lending interventions have contributed to integration of markets by the construction of transport corridors. As shown in Table 4, ADB as early as 1996 began to connect Guangxi's trade activities to the region by building Fanchenggang port terminals and linking landside road networks.

26. In addition, the GMS Transport Sector Strategy, 2006-2015 of March, 2007 and the August, 2008, 12<sup>th</sup> Meeting of Sub-regional Transport Forum, expressed the following priority transport project interventions:

- Baise-Debao-Longbang Expressway (Vietnam border) and to be in coordination with the 2007 Sino-Vietnam agreement for the Longbang-Chaling border economic cooperation zones
- Baise-Hechi Expressway
- Western Yunnan Roads Development Project II
- Hanoi-Lang Son Expressway Project (connects to Guangxi, Pingxiang)

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<sup>5</sup> Regional Cooperation Operations Business Planning, Greater Mekong Subregion 2009-2011, ADB, September, 2008.

<sup>6</sup> Regional Cooperation and Integration Strategy, ADB, July, 2006. The other 2 pillars are: monetary and financial cooperation and integration and cooperation in regional public goods. ("clearing the red tape at the country borders would generate approximately twice as much GDP than tariff liberalization would", p. 13), pgs 11-17.

- Ha Long-Mong Cai Expressway Project (connects to Guangxi, Dongxing)

**Table 4: ADB Transport Corridor Projects**

Project Name	Date	Amount	Description
Fangchenggang Port Development	9/2002	\$52 million	One berth container terminal; one berth bulk terminal; 20 km.  <u>Objectives:</u> development of the hinterland provinces' economies (Guangxi, Guizhou and Yunnan)
Guangxi Roads Development	12/2006	\$150 million	highway to the port- Expressway-Nanning- Youyiguan-179.2 km, 4 lane; link roads to 7 counties-64 km; local roads improvements-977.2 km.  <u>Objectives:</u> part of national trunk highway system connects to National Route 1 in Vietnam and will facilitate regional cooperation. Link roads facilitated 3 new Guangxi- ASEAN industrial zones: Chongzuo, Fusui, Pingxiang
Guangxi Roads Development Project II	12/2007	\$200 million	Expressway-Baise-Nanning-188 km; Class II connecting road-25 km; 12 interchanges; upgrade intercity roads-Baise- Napo/Vietnam border-250 km; and minority village roads-500 km. <u>Objectives:</u> better access to markets, jobs, activity centers
Western Guangxi Roads Development Project	8/2007	\$300 million	Expressway-Longlin-Baise-177 km; upgrade border and rural roads-1,060 km; 50 township bus stations  <u>Objectives:</u> regional transport system to promote trade and reduce barriers with Vietnam.

27. The physical infrastructure connectivity in the region of expressways to national highways and urban-rural road networks is the foundation to accelerate industrialization and urbanization and improve regional economic growth as stated in the Guangxi and city government master plans. However, day to day business operations are constrained by border delays which are costly and prevent the transport corridors from becoming economic corridors unless there are further project interventions. ADB has instituted a number of trade facilitation programs to transform the transport corridors to operational economic corridors and to overcome the barriers to trade and investment.

28. The Cross Border Transport Agreement (CBTA) of 2004 and the Economic Corridors Forum (ECF) of 2008 are GMS institutional mechanisms to organize strategies

and implement project interventions in order to overcome the non-physical barriers to regional trade and shift from constructing transport to economic corridors. The North-South Economic Corridor, the East-West Economic Corridor and the Southern Economic Corridors are the main organizational frameworks to identify major cities and towns along the corridors that will generate business opportunities and spread regional economic growth to the outlying areas. Some of these major cities or nodal points along the corridors are the cross border towns where there needs to be harmonization of procedures and improved information technology systems to smooth the flows of trade and tourism.

29. In 2009, ADB approved the regional policy and advisory technical assistance project for Developing Cross-Border Economic Zones (CBEZ) between the PRC and Vietnam which will support the North-South Economic Corridor. The border crossing points of Hekou, Yunnan-Lao Cai and Pingxiang, Guangxi-Dong Dang need to become stronger links in the supply or value chain for the growing border business activities and to ease the flow of goods between the PRC and ASEAN markets. The CBTA, the ECF and the CBEZ programs involve more private sector participation so that the corridors can become centers of economic activities unhindered by cross border barriers to regional economic cooperation.

30. The Asian Development Bank lending and non-lending programs are shifting from constructing road corridors and power transmission projects to projects related to urban development, trade facilitation and logistics. These projects include urban roads, flood and drought risk management and mitigation, biodiversity, water supply and sanitation improvements in towns along the GMS corridors as outlined in the September, 2008 Regional Cooperation Operations Business Plan. The shift is gradual, but there is more focus on improving living conditions for populations along corridors and their connected communities for long term impact on regional economic development.

31. The priorities of the remaining years of the GMS Strategic Framework (2002-2012) are towards: (i) transforming the GMS transport corridors into economic corridors-the corridors must be inclusive in nature, and the potential negative social and environmental effects must be mitigated; (ii) accelerating the implementation of the CBTA and other trade and transport facilitation initiatives; (iii) reducing environmental risks to local livelihoods and GMS development plans.<sup>7</sup>

32. Guangxi has one of the clearest indications of the ADB-GMS theme of urban development along the corridors. The first intervention was the Guangxi, Nanning Urban Infrastructure Development Project demonstrating ADB's commitment to the objectives of poverty alleviation and improving living conditions as well as fulfilling the Millennium Development Goals. The following Table 5 shows the continuing urban development projects in Guangxi:

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<sup>7</sup> Joint Ministerial Statement, paragraph 13, Greater Mekong Subregion Economic Cooperation Program, 15<sup>th</sup> Ministerial Meeting, 19 June, 2009, Cha-Am Petchburi, Thailand.

**Table 5: Urban Development Projects in Guangxi**

<b>Project Name</b>	<b>Date</b>	<b>Amount</b>	<b>Description</b>
Nanning Urban Infrastructure Development Project	11/2004	\$100 million	Flood control; environmental & ecological improvements <u>Objectives:</u> basic sanitation and safe water to drink
Wuzhou Urban Development Project	8/2007	\$100 million	Urban road network & bridge to safer areas -36.2 km; geohazards system. <u>Objectives:</u> Improve urban infrastructure to support regional multimodal hub and 6 domestically funded projects: 3 expressways, 2 railways, 1 river
Southwest Urban Development Project (Fangchenggang, Chongzuo, Baise)	1/2008	\$300 million	Urban roads & networks; lake rehabilitation; coastal protection and connecting bridge for Baise <u>Objectives:</u> Accelerate development of urban & industrial areas and to benefit from & promote regional economic cooperation
Beibu Gulf Cities Development Project (Fangchenggang, Beihai, Qinzhou)	10/2009	\$400 million	Urban roads & bridge-70 km; municipal infrastructure for water treatment. <u>Objectives:</u> Support planned industrial growth, encourage private investment, and tourism facilities, stimulate regional economies & trade (ASEAN/GMS)

