



# Technical Assistance Consultant's Report

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Project Number: 48122-001  
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## Greater Mekong Subregion: Capacity Development for Economic Zones in Border Areas (Cofinanced by the People's Republic of China Regional Cooperation and Poverty Reduction Fund)

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For the Asian Development Bank

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**Asian Development Bank**

# **Final Report**

## **Final Scoping Study for Future Project Preparation**

**Greater Mekong Subregion: Capacity Development for  
Economic Zones in Border Areas**

**August 2018**

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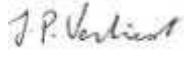

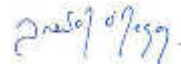
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## EXECUTIVE SUMMARY

1. The original terms of reference of TA8989 identified 6 main activities, namely (i) review the governments' policies and plans for the development of border areas including border economic zones; (ii) identify challenges and opportunities for the development of urban centers at border points and of BEZs in terms of urban planning and infrastructure development in each participating country; (iii) propose improvements in the future GMS corridor towns development approach with an increased focus on border areas; (iv) develop a pipeline for the fifth, sixth, and seventh phases of the GMS CTDP; (v) conduct regional seminars to increase awareness and capacity on urban, border area and BEZ development; and (vi) conduct pre-feasibility studies for the fifth GMS CTDP. The duration of the TA implementation was for 23 months –February 2017 to December 2018- divided in 3 phases, and 6 reports were to be delivered.

2. The TORs of TA8989 were revised in December 2017. The evaluation of the design and implementation arrangements for the on-going CTDPs was maintained as an important output while the rest of the TA would mainly focus on identifying and profiling 3 GMS economic hotspots or functional urban and economic hotspots, and develop the scope for project preparation for the next CTDP (CTDP 5). A pre-feasibility study for CTDP 5 is however not needed. The TA duration was cut to 19 months –from the original 23 months-. Progress Report II was prepared in February 2018 summarizing the changes to the TORs and identifying 3 major GMS border economic hotspots, namely the Greater Pakse Area in the south of Lao PDR, Lang Son/Dong Dang and Mong Cai on the border between Viet Nam and The People's Republic of China (PRC). Options for a fourth economic hotspot were also presented.

3. Section II of the final report (DFR) presents a detailed review of the concept and approach to the on-going and planned GMS corridor town development projects. From the review of implementation experience of the previous, ongoing and approved GMS Corridor Towns Development Projects (CTDP), the Greater Mekong Subregion (GMS) Tourism Projects and the Viet Nam Secondary Cities Development Project (SCDP), a number of the considerations emerge with regard to the preparation of future CTDPs and GMS Tourism Projects. The review is divided into 3 interrelated parts, reflecting the process of project development, implementation and sustainability. The parts are: A – Project Scope and Coverage, which provides a critique on the process of selecting the components which are carried forward into project feasibility studies (PPTAs); B – Project Implementation which explores the procedures from PPTA endorsement, through to project implementation; and C – Project Sustainability, which is focused on the difficulties of sustainable O&M in the post project implementation period experienced in some geographies.

4. Strategic Planning and Selection of Project Components: Previous CTDP projects have focused on urban infrastructure improvements but have been somewhat piecemeal in design, leaving some towns with 50% of infrastructure needed without returning for a second project phase. While improving the quality of life of some residents, the broader impact of the project investments on stimulating economic growth, private investment and job creation has been less than anticipated. There is thus a need to take a more comprehensive, multi-sectoral approach in determining the socio-economic development needs of the future CTDP project towns.

5. A more comprehensive planning approach, through the SLEDP mechanism, is likely to lead to more inclusive project development, expanding beyond the "traditional" utilities project to include urban regeneration/urban conservation and tourism projects which have good economic development potential, social and community development potential and, importantly, create opportunities for attracting private sector investment. These could include such elements as: (i)

markets; (ii) public transport facilities; (iii) street lighting; (iv) car parking facilities; (v) public parks and green spaces; (vi) public toilets; (vii) traffic management (if an issue), and other municipal facilities, which have previously been treated as “one off” project components, which do optimize economic and social development potential, but at the same time add to the O&M liability of local governments.

6. **Project Design and Implementation:** With specific reference to hard infrastructure, where sanitation and waste water treatment plants (WWTPs) are included in project designs, household connections and on-site plumbing costs should also be financed under the project, as these are crucial to the operational and financial viability of the sanitation system. Sewerage system development is expensive in part because of the high cost of land acquisition for waste water treatment plant development (WWTP), as such land is seldom identified at an early stage in the towns/cities’ development when the availability and cost of land is still low. Land needs to be reserved for WWTPs or SWM landfills as early as possible, which will help lower the cost of sewerage development or SWM. O&M has proved even more difficult.

7. **Project Consultants:** PPTAs are generally under-resourced and time-constrained, so that the consultant teams are unable to complete the assignments thoroughly because the teams are stretched. PPTA consultants’ recommended solutions and packaging should be reviewed and checked for appropriateness as early as possible during the PPTA stage

8. **Timing of consultants’ inputs and the durations of PPTAs** should be considered and planned more carefully in the PPTAs’ Terms of Reference. For example, it is common for resettlement, social and environment specialists to start close to the beginning of a project, before the subproject scope has been sufficiently defined for them to have meaningful input. Therefore, such specialists should preferably be fielded either later in the PPTA process or have their work undertaken in two phases, first at the start of the PPTA and again later after the subprojects’ scopes are more clearly defined

9. **Project start-up delays** also result in costs rising further. Delays in mobilizing project implementation support consultants for undertaking the detailed engineering design (DED), project management and construction supervision lead to cost escalation not only because of inflation, but at times because the project towns have expanded faster than expected since the PPTA was prepared.

10. **To reduce project start-up delays**, advance actions for recruitment of project implementation support consultants should be included as early as possible during the PPTA stage, as it can take the governments’ EA 12-18 months to mobilize them. Some works packages should be identified and detailed engineering design (DED) and bidding documents (including Master Bidding Documents) should be prepared for advance procurement under the PPTA stage. Procurement for these initial packages should be started in parallel with loan approval processing if possible.

11. **It is best to have only a single project implementation support consultants’ package** covering all aspects of the project implementation requirements (project management, DED and bidding documents, procurement, construction supervision, project performance management information system-PPMIS, etc.) for the loan/grant project in each country

12. **Institutional Aspects:** A multi-sector approach is generally more useful but the selection of an appropriate EA becomes particularly important for managing interagency relations. For example, in Viet Nam, setting up EAs at the provincial peoples committee (PPC) level has led to improved interagency coordination. Implementing agencies (IAs) would be respective departments or cities under the PPC.

13. Project Sustainability and O&M: From the experience of O&M in the GMS countries (i.e. Cambodia, Lao PDR, Myanmar and Viet Nam), this is the “Achilles heel” of ADB project loan experience in the provision of sustainable hard infrastructure. Like all developing countries, the GMS countries are generally not good at O&M.
14. Based on the experience of SCDP, CTDP2 and GMS Tourism 2, O&M in the project affected areas illustrates the difficulties that provincial and local governments have in planning and implementing sustainable O&M programs, including ADB projects.
15. It is a fundamental challenge for the ADB to find solutions to the outstanding O&M problems, which in our view must ensure ADB project loans are better supported. This in turn requires attention is given to: (i) generally higher levels of financing for O&M as part of project loans and counterpart funding; and (ii) higher levels of capacity building and training for the O&M related provincial and local authorities and any associated private/community investors, where there are PPPs/PCPs, etc. This in our view is needed in situations where finance for capacity building is part of a project loan and/or where it is government financed (counterpart funding) as in Viet Nam. For the latter, project loans require strong O&M guarantees.
16. Capacity Building and Training: Regarding soft sector capacity building, it appears that the GMS Tourism Projects are significantly more successful than the CTDPs/SCDP. Each of the GMS Tourism Projects contains specific and separately financed components supporting soft sector objectives, including: (i) establishing participatory processes for engaging with local communities, ethnic minorities and for gender empowerment in tourism development; (ii) promoting sustainable community investment and management of tourist related projects and facilities; (iii) improving tourism marketing and promotion skills; and (iv) income generation.
17. Section III of the FR explains briefly how towns were identified as potential candidates for the next CTDPs. After a detailed economic analysis undertaken in TA8989 Progress Report I, discussions with stakeholders, and given the need for some geographical spread, a number of GMS border towns were identified as emerging potential GMS economic hotspots. The towns were grouped into 2 sets. The first group includes towns which could be selected for the CTDP 5 or 6 while the second group could be targeted for later CTDPs. The first group includes 5 towns including 2 of them in Viet Nam–Lang Son/Dong Dang and Mong Cai-. Due to the forthcoming changes in Viet Nam’s access to ADB concessionary funding, the Cambodian border towns of Poipet and Bavet were included as potential alternative choices. For the first group of towns, a detailed analysis and area profiling together with the preliminary identification of project components is undertaken. Section IV of the FR provides an analysis and detailed area profiling of the Greater Pakse Area (Lao PDR), Lang Son/Dong Dang (Viet Nam) and Mong Cai (Viet Nam) as well as a preliminary profiling for Poipet and Bavet (Cambodia).
18. The Greater Pakse area has 2 major economic strengths making it an emerging GMS economic hotspot: (i) a very rich agricultural area and agro-industry sector potential; and (ii) large tourism potential. Rapid economic developments over the past decade and infrastructure investment in the Champasack province of Lao PDR where Pakse is located and in the neighboring provinces of Sarawan, Sekong and Attapeu have contributed to establish the Greater Pakse Area as a major GMS regional center in the South of Lao PDR, and to strengthen the urban area’s ties with the neighboring countries of Cambodia, Thailand and Viet Nam. Economic and trade ties with the border Province of Ubon Ratchathani in Thailand are particularly strong (Zola, 2013). As an emerging main urban center in the southern part of Lao PDR, the Greater Pakse Area as a center for agricultural production and trading, services and tourism, is one of the main urban centers targeted by the Lao PDR’s government in its strategy to eradicate poverty. The Champasack province is a very dynamic region with economic growth for 2017 recorded at 8.12 percent compared to national economic growth of approximately 6.9 percent (ADB, 2017)

(Department of Planning and Investment, Champasack, 2018). Income per capita increased since 2010 from USD 1,097 to USD 2,488 in 2017, which marks an annual growth rate of around 18 percent.

19. While the whole area of Pakse and its close hinterland on the Bolaven Plateau are de facto an economic zone without boundaries, several delimited economic zones are also under development both around the urban area of the town of Pakse and at the border with Thailand, about 40 km from Pakse. Due its location, Pakse has also recently been able to attract Thailand “plus one” investments in manufacturing. The vibrant economy of the Greater Pakse area has resulted in an expansion of its urban area putting pressure on its urban infrastructure and services. ADB is implementing a Pakse Urban Environmental Project which will be completed in 2021. A Pakse Urban Development Strategy to the year 2030 was prepared in 2011. A new urban master plan will be finalized by end of 2018. The urban development strategy outlines some of the priority multi-sector investment needs for Pakse. The strategy is divided into 3 development phases - 2011-2015, 2016-2020, 2021-2030-which have so far more or less guided the development of the growing city area of Pakse. However, several major urban, transport and environmental/greening projects have been much delayed, mainly due to a shortage of funding. The Greater Pakse area should be a strong candidate for the CTDP 5.

20. Lang Son and its sister town of Dong Dang are very crowded border towns due to heavy traffic to and from China. Several border economic zones are being developed on the PRC side of the border in Pingxiang with significant public and private investments in BEZs and urban infrastructure. The Dong Dang/Lang Son border is a major border for Viet Nam and ASEAN trade with the PRC. Lang Son will be linked to Hanoi 140 km away by a motorway which is under construction. Several border economic zones –for processing goods exported to China- are planned on the Viet Namese side of the border. Viet Nam has the advantage of having significantly lower labor costs than across the border in China. The Lang Son province of Viet Nam has also good tourism potential. Lang Son-Dong Dang has good potential to develop as a GMS economic hotspot mainly based on the processing of local agriculture and forestry products for export to the PRC, and also as a tourism center.

21. The greater Mong Cai area in the Quang Ninh province of Viet Nam is another potential developing GMS economic hotspot. Mong Cai is a busy border town opposite Dongxing in the PRC. Economic zones are being developed on both sides of the border including a possible cross border economic zone close to the current border urban area. Another large border economic zone is also being developed in Viet Nam, along the coast about 30 km south of Mong Cai based on a master plan up to 2030 and 2050. New border crossing infrastructure –bridges between Mong Cai and Dongxing- is being built and significant new urban developments are planned around the current urban area of Mong Cai.

22. Poipet on the Cambodia-Thailand border and Bavet on Cambodia-Viet Nam border are currently quite different centers of activity but both have significant urban development problems due to their border location and rapid economic growth. Both municipalities are at strategic border points of Cambodia with its main economic partners, namely Thailand and Viet Nam, along the main GMS Southern Economic Corridor (SEC). The relocation of investments from both Thailand and Viet Nam will be the main driving force behind the development of both border towns as GMS economic hotspots. But being at the borders of Cambodia and close to major transport hubs and advanced industry clusters in Thailand and Viet Nam make Bavet and Poipet also attractive locations for investments from other countries. Bavet has already been particularly successful at attracting significant foreign investment in its industrial zones mainly because of its proximity to Ho Chi Minh City air and maritime transport hubs.

23. Until recently, Poipet has benefitted much less than Bavet from foreign direct investment inflows for a number of reasons including past border security issues with Thailand and poor cross border infrastructure. However, this situation will change dramatically. Indeed, Thailand is currently building a major four lanes road by-pass of Aranyaprathet, the town opposite Poipet on the Thai side of the border, and developing a large new border gate south of Poipet. At the same time, the railway link with Thailand has now been re-established although not yet over the whole distance to Phnom Penh. The new railway line will be a major boost to the supply chains in the GMS and will become an important connection for freight transport between Cambodia and Thailand.

24. These new transport infrastructures will bring major changes to Poipet. Already over the past few years, 2 new border economic zones have been set up attracting several Thai and Japanese investors. Poipet is close to Thailand's transport hubs, Laem Chabang deepsea port (250 KM) and Suvarnabhumi (300 KM). It is also only about 270 km away from Thailand industrial clusters south of Bangkok. Finally, it is estimated that a little over 1 million Cambodian migrant workers are present in Thailand. With the major improvements in border crossing infrastructure in Poipet raising its attractiveness to foreign investors, in particular those from Thailand, some of these Cambodian workers are likely to return home for employment. This is already happening together with internal Cambodia migration to the Poipet area.

25. Only a decade ago, both Poipet and Bavet were small localities. Since then, the huge population growth in both Bavet and Poipet due to in-migration linked to fast economic growth driven by foreign investment and tourism has put severe strains on both municipalities' urban and transport infrastructure as well as on the quality of life of their population.



## LIST OF ABBREVIATIONS

ACMECS	Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy
ADB	Asian Development Bank
AEC	ASEAN Economic Community
ASEAN	Association of South East Asian Nations
BDS	Business Development Services
BCIM	Bangladesh-China-India-Myanmar
BEZ	Border Economic Zone
BOT	Build - Operate - Transfer
BTZ	Border Trade Zone
CBSEZ	Cross Border Special Economic Zone
CBEZ	Cross Border Economic Zone
CBTA	Cross Border Transport Agreement
CCA	Common Control Area
CDC	Council of Development of Cambodia
CDTA	Capacity Development Technical Assistance
CEC	central economic corridor (within GMS)
COL	Concessional OCR Loan
CSEZ	Cambodia Special Economic Zones Board
CNY	Chinese Yuan
CPC	Cambodian People's Party
CTDP	Corridor Town Development Project
CY	Container Yard
DBO	Design - Build - Operate
DBTZ	Dansavanh Border Trade Zone
D & D	De-concentration and Decentralization
DED	Detailed engineering design
DHUP	Department of Housing and Urban Development
DONRE	Department of Natural Resources and Environment
EA	Executing Agencies
EDC	Electricite du Cambodge
EPZ	Export Processing Zone
EWEC	East - West Economic Corridor
GMS	Greater Mekong Sub-region
GMS RIF-IP	GMS Regional Investment Framework Implementation Plan
GMS-SF	Greater Mekong Sub-region Strategic Framework
GMS UD-SF	GMS Urban Development Strategic Framework 2015-2022
GPP	Gross Provincial Product
FDI	foreign direct investment
FRC	Final Registration Certificate
ICB	international competitive bidding
IDE	Institute of Developing Economies
IEE	initial environmental examination
JETRO	Japan External Trade Organization
JICA	Japan International Cooperation Agency
KOICA	Korean International Cooperation Agency
LAK	Lao Kip
Lao PDR	People's Democratic Republic of Laos

LDC	Least Developed Country
LOC	Law on Concession
MAFF	Ministry of Agriculture Forests and Fisheries
MCFA	Ministry of Culture and Fine Arts
MFF	Ministry of Economy and Finance
MEYS	Ministry of Education Youth and Sports
MFAC	Ministry of Foreign Affairs and Cooperation
MFF	multi-tranche financing facility
MIH	Ministry of Industry and Handicraft
MLMUPC	Ministry of Land Management Urban Planning and Construction
MME	Ministry of Mine and Energy
MOC	Ministry of Commerce
MOE	Ministry of Environment
MOF	Ministry of Finance
MOH	Ministry of Health
MoIC	Ministry of Industry and Commerce
MONRE	Ministry of Natural Resources and Environment
MOU	Memorandum of Understanding
MPI	Ministry of Planning and Investment
MPWT	Ministry of Public Works and Transport
MTIP	Medium-Term Investment Plan
NCB	national competitive bidding
NCSEZ	National Committee for SEZs
NEDA	Neighboring Countries Economic Development Cooperation Agency (Thailand)
NSEC	North - South Economic Corridor
NSEP	National Socio-Economic Plan
OCR	Ordinary Capital Resources
ODA	Overseas Development Assistance
O&M	Operation and Maintenance
OETCZ	Overseas Economic and Trade Cooperation Zone
OSS	One-Stop Office
PMU	Project Management Unit
POSEZ	Poipet O'Neang Special Economic Zone
PPC	Provincial People's Committee
PPMIS	project performance management information system
PPP	Private Public Partnership
PPTA	Project Preparation Technical Assistance
PRC	People's Republic of China
QIP	Qualified Investment Project
RGC	Royal Government of Cambodia
RIF-IP	Regional Investment Framework Implementation Plan
RP	Resettlement Plan
SCDP	Secondary Cities Development Project
SECA	Special Economic and Commercial Area
SEC	Southern Economic Corridor
SEZ	Special Economic Zone
SEZO	SEZ Promotion and Management Office
SLEDP	strategic local economic development plan
SME	small and medium enterprises

SNA	Sub-national Administration
SPZ	Special Promotion Zone
SWM	solid waste management
SWOT	strengths, weaknesses, opportunities and threats
TA	Technical Assistance
TOR	Terms of Reference
UDAA	Urban Development Administration Authority
UD-SF	Urban Development Strategic Framework
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
VAT	Value Added Tax
UNIDO	United Nations Industrial Development Organization
WWTP	Wastewater Treatment Plan

### TA CONSULTANT TEAM

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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>II</b>
<b>LIST OF ABBREVIATIONS</b>	<b>VII</b>
<b>TA CONSULTANT TEAM</b>	<b>X</b>
<b>I. INTRODUCTION</b>	<b>1</b>
A. Background	1
B. Activities Carried Out Under TA8989	7
C. Outline of the Final Report	8
<b>II. REVIEW OF CONCEPT AND APPROACH TO THE ON-GOING AND PLANNED GMS CORRIDOR TOWNS DEVELOPMENT PROJECTS</b>	<b>9</b>
A. Project Scope and Coverage	9
1. Strategic Planning and Selection of Project Components	9
B. Project Implementation	12
1. Project Design and Implementation	12
2. Project Consultants	13
3. Institutional Aspects	15
C. Project Sustainability	15
1. Operations and Maintenance	15
2. Capacity Building and Training	16
<b>III. IDENTIFYING ECONOMIC HOTSPOTS</b>	<b>29</b>
A. Definition	29
B. Potential Economic Hotspots	29
1. Priority Economic Hotspots	30
a. Greater Pakse Area (Lao PDR)	30
b. Lang Son/Dong Dang (Viet Nam)	30
c. Mong Cai (Viet Nam)	30
d. Poipet-Bavet (Cambodia)	30
2. Potential Future Economic Hotspots	31
a. Kaysone Phomvihane (Lao PDR)-Mukdahan (Thailand)	31
b. Myawaddy (Myanmar)- Mae Sot (Thailand)	31
<b>IV. ANALYSIS, AREA PROFILING AND PROJECT IDENTIFICATION FOR SELECTED ECONOMIC HOTSPOTS</b>	<b>34</b>
A. Greater Pakse Area (Lao PDR)	34
1. Background	34
2. Socio-Economic Profile	37
a. Social characteristics	37
(i) Population	37
(ii) Education and skills	38
b. Local economy	39
(i) Macroeconomic Perspective	39
(ii) Employment	40
(iii) Sectors	40
3. Urban Master Plans and Peri-Urban Development	53

a.	Pakse Urban Strategy and Master Plan	53
b.	Pakse Peri-Urban Developments: Pakse Hinterland Links	62
4.	Environment, Landscaping and Natural Resources Planning	64
5.	Infrastructure and public utilities	67
6.	Local institutions	68
7.	Capacity Development (local administrations and provincial/district government)	72
8.	Provincial International Cooperation and Official Development Assistance (ODA)	75
9.	Private Sector Investments Opportunities and Public Private Partnership Dialogue (PPPD)	82
a.	General	82
b.	PPPs in Local Infrastructure	83
c.	Business Community Economic Development and Industrial Zones	84
d.	PPP and PPPD in hydropower	88
10.	Border Economic Zones in Champasack Province	90
a.	SEZ Management Structure at the National Level	90
b.	Special Economic Sub-Zones in and around Pakse	91
(i)	Vangtao-Phonthong Economic Development Zone	92
(ii)	Champa City Specific Economic Zone (Huay Poun)	93
(iii)	Four Thousand Island New Area	93
(iv)	Pakse-Japan SME SEZ	93
(v)	Champasack Lao Service Industrial Park	94
11.	Development Linkages of SEZs with the Local Economy	95
12.	Greater Pakse Area Project: Multi-Sector Investment Priorities	96
B.	Dong Dang – Lang Son (Viet Nam)	99
1.	Introduction	99
a.	Background	99
b.	Aims and Objectives	99
c.	Stakeholder Consultation	99
2.	The Border Gate Economic Zone	100
a.	The Policy Context	100
b.	Key Features and Spatial Dimensions	101
(i)	Huu Nghi Border Gate	102
(ii)	Coc Nam Border Gate	104
(iii)	Tan Thanh Border Gate	106
c.	Economic Development Characteristics and Potentials	110
d.	Institutional and Regulatory Dimensions	110
e.	Local Institutional Context in Lang Son	111
3.	Lang Son / Dong Dang: The Overview	113
a.	Socio-Economic Factors	113
b.	Environment	115
c.	Spatial Planning: The Dong Dang-Lang Son BGEZ Master Plan to 2030	116
d.	Economic Growth Potential – Tourism	120
e.	Public Investment	121
4.	Capacity Building and Financial Aspects	122
a.	Capacity Building Aspects	122
b.	The Financial and Implementation Perspective	123

5.	The Development Framework	124
a.	Problems and Opportunities	124
b.	Development Programming and Priorities	131
C.	Mong Cai (Viet Nam)	138
1.	Introduction	138
a.	Background	138
b.	Aims and Objectives	138
c.	Stakeholder Consultation	138
2.	The Border Zone	139
a.	The Policy Context	139
b.	Border Zone Collaboration	141
c.	Key Features and Spatial Dimensions	141
	(i) City Center/Bac Luan Bridge	141
	(ii) Floating Bridge Crossing	142
	(iii) The Mong Cai Border Economic Cooperation Zone (BECZ)/ The 2 <sup>nd</sup> Sino-Vietnam Bac Luan Bridge 2 Crossing	142
d.	Economic Development Characteristics and Potentials	143
e.	Institutional and Regulatory Dimensions	143
	(i) Mong Cai BGEZ Development in a Provincial Context	143
	(ii) Institutional Situation and Challenges in Mong Cai	145
3.	Mong Cai - Hai Ha: The Overview	146
a.	Socio-Economic Factors	146
b.	Spatial Planning – The Master Plan for Mong Cai Border Economic Zone to 2030, with a Vision to 2050	147
c.	Public Investment	151
4.	Implementation Aspects	152
a.	Capacity Building	152
b.	Financial and Implementation Perspectives	152
5.	Development Framework	153
a.	Problems and Opportunities	153
b.	Development Programming and Priorities	158
D.	Poipet - Bavet (Cambodia)	164
1.	Introduction	164
2.	Poipet	166
a.	The Border Zone	166
	(i) Border Gates	166
	(ii) Special Economic Zones	169
	(iii) Border Zone Collaboration	172
b.	Socio-Economic Profile	172
	(i) Demographic Characteristics	172
	(ii) Economic-Trade Profile	173
c.	Urban Infrastructure	176
	(i) Existing Land Use and Zoning Map	176
	(ii) Core Urban Area and Landscape	178
	(iii) Urban Economic Infrastructure	178
	(iv) Urban Services	179

d.	Challenges for Poipet as a GMS Economic Hotspot	181
3.	Bavet	183
a.	The Border Zone	183
(i)	Border Gates	183
(ii)	Border Economic Zones	184
(iii)	Border Cooperation	185
b.	Socio-Economic Profile	186
(i)	Demographic Characteristics	186
(ii)	Economic-Trade Profile	187
c.	Urban Infrastructure	188
(i)	Existing Land Use and Zoning Map	188
(ii)	Core Urban Area and Landscape	189
(iii)	Urban Infrastructure	189
(iv)	Urban Services	190
d.	Challenges for Bavet as a GMS Economic Hotspot	191
4.	Institutional Aspects and Challenges in Poipet and Bavet	194
a.	General situation	194
b.	Local Institutional Framework	200
(i)	Poipet	200
(ii)	Bavet	201
c.	Public Private Partnership for Public Service Provision	205
(i)	Poipet	206
(ii)	Bavet	207
d.	Institutional Aspects of SEZs	209
(i)	Poipet	209
(ii)	Bavet	210
e.	Official Development Assistance (ODA)	210
(i)	Poipet and Banteay Meanchaey	210
(ii)	Bavet and Svay Rieng	212
f.	Environment, Natural Resources, Heritage and Climate Change	212
(i)	Poipet and Banteay Meanchey	212
(ii)	Bavet and Svay Rieng	214
g.	Institutional Challenges	215
h.	Main Institutional Conclusions and Recommendations in a Perspective of Further ADB Support	219
(i)	Long-term vision	219
(ii)	GMS Project approach in a shorter term	219
	<b>ANNEXES</b>	<b>221</b>
A.	Annex I: Information Tables	221
B.	Annex II: Official Development Assistance	230
	<b>BIBLIOGRAPHY</b>	<b>248</b>

## List of Tables

Table 1: Priority Border Points for Area Plans	2
Table 2: Past GMS Corridor Towns Development and GMS Tourism Projects	17



Table 3: List of all the GMS border towns, CTDPs towns and GMS Economic Hotspots	33
Table 4: Total projected population of Pakse and other districts	38
Table 5: Composition and drivers of growth of the Champasack economy	40
Table 6: Employment data for Champasack province	40
Table 7: Agriculture in Southern Lao PDR: Products, planted area and production volume	42
Table 8: Major environmentally sensitive natural areas in Champasack province	64
Table 9: Main Provincial Agencies Responsible for Economic Development	69
Table 10: The Main Districts Driving Development in Champasack province	71
Table 11: Tentative long list of capacity development topics in Champasack province	73
Table 12: Summary Table of Development Projects in Champasack Province of Lao PDR	77
Table 13: Tentative planned and existing industrial zones in Champasack province	85
Table 14: Potential Aspects of a Strengthened PPPD in Champasack	87
Table 15: List of Persons Met in Lao PDR	98
Table 16: Lang Son Province - Exports and Imports (Million US\$)	110
Table 17: Population Forecasts	114
Table 18: Population Growth and Employment Characteristics by Sector (2015-2030)	120
Table 19: Public Facilities and Infrastructure Provision	121
Table 20: Lang Son/Dong Dang BGEZ: Strengths, Weaknesse, Opportunities and Threats (SWOT) Analysis	127
Table 21: Program Framework for the BGEZ	132
Table 22: Priority Investment Program for the BGEZ	137
Table 23: Population Forecasts for the MCEZ	147
Table 24: Public Facilities and Infrastructure Provision	151
Table 25: Mong Cai EZ: SWOT Analysis	154
Table 26: Program Framework: Mong Cai Border Gate Economic Zone (MCEZ)	159
Table 27: Priority Investment Program for the Mong Cai/Hai Ha MCEZ	163
Table 28: Demographic Feature of Poipet	172
Table 29: Businesses Operating in Poipet, 2016	173
Table 30: Top 10 Exports from Cambodia to Thailand through Poipet Border Crossing (2010-2018)	175
Table 31: Top 10 Imports of Cambodia from Thailand through Poipet Border Crossing (2010-2018)	176
Table 32: Selected Urban Services	179
Table 33: Poipet - Environmental Issues	180
Table 34: Bavet Demographic Profile, 2013	187
Table 35: Planning objectives and actions	194
Table 36: Ministries Related to Development of BEZs and Responsibilities	196

## List of Figures

Figure 1: TA 8989-Priority Border Points	4
Figure 2: Approved CTDP 1, 2, 3 4	6
Figure 3: GMS Economic Hotspots	32
Figure 4: Pakse and Neighboring Provinces in Lao PDR and Thailand	34
Figure 5: Map of the Emerald Triangle and the Para-EWEC	35
Figure 6: Population distribution in Champasack province	37
Figure 7: Enrollment rates by level of education	39
Figure 8: Agricultural production by crop and region, 2016 (in thousand tons)	41
Figure 9: Agricultural exports from Champasack province 2017, in tons	43
Figure 10: Agricultural exports in 2017 (under contract farming arrangements), in tons	43
Figure 11: International visitors to Lao PDR	46
Figure 12: Tourism sites in Champasack	47
Figure 13: Pakse airport connectivity	48

Figure 14: Route options from Pakse to Siem Riep	49
Figure 15: Composition of industrial sector in Champasack province 2017	50
Figure 16: Imports and exports at Chong Mek (Thailand) /Vangtao (Lao PDR) border, 2010-2017 (in million USD)	51
Figure 17: Share of top-10 Thai exports (Lao imports) via Chong Mek/Vangtao border 2010-2017 (in million USD)	51
Figure 18: Share of top-10 Thai imports (Lao exports) via Chong Mek/Vangtao border 2010-2017 (in million USD)	52
Figure 19: Pakse and Surrounding Districts	53
Figure 20: Current Urban Area of Pakse	54
Figure 21: Current Land Use Activities	55
Figure 22: Urbanization Trends in Pakse	55
Figure 23: Proposed New Roads (dotted lines)	57
Figure 24: Major Projected Transport Infrastructure In and Around Pakse	58
Figure 25: Transport Plan for Pakse City	60
Figure 26: Map of Four Specific Development Zones in Pakse City	61
Figure 27: Paksong Master Plan	62
Figure 28: Paksong and the Bolaven Plateau	63
Figure 29: National level SEZ management structure	90
Figure 30: Map of Pakse area	92
Figure 31: Lang Son Province: Location and Districts	100
Figure 32: Huu Nghi International Border Gate: Existing and Proposed Facilities	103
Figure 33: Huu Nghi International Border Gate: Panorama	104
Figure 34: Coc Nam International Border Gate: Existing and Proposed Facilities	105
Figure 35: Tan Thanh International Border Gate: Existing and Proposed Facilities	107
Figure 36: Tan Thanh International Border Gate Economic Concept Plan	108
Figure 37: Dong Dang-Lang Son BGEZ Master Plan to 2030	117
Figure 38: Urban Expansion Areas	119
Figure 39: Quang Ninh Province: Industrial Parks and Economic Zones	139
Figure 40: The Master Plan for Mong Cai Border Economic Zone to 2030, with a Vision to 2050	148
Figure 41: Spatial Development Orientation Plan	149
Figure 42: Strategic Locations of Bavet and Poipet	166
Figure 43: Location map of New International Check Point Stung Bot – Ban Nong Ian (Poipet)	168
Figure 44: Border Checkpoints between Thailand and Cambodia Close to the Southern GMS Economic Corridor	169
Figure 45: Location map of Length from Sanco Sez to the regional	171
Figure 46: Land Use and Zoning Plan, Municipality of Poipet 2010	177
Figure 47: Map Delineating the Core Urban Area and Landscape	178
Figure 48: Master Plan of Poipet City	182
Figure 49: Bavet Town and Border Area	183
Figure 50: Existing Land Use	188
Figure 51: Concept Plan for Bavet: ADB May 2015.	192
Figure 52: Municipalities, Districts and Sangkat in the Banteay Meanchey Province	200
Figure 53: The two Sangkat of Poipet Municipality	201
Figure 54: Municipalities, Districts and Sangkat in the Svay Rieng Province	202
Figure 55: Map of the five Sankat in Bavet	203
Figure 56: The institutional arrangement in provinces and municipalities in Cambodia	204
Figure 57: Poipet area: low rainfalls	213

## I. INTRODUCTION

### A. Background

1. It is useful to recall the background of the CDTA-8989-REG: Greater Mekong Subregion: Capacity Development for Economic Zones in Border Areas. For each GMS corridor, the Greater Mekong Subregion Strategic Framework 2012-2022 (GMS-SF) (ADB 2011) puts an emphasis on “investments” aimed at strengthening urban development, upgrading logistics, improving the network of feeder and rural roads, and developing other transport modes” (ADB 2011, p 12). It clearly “provides for a central role for the urban sector through its emphasis on corridor development and multi-sector investments” (ADB, 2014, p. 12).