#### **IV. Detailed Analysis on the Development of Economic Corridors**

33. In 1998, the Eighth GMS Ministerial Meeting in Manila instituted the economic approach policy to accelerate the pace of subregional economic cooperation. Its main objectives are: (i) provide a spatial focus to GMS activities, with the backbone, growth centers, and nodal points serving as catalysts to the development of surrounding localities; (ii) open up many opportunities for various types of investments from within and outside the subregion; and (iii) promote synergy and enhance the impact of subregional activities through the clustering of projects.<sup>8</sup>

34. Transport corridors become economic corridors when there is the smooth operations of the businesses to move and store goods within Guangxi and China and across borders with lower costs and less time to travel as well as to move people and vehicles along the corridors for tourism opportunities. The main cities along the corridors are catalysts to improving corridor performance, yet are not the sole beneficiaries of the new expressways that form the main corridors. The test of transforming transport corridors into economic corridors involves attracting investment and economic development to smaller

<sup>8</sup> "Toward Sustainable and Balanced Development: A Strategy and Action Plan for the GMS North-South Economic Corridor," ADB, Discussion Draft, February 4, 2009, p. 1, paragraph 2.

towns and rural areas in the surrounding counties of the main corridors through the linked road networks that are part of the transport corridor projects funded by ADB.

35. The pre-conditions for economic corridors are the construction of modern expressways, national highways, urban road networks and municipal improvements, and upgrading of rural road networks to connect to the main transport corridors. These basic regional infrastructures are in place and being constructed. However, there are weaknesses in physical infrastructures and processes at the border crossings. There are also problems in generating more broad-based and balanced growth by urban areas integrating rural economies and populations with national, subregional and global markets through rural-urban-subregional linkages. Strengthening of the linkages results from effective urban and corridor development strategies since 90 percent of the poor live in the rural areas.

36. The policy framework of the Eastern subcorridor of the GMS North-South Economic Corridor flagship program is well established from ADB and Guangxi projects completed and planned. The Nanning-Youyiguan-Hanoi and the Nanning-Dongxing-Hanoi transport corridors are resulting in improved business opportunities to those using the new expressways and their linked roads by reducing time to travel and lower vehicle operating costs.<sup>9</sup> Moreover, Baise is emerging as a new third section on the Eastern subcorridor of the NSEC program.

37. ADB projects in Baise are constructing expressways and linked roads to the hinterland for connectivity and regional economic cooperation and for urban development, yet Baise is not defined in the NSEC framework. The remoteness, uneven development and numerous rural counties of Baise coupled with the sequences of project interventions (Baise-Nanning; Baise-Longlin; Baise-Longbang; Baise-Hechi expressways and the Southwest Urban Development) compared to the two Nanning Eastern subcorridors warrant Baise to be included in the NSEC framework. Moreover, Baise strengthened its transport corridor function by starting to implement the 2007 Longbang-Chaling border agreement with Vietnam to construct a bilateral economic cooperation zone and strive for a free trade zone in order to capitalize on border trade, processing and tourism growth opportunities.

38. The next stage of developing the transport corridors into economic corridors is for harmonizing logistics processes and services for traders such as Customs, information exchanges, warehousing, and trucking. The NSEC policy framework with the CBTA and ECF institutional arrangements are needed to make corridor improvements within and across borders. Trade flows will increase and capacity to handle shipments on the corridors will be constrained without logistics corridors taking shape. The transformation to logistics corridors will be hastened by the full opening of the ASEAN-PRC FTA in 2010. Traders will demand more services and reliability as opportunities unfold on and in the vicinity of the new transport corridors.

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<sup>9</sup> The expressway has cut travel time from Nanning to Youyiguan from more than 5 hours to less than 2 hours, and travel distance by 45 km. It has also relieved traffic congestion and bottlenecks on the parallel NH322. With the expressway, traders from Pingxiang can now do business in Nanning and be back home on the same day, instead of a day or so later. The link roads and local roads enable the poor living in the project area to seek employment elsewhere and allow easier access to market and public services. The link roads provide good access to the three new Guangxi-ASEAN industrial zones (one each in Chongzuo, Fusui, and Pingxiang) and the Wantong Logistic Center, and have attracted new industry into the project area. The Project has stimulated the local economy and enhanced border trade. Bus fares have gone down by an average of 15% since the completion of the Project. Similarly, freight charges per ton km have gone down by the same margin as a result of better roads and lower vehicle operating costs despite the rise in fuel costs. *Project Completion Report Guangxi Roads Development Project, People's Republic of China, Loan 1851-PRC, ADB, August 11, 2008, paragraphs 34, 49.*

**Table 6: Corridor Development Level<sup>10</sup>**

<b>Stage</b>	<b>Corridor</b>	<b>Definition</b>
Level 1	Transport Corridor	Corridor that physically links an area or region
Level 2	Multimodal transport corridor	Corridor that physically links an area or region through the integration of various modes of transport
Level 3	Logistics corridor	Corridor that not only physically links an area or a region, but also harmonizes the corridor institutional framework to facilitate the efficient movement and storage of freight, people and related information
Level 4	Economic corridor	Corridor that is able to attract investment and generate economic activities along the less-developed area or region ; physical links and logistics facilitation must first be in place

39. Full implementation of the CBTA annexes (16) and protocols (3) is critical in the next stage of the corridor transformation. Delays will compound at the borders from trucks transloading all goods from Chinese to Vietnamese trucks and vice versa as trade increases and will worsen further without modern information technologies. Hence, the key steps to implementation into logistics corridors require:

- Intergovernmental agreements to enable trucks and drivers to cross into each others territories to designated areas such as inland depots, cargo transfer terminals or dry ports (rural and urban) for transloading, consolidating and distribution of cargo. The ECF provides the institutional arrangement to bring together the public and private sectors and the local, provincial and central governments with the National Transport Facilitation Committee of the PRC. (protocol 1 and the GMS Road Transport Permit)
- Intergovernmental agreements to exchange data across borders. The PRC e-Port system (used in Youyiguan/Pingxiang), electronic date interchange and pre-clearance Customs formalities are needed. The CBTA is implementing a public private partnership to accelerate the cross border movement of goods, vehicles and containers through the GMS Customs Transit System (CTS)
- Cross border pilot projects under CBTA for best practices shared with other border crossings as models of corridor development (Youyiguan & Dongxing)

40. Urban development by ADB project interventions of strategically located cities on the regional transport corridors will generate regional economic growth by attracting investments for economic activities to those cities. There is already evidence of economic growth from urban development project interventions. Chongzuo and Fusui are linked to the Nanning-Youyiguan new expressway which improves their new ASEAN industrial park opportunities. Recently, there are proposed project interventions of a local urban road network and reduction of the pollution in the Shuikou Lake of Chongzuo which will improve business and living standards and attract businesses and tourists. However, the promotion of just a few cities along the corridors will not be sufficient to achieve the GMS Strategic

<sup>10</sup> "Logistics Development in the North-South Economic Corridor of the Greater Mekong Subregion, Banomyong, Ruth, *Journal of Greater Mekong Subregion Development Studies*, ADB, Volume 4, December 2008, p.46.