2. The GMS Regional Investment Framework Implementation Plan (GMS RIF-IP) (ADB 2014) thus focuses on providing basic infrastructure within “corridor towns”. The objective is to transform corridor towns into economic hubs attracting investments, by improving urban-environmental infrastructure, upgrading urban roads, implementing flood control measures as well as through multi-sector investments in water supply, waste water treatment, and solid waste management. Such urban investments will also contribute to reducing the carbon footprint of corridor towns, making them greener and more livable. The GMS RIF-IP also recognizes that physical investments need to be complemented by the strengthening of institutional capacities of local governments and municipalities for strategic planning, the management of urban public investments, for policy dialogue and for developing climate resilience. (ADB, 2015) To promote the development of economic corridors, the GMS-SF also emphasizes the importance to encourage private sector investment through supply chains and in special economic zones or industrial parks in border areas or other locations along the GMS corridors.<sup>1</sup>

3. Reflecting the importance given to urban development in the GMS-SF, a GMS Task Force on Urban Development was approved at the 18<sup>th</sup> GMS Ministerial Conference in Nanning in December 2012 and later transformed in a working group in 2016. This “reflects recognition of the huge potential for urban development, increased rural-urban links, and spatial prioritization along the GMS transport corridors” (GMS UD-SF 2015, p1). To define the GMS urban development approach and strategy, a GMS Urban Development Strategic Framework 2015-2022 (GMS UD-SF) was completed in 2015 (ADB 2015). The GMS UD-SF includes 3 pillars, namely (i) planning and development of key urban centers; (ii) planning and development of border areas; and (iii) capacity development in urban planning and management, including increased synergy with other GMS sectors.

4. The second pillar emphasizes the strategic importance of border towns and economic zones in border areas in the development of the GMS economic corridors and in support of overall economic growth in the GMS. Border areas on regional transport corridors always played a key role in the development of the GMS, but until recently physical investment, regulations and capacity building mainly focused on facilitating border crossing facilities themselves or on improvements in some (Lindfield, 2017) urban infrastructure in border towns. The GMS UD-SF recognizes that targeting urban infrastructure investments in border towns together with institutional capacity building for the development of border economic zones could contribute significantly to economic growth, job creation and cross border cooperation in the GMS.

5. While capacity development for urban management and investment in local urban infrastructure is essential, this is however “not sufficient to foster the development of value-added clusters as the remaining constraints are still a disincentive for most investors” (Lindfield 2017 p.3). Effective strategic planning, competitive strategic geographic location close to manufacturing

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<sup>1</sup> ADB supports national urban development strategies in several GMS countries (Lao PDR, Vietnam and Cambodia).

clusters or transport hubs, major economic comparative advantages, clear border area development plans linked to urban master plans and efficient private-public sector institutional arrangements in support of the development of local and cross border clusters (e.g. corridor development corporations) are essential for the development of successful economic zones in border areas.

6. As a priority project in the GMS-UD-SF, CDTA-8989-REG was agreed to at the Fourth Meeting of the GMS Task Force on Urban Development in Nay Pyi Taw in August 2015. While the title of the TA “capacity development for economic zones in border areas” can be somewhat misleading, one of the main objectives of the TA is to identify potential anchor urban areas for the formulation of the next CTDPs, namely the 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> CTDP. The “economic zones” component requires the consideration of much broader institutional and economic development issues, focusing on the economic competitiveness of GMS corridor towns (Lindfield 2017) and which are much broader than urban development issues because they are multi-sector and might include parts of the towns’ connection with their hinterland. A multi-tranche approach might also be appropriate in specific cases. TA-8989-REG thus covers two different, though related, aspects of development, namely:

- (i) Urban development
- (ii) Development of competitive regional or sub-regional growth poles

7. Because of the opportunities to create cross border synergies and complementarities and to link to value chains, border areas could have better potential to create competitive regions along GMS corridors. Interestingly, the GMS RIF-IP mentions only cross-border economic zones whereas TA-8989 only relates to border economic zones within each country. In some particular cases, cross-border economic zones (CBEZs) can be developed but these are very much exceptions due to the complexity of harmonizing policies and legislation (Abonyi and others, 2014). The development of economic zones in towns on each side of the border is more realistic. However, if economic zones in border town areas are to develop as investment hubs and platforms for local firms to enter regional and global supply chains, close cooperation and coordination across the border to seek complementarities and create synergies can be essential for success.

8. The GMS UD-SF identified 17 priority border points (Table 1) to be evaluated and prioritized during the implementation of CDTA 8989-REG (see Figure 1). The GMS UD-SF however notes that the list of border areas is “preliminary and can be updated and amended”.

**Table 1: Priority Border Points for Area Plans**

*(taken from Urban Development Strategic Framework)*

No	Countries	Border Points
1	PRC–Myanmar	Ruili–Muse
2	PRC–Viet Nam	Hekou–Lao Cai
3	PRC–Viet Nam	Pingxiang–Dong Dang
4	PRC–Viet Nam	Dongxing–Mong Cai
5	Myanmar–Thailand	Tachileik–Mae Sai
6	PRC–Lao PDR	Mohan–Boten
7	Thailand–Lao PDR	Chiang Kong–Houayxay
8	Myanmar–Thailand	Myawaddy–Mae Sot
9	Thailand–Lao PDR	Nakhom Panom–Thakhek
10	Thailand–Lao PDR	Mukdahan–Kaysone Phomvihane
11	Lao PDR–Viet Nam	Dansavanh–Lao Bao

<b>No</b>	<b>Countries</b>	<b>Border Points</b>
12	Myanmar–Thailand	Htikhi–Ban Phu Nam Ron
13	Thailand–Cambodia	Aranyaprathet–Poipet
14	Thailand–Cambodia	Hat Lek–Cham Yeam
15	Thailand–Lao PDR	Nong Khai–Vientiane
16	Cambodia–Viet Nam	Bavet–Moc Bai
17	Cambodia–Lao PDR	Dong Kralor–Veun Kham

Note: Countries Border Points: Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

9. Figure 1 shows the priority border points identified under TA8989.

**Figure 1: TA 8989-Priority Border Points**

Official map 2017-06

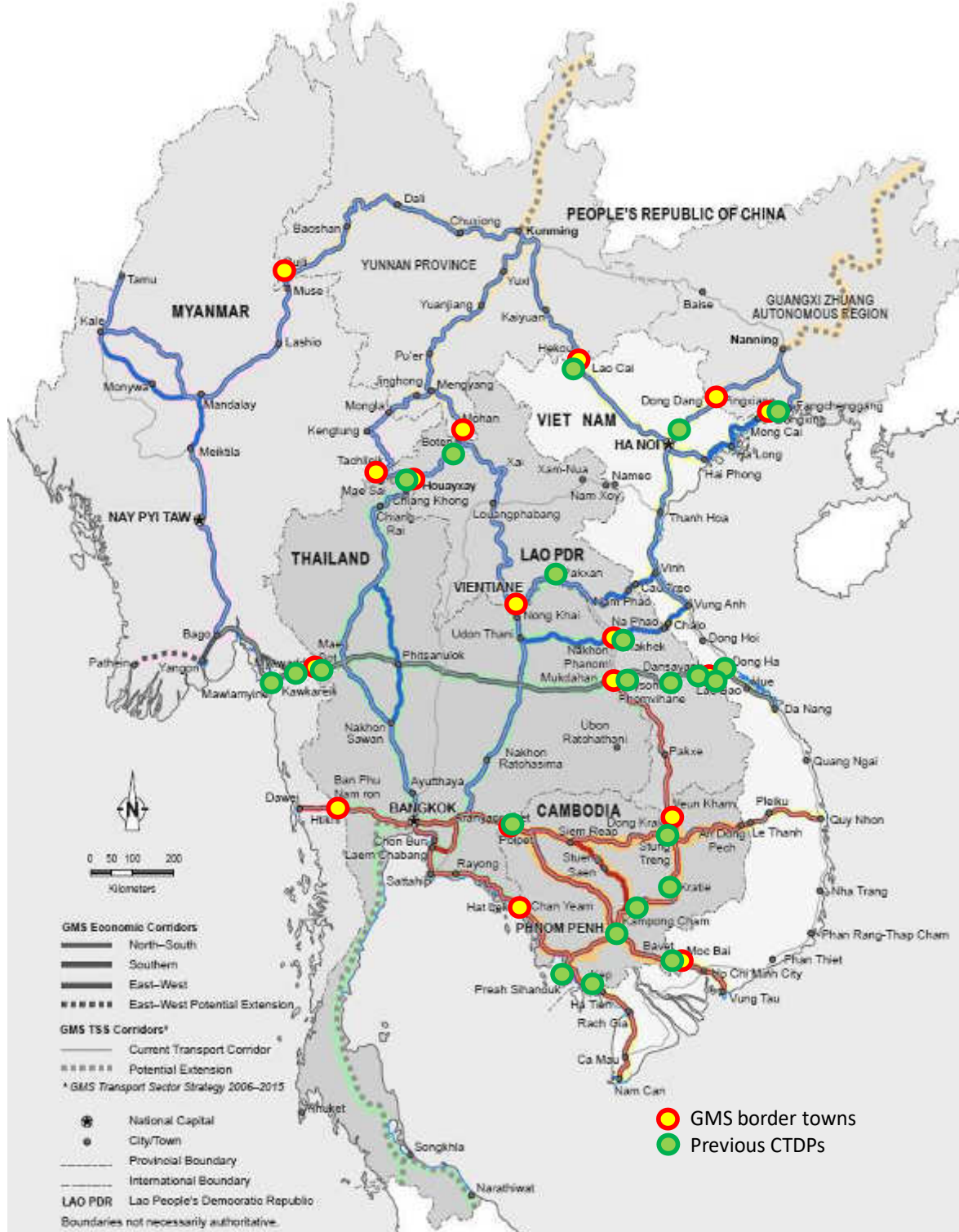


10. Figure 2 shows the towns where CTDPs are ongoing. Although CTDP 3 (Myanmar towns) and 4 (Lao PDR and Cambodia towns) have not yet started, 8 towns under CTDP 1 and 2 are also border points. The impact on investment, economic activity clustering and economic development in the CTDP border towns under implementation is dramatically different suggesting the current approach to the identification of candidate towns for CTDPs including border towns and the design and implementation of the CTDPs should be extensively reviewed to enhance their impact on both urban development and economic activity in and around the towns concerned

11. One of the major objectives and outcome of the TA is thus to review the concept and approach to on-going corridor towns development projects. This is discussed in section II of this final report.

**Figure 2: Approved CTD 1, 2, 3 & 4**

Official map with all CTD locations





12. Looking at the preliminary impact of the on-going CTDPs involving GMS border towns (ADB, 2017), in the case of Dansavanh (Lao PDR) and Lao Bao (Viet Nam), Houayxay (Lao PDR), Mong Cai (Viet Nam), the CTDPs had hardly any impact on attracting investment and on the development of economic zones. There was also little cross border coordination on economic development. In Kaysone Phomvihane (Lao PDR), the CTDP had only a marginal impact on the economic zone development as there was little interaction between municipal authorities and zone developers and operators. In Bavet (Cambodia), because of its proximity to the transport hub of Ho Chi Minh City (Viet Nam) and competitive labor costs, several large economic zones employing thousands of workers developed rapidly putting huge strains on the small town's infrastructure and environment. Because of its limitations, CTDP 1 only marginally improved the urban conditions. Major urban infrastructure and services issues remain and are worsening. Across the border at Moc Bai (Viet Nam), the CTDP 1 had little impact on the development of an active economic zone partly due to policy changes by the government of Viet Nam and the comparative advantage of the cross-border town of Bavet where Viet Nameese firms are major investors. An opportunity for a cross border economic zone could have been explored. In Poipet, in spite of its competitive location and labor cost, CTDP 1 had no impact on the development of economic zones largely because of border crossing issues with Thailand. The CTDP 1 only marginally addressed some urban infrastructure and services issues. With relations improving with Thailand and Poipet being an attractive investment location for Thailand "plus one" investors, urban conditions will deteriorate significantly over the next decade. The ongoing CTDPs thus offer some valuable if limited lessons for the research under TA8989.

## **B. Activities Carried Out Under TA8989**

13. The contract between ADB and PM Group to implement CDTA8989-REG was signed on February 2<sup>nd</sup>, 2017 and the notice to proceed (NTP) was provided on 3 February 2017. The REG-CDTA has been financed by the ADB Technical Assistance Fund and a co-financed grant provided by People's Republic of China Regional Cooperation and Poverty Reduction Fund.

14. The original terms of reference of TA8989 identified 6 main activities, namely (i) review the governments' policies and plans for the development of border areas including border economic zones; (ii) identify challenges and opportunities for the development of urban centers at border points and of BEZs in terms of urban planning and infrastructure development in each participating country; (iii) propose improvements in the future GMS corridor towns development approach with an increased focus on border areas; (iv) develop a pipeline for the fifth, sixth, and seventh phases of the GMS CTDP; (v) conduct regional seminars to increase awareness and capacity on urban, border area and BEZ development; and (vi) conduct pre-feasibility studies for the fifth GMS CTDP. The duration of the TA implementation was for 23 months –February 2017 to December 2018- divided in 3 phases, and 6 reports were to be delivered.

15. The inception report was completed in June 2017 and discussed at the first meeting of Working Group on Urban Development in Hanoi on 28 June 2017. One important finding discussed at the WG-UD meeting was the need to "define border areas in a flexible way involving cities or towns some distance away from border points but with the potential to form cities clusters". A broader multi-sector spatial approach to corridor town development linking cities or towns and their hinterland was also suggested.

16. In the next phase of the TA implementation, border economic zones policies and their implementation in the six GMS countries were reviewed. A detailed assessment of the 17 border points -34 border towns/areas – identified under the TA was undertaken during field visits and discussions with border economic zones and provincial and local authorities. Using a broad set of indicators, both quantitative and qualitative, the 17 border points were prioritized as possible

candidates for future CTDPs. The summary of all the findings under this phase of the TA was included in Progress Report I finalized at the end of September 2017.

17. Under the original TORs of TA8989, Phase 2 of the project would build more detailed profiles for 8 border zones, which would form the foundation for inclusion in GMS CTDPs 5, 6 and 7. Pre-feasibility studies would then be prepared for the two top ranked border zones (4 corridor towns) for inclusion in GMS CTDP 5.

18. The findings of Progress Report I were discussed with ADB in November 2017 and it was agreed to refocus the TA more around the concept of competitive cities and support for the development of value-added clusters able to attract investment. While urban management and investment in local infrastructure – urban roads, drainage, water supply, waste water, solid waste and flood prevention- are essential, they are not sufficient for the development of clusters in industries and services. Broader institutional and economic development issues need to be addressed through a multi-sector approach to the development of economic hotspots (United Cities and Local Governments, 2016), Lindfield 2017). Three components need to be look at, namely infrastructure, cluster support and finance. As shown in Progress Report I, institutions for cluster support and cross-national coordination are relatively little developed in the GMS. They are however essential for the successful development of border economic zones and towns. Any future border area project should incorporate such institutional development. Finally, at many border points, human resources capacity is weak and the availability of skilled workers is an issue.