Framework vision of: enhanced connectivity, increased competitiveness and greater sense of community.

41. Rural-urban-subregional interdependencies need to be fully considered in view of the transformation of the transport corridors into economic corridors so that broad based economic growth can occur to reduce poverty evenly in Guangxi and across the borders. The interventions need to go beyond urban development and transport corridor construction and include more sequencing and coordination to fully integrate all of the region's inhabitants and their productive potential into the economic corridors.

42. Major implications of the expanded interconnectedness and accompanying transformation are that (i) the growth and welfare of urban centers and their rural hinterlands are no longer affected only by internal factors, but are also influenced by forces far beyond national borders; (ii) cities and towns are increasingly placed in a competitive framework of subregional intercity networks; and **(iii) economic corridors create significant opportunities to strengthen the rural-urban-subregional linkages in the poorer sections of the Mekong region, and present considerable planning and management challenges for the urban areas to meet the new demands of the integration process.** Understanding of the forces of subregional integration as well as the prominent roles that urban areas are playing and will play in the subregional integration process is vital to devising and implementing appropriate strategies that will unleash the potential of urban areas to exploit the new opportunities for the benefit of the region's poor.<sup>11</sup>

43. Congestion will occur along the corridors and at the borders and presents opportunities to inland and rural areas which can function as agriculture and minerals processing plants and inland distribution and cargo transfer centers in the context of value chains of business activities. For example, distribution headquarters in cities on the corridor and at the borders could cooperate with rural areas to serve as distribution branches and perform Customs clearance inland (in bond) and with modern information systems. There are numerous stages of economic activities between, for example, the extraction of minerals and the harvesting of agriculture products to the delivery of intermediate and finished products to customers that would involve the coordinated integration of urban and rural businesses and require supporting infrastructures. Development of economic corridors needs interventions to integrate the urban-rural-subregional linkages. The goals of the interventions will be to prevent overburdening of urban resources (water, sanitation, roads) by balancing the labor pools and economic activities between rural and urban areas.

44. It is the goal of the growth centers along the GMS Eastern subcorridor comprised of Nanning, Chongzuo, Baise and Fangchenggang to attract investment to their industrial parks for business development. The project interventions of better urban road networks and improved environmental conditions serve to accommodate enterprise development around the industrial zones. However, manufacturers and distributors in the parks will need low costs and access to global markets by efficient transport from and to their businesses, across the borders, or by ocean or both. As more economic activities occur along the subcorridor, the performance of the subcorridor and their competitiveness will determine long term local and regional economic growth. Moreover, the tourist industry's buses need to share with the cargo transport and the public transport the same local and regional infrastructures of urban road networks, expressways, highways and border crossings. Current increases in trade, tourism and passenger car ownership in Guangxi will be constrained and undermine growth unless the logistics stage of corridor development is implemented.

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<sup>11</sup> "Technical Assistance for Rural, Urban and Subregional Linkages in the Greater Mekong: A Holistic Approach to Development and Poverty Reduction," Cezayirli, G., ADB, September, 2003, paragraph 7.

45. Several ADB and Guangxi border initiatives will provide the foundation to ease the flows of inbound and outbound transport for the key urban growth centers along the subcorridor. The CBTA is the primary program with its pilot project for trade facilitation at border crossings of Hekou in Yunnan and Pingxiang in Guangxi. The China-ASEAN Free Trade Area Pingxiang Logistics Park near the Nanning-Friendship Gate expressway to Vietnam is constructing the storage, Customs, processing and logistics functions to accommodate increasing trade and tourism along the subcorridor. There will also be a joint economic zone of 17 square kilometers evenly divided between Pingxiang and Dong Dang, Vietnam and all facilities are scheduled to be completed by 2012. Dongxing and Baise-Longbang are also planning and building facilities at the borders in cooperation with Mong Cai and Chaling, Vietnam, respectively in order to lower the physical and non-physical barriers to trade and tourism. Finally, ADB is instituting a program to construct cross border economic zones (CBEZ) after the People's Republic of China and Vietnam reached consensus to jointly establish CBEZs in Yunnan, Hekou-Lao Cai and in Guangxi, Pingxiang-Dong Dang. The ADB initiative will address the joint development, management and private sector participation of the CBEZs and coordinate linkages to the key urban growth cities along the subcorridor.

46. The link between the key growth cities on the subcorridor and border crossings will be raised to developed country standards with multimodalism, information systems and by organized corridor management. Road transport is only one mode to sustainably develop economic corridors. Guangxi has rail, inland waterways with Youjiang, Zuojiang and Xijiang flowing with Vietnam and the Pearl River as well as seaport access and air transport to consider. The next stage of corridor development will involve a process change of moving general cargo by the use of overloaded trucks to the use of forty and twenty foot equivalent unit shipping containers (FEU, TEU) on truck chassis which are loaded from ocean vessels and can be moved by rail and on river barges. The intermodalism function of transport can ease congestion, lower costs and improve reliability to shippers while lowering environmental hazards. Also, information systems will be important to not only organizing and processing shipments in a single electronic window computer system across the subcorridor, but for developing websites to inform all government agencies and the private sector about the Eastern subcorridor's progress.

47. Finally, stakeholders within Guangxi and across the region need to organize to better coordinate and manage government and business interests in the subcorridor development by forming a subcorridor committee under the guidance of the ECF. The stakeholders include: local, provincial and national representatives from sector agencies in transport, trade, urban, investment and the private sector. The subcorridor committee will be responsible for providing a voice to all the interests in attracting investments and monitoring and measuring the performance (time, cost, reliability) of the subcorridor and the link between the key growth cities and the borders to ensure an unhindered flow of goods, people and information. The subcorridor committee or coalition can analyze the changes and determine where improvements and expansions are required as the corridor matures from the transport to the logistics to the economic corridor stages.

48. Guangxi's regional cooperation strategy is based on geographical advantages of the province as a transport and logistics hub for the southwest China region connecting to domestic and international regional markets. The strategy recognizes that cooperation is possible only by linking roads, railways and waterways throughout the region and by access to seaports. The strategy realizes that benefits and contributions cannot occur without higher levels of industrialization and urbanization in key urban areas along the corridors.

49. The central government raised the importance of Guangxi's regional development status in March, 2006 by forming the Guangxi Beibu Gulf Economic Zone (GBGEZ) and only recently, in January, 2008 introduced the Development Scheme to 2020. The high national

status of the GBGEZ will provide national preferential policies and funding to accelerate the industrialization and urbanization process which at present lags far behind more developed regions in the eastern and coastal areas as well as in the western areas. However, the Development Scheme of 2008 only focuses on Nanning and the coastal cities of Beihai, Qinzhou and Fangchenggang with Yulin and Chongzuo added in the May, 2009 report by the Office of Planning, Development and Administration Commission of Guangxi Beibu Gulf Economic Zone for the August, 2009 Forum in Nanning. Baise requires equal significance to the Development Scheme since their road networks, industrialization and urbanization are progressing as part of the transformation from transport to economic corridors along the Eastern subcorridor.

50. The approach by Guangxi to regional cooperation is comprehensive and appropriate for an early stage development scheme. In general, the strategy includes the Beibu Gulf, the provinces of the southwest, South and Central China and connects to ASEAN and East China. The plan divides the GBGEZ into 9 percent cities for urbanization and industrialization; 56 percent countryside for agriculture; and 35 percent eco-zone for nature resources. Industrial planning by clustering is appropriate, yet only targets industrial or functional zones in the Beihai, Qinzhou and Fangchenggang and coastal ports, and includes Nanning and the borders of Dongxing and Pingxiang zones. However, the infrastructure planning includes expressways and railway routes constructed for connecting Guangxi's inland cities and neighboring provinces, but no mention of the inland waterways for regional economic development. Improvements to the GBGEZ strategy and the approach will require a plan that is shorter in term and in more detail. Such as, a strategy from 2010-2015 and from 2015-2020 with a more detailed or separate sectoral focus for transport (all modes and multimodal), border-corridor, trade and investment, industrial (manufacturing & tourism) and agriculture.

51. However, the Guangxi Eleventh Five-Year Urbanization Development Planning, 2006-2010 does show strategies to evenly develop the whole province for regional economic cooperation. The "Four Industrial Clusters and Four Town Belts of Urbanization," has economic corridor implications. They are: Youjiang Valley corridor with Baise and Pingguo as the axis; Guizhou-Guangxi corridor with Hechi and Yizhou as the axis; Guangxi Southwest corridor with Nanyou and Chongzuo-Qinzhou highways to link Nanning to Fangchenggang; and the Northeast cities and towns belt with Hezhou as the axis. The industrial clusters and parks are planned to maximize radiation effects and create linkages to the cities and towns.

52. In addition, Baise has a research plan for regional cooperation with the southwest that in detail describes infrastructure connectivity with Yunnan and Guizhou, industrial development of leading sectors in each of the three provinces as well as tourism development, border development with Vietnam (Red River Basin) and ASEAN cooperation. In short, Baise is described as the hub at the junction of the three provinces to access the sea and pivotal to East, West, Central and North and South. The GBGEZ strategy needs to improve on the strategic geographic coverage of cities and rural regions in Guangxi that are developing in regional cooperation. The need for an even development and inclusive approach throughout Guangxi is more significant for Guangxi's regional cooperation with Vietnam and other developing member countries of ADB.

53. Vietnam's level of economic development is behind Guangxi's by a number of years and will become a hindrance to regional economic growth for Guangxi, if policies and infrastructure are not evenly developed across the borders. There is a need for harmonizing the cross-border infrastructure of facilities and roads as well as policies for truck permits crossing into national territories and data exchange agreements between the two countries. Presently, there are meetings between Guangxi and Vietnam striving to evenly develop the corridors across the borders in order to synchronize planning, implementation, and

construction with the same standards, especially for the four border highways of: Nanning-Youiguan-Dong Dang; Dongxing-Mongcai as well as the Baise-Jingxi-Langbang-Gaoping and Chongzuo-Shuikou crossings. The port management office of July, 2008 was formed to improve PRC-Vietnam communications.

54. Improvements to the GBGEZ strategy and implementation will accelerate with ADB interventions for not only the CBTA pilot projects at Pingxiang and Dongxing ,but for additional border infrastructure assistance in cooperation with the PRC National Transport Facilitation Committee. The projects can include border bridges (Beilunhe bridge Number 2 and Shuikou Bridge Number 2) for trade and economic development. Finally, ADB's GMS Corridor Towns Development Project (CTDP) for the Government of the Socialist Republic of Vietnam can be coordinated with the Guangxi Southwest Urban Development Project (Fangchenggang, Chongzuo, Baise) since the CTDP involves Dong Dang Town, Lang Son province across from Pingxiang, Guangxi on the Eastern subcorridor of the NSEC for investments in urban roads, water supply, sanitation and dry-port reloading facilities.

**Photograph 1: Pingxiang Border Crossing Congestion**



**Photograph 2: Vietnam Road from Mong Cai-Hanoi**

**Table 7: Baise Border Trade**

Year	Small Border trade		Commodity Border trade	
	Exports	Imports	Exports	Imports
1996	US \$997.85			
1997	844.74			
1998	1618.78	41.11		
1999	1201.79	63.1		
2000	1092.58	306.51		
2001	1801.97	191.74		
2002	4757.31	2889.37		
2003	5749.48	4292.66	4004	1233.5
2004	1990.25	11479.08	3637.7	1581.7
2005	3012.68	8601.61	6083.8	717
2006	5495.27	20221.2	1371	192.5
2007	5672.39	25206.7	1152.6	1669
2008	16738.48	9656.12	526	1028
2009 forecast	12000	2000	735	1323.5
2010 forecast	15000	2500	808.8	1397
2011 forecast	16000	2800	882	1470

Source: Baise Development and Reform Commission (US\$)

**Table 8: Dongxing Border Trade**

<b>Year</b>	<b>Exports</b>	<b>Imports</b>
2007	2005	\$175.2
	2006	\$218.7
		\$342.4
	2008	\$572.1
	2009	\$188.0
<b>Jan-May</b>		\$349.1

US\$ millions, Source: Fangchenggang Foreign Affairs Office

#### V. ADB Planned Urban Development Interventions in Guangxi and Regional Cooperation

55. The border cities of Fangchenggang, Chongzuo and Baise are less developed small and medium-sized cities with poverty higher than Guangxi's and the national averages. The proposed ADB project with the Guangxi Zhuang Autonomous Region Government (GZARG), Southwest Urban Development Project, is to improve the urban roads and environmental systems so that traffic congestion and flooding are not disrupting commercial activities and to better connect the cities to the transport corridors of the region. Fangchenggang is a port city with sea and land importance to not only Guangxi, but to the entire southwest of the PRC to southeast Asia and world markets. Chongzuo city is located along the road and rail trade corridor that links Guangxi from Nanning capital city across to Vietnam markets and other southeast Asia markets. Baise city is more remote than the other two project cities, yet has significance to link Yunnan and Guizhou by expressways and national highways 323 and 324 to domestic markets and to connect to the seaports of Guangxi and regional corridors as well as border trade with Vietnam. These three cities share a borderline of 1,020 kilometers (km) with Vietnam and Guangxi has a shoreline that is 1,595 km. long. The Project cities are designated growth areas or nodal points to the development of ADB's Eastern subcorridor of the North-South Economic Corridor (NSEC) from Nanning-Hanoi via the Youyi Pass or from Fangchenggang-Dongxing-Mong Cai-Hanoi as well as the construction of corridor routes from Baise to Nanning and from Baise-Longlin and from Baise to Longbang-Vietnam to the Greater Mekong Subregion.