19. The TORs of TA8989 were revised in December 2017. The evaluation of the design and implementation arrangements for the on-going CTDPs was maintained as an important output while the rest of the TA would mainly focus on identifying and profiling 3 GMS economic hotspots or functional urban and economic hotspots, and develop the scope for project preparation for the next CTDP (CTDP 5). A pre-feasibility study for CTDP 5 is however not needed. The TA duration was cut to 19 months –from the original 23 months-. Progress Report II was prepared in February 2018 summarizing the changes to the TORs and identifying 3 major GMS border economic hotspots, namely the Greater Pakse Area in the South of Lao PDR and Lang Son/Dong Dang, Mong Cai on the border between Viet Nam and China. Options for a fourth economic hotspot are also presented. Only few border points/cities in the GMS have the potential to develop as competitive cities capable of attracting significant investments and play a strategic role in the GMS. The economic growth potential needs to be carefully assessed and constraints identified with regard to infrastructure, services, finance and institutions. Progress Report III which was prepared in May 2018 updates implementation progress before the draft final report (DFR). The DFR was discussed at the second meeting of the GMS Working Group on Urban Development in Manila on 4-5 July 2018.

### **C. Outline of the Final Report**

20. Section II presents a detailed review of the concept and approach to the ongoing and planned GMS corridor towns development projects. It reviews the design and planning for the CTDPs and also identifies implementation issues including project preparation, procurement issues, safeguard issues and problems with project implementation consultants. As the ADB GMS Tourism Projects also include urban infrastructure investments, these were also included in the review of section II. Section III of the report defines the concept of economic hotspots and outlines the analysis undertaken under TA8989 to identify a number of economic hotspots. Section IV provides a preliminary analysis and area economic profiling for 3 potential economic hotspots – Greater Pakse area (Lao PDR), Lang Son/Dong Dang (Viet Nam), Mong Cai (Viet Nam) and a preliminary profiling for other economic hotspots, namely Poipet and Bavet (Cambodia).

## **II. REVIEW OF CONCEPT AND APPROACH TO THE ON-GOING AND PLANNED GMS CORRIDOR TOWNS DEVELOPMENT PROJECTS**

21. From the review of implementation experience of the previous, ongoing and approved GMS Corridor Towns Development Projects (CTDP)<sup>2</sup>, the Greater Mekong Subregion (GMS) Tourism Projects and the Viet Nam Secondary Cities Development Project<sup>3</sup> (SCDP), the following considerations emerge with regard to the preparation of future CTDPs and GMS Tourism Projects. Further details regarding the project design and project specification aspects are shown in Table 2 on a project by project basis.

22. The review is divided into 3 interrelated parts, reflecting the process of project development, implementation and sustainability. The parts are: A – Project Scope and Coverage, which provides a critique on the process of selecting the components which are carried forward into project feasibility studies (PPTAs); B – Project Implementation which explores the procedures from PPTA endorsement, through to project implementation; and C – Project Sustainability, which is focused on the difficulties of sustainable O&M in the post project implementation period experienced in some geographies.

### **A. Project Scope and Coverage**

#### **1. Strategic Planning and Selection of Project Components**

23. Previous CTDP projects have focused on urban infrastructure improvements but have been somewhat piecemeal in design, leaving some towns with 50% of infrastructure needed without returning for a second project phase. While improving the quality of life of some residents, the broader impact of the project investments on stimulating economic growth, private investment and job creation has been less than anticipated. There is thus a need to take a more comprehensive, multi-sectoral approach in determining the socio-economic development needs of the future CTDP project towns. Projects could target fewer towns to have a larger impact on the towns selected or should plan for a staged development over several phases, if more towns must be covered with the ADB resources allocated.

24. Main project development weaknesses include: (i) projects with a heavy bias towards the provision of hard infrastructure, where a wider vision of hard and soft intervention would be more beneficial; (ii) the relationship of local urban priorities to the wider economic perspective of the corridor context, including associated economic zones, is not realized; (iii) the relationship of local priorities to the need for a comprehensive approach to poverty alleviation and other social development objectives is mostly not realized; (iv) the “green city agenda”, particularly in the urban fringe, is often not fully considered, leading to poor agricultural land management and urban/rural blight; and (v) there is a need for more sustainable levels of post-project capacity building and finance to ensure sufficient project maintenance.

25. The CTDPs have and will continue to be successful in addressing essential environmental needs and providing utilities and urban infrastructure meeting local needs and generally improving the project towns. Typically, the development components would be: (i) urban roads and drainage;

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<sup>2</sup> Loan/Grant nos. 2983-CAM (SF), 8265-CAM (SCF), 0334-CAM (UEIF), 0335-CAM (SCF) Greater Mekong Subregion: Southern Economic Corridor Towns Development Project; 2931-LAO, 0313-LAO, 0314-LAO Greater Mekong Subregion: East-West Economic Corridor Towns Development Project; 2969-VIE, 0329-VIE Greater Mekong Subregion: Corridor Towns Development Project (CTDP 1)

Loan nos. 3314-CAM, 3315/8296-LAO, 3353-VIE Second GMS Corridor Towns Development Project (CTDP 2)  
Project 48175 MYA Third Greater Mekong Subregion Corridor Towns Development Project (CTDP 3)

Project 50099 CAM, LAO Fourth Greater Mekong Subregion Corridor Towns Development Project (CTDP 4)

<sup>3</sup> Loan 3044-VIE Secondary Cities Development Project (SCDP).

(ii) flood control/protection; (iii) solid waste management (SWM); (iv) water supply; and (v) wastewater management (WWM). Some projects have however not always been successful in terms of wastewater management and solid waste management, where significant issues regarding choice of technologies and O&M have later been exposed. They are nonetheless essential as part of core infrastructure for future urban growth.

26. From past experience, many if not most of the PPTA subprojects are pre-determined or “pre-selected” by the government authorities, based on existing development plans, prior to the time the PPTA consultants are mobilized, so that selection decisions are difficult to change. This has resulted in weak subprojects included in some of the project loans.<sup>4</sup> Selected road development proposals mainly in some Viet Nam corridor towns, such as Bac Giang in Corridor Towns Development Project 2 (CTDP2) and Tam Ky in Secondary Cities Development Project (SCDP) typify this situation.

27. Therefore, it is recommended that selection of project components for investment support under CTDPs PPTAs (and GMS Tourism projects) begin with a more comprehensive, multi-sectoral strategic planning exercise, including review of existing statutory city master plans or development plans. The review of existing plans should critically assess, update and improve them where needed, and incorporate investments proposed under the planned new ADB-financed interventions.

28. The mechanism promoted for setting a more sustainable and “economic savvy” context within the structure of PPTAs is traditionally the Strategic Local Economic Development Plan (SLEDP). However, the nature and scope of the SLEDPs, will need to be expanded in comparison with the previous examples used in support of the CTDPs. CTDP2 was typical in this regard, where a medium-term investment program, concentrated around utilities infrastructure and public facilities for the corridor town was the primary output. This is insufficient and does not address wider issues related to: (i) maximizing economic development potential and assisting economic zone expansion; (ii) parallel social development and poverty alleviation; and (iii) parallel capacity building to maximize market potential in the corridor towns and associated economic zones areas. Largely, because of this, local stakeholders did not always recognize the value of the SLEDPs as a value-added component by comparison with their existing policy context. (e.g. statutory socio-economic development plans). It is essential therefore that the SLEDPs should be: (i) broad based, inclusive of hard and soft components; (ii) capable of integration with other sector based statutory and advisory plans; and (iii) and contain a value-added component(s) to attract local stakeholder interest and support.

29. A more comprehensive approach to promote socio-economic development of the towns/cities using SLEDPs would likely yield recommendations for support of not only “hardware” but also “software” needs, such as measures to provide; (i) investment incentives for private investors; (ii) support for promoting micro-, small and medium enterprises through business development services and credit; (iii) skills training for the workforce; (iv) and assistance to disadvantaged groups such as ethnic minorities to be engaged in economic activities, which will more effectively promote development in the corridor towns, and capitalize on their location along the GMS economic corridors.

30. The SLEDPs should ideally be undertaken prior to finalizing the design of a PPTA, to determine the subproject components for support, or alternatively at the initial stage of a PPTA. This should be led by technical support from development economists and urban and regional planners, involving consultations with the range of stakeholders, including representatives of local and central government, the private sector, traders, and local communities. The outcomes would then determine the types and prioritization of investment subprojects required over the medium-

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<sup>4</sup> Examples of projects where this occurred include SCDP, CTDP2 and GMS Tourism 2.

term to stimulate socio-economic development of the CTDP towns/cities, including urban infrastructure improvements. In this context, the CTDP 4 including towns in Lao PDR and Cambodia has started a move in the right direction, although the results have not entirely met the needs of an inclusive project development, where it is understood some strategic planning and investment priorities are not entirely taken up in the proposed project loan.

31. A more comprehensive planning approach, through the SLEDP mechanism is likely to lead to more inclusive project development, expanding beyond the “traditional” utilities project to include urban regeneration/urban conservation and tourism projects which have good economic development potential, social and community development potential and, importantly, create opportunities for attracting private sector investment. These could include such elements as: (i) markets; (ii) public transport facilities; (iii) street lighting; (iv) car parking facilities; (v) public parks and green spaces; (vi) public toilets; (vii) traffic management (if an issue), and other municipal facilities, which have previously been treated as “one off” project components, which do optimize economic and social development potential, but at the same time add to the O&M liability of local governments.

32. SLEDPs yielding investment priorities over a medium-term time frame would likely require a phased approach to the investments, based on progress in institutional reforms and capacity building, regulatory reforms and other preconditions for the successive project interventions. In this regard and under some specific country conditions, a multi-tranche financing facility (MFF) modality could be considered as an appropriate means of providing the longer-term development support required.

33. A good example of an MFF applied by ADB to promote multi-sector investments for stimulating socio-economic growth and regional cooperation is the Guangxi Regional Cooperation and Integration Promotion Investment Program<sup>5</sup>.

34. Tourism remains an important driver of economic growth and a high priority in the GMS with positive impacts on reducing poverty and inequality, as currently guided by the Mekong Tourism Sector Strategy 2016-2025<sup>6</sup>. In addition to components for improving the quality and management arrangements (including community participation) for tourist destinations, previous GMS Tourism projects have included important components to address essential urban infrastructure improvements in the tourist destination towns, such as local roads, water supply and sanitation, to meet the towns’ current needs, as well as tourism basic infrastructure or what is referred to as “last mile infrastructure” which provide the links that makes a tourist site work. Often access to tourist sites are restricted due to poor roads or lack of alternative means of access such as boat landings to allow access by waterway. These investments typically are low cost with high economic benefits including for local communities from the resulting increased tourism opportunities.

35. The availability of tourism potential helps make infrastructure more efficient, as tourism helps to cross-subsidize investment and operational costs of the infrastructure investments that serve the needs of city residents. For example, the tariffs for sanitation services in Siam Reap charged to businesses are higher than residential tariffs. At the same time there is need for more imagination in the application of direct tourism charges beyond entry fees, for instance by applying a surcharge on the use of transport services and tourism accommodation. The GMS Tourism 4 project is a good example to follow, where government surcharging is proposed on privately operated inter-island fast ferry services ticketing. Also, the experience of some previous GMS

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<sup>5</sup> Project 50050-002: China, People’s Republic of: Guangxi Regional Cooperation and Integration Promotion Investment Program. \$450 million OCR and \$730 million government counterpart financing in 3 tranches during 2016-2024, December 2016. Asian Development Bank.

<sup>6</sup> <https://www.mekongtourism.org/about/tourism-sector-strategy/>

Tourism project components has shown that the physical works components are not always the best value for money. The potential remains for larger scale tourism plans and projects, with a better integrated public-private-community led approach that will benefit whole communities and private sector investors. Other types of investments that would have a positive impact on tourism development and improving the quality of life of town residents should also be considered in future projects, such as initiatives to promote tourism SME development and building or upgrading town parks and green spaces. To this extent, there maybe a case for more integration between CTDPs and strategic tourism projects.

## **B. Project Implementation**

### **1. Project Design and Implementation**

36. With specific reference to hard infrastructure, where sanitation and waste water treatment plants (WWTPs) are included in project designs, household connections and on-site plumbing costs should also be financed under the project, as these are crucial to the operational and financial viability of the sanitation system. On-site plumbing within the property boundaries is an additional expense for households which might lead them not to connect to the system. Ensuring that households connect to the system, as it is being constructed, is critical. Including a budget for this ensures it is done, and a suitable mechanism for fully or partially recovering this cost from the households over time could be developed by the government. Under Cambodia CTDP2, the PPTA design included budget provision for full household connection costs based on the cost estimates provided by the department of public works and transport (DPWT) Sihanoukville, but unfortunately, the allocations were removed when the costs determined by the final design consultant were significantly higher.

37. Sewerage system development is expensive in part because of the high cost of land acquisition for waste water treatment plant development (WWTP), as such land is seldom identified at an early stage in the towns/cities' development when the availability and cost of land is still low. By the time the authorities have decided to develop a WWTP, or create a new sanitary landfill, the land value has increased significantly due to the towns'/cities' growth. Land needs to be reserved for WWTPs or SWM landfills as early as possible, which will help lower the cost of sewerage development or SWM. O&M has proved even more difficult (see next section below).

38. The approach to land acquisition and resettlement must be practical. For example, the Cambodian government cannot purchase a site for an ADB-financed project until the project has been approved by the ADB Board. Therefore, sites for sub-projects that require large areas, such as WWTPs and sanitary landfills, may not be secured until after loan approval. For Cambodia's CTDP2, there were a couple of sites that were fully appraised during project preparation (with full resettlement plans (RPs), initial environmental examinations (IEEs), etc.) even though they were not already owned by the Government. After loan approval, the Government was unable to purchase the original site, and a new site had to be purchased. For future projects, the Resettlement Framework currently under development for the CTDP4 and the Tonle Sap 2 projects should be used, so that there is an agreed framework governing how land acquisition would be undertaken after loan approval. In addition, at least 2 suitable alternate subproject sites should be identified, and basic due diligence (covering technical, environmental and social aspects) conducted for each alternate site, in cases where land is to be purchased. Thus, the government would have options if the first identified site is not available after loan approval. ADB would be aware of the alternative sites and would have done some basic due diligence.

39. The social development (and gender) aspects of project designs are often not maximized, and taken into account during project implementation. Typically, the expansive nature of

SPRSS/GAPs is not matched by an appropriate scale of project loan/government financing, thus restricting the effectiveness of consultant work in social development. For example, this was the case in CTDP2 where some recommendations for community financing/micro-finance supported by capacity building for ethnic minorities was not taken forward.

40. In all projects reviewed, there is quite rightly great attention given to the importance, sensitivity and detailing on safeguards. The time limitations of PPTA processing are critical in this regard, such that risks of delay implied by an ADB Category A designation particularly in the environment sector can result in the loss of potentially good project components. This was the case in SCDP (Viet Nam), CTDP2 and GMS Tourism 2. This situation may be unavoidable and perhaps points the way towards advanced screening of all potential project components to ensure the exclusion of Environment Category A projects.

## **2. Project Consultants**

41. PPTAs are generally under-resourced and time-constrained, so that the consultant teams are unable to complete the assignments thoroughly because the teams are stretched. PPTA consultants' recommended solutions and packaging should be reviewed and checked for appropriateness as early as possible during the PPTA stage.

42. Extra emphasis should be placed on cost estimates and safeguards issues, as this is often where problems arise during implementation, and are difficult to resolve. Construction costs are often underestimated. This should also be supported by a more thorough approach to hard-infrastructure design. This may require providing independent, supplementary support to ADB project officers to ensure the needed skills for this are available, and thereby avoid poor choices in infrastructure design that do not match realities on the ground. For example, in Viet Nam several projects have been grossly under estimated during the PPTA stage (e.g. metro and highway projects), leading to requests for supplementary financing, or cancelation of project components, and consequently significant implementation delays. Also, under CTDP2 two strong potential project components (WWTP and SWM) ultimately were not included in the final design.

43. Timing of consultants' inputs and the durations of PPTAs should be considered and planned more carefully in the PPTAs' Terms of Reference. For example, it is common for resettlement, social and environment specialists to start close to the beginning of a project, before the subproject scope has been sufficiently defined for them to have meaningful input. Therefore, such specialists should preferably be fielded either later in the PPTA process or have their work undertaken in two phases, first at the start of the PPTA and again later after the subprojects' scopes are more clearly defined.

44. Project start-up delays also result in costs rising further. Delays in mobilizing project implementation support consultants for undertaking the detailed engineering design (DED), project management and construction supervision lead to cost escalation not only because of inflation, but at times because the project towns have expanded faster than expected since the PPTA was prepared. For example, due to cost increases and outstanding resettlement issues, under the Cambodia Southern Economic Corridor Towns Development Project (CTDP1), the Bavet sewerage system and a flood protection dike in Naek Loeung to expand the town were both cancelled. During the PPTA stage, some components were dropped from the scope of the Cambodia Fourth Corridor Towns Development Project (CTDP4) to remain within the available funding envelope, due to initial underestimation of the funding required.