56. The Project components in each city will increase urban road capacities so that congestion is reduced, productivity is raised and more urban growth can occur in business activities from the industrial parks linking with rural value chains and are also for the expansion of the land areas of the cities so that the inhabitants can travel from residences to workplaces. The Project components will also improve environmental conditions by reducing incidences of flooding and the damages resulting from flooding and to make the cities more attractive for the inhabitants and tourists. The urban road networks and municipal improvements will ultimately connect the cities to their corridors and seaports en route to regional economic growth within and across national borders. The proposed Project interventions will improve urban infrastructure services to meet the increasing demands of urban development and regional cooperation.

57. Each project city has unique contributions and benefits with regional cooperation for both Guangxi and the PRC and for the GMS based on their geographic locations on the Eastern subcorridor of the NSEC. Fangchenggang serves as a local industrial center of regional trade for primarily, iron and steel and as a transit gateway for much of China to and from ASEAN markets by sea and across the border to Vietnam. The port transport function of Fangchenggang places stress on the urban infrastructures in the port area which requires capacity improvements. The lack of urban road capacity with the port and its terminals

hinders port expansion plans which in turn limits area businesses from increasing their production and in effect impedes regional economic growth.

**Table 9: Key Indicators of Guangxi Southwest Urban Development Project (2008)**

	Fangchenggang	Chongzuo	Baise
Target Sectors	Iron & steel	Sugar cane	Aluminum
Transport Modes	Ocean, Road, Rail	Road, Rail, Zuojiang	Road, Rail, Youjiang
Trade Corridors	Land: Nanning-Dongxing-Hanoi Sea: SE Asia	Nanning-Youyiguan-Hanoi	Nanning; Longlin; Longbang-Hanoi
International Trade	\$1.459 billion (2007)	\$1.598 billion(2008)	\$439 million-'07
*CAGR	24.48% 2003-2007	34% 2000-2008	35% over 2006
GDP	\$3.120 billion	\$3.894 billion	\$6.294 billion
CAGR	18.7% 2003-2008	14% 2000-2008	16% 2003-2008
Per Capita	\$2,636 (2007)	\$1,341 (2007)	\$1,221 (2007)
Land Area (sq.km.)	6,173	17,345	36,252

Sources: Statistics Yearbooks of Project Cities and [www.chinaknowledge.com/Business/City](http://www.chinaknowledge.com/Business/City) (2007)

\*CAGR: compound annual growth rate. US \$

### Fangchenggang

58. Fangchenggang urban development master plans are consistent with Guangxi urban planning of expanding urban areas and cultivating industrial clusters in stages over the next ten years. The low level of industrial development hinders urban development plans. The port is the center of the City's growth targets with expansion plans to increase cargo handling of 60 million tons per year by 2012 and 300 million tons by 2020. Industrial clustering is centered on the iron and steel industry with the first stage factory output of 10 million tons of steel per year and the third stage of 30 million tons per year. The clustering will involve 50 upstream and 200 downstream projects to support iron and steel and for business development in regional economic growth. These industrial activities will occur in Qisha and Gongche Industrial Parks near the port and are central to the Project's urban road networks. Population growth targets are in two stages from 2007 of 203,000 to 2015 or 280,000 to 2020 of 1 million with an urbanization level of 69 percent by 2015 and 78 percent by 2025.

**Table 10: Gongche Industrial Park Businesses**  
(Registered Capital of over US \$735, 300)

Company Name	Product
Fangcheng Tianmu Chemicals, Ltd.	Inorganic Acid
Fangchenggang Yuezhong Concrete Invst	Cement Products
Fangchenggang Rongxing Mining Co.,Ltd.	Iron Ore
Guangxi Fanya Iron & Steel Processing	Steel processing
Guangxi Fangchenggang Huachen Mining	Reduced ilmenite
Guangxi Fangchenggang Haiyuan Wine & Chemicals Co., Ltd.	Producing Alcohol
Shenglong Metallurgy Co. Ltd.	Producing Iron & Steel
Fangchenggang Zhongyi Heavy Industry	Producing Steel Structures
Fangchenggang Yongda Processing & Distribution Factory	Producing Steel Structures

Source: Fangchenggang Port Group Co., Ltd., 2009

59. Industrialization of agriculture and forestry resources is also planned in cooperation with rural and ASEAN suppliers of vegetables, fruits and timber for processing, preserving and branding into value added goods for trade within China and to external markets in southeast Asia. The services sector will expand to become the largest proportion of Fangchenggang's economic output over the primary and secondary sectors. The port will also become a logistics hub for value added services and essential to the tourism industry for cruise ships. Cross-border tourism with Vietnam and financial services will be targeted for regional economic integration as well.

60. Fangchenggang's city development plans and meeting targets for growth will depend on external forces of the GBGEZ, ASEAN, Western Development national government assistance, as well as ADB project interventions in order to accelerate industrial and urban plans. Fangchenggang's growth rate in 2007 was 20 percent over 2006 for a total output of US \$23.4 million, yet still much lower than Nanning's economic output of US \$156.1 million; Beihai's, US \$35.8 million and lower than other PRC major port cities of Tianjin, US \$727.9; Ningbo, US \$504.8 and Shanghai, US \$1.76 billion (Fangchenggang Master Plan). Urban growth targets will not be met without foreign trade growth and the related promotion of regional economic cooperation programs.

61. The transport infrastructure development is critical to regional economic growth and integration. Fangchenggang's urban development goals will rely on the Fangchenggang-Nanning expressway; the Qinzhou-Chongzuo expressway and the Fangchenggang-Dongxing secondary roads. These infrastructure connections will strengthen regional integration along with the Project urban road network supporting the Qisha and Gongche Industrial Parks with their seaport connections. The road networks will also have the capacity to transport inhabitants to and from residential areas for the industrial parks.

### **Chongzuo**

62. Chongzuo is strategically located on the Eastern corridor of the NSEC along the Youyiguan expressway between Nanning and Pingxiang which borders Vietnam at Huu Nghi and Lang Son en route to Hanoi and Haiphong seaport. The urban development plans and goals are to expand the urban area to the north (Chengbei) and south (Chengnan) for industrial zone and residential development, respectively, away from the old city near the Zuojiang river. Urban development plans to contribute and benefit with regional cooperation by road and rail connections to Qinzhou and Fangchenggang ports in the southeast for ASEAN markets and to Baise in the northwest. Chongzuo plans to make optimal use of the Zuojiang river for cargo ship transport through the Xijiang river to the Pearl river network to Guangdong and Hong Kong for regional economic integration. There are plans to upgrade the river to navigate larger vessels in a staged approach over the next ten years.

63. Since 2003, tremendous growth occurred in Chongzuo when the PRC State Council re-established Chongzuo county as an independent city. The gross domestic product (GDP) of the city grew from US \$1.532 billion to US \$3.894 billion between 2003 and 2008 for an annual growth rate of 21%. In 2008, foreign trade was US \$1.598 billion for an increase of 48% over 2007. Improving economic conditions are lifting incomes as the urban per capita disposable income increased 15% in 2008 over 2007 to US \$1,872 and rural income increased by 14% to US \$552.