45. To reduce project start-up delays, advance actions for recruitment of project implementation support consultants should be included as early as possible during the PPTA stage, as it can take the governments' EA 12-18 months to mobilize them. Some works packages

should be identified and detailed engineering design (DED) and bidding documents (including Master Bidding Documents) should be prepared for advance procurement under the PPTA stage. Design-build packages should be considered, if possible. Procurement for these initial packages should be started in parallel with loan approval processing if possible.

46. For PPTA consultants, TORs should also include participation in pre-loan fact-finding missions and assistance with advance actions. Procurement assistance for the EAs at critical stages in undertaking advance actions is important, in order to (i) reduce evaluation times, (ii) improve evaluation methods, and (iii) improve the quality of submissions to ADB for approval/no objection. Therefore, if not included in the PPTA TORs, other funding sources should be sought to provide this support.

47. Given the increased scope of PPTAs, additional sources of funding for PPTAs should be sought, such as from regional technical assistance (TA) set-asides. For example, the Nordic Development Fund provides a pool of around \$10 million for TA to address resilience of subprojects from climate change risks (including waste water treatment plants, storm water drainage, flood protection, etc.).

48. It is best to have only a single project implementation support consultants' package covering all aspects of the project implementation requirements (project management, DED and bidding documents, procurement, construction supervision, project performance management information system-PPMIS, etc.) for the loan/grant project in each country. The project implementation support consultants' budget should be sufficient to undertake the work. The team leader's role should not be less than 75-80% of the project implementation duration, which may meet resistance on the part of the EA but is a critical factor for success. Consultants' proposals need to be carefully reviewed, and firms selected must have prior work experience in the country. Selection of the team leader must be carefully scrutinized. Experienced and qualified local consultants must be included in the teams. For example, the project implementation support consultants under Cambodia's CTDP1 performed poorly and were replaced by the capacity building consultants whose TOR were expanded, resulting in significant implementation delay.

49. Project implementation support consultants' TORs should include a rapid review of PPTA recommended solutions and packages during the consultants' inception stage to identify potential issues early on. The TORs should include a provision (e.g. 5-10% of total person months) for "non-key (or unspecified contingency) experts" that is budgeted for and allows for firms to provide expertise in addition to those positions listed in the request for proposals (RFP). For example, in the ongoing CTDP2 projects in Cambodia and Laos, there is a frequent need for contract variations to, for example, add 1 or 2 persons months for a specialized engineer which was not foreseen when the original TOR was drafted (and hence not included in the firm's proposal). Having a provision for non-key experts that can be defined when the need arises gives the consulting firms flexibility, and also holds them to account for ensuring that necessary expertise is made available expeditiously.

50. In addition to the points above, or alternatively, a partially "output-based contract" could be considered to provide the project implementation support consultants with the incentives to mobilize resources and complete work quickly.

51. In designing the project packages, a balance of national competitive bidding (NCB) and international competitive bidding (ICB) packages should be achieved, but the number of packages should be minimized as much as possible. It is preferable to have fewer but larger contract packages.



52. Counterpart funding availability for soft sectors is typically more difficult to secure than for hard infrastructure investment. Therefore, it may be necessary to seek grant co-financing to supplement soft infrastructure investments.

### **3. Institutional Aspects**

53. A multisector approach is generally more useful but the selection of an appropriate EA becomes particularly important for managing interagency relations. For example, in Viet Nam, setting up EAs at the provincial peoples committee (PPC) level has led to improved interagency coordination. Implementing agencies (IAs) would be respective departments or cities under the PPC.

54. In Viet Nam, for instance there is also a trend towards using “professional project management units (PMUs)” that are given responsibility to manage the implementation of multiple development partner-financed projects. One of the risks of using these professional PMUs is that they tend to be more focused on hard infrastructure. To mitigate this risk, arrangements must be made during project formulation to have staff seconded to the PMU from other agencies dealing with the “soft sectors” (e.g. environment, gender, social development, etc.).

55. There is a tendency for some government authorities/EAs/IAs to give less attention to the “software” aspects of projects, such as the implementation of resettlement action plans and gender action plans, preparing and implementing construction environment management plans to mitigate potential negative impact on residents of construction activities, establishment of grievance redress mechanisms, environmental impact monitoring and reporting, applying occupational safety standards in construction works, etc. This requires effective monitoring and support by project implementation support consultants as well as ADB project officers.

## **C. Project Sustainability**

### **1. Operations and Maintenance**

56. From the experience of O&M in the GMS countries (i.e. Cambodia, Lao PDR, Myanmar and Viet Nam), this is the “Achilles heel” of ADB project loan experience in the provision of sustainable hard infrastructure. Like all developing countries, the GMS countries are generally not good at O&M. Lao PDR seems to be the weakest in terms of O&M while O&M performance in Viet Nam corridor towns is patchy.

57. Based on the experience of SCDP, CTDP2 and GMS Tourism 2, O&M in the project affected areas illustrates the difficulties that provincial and local governments have in planning and implementing sustainable O&M programs, including ADB projects. At its worst, this has led to ADB 2nd round investment in projects where there is O&M failure of 1st round ADB projects. Examples include:

- Previous ADB-financed landfills, which become unsustainable dumpsites in post implementation and are then financed again as part of another project loan. The dumpsites in Luang Namtha and Huoaxsay in Lao PDR, and at Sihanoukville in Cambodia, which were re-financed and/or proposed to be re-financed in CTDP2 are indicative.
- Previously designed new roads and public spaces, which fall apart and have to be re-constructed and re-financed. Examples include roads and drainage provision re-financed in GMS Tourism 2.

58. In the case of comprehensive multi-sectoral projects, a major concern is the capacity of the Executing Agencies (EAs) and project managers which need to be carefully assessed and supported

in order to manage a large number of diverse project components that require engagement with many different stakeholders and government agencies, and differing expertise to deliver.

59. It is a fundamental challenge for the ADB to find solutions to the outstanding O&M problems, which in our view must ensure ADB project loans are better supported. This in turn requires attention is given to: (i) generally higher levels of financing for O&M as part of project loans and counterpart funding; and (ii) higher levels of capacity building and training for the O&M related provincial and local authorities and any associated private/community investors, where there are PPPs/PCPs, etc. This in our view is needed in situations where finance for capacity building is part of a project loan and/or where it is government financed (counterpart funding) as in Viet Nam. For the latter, project loans require strong O&M guarantees.

60. Financial sustainability is a critical issue, and the approach to this must be tailored to each town, based on an assessment of transfers, tariffs and taxes. Each town is different, and cost recovery mechanisms should be tailored to specific situations in each town. In some cases (e.g. where there is good cooperation between the DPWT and the utilities authorities), towns may prefer to charge tariffs through an existing bill (e.g. water supply or electricity); in other cases (e.g. where there are a large number of tourists and tourism facilities), a tourism tax or similar measure may be considered.

## **2. Capacity Building and Training**

61. Regarding soft sector capacity building, it appears that the GMS Tourism Projects are significantly more successful than the CTDPs/SCDP. Each of the GMS Tourism Projects contains specific and separately financed components supporting soft sector objectives, including: (i) establishing participatory processes for engaging with local communities, ethnic minorities and for gender empowerment in tourism development; (ii) promoting sustainable community investment and management of tourist related projects and facilities; (iii) improving tourism marketing and promotion skills; and (iv) income generation.

62. For example, under the GMS Tourism 1 Project, over 17,000 people participated in community participation and institutional strengthening programs, including policymakers and public and private sector tourism managers, and about 24,000 people participated in community-based environmental and cultural conservation and tourism awareness seminars. The project enabled mainly poor rural communities to develop 49 community-based tourism (CBT) programs, such as trekking tours, homestays, cultural performances, river excursions and elephant riding. As a result of implementing gender and ethnic participation plans prepared under the project, overall women's participation ranged from 33% to 50% and participation of ethnic minorities was up to 50%. 2,100 new entrants were trained to operate tourism-related micro and small enterprises. Tourism management committees were established at each CBT site, which participate in semi-annual meetings with the local tourism authorities.

63. Under the GMS Tourism 2 Project, about 2,300 tourism site managers received sustainable tourism management training, and about 6,000 residents participated in sustainable tourism awareness seminars, benefitted from tourism-related business support services and tourism destination marketing. Women's participation ranged from 40% (Laos) to 63% (Viet Nam). Tourism master plans were prepared for all project areas. Local heritage resources were documented in the master planning process and used to guide information and education campaigns, training and environmentally-friendly tourist excursions. Under the project, mostly poor, rural communities were able to develop 32 community-based local tours, 23 CBT attractions and 23 supply chain products.

**Table 2: Past GMS Corridor Towns Development and GMS Tourism Projects**

<b>Corridor Towns Development Project 1</b>	
Outputs	The expected project impact will be the development of the project towns to become centers of economic activity, thereby contributing to the transformation of transport and economic corridors within the GMS. The project outcome will be improved urban infrastructure and enhanced climate resilience in the project towns. The outputs will be (i) adoption and implementation of strategic local economic development plans (SLEDP) in the project towns; (ii) implementation of priority urban infrastructure investments (including climate change resilience measures); and (iii) strengthened institutional capacity. Subprojects are selected based on criteria such as: (a) consistency with the project's overall goals and objectives; (b) potential impact on economic growth and competitiveness; (c) expressed interest and commitment of the executing agency to provide the necessary resources. The subprojects planned are: In Cambodia- Battambang: wastewater treatment (WWT); flood control; materials recovery facility (MRF). Bavet: WWT; urban roads; MRF. Neak Loeung: flood control. Poipet: WWT; solid waste management (SWM); MRF. In Lao PDR- Kaysone Phomvihane: WWT; urban roads; SWM; Mekong River embankment protection; MRF. Phine: urban roads. Dansavanh: urban roads. In Viet Nam- Dong Ha: city master plan; urban roads; river embankment; river port rehabilitation; MRF. Lao Bao: urban roads, SWM. Moc Bai: water supply.
	Project Towns - (1) Cambodia: Battambang, Bavet, Neak Loeung, Poipet; (2) Laos: Kaysone Phomvihane; Phine; Dansavanh. (3) Viet Nam: Dong Ha, Lao Bao, Moc Bai.
<b>Evaluation Factors</b>	<b>Project Weaknesses</b>
Economic Development	SLEDPs have been adopted by the project cities in Viet Nam. Unable to assess project weaknesses in terms of effectiveness in achieving economic development objectives yet because project implementation is still ongoing.
Social Development	Unable to assess project weaknesses in terms of effectiveness in achieving social development objectives because project implementation is still ongoing. In Viet Nam, efforts to implement the gender action plan were constrained due to inadequate technical advisory support initially, but are now proceeding.
Environment	Unable to assess project weaknesses in terms of effectiveness in achieving environment management objectives because project implementation is still ongoing.
Inclusive Development	Unable to assess project weaknesses in terms of effectiveness in achieving inclusive development objectives because project implementation is still ongoing.

<p>ADB Process</p>	<ol style="list-style-type: none"> <li>1. In Cambodia, poor performance of the consultants engaged to prepare the detailed engineering design (DED) led to their termination and replacement by the project implementation support and capacity building consultants with expanded terms of reference, resulting in a 2 years delay of project implementation, and revision of loan/grant closing date to 30 June 2021. Due to cost increases (including from underestimation of civil works scope) and outstanding resettlement issues, subproject priorities were reviewed and some subprojects (Bavet WWT and flood control in Neak Loeung) were deferred and will be canceled if insufficient funds.</li> <li>2. In Viet Nam, the Dong Ha river port subproject was canceled, and Khe May Lake Conservation Project in Dong Ha city was added. Civil works procurement completed April 2018 and are under implementation. Despite initial delays, the project is expected to be completed as scheduled on 30 June 2019.</li> </ol>
<p><b>Corridor Towns Development Project 2</b></p>	
<p>Outputs</p>	<p>The PPTA was built around the following primary outputs:</p> <ul style="list-style-type: none"> <li>• <u>Output 1</u>: National GMS Urban Development Strategies - In each country, to explore the urban system and prepare a proposal for a strategic framework for urban development that will cover the period (2014-2020) and to further a course of action to be taken to facilitate the smooth development of the urban system. To produce a Rationalized Urban Development Strategy (RUDS) and an investment priority list to support the strategy in each country.</li> <li>• <u>Output 2</u>: Strategic Local Economic Development Plans (SLEDPs) - To prepare SLEDPs for each project town, appropriate for the regional context. To identify priority subprojects to be funded by the ensuing loan project and under other funding modalities (stand-alone private sector investments, or public private partnership arrangements) in order to support each town development strategy.</li> <li>• <u>Output 3</u>: Feasibility Studies and Institutional Arrangements. - To prepare a feasibility study (technical, financial, social, environmental and economic analysis) for each subproject component, including procurement plans as well as land acquisition and resettlement plans. In each town, to assess local government capacity and institutional mechanisms in the urban sector and to identify the institutional arrangements as well as capacity building needs for project implementation.</li> </ul> <p>Project Towns - (1) Cambodia: Kampot and Sihanoukville; (2) Lao PDR: Houayxay and Luang Namtha; and (3) Viet Nam: Bac Giang, Mong Cai and Sa Pa (Lao Cai Province). The project towns in Cambodia and Lao PDR are distinguished by their geographical proximity and access to strategic GMS transport corridors. The project towns in Viet Nam are geographically separate. Only Mong Cai is located in a strategic GMS economic corridor (and cross border situation).</p>

Evaluation Factors	Project Weaknesses
Economic Development	<ol style="list-style-type: none"> <li>1. Some selected project corridor towns, unlikely to be catalysts for economic growth. The reasons are multiple, but include; (i) locations have basic economic constraints/lack economic advantage; (ii) locations are relatively remote in comparison to competitors; (iii) locations lack the capacity to promote an essential inclusive local economic development strategy to secure economic growth, and (iv) locations do not have serviced land to promote economic development.</li> <li>2. Most corridor towns selected in 1 country context without reference to adjoining border and therefore cross-border economic development issues/potential not considered in the PPTA.</li> <li>3. The potential/needs of economic zones associated with the selected corridor towns not fully realized in PPTA.</li> </ol>
Social Development	<ol style="list-style-type: none"> <li>1. Poverty reduction (and social development generally) was treated as spin off benefit of hard infrastructure investment, rather than a “driver” in an integrated approach to poverty reduction in the corridor towns.</li> </ol>
Environment	<ol style="list-style-type: none"> <li>1. The potential for optimizing environmental sustainability not fully realized in the choice/prioritization of the project loan components.</li> <li>2. Some pre-determined projects not appropriate to meeting the wider Green City Agenda and may be detrimental to good land management, lead to unnecessary land speculation and agricultural land blight. Under circumstances project component selection for inclusion in the loan is not always ideal as result of participating EA political pressures.</li> </ol>
Inclusive Development	<ol style="list-style-type: none"> <li>1. PPTA project development was set within the context of local government perceived needs, and partly without reference to the wider economic and social needs of the corridor town.</li> <li>2. Essential parallel policy initiatives and proposals to increase government/economic zone authorities’ capacity were lacking.</li> <li>3. Viet Nam - Unrealistic master planning population growth targets leading to priority investment in non-beneficial hard infrastructure, unrelated to the short-medium term development realities and economic development needs.</li> </ol>
ADB Process	<ol style="list-style-type: none"> <li>1. Pre-determined projects often not appropriate to meeting sound socio-economic development objectives or the wider green city agenda.</li> <li>2. Preparation of Strategic Local Economic Development Plans (SLEDPs) and other plan reviews (e.g. master plans) was under-resourced and consequently heavily biased to the provision of hard infrastructure in the corridor towns.</li> <li>3. The SLEDPs timing was programmed too late to influence the choice of project loan components, thus SLEDP priorities were not consistently reflected by the project loan components.</li> </ol>
<b>Corridor Towns Development Project 3 (Myanmar)</b>	

Outputs	<p>The PPTA was built around the following primary outputs:  <u>Output 1</u>: Enhanced city competitiveness to help vitalize the economic activities that will contribute to development not only within the project cities, but also the GMS region.  <u>Output 2</u>: Improved basic urban services to address the local needs for basic urban services in each project city.  Output 3: Strengthened urban management capacity of the State governments.</p> <p>Project Towns – Mawlamyine, Hpa-An; and Mywaddy</p>
<b>Evaluation Factors</b>	<b>Project Weaknesses</b>
Economic Development	<ol style="list-style-type: none"> <li>1. Some selected project corridor towns, unlikely to be catalysts for economic growth</li> <li>2. The potential/needs of economic zones associated with the selected corridor towns not fully realized in PPTA, but proposed for further study (Joint Spatial Development Plan for Myawaddy - Mae Sot).</li> </ol>
Social Development	<ol style="list-style-type: none"> <li>1. Poverty reduction (and social development generally) was treated as spin off benefit of hard infrastructure investment, rather than a “driver” in an integrated approach to poverty reduction.</li> </ol>
Inclusive Development	<ol style="list-style-type: none"> <li>1. PPTA project development was set within the context a hard infrastructure loan project, partly without reference to the wider economic and social needs of the corridor towns.</li> <li>2. Essential parallel policy initiatives and proposals to increase government/economic development capacity were lacking.</li> </ol>
ADB Process	<ol style="list-style-type: none"> <li>1. Pre-determined projects often not appropriate to meeting sound socio-economic development objectives or the wider green city agenda.</li> <li>2. Preparation of other supporting plans (e.g. master planning for Myawaddy) were under-resourced and consequently not included as part of the PPTA.</li> </ol>
<b>Corridor Towns Development Project 4</b>	
Outputs	<p>The PPTA was built around the following primary outputs:  <u>Output 1</u>: Development/updating and endorsement of strategic local economic development plans (SLEDP).  <u>Output 2</u>: Implementation of priority urban infrastructure investments.  <u>Output 3</u>: Strengthening of institutional capacities for sustainable financial and operational performance improvement of public services, integrated disaster risk management in urban planning and managing public investments.</p> <p>Project Towns - (1) Cambodia: Kampong Cham, Kratie and Stung Treng; (2) Lao PDR: Paksan and Thakhek. All towns are located on the national highway networks, along the banks of the Mekong River.</p>
<b>Evaluation Factors</b>	<b>Project Weaknesses</b>

Economic Development	1. The economic development potential of the single linked corridor concept was not fully developed, such that the project loan components are dominated by a series of hard infrastructure projects responding to the locally identified needs of each selected corridor town.
Social Development	1. Poverty reduction (and social development generally) was treated as a spin off benefit of hard infrastructure investment, rather than a “driver” in an integrated approach to poverty reduction.
Environment	1. The potential for optimizing environmental sustainability not fully realized in the choice/prioritization of the project loan components. Under circumstances project component selection for inclusion in the loan is not always ideal as result of participating EA political pressures.
Inclusive Development	1. PPTA project development was set within the context a hard infrastructure loan project, without fully developing the wider economic and social needs of the corridor towns and their linkages.
ADB Process	1. Pre-determined projects often not appropriate to meeting sound socio-economic development objectives or the wider green city agenda. 2. Preparation of strategic plans and other plan reviews (e.g. master plans) is under-resourced and consequently the proposed projects are heavily biased to the provision of hard infrastructure in the corridor towns
<b>Secondary Corridor Towns Development Project (Viet Nam)</b>	
Outputs	The primary output of the PPTA was to improve urban infrastructure and municipal services in three cities: Buon Ma Thuot, Ha Tinh, and Tam Ky through integrated urban and regional development processes, investments in urban infrastructure construction, and upgrading and strengthening the management capacity of local governments. This was to include: (i) compatibility with the strategic development thrusts and the need to enhance social and economic conditions in the cities; (ii) climate change adaptation and mitigation; (iii) project communities’ awareness, participation and benefits from the proposed improvements; (iv) optimal private sector participation in the project; and (v) optimal capacity of the implementing and managing institutions is achieved.
	Project Towns - Buon Ma Thuot, Ha Tinh and Tam Ky
<b>Evaluation Factors</b>	<b>Project Weaknesses</b>
Economic Development	1. Selected project corridor towns, unlikely to be catalysts for economic growth. 2. The potential/needs of economic zones associated with the selected corridor towns not realized in PPTA.
Social Development	1. Poverty reduction (and social development generally) was treated as a spin off benefit of hard infrastructure investment, rather than a “driver” in an integrated approach to poverty reduction.

Environment	<ol style="list-style-type: none"> <li>1. The potential for optimizing environmental sustainability not fully realized in the choice/prioritization of the project loan components.</li> <li>2. Some pre-determined projects not appropriate to meeting the wider Green City Agenda and potentially detrimental to good land management, leading to unnecessary land speculation and agricultural land “blighting”. Under circumstances project component selection for inclusion in the loan is not always ideal as result of participating EA political pressures.</li> </ol>
Inclusive Development	<ol style="list-style-type: none"> <li>1. PPTA project development was set within the context of a hard infrastructure loan project, largely without reference to the wider economic and social needs of the corridor town.</li> <li>2. Essential parallel policy initiatives and proposals to increase government/economic zone authorities’ capacity were lacking.</li> </ol>
ADB Process	<ol style="list-style-type: none"> <li>1. Pre-determined projects often not appropriate to meeting sound socio-economic development objectives or the wider green city agenda.</li> <li>2. No strategic planning context for project component choice/Unrealistic statutory master planning context.</li> </ol>
<b>Mekong Tourism Development Project (GMS Tourism 1)</b>	
Outputs	<p>The objective of the project was to promote sustainable tourism in the lower Mekong basin countries through infrastructure improvements, community and private sector participation, and subregional cooperation. Primary outputs of the project were: (i) tourism-related infrastructure improvement, including urban environmental improvement and last mile tourism access infrastructure (small airport upgrading; access road improvement; river piers); (ii) sustainable pro-poor community-based tourism development; (iii) sub-regional cooperation for sustainable tourism; and (iv) implementation assistance and institutional strengthening in project management and tourism management.</p>
	<p>Project Towns/Provinces – (1) Cambodia: Siem Reap, Stung Treng, Rattanak Kiri, Phnom Penh; (2) Lao PDR: Luang Namtha, Luang Prabang, Khammaouan; (3) Viet Nam: An Giang, My Tho, Chau Doc, Vinh Xuong.</p>
<b>Evaluation Factors      Project Weaknesses</b>	
Economic Development	<p>Foreign exchange earnings from tourism increased between 2003 and 2010 in Cambodia 414%, in Lao PDR 237% and 439% in Viet Nam. New tourism opportunities from sustainable use of natural and cultural heritage contributed to a rise in tourism employment by 79% in Cambodia, 31% in Lao PDR and 14% in Viet Nam. Net tourism expenditure in the 3 countries is estimated at \$2.23 billion in 2010. The share of destination tourism expenditure reaching the poor at tourist sites is estimated at 27% in Lao PDR, 26% in Viet Nam and 7% in Cambodia.</p>



Social Development	<p>The project assisted local communities to develop pilot ecotourism and village-based tourism products and services, strengthen cultural and environmental heritage conservation, promoted gender empowerment, ethnic participation and micro-enterprise development. Poverty rates declined in Cambodia from 35.9% to 30.1% between 2004 to 2007; and between 2004 to 2008 in Lao PDR from 38.6% to 27.6% and in Viet Nam from 28.7% to 13.5%.</p>
Environment	<p>Environmental mitigation measures were adequately implemented during civil works construction. WWT, drainage and SWM has greatly improved sanitary conditions in urban areas and catalyzed public/private investment in tourism related infrastructure and services. Villages along project roads have benefitted from reduced dust and improved access to services and transportation.</p>
Inclusive Development	<p>The project's investments in infrastructure, pro-poor community-based tourism, regional cooperation and capacity building have enabled the poor to access new livelihood opportunities in the service sector and helped create conditions for private tourism enterprises to thrive. Overall women's participation in tourism-related activities was 46% in Cambodia, 31% in Lao PDR and 50% in Viet Nam. Ethnic participation was 50% in Cambodia and 53% in Lao PDR, reflecting the demographics of the project areas.</p>
ADB Process	<p>While outputs (b), (c) &amp; (d) were soundly designed, as were the infrastructure improvements in Lao PDR and Viet Nam, the cancelation of planned airport improvements in Cambodia (Rattanak Kiri and Stung Treng due to high resettlement costs and national road improvements which reduced travel times and undercut the economic viability of the airports) and substantial design changes of 3 civil works projects under output (a) suggest the need for more detailed feasibility analysis during project preparation.</p> <p>Provision of a start-up specialist during project preparation specifically to assist executing agencies without prior experience implementing ADB-financed project would reduce implementation delays.</p>
<p><b>GMS Sustainable Tourism Development (GMS Tourism 2)</b></p>	

<p>Outputs</p>	<p>The project was designed to benefit the poor in Laos PDR and Viet Nam through promoting environmentally and socially sustainable tourism. The expected project impact was the development of a sustainable, culturally and environmentally sound pro-poor tourism approach for the GMS, and the preservation of natural and cultural heritage. The expected outcome was sustainable tourism development that creates livelihood opportunities for the poor. The five project outputs were: (i) four subprojects to protect natural and cultural heritage sites and improve environmental conditions in an urban tourism center; (ii) promote pro-poor, community-based tourism (CBT) development and link producers of agricultural products and handicrafts to tourism supply chains; (iii) transform the east-west and north-south GMS transport corridors into transnational tourism corridors (infrastructure developed at 13 sites including tourism information center and immigration terminal at Viet Nam’s Lao Bao border gate, community-managed rest areas, viewpoints and roadside markets); (iv) create a pool of trainers and master trainers to (a) improve small-scale tourism and hospitality services; and (b) public tourism planning and management; (v) project implementation and management support consulting services.</p> <p>Project Towns/Provinces – (1) Lao PDR: Siphadone Wetland, Vang Vieng town; (2) Viet Nam: Phong Nha Khe Bang National Park, Bac Kan.</p>
<p><b>Evaluation Factors</b></p>	<p><b>Project Weaknesses</b></p>
<p>Economic Development</p>	<ol style="list-style-type: none"> <li>1. Overall, about 72,000 people in project areas benefited directly and 288,000 indirectly from (i) jobs and economic opportunities created; (ii) improved transport services, a cleaner environment and better recreation facilities; and (iii) increased local involvement in tourism planning and management. Capacity building and training activities equipped more than 23,000 residents, tourism managers and service providers with the knowledge and skills needed to benefit from tourism growth. Nearly 6,000 residents benefited from tourism-related business support services and destination marketing.</li> <li>2. The executing agencies collaborated with industry associations and chambers of commerce to organize familiarization visits to project areas for investors and tour operators. These helped mobilize significant private hospitality investment (including \$1.2 million investment to expand the Phong Nha Khe Bang farm stay program by a Viet Nameese tour operator).</li> <li>3. In addition to infrastructure development, project also supported (i) preparation of tourism development master plans in all project areas; (ii) tourism management training; (iii) public awareness programs to promote sustainable tourism; (iv) marketing and promotion; (v) private investment facilitation.</li> </ol>

	<p>4. However, fewer than expected visitors to tourist sites in towns off the main corridors undermined financial sustainability. Although several output (ii) and (iii) interventions aimed to build synergies with transport sector investments by creating tourist rest areas and other attractions along improved transnational highways, some became less relevant as market demand shifted and travel times between corridor towns decreased.</p>
<p>Social Development</p>	<ol style="list-style-type: none"> <li>1. The project's capacity building and small-scale infrastructure investments enabled mostly rural poor communities to develop 32 community-based tours, 23 community-managed tourist attractions and 23 supply-chain products. These include community-managed waterfalls, caves, and hot springs; trekking, river excursions, homestays, and local markets, and handicraft and food service enterprises.</li> <li>2. However, at project completion, about one-third of the community-managed tours were generating only modest benefits due to lower than expected demand. On the other hand, 80% of the supply-chain initiatives by village-based production and marketing groups were successful.</li> <li>3. Over 2,000 residents (41%-49% women) attended gender- and ethnic-sensitive enterprise training and public awareness programs to prevent HIV/AIDS and human trafficking.</li> </ol>
<p>Environment</p>	<ol style="list-style-type: none"> <li>1. Environmental impacts were minor and largely confined to construction stage. Physical improvements to drainage, roads and walkways in sensitive cave environments generated positive benefits. Improved sanitation benefited about 1,500 residents and enabled families to develop homestays. Improved solid waste management also produced positive environmental benefits.</li> <li>2. About 2,300 tourist site managers received sustainable tourism management training and 6,000 residents participated in sustainable tourism awareness seminars.</li> <li>3. However, despite adequate regulations and the project's campaign to raise environmental awareness, the Nam Vong River continued to show worsening levels of sulfates, hydrogen sulfide, and biological oxygen demand due to lingering wastewater management issues.</li> </ol>
<p>Inclusive Development</p>	<ol style="list-style-type: none"> <li>1. The project supported gender and ethnic development, including documentation of cultural practices.</li> <li>2. Women's participation in project activities ranged from 40% (Laos) to 63% (Viet Nam). Women own and manage nearly all the production and marketing groups formed with project assistance. About 37,000 women benefitted directly and 150,000 indirectly from project activities. Overall, women hold 75% of tourism-related jobs in project areas.</li> <li>3. Ethnic groups comprised 47% of project beneficiaries in Lao PDR and 85% in Viet Nam.</li> </ol>

<p>ADB Process</p>	<ol style="list-style-type: none"> <li>1. The project is considered generally well-designed and prepared, with adequate resources allocated by ADB and the governments for its formulation. Participatory consultations in all project areas included community meetings, in-depth socio-economic surveys with 200 families, and 1,400 visitor surveys. More than 250 public and private sector tourism industry stakeholders joined 8 workshops to review and validate the proposed project scope. Outputs 1, 4 &amp; 5 were largely implemented as planned. However, Lao PDR selected 9 project provinces with many small, scattered infrastructure subprojects under outputs 2 &amp; 3. This stretched the executing agency’s capacity to adequately supervise construction and build capacity for O&amp;M. Minor changes in scope to cancel redundant roadside parking areas and relocate the east-west economic corridor visitor information center from Dong Ha city to the Lao Bao international gateway improved relevance of output 3.</li> <li>2. However, Viet Nam was negatively affected by slow consultant recruitment. Infrastructure procurement was delayed because subprojects were designed and tendered successively rather than simultaneously.</li> <li>3. Deficient geotechnical surveys delayed construction of the Ban Kan Cultural Exchange and Tourism Information Center.</li> <li>4. During implementation, the civil works packages for national competitive bidding were broken down further into smaller packages from 6 to total 16 packages, which increased transaction costs and may have discouraged bids from larger, more qualified contractors. Poor civil works design and supervision undermined resilience to floods, increased costs, delayed completion, and reduced tourism functionality. Quality of small-scale civil works was often deficient due to inadequate supervision.</li> <li>5. More attention is needed to selecting quantifiable design and monitoring framework (DMF) indicators and avoiding redundant indicators. Comprehensive baseline data should be collected for all DMF indicators during project preparation. More emphasis is required on assessing provincial procurement and financial management capacity in light of the devolution of implementation responsibility to provinces. Annual work plan and budget approvals should also be devolved to the project coordination units (PIUs) and project implementation units (PIUs) to reduce implementation delays. Project implementation periods of tourism projects of 6 to 7 years are more realistic and would allow more time for institutionalizing O&amp;M systems.</li> </ol>
<p><b>GMS Tourism Infrastructure for Inclusive Growth (GMS Tourism 3)</b></p>	
<p>Outputs</p>	<p>The expected project impact is increased tourism employment for people living in underdeveloped segments of the GMS corridors in Cambodia, Lao PDR and Viet Nam. There are four project outputs: (i) last-mile tourism infrastructure improved in each participating province in each country; (ii) environmental services in cross-border</p>