64. Sugar cane and agriculture processing is the primary industrial development structure with logistics functions such as storage areas and the tourism industry development to also contribute to economic growth. Chongzuo's sugar cane industry contributes one-third of the region's total sugar cane output and is known as "sugar city" and

as the “green treasure house” based on the ideal subtropical monsoon climate. Rice, corn, cassava, bananas and pineapples dominate the landscape of the 228.35 thousand hectares of cultivated land. Industrial development will also involve minerals of manganese, coal, uranium and tungsten iron. Finally, tourism is taking more of a share of the city’s economy and contributed US \$253, 088,235 in 2008 or 6.5% of the total GDP. The Project’s flood control dykes will serve to protect the cultural and natural attractions as more people from the region come to appreciate the world’s largest border waterfalls, the cliff murals and nature reserves.

65. The Project’s urban road network will serve to improve traffic flows within the City for the industrial zones and to rural area traffic flows. The goal is to expand the City from 32 square kilometers to 50 square kilometers by 2020 to accommodate the industry in the north, the west for tourism and in the southeast as a logistics hub for ASEAN markets. The Chongzuo government forecasts the population to grow from 130,000 to 500, 000 by 2020.

### **Baise**

66. Baise is evolving into a critical node on the Eastern subcorridor of the NSEC. Expressways connect Baise to Nanning to the southeast for regional cooperation as well as to national highways 323 and 324 to connect with Guizhou and Yunnan provinces to the north and to the south to Guangdong. New expressways from Baise will connect to Longlin in the northwest for regional cooperation with Guizhou and Yunnan which includes growth to the tourist industry from popular natural and cultural attractions as well as expressway connections to Longbang in the south for Vietnam border-crossing en route to GMS regional economic integration.

67. At present, the old City area is densely populated and will shift industrial activities to the new city area in the east in the new urban development plan. The master plans of Baise urban development are to strengthen the weak urban road networks and increase regional connections. The Nanning-Kunming trunk line connects to Beihai, Qinzhou and Fanchenggang ports in the south for southwest China and ASEAN markets. All townships are connected by roads and there is access to every village. The construction of the expressway to Longbang will open up bilateral border trade opportunities with Vietnam to GMS markets but, the border port needs infrastructure development.

68. Urban master plans aim to bring Baise to a new level of development in the aluminum industry and tourism and to bring full benefit from regional cooperation programs of the China-ASEAN Free Trade (CAFTA), PPRD, GBGEZ and bilateral agreements with Vietnam. Baise is targeting the aluminum industry to further bolster economic development in which it has reserves of 780 million tons of bauxite which is a necessary input to producing aluminum. Some other major mineral reserves are of coal, natural gas, antimony and copper. Agriculture products are of mango, tea, bamboo and fennel oil. The GDP grew from US \$2.457 billion in 2003 to US \$6.291 billion in 2008 for an annual average growth rate of 16%. The City forecasts the population to grow from 250,000 in 2009 to 280,000 in 2015 and 500,000 in 2020. In 2008, urban per capita disposable income was US \$1937 and US \$415 in rural areas.

69. The City will construct an integrated transport system for road, rail and the inland waterways in the Youjiang Valley Economic Area. Industrial and agricultural development are not the only targets for economic growth in Baise. Tourism will be developed in stages in cooperation with Guizhou and Yunnan in regional economic integration. Five major tourism zones will be improved: Central, Youjiang district; South, Jingxi (near the border along the Longbang expressway); North, karst; East, Pingguo; West, Longlin. From 2004-2009, there were 143,000 overseas tour groups and 3.6 million domestic tourists for

revenues of US \$31 million and US \$220.5 million, respectively. Target growth from 2010-2020 will be met by improving the urban infrastructure and transport networks in Baise for 280,000 overseas groups for US \$70 million in revenues and 5.8 million domestic tourists for US \$419 million in revenues (Baise Master Plan).

### **Inland Waterways**

70. The regional economic growth in Guangxi will increase by the implementation of the "Golden Waterway Plan of 2008-2020." The Xijiang river is part of the Pearl River and navigable from the border with Vietnam to Yunnan and Guizhou to Guangdong, Hong Kong, and Macau. The target is for navigation of the 1, 621 km. of the 3,101 km long river which includes 429 km Youjiang and 322 km Zuojiang rivers. The urban master plan requires the design of class II channel navigation for 3,000 ton ships for industrial transport of coal, cement, aluminum, manganese, iron, containers and for tourism traffic. The Xijiang river system encompasses an area populated by 44.8 million which accounts for 92 percent of the whole district area.

71. The Youjiang and Zuojiang rivers coursing through Baise and Chongzuo, respectively are alternatives for transport to the road and railway modes. The Youjiang traverses to Nanning to the West River (Xijiang) through Guigang to the Pearl River to Wuzhou and down to Guangdong province. Zuojiang is the largest river in Chongzuo and is a tributary of the Yujiang river of the Xijiang water system in the Pearl River Basin. The Zuojiang flows from the southwest to Chongzuo to the northeast. Inland waterways can add to the Project cities' multimodal network while reducing road congestions, costs and environmental problems. GZARG's goal is for 37% of all shipments to move by inland waterways.<sup>12</sup> The short term plan is to construct the Xijiang river from Nanning to Guigang. The long term plan is for the Xijiang river channel expansion and for the Zuojiang (not as navigable) and the Youjiang channel construction from 2010-2020 for regional river shipping. World Bank has several waterway projects in Guangxi such as the Nagi dam in Baise to Nanning to improve navigation for 500 ton ships (class IV-III) and a Guigang dam to improve water level from Nanning to Guangzhou for 1000 ton (class II) ships.

**Table 11: Guangxi Navigation Freight Volumes  
(10,000 tons)**

<b>Navigation Routes</b>	<b>2008</b>	<b>2010 (forecast)</b>
Autonomous Region-total	6285	7000
<b>Xijiang main navigation routes</b>	<b>5215</b>	<b>6100</b>
Liuzhou-Guizhou river	582	1160
Hongshui river	125	630
<b>Youjiang river</b>	<b>131</b>	<b>660</b>
Nanpan river	29	40
Dului river	33	60
Rong river	80	100
<b>Zuojiang river</b>	<b>192</b>	<b>300</b>
Gui river	11	100
Xiu river	213	300
Hejiang river		50

<sup>12</sup> Ms. Zhang Xuelian, Deputy Chief, Guangxi Communications Department, Foreign Capital Utilization Division, meeting in Nanning June 12, 2009.