<p>Outputs (cont.)</p>	<p>tourism centers improved; (iii) institutional capacity to promote inclusive tourism growth strengthened; and (iv) effective project implementation and knowledge management. Subprojects for outputs (i) and (ii) were selected based on following criteria: (a) infrastructure constraints; (b) location in GMS corridor with good tourism and economic development potential; (c) site is on a multi-country tour circuit prioritized in the GMS Tourism Sector Strategy and the respective national tourism strategy; (d) private enterprises and local communities are interested in managing tourism amenities developed by the project; (e) local stakeholders including women and ethnic groups endorse the subprojects.</p>
	<p>Project Towns/Provinces – (1) Cambodia: Kampot, Kep and Koh Kong provinces; (2) Lao PDR: Champassak, Khammouane, Luang Prabang, Oudomxay; (3) Viet Nam: Dien Bien, Ha Tinh, Kien Giang, Lao Cai, Tay Ninh provinces.</p>
<p><b>Evaluation Factors</b></p>	<p><b>Project Weaknesses</b></p>
<p>Economic Development</p>	<p>1. Project areas (provinces) appropriate, but selection of a number of subprojects, while in themselves worthwhile and likely to stimulate local economic development, are unlikely to further the wider/regional socio-economic development objectives or the GMS economic corridor agenda.</p>
<p>Social Development</p>	<p>1. Awareness campaigns related to road safety, food safety, HIV/AIDS, child exploitation and human trafficking were well intended but outside of the mandate of the national tourism organizations, and delivery mechanisms were insufficiently clarified in the project document.</p>
<p>Environment</p>	<p>1. Biodiversity and cultural heritage could have been more looked at during the PPTA as opportunities for interpretation and learning rather than problems to stay away from.</p>
<p>Inclusive Development</p>	<p>1. PPTA project development was set within the context of a hard infrastructure loan project, without fully developing the wider economic and social needs of the corridor towns and their linkages.</p>
<p>ADB Process</p>	<p>Lack of a holistic approach to project preparation resulted in disconnects between various components (infrastructure, tourism product development, tourism management capacity building, O&amp;M planning and capacity building, social development, environment etc.). This could have been avoided by adopting a more strategic, holistic approach from the outset, but this would have required the Team Leader to be able to focus on the coordination required for this, instead of being also responsible for document production (institutional analysis, O&amp;M planning etc.).</p>
<p><b>2<sup>nd</sup> Tourism Infrastructure for Inclusive Growth Project (GMS Tourism 4)</b></p>	
<p>Outputs</p>	<p>The expected project impact is sustainable, inclusive and more balanced tourism development, as envisaged in the <i>ASEAN Tourism</i></p>

<p>Outputs (cont.)</p>	<p><i>Strategic Plan 2016-2025.</i> There are three main project outputs: (i) multiple transport and urban infrastructure subprojects in each of the participating provinces in all three countries and which may be financed by an ADB Loan. The choice of the subprojects reflects the priorities of the GMS policy and development in the tourism sector: (ii) Capacity to Implement ASEAN Tourism Standards are Strengthened; and (iii) Institutional Arrangements for Tourism Destination Management and Infrastructure Operations and Maintenance (O&amp;M) are Strengthened.</p>
	<p>Project Towns/Provinces – (1) Cambodia: Kep and Sihanoukville; (2) Lao PDR: Champasack Province (Nakasang); Vientiane Province/Vang Vieng and Luang Prabang; (3) Hoa Binh, Nghe An, Quang Binh, Quang Tri and Thua Thien Hue Province.</p>
<p><b>Evaluation Factors</b></p>	<p><b>Project Weaknesses</b></p>
<p>Economic Development</p>	<p>1. Some project components are unlikely to be significant catalysts for growth in the tourism sector, for instance, road widening/ upgrading for some project components, in Nghe An province in Viet Nam and Champasack province in Lao PDR.</p>
<p>Social Development</p>	<p>1. Poverty reduction (and social development generally) was treated as a spin off benefit of hard infrastructure investment, rather than a “driver” in an integrated approach to tourism planning and development. 2. From previous experience in the project provinces (particularly in Lao PDR and Viet Nam) there are risks that community participation in tourism O&amp;M may fail for some of the components to be included in the Project Loan.</p>
<p>Environment</p>	<p>1. The potential for optimizing environmental sustainability not fully realized in the choice/prioritization of the project loan components. 2. Some projects, (i.e. Sihanoukville Ferry Piers) would have been better set: (i) in the context of an Environmental Threshold Analysis; (ii) comprehensive planning approach, to ensure an inclusive approach to environmental sustainability at tourism destinations (e.g. wastewater management); and (iii) an inclusive approach to ferry pier development and restoration of beachfront environments.</p>
<p>Inclusive Development</p>	<p>1. Not applicable.</p>
<p>ADB Process</p>	<p>1. Pre-determined projects often not appropriate to meeting sound strategic tourism development objectives or the wider sustainability agenda. Under circumstances project component selection for inclusion in the loan is not always ideal as result of participating EA political pressures. 2. Some projects contain high risk of O&amp;M failure based on: (i) past performance of provincial/district authorities in O&amp;M, including Champasack and Vientiane Provinces in Lao PDR regarding ADB project implementation; (ii) past and current performance in public facilities O&amp;M generally, including Nghe An and Quang Tri Provinces in Viet Nam.</p>

Source: PPTA Consultant

### III. IDENTIFYING ECONOMIC HOTSPOTS

#### A. Definition

64. During implementation of TA8989, the TA team visited the 17 border points identified in the GMS Urban Strategic Framework. For each border point, a detailed analysis of their economic potential and of associated urban development issues was undertaken (ADB, 2017). Preliminary lessons about the impact on GMS economic activity of some of the on-going border towns CTDP were also drawn. Finally, the literature on economic zones development and on the clustering of economic activities provided useful guidance (Maffioli, 2016), (Lindfield, 2017).

65. Work under TA8989 showed that capacity development for urban management and investment in local urban infrastructure is important. However, this is “not sufficient to foster the development of value-added clusters as the remaining constraints are still a disincentive for most investors” (Lindfield 2017 p.3). Effective strategic planning, competitive strategic geographic location close to manufacturing clusters or transport hubs, major economic comparative advantages, clear border area development plans linked to urban master plans and efficient private-public sector institutional arrangements in support of the development of local and cross border clusters (e.g. corridor development corporations) are essential for the development of successful economic zones in border areas.

66. Clearly many of the GMS corridors border towns while important border towns are unlikely to develop as GMS economic hotspots attracting investments. A combination of factors is needed to have the potential to develop as a successful economic hub. These include a unique set of economic comparative advantages which can support clustering of economic activities. These could be agricultural and agro-industry potential or tourism potential and/or advantageous labor costs compared to the neighboring country. Location is also a key factor such as closeness to major transport hubs and industrial/services clusters.

67. The analysis under TA8989 also shows that to realize the economic potential of corridor towns it is imperative that a multi-sector project approach be taken such as linking better the towns to their hinterland, supporting human resources development and institutional capacity and setting up private-public sector consultation mechanisms to guide the development of economic zones.

#### B. Potential Economic Hotspots

68. After a detailed economic analysis undertaken in TA8989 Progress Report I, discussions with stakeholders, and given the need for some geographical spread, a number of GMS border towns were identified as emerging potential GMS economic hotspots. The towns were grouped into 2 sets. The first group includes towns which could be selected for the CTDP 5, 6 or 7 while the second group could be targeted for later CTDPs. The first group includes 5 towns including 2 of them in Viet Nam. Due to the forthcoming changes in Viet Nam’s access to ADB concessionary funding –Viet Nam will only have access to ADB non-concessional lending from 2019 onwards-, the 2 Cambodian border towns of Poipet and Bavet were included as potential alternative choices. For the first group of towns, a detailed analysis, area profiling together with a preliminary projects’ identification is undertaken in section IV of this final report.

## 1. Priority Economic Hotspots

### a. Greater Pakse Area (Lao PDR)

69. The Greater Pakse area has 2 major economic strengths making it an emerging GMS economic hotspot: a very rich agricultural area and strong agro-industry sector potential and an important tourism potential. Economic links with Ubon Rachathani Province of Thailand are very strong. While the whole area of Pakse and its close hinterland on the Bolaven Plateau, is de facto an economic zone without boundaries, several delimited economic zones are also under development both around the urban area of the city of Pakse itself and at the Chongmek (Thailand)-Vangtao (Lao PDR) border with Thailand, about 40 km east from Pakse. The city of Pakse acts as regional hub for the south of Lao PDR and was elevated to a “city” status by the Lao PDR Government in June 2018 –a status identical to that of Vientiane-. Due its location, Pakse has recently also been able to attract Thailand “plus one” investment in manufacturing. The vibrant economy of the Greater Pakse area has resulted in an expansion of its urban area putting pressure on its urban infrastructure and services. ADB is implementing a Pakse Urban Environmental Project which will be completed in 2021. The Greater Pakse area appears a strong candidate for the CTDP 5.

### b. Lang Son/Dong Dang (Viet Nam)

70. Lang Son and its sister town of Dong Dang are very crowded border towns due to heavy traffic to and from China. Several border economic zones are being developed on the Chinese side of the border in Pingxiang with significant public and private investments in BEZs and urban infrastructure. The Dong Dang border is a major border for Viet Nam and ASEAN trade with China. Lang Son will be linked to Hanoi 140 km away by a motorway which is under construction. Economic zones –for processing goods exported to China- are also planned on the Viet Nameese side of the border. Viet Nam has the advantage of having significantly lower labor costs than across the border in China. Lang Son/Dong Dang has good potential to develop as a GMS strategic economic hotspot. The area has good potential for agro-industry and tourism.

### c. Mong Cai (Viet Nam)

71. The greater Mong Cai area in the Quang Ninh province of Viet Nam is another potential developing GMS economic hotspot. It is a busy border town opposite Dongxing in China. Economic zones are being developed on both sides of the border including a possible cross border economic zone close to the current border urban area. Another large border economic zone is also being developed along the coast about 30 km south of Mong Cai based on a master plan up to 2030 and 2050. The processing of agricultural products and seafood for exports to China, textile and garment industries as well as logistics services are some economic advantages of Mong Cai. Due to its location next to the sea and good connectivity with the Chinese market, Mong Cai has also a lot of potential for tourism development. New border crossing infrastructure – bridges between Mong Cai and Dongxing- is being built and significant new urban developments are planned around the current urban area of Mong Cai

### d. Poipet-Bavet (Cambodia)

72. Poipet on the Cambodia-Thailand border and Bavet on Cambodia-Viet Nam border are currently quite different centers of activity but both have significant urban development problems due to their border location and rapidly developing special economic zones. Bavet is a strategic town in Cambodia located on the Southern GMS Economic Corridor on the border with Viet Nam and close to Ho Chi Minh City. Bavet is a rapidly growing industrial town with 3 special economic



zones employing over 30,000 workers. A number of dry ports are located close to the town center. Due to its location, low labor costs and the favorable GSP regime enjoyed by Cambodia, Bavet is fast becoming an economic hotspot in the GMS. It is an attractive location for “Viet Nam + one” investors. In spite of its inclusion in the CTD 1, with the rapid expansion of the small town due to migration from other parts of Cambodia, urban infrastructure and services have been deteriorating rapidly affecting even the operations of the SEZs.

73. Due to the congested border facilities and cross border problems with Thailand, Poipet has grown moderately over the past few years. Although a vast amount of land -900 hectares- was set aside by the government for the development of SEZs, significant investment by the private sector in economic zones only started in the past few years. The comparative advantage of Poipet is its strategic location close to the industrial clusters in Thailand and the Thai transport hubs, making it an attractive location for “Thailand + one” investors and labor-intensive industries. The labor costs in Poipet are much lower than those in Thailand. Poipet also benefits from casino-based tourism –more than 17 big hotels/casinos are under operation-. Finally, Poipet is a major transshipment and logistics center. The situation in Poipet will change dramatically over the next few years as Thailand is building a large modern cross border road connection to Thailand together with border facilities which will make Poipet a very attractive investment destination in the GMS. Both towns are on the Southern economic corridor and have been included in the first CTD. Both towns have expanded significantly since the approval of the CTD putting pressure on infrastructure and urban services.

## **2. Potential Future Economic Hotspots**

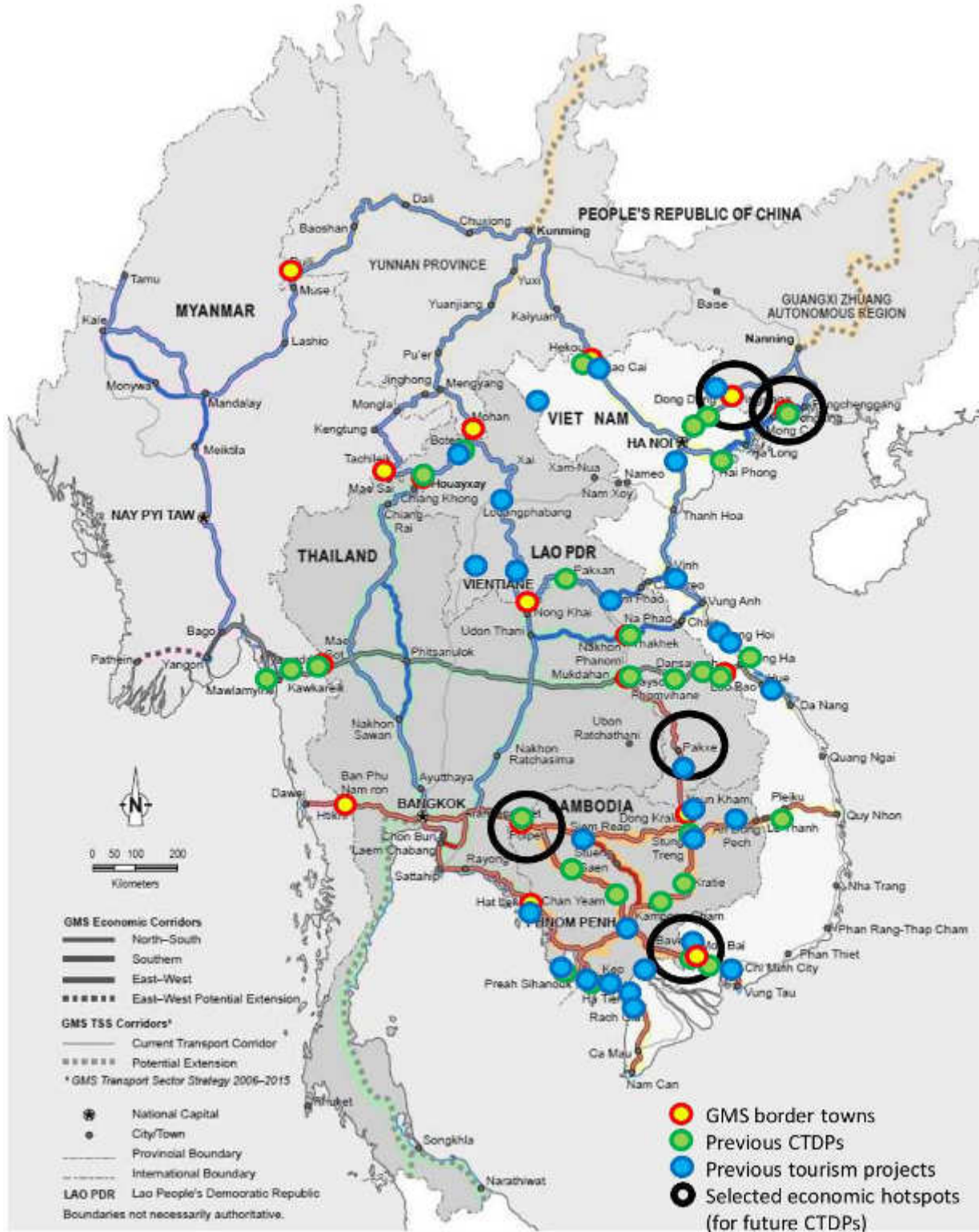
### **a. Kaysone Phomvihane (Lao PDR)-Mukdahan (Thailand)**

74. Kaysone Phomvihane is the second largest city in Lao PDR situated on both the EWEC and the Central Economic Corridor. The relatively large and successful Savan-Seno SEZ is located on the outskirts of the town. On the Thai side of the border, parts of the Mukhdahan province are targeted for the development of border economic zones but little investment has occurred so far. There appears to be a lack of vision and long-term plan for the development of a border economic zone in Mukdahan. Any BEZ in Mukdahan would need to seek complementarities with the developments in the Sawan Seno economic zone. Kaysone Phomvihane is part of the CTD 1 which is scheduled for completion in 2020. A SLEDP was prepared under the CTD but ultimately was not used by the authorities. A 30-years Master Plan is under preparation for Kaysone Phomvihane. Overall this border point has the potential to develop as an important GMS economic hotspot.