<b>Guangxi Inland Port Throughput Status and Forecast Table</b>		
(10,000 tons)	<b>2008</b>	<b>2010 (forecast)</b>
<b>Port</b>		
Inland Port Total	4675.5	7200
<b>Nanning port</b>	<b>233.3</b>	<b>870</b>
Guigang port	3112.1	3660
Wuzhou port	836.4	1500
Liuzhou port	192.6	610
<b>Baise port</b>	<b>12</b>	<b>550</b>
Laibin port	205.8	870
<b>Chongzuo port</b>	<b>72.4</b>	<b>230</b>
Guilin port	6.3	40
Hezhou port	4.6	50
Hechi port		80
Yulin port		50

Source: Guangxi Communications Department, Nanning, 2009

### **Assessment of City Development Strategies and the Role of the Proposed Project**

72. The existing infrastructures in Fangchenggang are not adequate to handle the rising demands from regional trade, tourism and public traffic. The city development strategy outlines the seaport and border-crossing gateway advantages of Fangchenggang for regional economic integration of southwest China with ASEAN and Indochina markets. Higher levels of urbanization and industrialization will be achieved by the construction of the Project's seven road segments that total 27.6 km. for added capacity needed in the port area of Gongche and Qisha industrial parks. The coastal protection component will also improve living conditions which is instrumental in attracting investments for expanding the city and more industrial development. The Project urban road network will access the expressways to the East for Beihai and Qinzhou ports and to the North to Nanning as well as improve value chain linkages with the neighboring counties and to the Dongxing border-crossing en route to Vietnam.

73. Fangchenggang is a critical sea and land node in transforming the transport corridor to an economic corridor. The intermediate stage of corridor development is to construct a logistics corridor. The port City's logistics planning will need to keep pace with the demands on the urban infrastructures and services both in the port area and at the borders as tariffs are reduced in 2010 for the ASEAN regional trading partners. Future stages of development will require adding more capacity to the urban roads for Qisha and Gongche industrial areas as well as from Fangchenggang to Dongxing. Traffic congestion in the port areas will be compounded with the integration of the rail bulk and container traffic coupled with the iron and steel industrial development even in view of the separate dedicated rail line for iron and steel. Current estimates are for port capacity to increase from 40-60 million tons to 125 million tons by 2020.

74. Chongzuo's urban development strategy indicated urban road capacity constraints to support expansion of the South (Chengnan) city area for residential and administrative functions and for the North (Chengbei) area for industrial development. The initial stages of development require industrial areas in the North for sugar cane processing; manufacturing and trading; building materials near the Zuojiang river and in the South for high-technology and non-polluting industry. The later stages of urban planning to 2020 will require more multimodal functions by constructing a rail freight station and inland waterways as well as

more highways to connect city traffic for cargo, residents and tourists to external traffic. The ADB Project intervention of two roads in the North and three roads in the Southeast totaling 13 kilometers will improve traffic flows, especially in the new South city where no roads exist. The Shuikou Lake rehabilitation is consistent with the urban plan for the tourist industry to become a major portion of economic growth in the services sector.

75. The urban and industrial expansion planning are in coordination with the promotion of regional economic integration. The city is 110 km south of Nanning and a pivotal node on the new transport corridor of the Youyiguan expressway to Pingxiang at the South border and to Baise in the northwest and for a new expressway to Qinzhou in the southeast port area of Guangxi. Intermediate and later stages of urban development will require logistics corridor enhancements for storage, information systems to Pingxiang and other inland terminals, multimodalism, and more value added functions as trade demands increase from the region. Road congestion will be a problem in the City and along the corridor as trade, local and area residents and tourist traffic grows. The urban master plans need to have clearer phases of urban and industrial growth in five year terms in order to coordinate urban and regional infrastructure projects as the transport corridor transitions to a logistics corridor and to a full fledged economic corridor that attracts more investments.

76. Baise is requiring new urban roads to expand the city into new urban and industrial areas away from the congested areas. The urban expansion plans are faced with not only local traffic, but the regional traffic from the 323 national highway through the old urban area. The urban strategy outlines a cross highway network with fast external links from Baise to strengthen the Youjiang urban area status as a regional center. More roads through the whole city will improve the level of external road networks and connect to area cities and towns for their natural resources to be used for processing to regional markets. The urban plan also requires the dredging of the Youjiang for navigation and to construct modern railways to position the Youjiang Valley as a regional transport hub.

77. The Project components of a 4.25 km South Ring Road and Longwang bridge of six lanes will have a dual function. The road will improve traffic flows for the city and for the regional cargo and tourist traffic between Yunnan and Guizhou to Nanning. The city's short term plan and long term plan is to develop the industrial areas from the old city area, Hexi to the new city areas, Henan, for residential, and Hedong for trade, logistics and industrial uses.

78. Baise is also an important nodal point on the transport corridor of the Eastern subcorridor of the GMS NSEC. The Project's South Ring Road and Longwang bridge over the Youjiang (navigation to class III 1000 ton vessels) will improve conditions for the City to construct long distance bus stations in the new Longjing district which is important to developing the tourist industry. The City strategy for tourism development has the next stage from 2011-2020 for building the five major tourist zones: Youjiang Valley; Jingxi; North-karst scenery; Pingguo; and Longlin. "Although the scope of economic development in GMS economic corridors is broadly inclusive, tourism has been identified as a flagship program offering significant opportunities for priming economic growth in the corridors."<sup>13</sup>

## **VI. Conclusions and Recommendations**

79. The Guangxi Southwest Urban Development Project proposed interventions will provide the infrastructure linkages to support higher levels of urbanization, industrialization and regional economic cooperation. Fangchenggang, Chongzuo and Baise are experiencing rapid trade growth within China and with external markets in southeast Asia.

<sup>13</sup> "Developing Tourism in the Greater Mekong Subregion's Economic Corridors," Alampay and Rieder, *Journal of Greater Mekong Subregion Development Studies*, Volume 4, December, 2008, p. 65.

The GBGEZ, the CAFTA and the PPRDECA policies are furthering Guangxi's geographic significance to regional economic cooperation. The Project urban roads and environmental improvements will increase infrastructure capacities for industrial zone and related traffic and strengthen the cycle of more trade and attracting more investments to lead to higher levels of urbanization and industrialization. However, regional economic cooperation is hindered without improvements to urban development linkages to rural areas and at the borders.

80. The Project cities are growth poles on the Eastern subcorridor of the GMS NSEC. The Project is one part of a series of interventions needed to transform the transport corridor into an economic corridor. The construction of expressways and urban-rural road connections are another critical part of regional economic cooperation. The intermediate stage over the next few years is of constructing a logistics corridor essential to lowering the barriers to trade and tourism development. The following recommendations and action items are a summary of issues involving the transformation of the transport-logistics corridor to an economic corridor:

- Include Baise on the Eastern subcorridor of the GMS NSEC
- Transform the transport corridor to a logistics corridor by accelerating full implementation of the CBTA to reduce border delays and by ECF active and regular meetings to include the local governments and in cooperation with the private sector. In particular:
  - intergovernmental agreement for truck crossings
  - intergovernmental agreement for data exchanges
  - pilot cross-border projects (Youyi & Dongxing apply to Longbang)
- Technical assistance interventions to enhance rural-urban-subregional value chain linkages
- Training to understand the best practices of multimodal, information systems and organized corridor management (all stakeholders from public and private sectors)
- Revising the GBGEZ Development Scheme of January, 2008 to include inland waterways; 2010-2015 and 2015-2020 periods; and details by sector: transport (all modes), corridor-border, trade and investment, industry (manufacturing & tourism), and agriculture
- Project assistance by ADB for infrastructure border bridges: Beilunhe bridge Number 2 and Shuikou bridge Number 2
- Coordination of the Guangxi Southwest Urban Development Project with the Vietnam Corridor Towns Development Project in ADB
- Interventions to assist in the physical infrastructures and institutional improvements for the China, Longbang-Vietnam Chaling Port, Sino-Vietnam Border Economic Cooperation Agreement (see Appendix A)

## **ANNEX A**

### **China Longbang-Vietnam Chaling Port Sino-Vietnam Border Economic Cooperation Agreement**

81. To carry out the strategy of “long-term stability, facing the future, good-neighborly relations, comprehensive cooperation”, improve economic development of border region, and achieve the goal of border friendship and , the Baise municipal government and Gaoping provincial government will meet the agreement on the basis of equality and mutual benefit, with friendly negotiation, to build up the economic cooperation area between Longbang and Chaling port. The cooperation agreement includes the following terms:

1. the total area of the economic cooperation region is 16 square kilometres.(8 square kilometres for each side separately).
2. the function of this economic cooperation region would be: border trading and transit trading; integrating processing of mineral, agricultural products and herbal medicine material; establishment of the bonded area.
3. giving priority for developing the follow industries in the economic cooperation region: the processing industry of mineral, agricultural products and herbal medicine material, logistics industry, tourist industry and Mechatronics assembling industry. Those industry and infrastructure should be improved for the two sides, as well as the compensation trading.
4. the cooperation mechanism in the region would be: it will be implemented by two steps, for the short term, the construction of the economic area would be conducted by each side separately; for the long term, Baise city and Gaoping Province would work together to improve the construction of economic cooperation area since 2011.
5. the management mechanism in the region would be: the “2+1” module will be used to set up the management institution. For each party, establish their own management committee, to accelerate the construction and execute their administration management rights. Meanwhile, a associated coordinating organization will be set up to deal with coordinating works.
6. according to the law, regulations and international convention from the two sides, the construction should be accomplished by the two sides together. And endeavor to accomplish the application procedure of Sino-Vietnam border economic cooperation area by Chinese central government, prepare the primary construction work.
7. Responsibility and obligation from government of the two sides
  - 7.1 Each side should provide convenience and preferential policies for investors according to related laws and regulations, and protect the legitimate rights for investors.
  - 7.2 Regular commission should be conducted for entrepreneurs from each party, to exchange experience. Provide more communication opportunities for investors from The two sides.
8. Preferential policy for investors: according to the laws and regulations, preferential policies should be established to encourage investment, including favorable land using, water and electric tariff and tax policies. Meanwhile, the economic cooperation region will be managed by referring to the border economic management module, to enjoy the border economic policies.
9. For the inspection of the export products in this area, “one stop-clear customs” inspection strategy would be carried out. Which means export products would be inspected only once by the two sides together.
10. Entrepreneurs who can do business within this area includes not only the natural person or legal person from the both sides, but also those from the third parties or regions.

## **Overall cooperation structure agreement between Baise Municipal Government and Gaoping Provincial People's Committee**

82. To strengthen the regional cooperation and make it be involved into the Pan Beibu Gulf of Economic Zone, speedy improve the construction and economic development, the two sides, include Baise Municipal Government and Gaoping Provincial People's Committee, will meet the cooperation structure agreement on the basis of mutual benefits, friendly and equal cooperation, as following:

### **Term 1**

83. By overall strengthening the cooperation of economy, trading and investment, the trading volume is expected to reach US\$ 100 million in 2010, import and export cargo will reach 500,000 ton, the total number of entry-exit people will reach 100,000.

### **Term 2**

84. The two sides agree to promote the cooperation in the fields of trading, tourism, transportation, agriculture, culture, education and hygiene. Negotiation will be conducted in each field soon, cooperation agreement will be signed as well. Great improvement is expected to make in these fields in the next five years.

## **Part I Investment cooperation on international transportation and road construction**

### **Term 3**

85. After the port upgraded and opened, the two sides should promote to put the transportation roads into use.

### **Term 4**

86. The management organization should be the international transportation management department, the management measures would be exchanged each other.

### **Term 5**

The two sides should accelerate the road construction to the port according to their own plan.

## **Part II Port construction and economic cooperation**

### **Term 6**

87. The two sides agree that an upgraded and opening port is important to improve economic development and external trading. Therefore, the two sides should submit the upgrading application from national competent departments. The two sides should also prepare the port upgrading work.

### **Term 7**

88. To strengthen the communication of enterprises and local people from the two sides, the governments from the two sides should encourage its enterprises to build up representative office in the other country. And convenient policies should be provided by both sides.

### **Term 8**

89. The two sides should promote a convenient trading environment, according to the agreement of Shuikou Port-Tuolong Port signed between Guangxi Provincial Government and Gaoping Provincial People's Committee.

**Term 9**

90. The two sides should promote the construction of Longbang-Chaling Port border economic cooperation region. The two sides should make effort on the planning and application work of border port economic cooperation region.

**Term 10**

91. The two sides agree to conduct exchange visits twice in a year. It will be held in Gaoping City in Vietnam in the first half year. And the exchange visit in the second half year will be held in Baise City in China.

**Part III Tourism development and cooperation**

**Term 11**

92. The two sides should promote transnational tourism together, and design the travelling route as early as possible.

**Term 12**

93. The two sides agree to accelerate the tourism projects development, including, river rafting project, such as, Napo Bainan River (in China)-Jingjiang River in Baole County(in Vietnam) travelling route. And transnational river rafting project, such as Nantan river in Jingxi County(in China)-Guichun river in Chongqing County(in Vietnam) travelling route.

**Term 13**

94. The two sides should strengthen tourism cooperation, develop border travelling project. Promote the Baise-Gaoping border tourist project to the Sino-Vietnam tourist product.

**Part IV Agriculture development and cooperation**

**Term 14**

95. The two sides agree to increase border cooperation in the area of cultivation, processing and trading agricultural products, including sugarcane, ginger, tobacco and mulberry, to alleviate poverty.

**Term 15**

96. The two sides should strengthen the cooperation in the area of epidemic prevention of poultry and animal Infectious Disease.

**Term 16**

97. The two sides should increase the cooperation in the field of control and prevention of agriculture, forest disease and fest.

**Part V Investment**

**Term 17**

98. The Baise City in China and Gaoping Province in Vietnam have meet the agreement that enterprises from its own country are encouraged to invest in the other country in the fields of roads construction, mineral processing, tourism, trading and service industry

**Term 18**

99. The two sides agree that investors' legitimate rights and interests from its own country should be protected in the other country.

## **Part VI Culture, Education and Hygiene**

### **Term 19**

100. An artistic team should be selected from its own country to play performance in the other country during the important trading activities

### **101. Term 20**

The two sides agree to increase cooperation in education, held teaching experience exchange to improve the education quality.

### **Term 21**

The two sides agree to strengthen cooperation and communication in education training, select students from its own country to study in the other country, provide convenient environmental for language and technology training.

### **Term 22**

The two sides agree to strengthen cooperation in hygiene field, work together on prevention of infectious diseases.