### **b. Myawaddy (Myanmar)- Mae Sot (Thailand)**

75. This is the main border point between Myanmar and Thailand. It is likely to develop as a cross border economic hotspot as the road from Myawaddy to Yangon is improved -Redesigned EWEC- and the second Thai-Myanmar Friendship bridge is completed in 2019. Mae Sot is the center of a garment and apparel cluster in Thailand relying mainly on labor from across the border in Myanmar. The Thai government is keen to develop a major border SEZ in Mae Sot and with improved border facilities, some of the main Thai labor intensive industries will move to Myawaddy while industries on the Thai side will focus on higher value-added components and R&D. The development of a cross-border special economic zone (CBSEZ) is possible (Abonyi and others 2014). Myawaddy is included in the 3<sup>rd</sup> CTD which will be approved by ADB in 2018 and is not likely to be completed until after mid-2020s. Investments in transport and border crossing facilities are being undertaken by Thailand. Myawaddy-Mae Sot is a strategic border point which will expand in the future. The 3<sup>rd</sup> CTD includes the preparation of a joint urban master plan which could support the formulation of a more comprehensive future CTD after 2025.

**Figure 3: GMS Economic Hotspots**



**Table 3: List of all the GMS border towns, CTDPs towns and GMS Economic Hotspots**

	<b>Border Points/Projects</b>	<b>Location</b>
<b>I</b>	<b>GMS border towns</b>	
1.	Ruili-Muse	PCR-Myanmar
2.	Hekou-Lao Cai	PCR-Viet Nam
3.	Pingxiang-Dong Dang	PCR-Viet Nam
4.	Dongxing-Mong Cai	PCR-Viet Nam
5.	Tachilek-Mea Sai	Myanmar-Thailand
6.	Mohan-Boten	PCR-Lao PDR
7.	Chiangkhong-Houayxay	Thailand-Lao PDR
8.	Myawaddy-Mea Sot	Myanmar-Thailand
9.	Nakhorn Panom-Thakhek	Thailand-Lao PDR
10.	Mukdahan-Kaysone Phomvihane	Thailand-Lao PDR
11.	Dansavanh-Lao Bao	Lao PDR-Viet Nam
12.	Hitkhi-Ban Phu Nam Ron	Myanmar-Thailand
13.	Aranyaprathet-Poipet	Thailand-Cambodia
14.	Hat Lek-Chan Yeam	Thailand-Cambodia
15.	Nong Khai-Vientiane	Thailand-Lao PDR
16.	Bavet-Moc Bai	Cambodia-Viet Nam
17.	Dong Kralor-Veun Kham/Nong Nok Kian	Cambodia-Lao PDR
<b>II.</b>	<b>Previous CTDPs</b>	
1.	CTDP1 (2012) – Kaysone, Phine, Dansavanh, Dong Ha, Lao Bao and Moc Bai	Lao PDR and Viet Nam
2.	CTDP2 (2015) – Kampot, Sihanoukville, Houyay, Luang Namtha, Bac Giang, Mong Cai, Sa Pa.	Cambodia, Lao PDR and Viet Nam
3.	CTDP3 – Mawlamyine, Hpa-An, Myawaddy	Myanmar
4.	CTDP4 (2017) Stung Treng, Kratie, Kampong Cham, Thakhek, Paksan,	Cambodia and Lao PDR
5.	Secondary Corridor Towns Development Project - Buon Ma Thuot, Ha Tinh, and Tam Ky	Viet Nam
<b>III.</b>	<b>Previous Tourism Projects</b>	
1.	1 <sup>st</sup> Tourism for Infrastructure for Inclusive Growth Project- Kampot, Kep, koh kong, Champasak, Khammouane Luang Prabang, Oudomxay, Dien Bien Phu, Ha Tinh, Kien Giang, Lao Cai and Tay Ninh	Cambodia, Lao PDR and Viet Nam
2.	2 <sup>nd</sup> Tourism for Infrastructure for Inclusive Growth Project- Kep, Sihanoukville, Champasak (Nakasang), Vientiane Province (Vangvieng), Luang Prabang, Hoa Binh, Nghe An, Quang Binh, Quang Tri and Thua Thien Hue	Cambodia, Lao PDR and Viet Nam
<b>IV.</b>	<b>Economic Hotspots</b>	
	<b>Priority Economic Hotspots</b>	
1.	Greater Pakse Area-Ubon Rachathani	Lao PDR-Thailand
2.	Lang Son/Dong Dang-Pingxiang	Viet Nam-PCR
3.	Mong Cai-Dongxing	Viet Nam-PCR
4.	Poipet-Bavet	Cambodia
	<b>Potential Future Economic Hotspots</b>	
1.	Kaysone Phomvihane-Mukdahan	Lao PDR-Thailand
2.	Myawaddy-Mae Sot	Myanmar-Thailand

#### IV. ANALYSIS, AREA PROFILING AND PROJECT IDENTIFICATION FOR SELECTED ECONOMIC HOTSPOTS

##### A. Greater Pakse Area (Lao PDR)

###### 1. Background

76. The GMS Urban Development Strategic Framework (ADB, 2015) does not include Pakse in the list of priority border points, but it recognizes that the list is preliminary and “may be updated and amended from time to time”.

77. Rapid economic developments over the past decade and infrastructure investment in the Champasack province of Lao PDR where Pakse is located and in the neighboring provinces of Salavan, Sekong and Attapeu have contributed to establish the Greater Pakse Area as a major GMS regional center in the South of Lao PDR, and to strengthen the urban area’s ties with the neighboring countries of Cambodia, Thailand and Viet Nam. Economic and trade ties with the border Province of Ubon Ratchathani in Thailand are particularly strong (Zola, 2013).

**Figure 4: Pakse and Neighboring Provinces in Lao PDR and Thailand**



Source: (FNE travel, 2018)

78. Many of the economic changes in the Greater Pakse area are driven by the implementation of the GMS and the ACMECS regional cooperation programs as well as the creation of the ASEAN Economic Community (AEC) in 2015.

79. The emergence of the Greater Pakse Area as a GMS border economic hotspot is due to both its “connectivity” and its “geography” (ERIA, 2016). With regard to connectivity, Pakse is on the GMS Central Economic corridor (CEC) linking Vientiane to Phnom Penh and Sihanoukville in Cambodia. About 140 km south of Pakse, the CEC passes the border with Cambodia at the Nong Nokkien (Veun Kham-Lao PDR) and Trapeang Kreal (Cambodia) border point before reaching the city of Stung Treng, 50 km further south. In the future, the CEC can branch east and reach Ho Chi Minh City via the Cambodia-Viet Nam border points of Trapeang Phlong (Cambodia)-Xa Mat (Tay Ninh Province of Viet Nam) or via the Hoa Lu/Loc Ninh Border gate in Binh Phuoc Province of Viet Nam (see Figure 5). Another possible border crossing is further south at Bavet (Cambodia)-Moc Bai (Viet Nam). This would shorten considerably the distance between southeastern Thailand – Ubon Ratchathani, Province of Thailand - and Pakse to Ho Chi Minh City - to between 740 and 810 Km depending on the border gate - and enhance the GMS hub position of the Greater Pakse Area.

80. To the East of Pakse, the border between Thailand (Ban Chongmek) and Lao PDR (Ban Vangtao) is about 40 km away via a new 4 lane highway built under a BOT scheme. The Chongmek-Vangtao border point is a strategic border on the so-called “parallel” East-West Corridor (Para-EWEC) linking Bangkok (Thailand) via the Thai border city of Ubon Ratchathani, 130 km from Pakse, to the Central Highlands of Viet Nam (Kon Tum province) and the port cities of Quy Nhon and Ho Chi Minh City. It is estimated that the Para-EWEC shortens the distance from Bangkok to the Vietnamese coast by 450 km compared to the East-West Economic Corridor (EWEC). In December 2003, the Thai government approved the development of the Chongmek border as a strategic border point. Since then both the Thai and Lao governments have made extensive infrastructure investments to upgrade border facilities (Zola 2013). On the Lao side however, facilities need further investment.

**Figure 5: Map of the Emerald Triangle and the Para-EWEC**



Source: www.ubonchamber.org

81. With regard to geography, because of its location, Pakse's economy is driven by two major growth factors, rich agriculture and tourism. With respect to both agriculture and tourism, the Greater Pakse Area and the Champasack province of Lao PDR of which it is the capital, should not be viewed in isolation. The whole southern part of Lao PDR, including the provinces of Attapeu, Sekong and Salavan, is a major economic center for agricultural production and agro-processing. The very fertile soil and unique favorable climatic conditions, particularly on the Bolaven Plateau about 50 km east of Pakse and elevated between 1,000 and 1,350 meters above sea level, make the area a major agricultural producer within the GMS region. Paksong is the center of the Bolaven Plateau (see Figure 5). For example, around the Bolaven Plateau a large share of Lao PDR's robusta and arabica coffee as well as a wide variety of vegetables and fruits, cardamom, tea and rattan are produced. Other agricultural products grown in the southern Laos area are cassava including organic cassava, rubber, tobacco, pineapple, bananas and other fruits as well as rice. Most of the agricultural products grown in the southern part of Laos are exported to Thailand either for future processing or distribution to markets in Thailand or for exports to third countries. All the major Thai agribusiness firms are based around Pakse and across the border with Thailand in the Ubon Ratchathani province. The Greater Pakse Area acts as a center where consolidation and first value added activities take place before exports to Thailand through the Vangtao (Lao PDR)-Chongmek (Thailand) border point.

82. The second driver of economic growth, tourism, is similarly centered around the Greater Pakse Area which act as a tourism hub. The famous UNESCO World Heritage site of Vat Phou, a large ancient Khmer temple complex and city, is located about 40 km from the city of Pakse. In addition, the whole southern part of Lao PDR has many attractive eco-tourism sites such as Si Phan Don (4,000 islands on the Mekong River), the Bolaven Plateau and its many trails and waterfalls around it, the Khone Phapheng water falls on the Mekong, attractive riverbanks of the Mekong as well as indigenous villages. The city of Pakse itself has attractive heritage architectural features and tourism potential though it is not fully exploited.

83. Pakse is also a major center and transit point for tourism to the Emerald Triangle, a regional tourism initiative set up under the ACMES regional cooperation program and which includes famous tourist attractions located around where the borders of Cambodia, Lao PDR and Thailand meet (see Figure 5).

84. The area includes Preah Vihear and Odor Meanchey provinces for Cambodia, Champasack and Salavan provinces for Lao PDR, and Ubon Ratchathani and Sisaket provinces for Thailand. The Emerald Triangle includes famous tourism sites such as the Pha Taem National Park in Ubon Ratchathani Province of Thailand, the Khao Pra Vihan National Park in Sisaket Province of Thailand, the Preah Vihear Khmer Temple complex of Cambodia, the Wat Phu Temple complex and the Khone Phapheng waterfalls in the Champasack Province of Lao PDR. A Tourist Information Center for the Emerald Triangle has been set up in Pakse with financial support from Thailand. Finally, tourists on the way to or coming from the Angkor Wat complex in Siem Reap in Cambodia often also visit Pakse as part of a larger tour. With improving infrastructure and enhanced accessibility of tourism sites around the whole southern area of Lao PDR the number of tourists can be expected to grow significantly in the future.

85. Finally, the good connectivity and geographical location of the Greater Pakse Area makes it attractive to foreign investment driven by Thailand's plus one strategy where Thai based companies relocate some of their components manufacturing to neighboring countries. Already a number a number of Thai based Japanese companies have relocated some of their operations to Pakse in the newly established Pakse-Japan SME SEZ (PJSEZ) -see below-.

86. At the strategic level, the 7th National Socioeconomic Development Plan (2011-2015) of Lao PDR for the first time recognizes the importance of urban areas as drivers of economic growth

and their major contribution to the country’s goal of eradicating poverty. The Lao PDR 8th National Social and Economic Development Plan 2016-2020 further confirms the importance of urban areas particularly those areas with connectivity to neighboring countries, such as Greater Mekong Sub-region, Asian Highway, East-West Corridor and North South Economic Corridor. As an emerging main urban center in the southern part of Lao PDR, the Greater Pakse Area as a center for agricultural production and trading, services and tourism is one of the main urban centers targeted by the Lao PDR’s government in its strategy to eradicate poverty. In fact, the Greater Pakse is in the process of achieving official city status -Nakone- similar to the capital city of Vientiane. Pakse is also included as a priority urban center in the “National Urban Sector Strategy and Investment Plan to the Year 2020” prepared by the DHUP in 2011 (DHUP, 2011).

## 2. Socio-Economic Profile

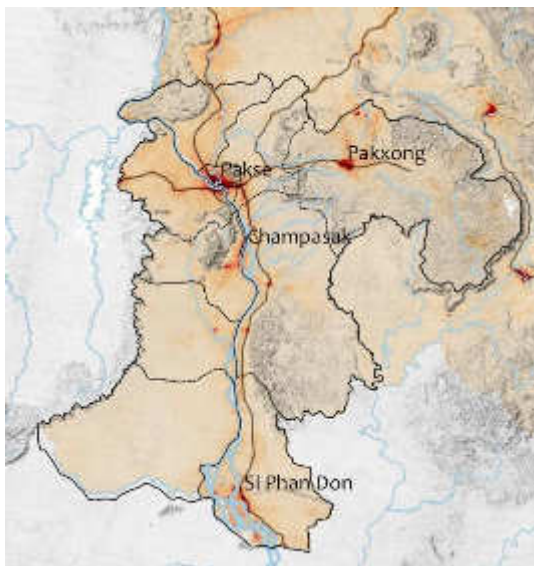
87. Champasack Province is the third largest province by population size with a total of 694,000 people after Vientiane Capital and Savannakhet Province (UNFPA, 2016). Champasack Province covers an area of 15,415 square kilometers and shares borders with Thailand and Cambodia. The province consists of 10 districts with Pakse being the administrative and commercial provincial capital and a total land area of 12,508 ha (Department of Planning and Investment, Champasack, 2018).

### a. Social characteristics

#### (i) Population

88. The population of the Champasack province has increased by almost 50 percent in the period from 1995 to 2018, from 501,000 to 714,000. The working age population (age 14-60 years) totals 426,000. As can be seen in Figure 6, the population distribution is centered around a few pockets of economic activity, mainly Pakse, Paksong, Champasack and the larger Si Phan Don area.

**Figure 6: Population distribution in Champasack province**



Source: Phil Knight.

89. Pakse, is the most populous city in the Southern part of Lao PDR. Pakse district is composed of 42 villages and 13,517 households. The Pakse district population has grown from 64,000 in 1995 to 79,000 in 2005. Since then growth has leveled off and stood in 2017<sup>7</sup> at 81,525 of whom 42,013 are the women. Population density is 644 people per square kilometer (Department of planning and investment, Champasack province, 2017). Including the urban population of the neighboring districts<sup>8</sup> (which are an extension beyond the Pakse district urban areas), the total urban population of the greater Pakse area is at around 133,000 (Lao Statistics Bureau, Ministry of Planning and Investment, 2015).

**Table 4: Total projected population of Pakse and other districts**

Districts	Total pop. in 2010	Total pop. in 2015	Total pop. in 2020	Total pop. in 2030
Pakse	86,432	100,200	116,200	148,800
Xanasomboun	68,380	77,000	86,700	107,800
Bachiang	53,553	60,300	67,900	84,500
Pathoumphone	56,439	63,600	71,700	89,200
Phonthong	93,594	105,400	118,700	147,600
Total	358,398	406,500	461,200	577,900

Source: (GHK International, in association with Halcrow& Lao Consulting Group, 2011)

90. The Pakse urban development strategy (GHK International, in association with Halcrow& Lao Consulting Group, 2011) includes more optimistic population figure as shown in Table 4. The population is expected to continue its growth path over the next 10-15 years. The growth of the city has been and will continue to be fueled by an increased number of investments and jobs available as well as a general trend of urbanization.

### **(ii) Education and skills**

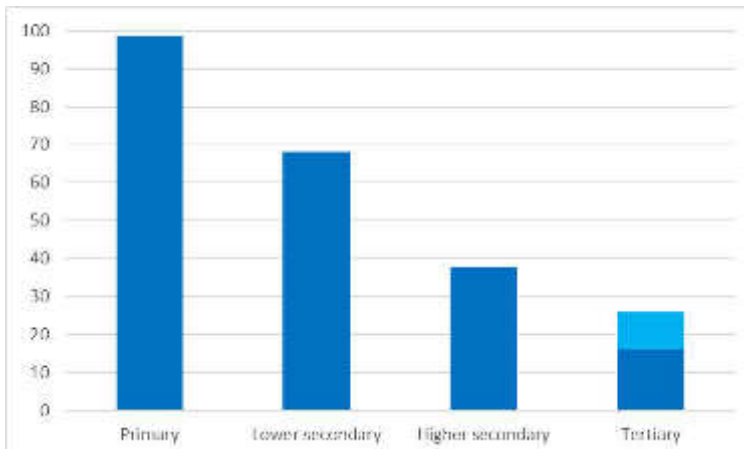
91. Education and skills development is a major challenge, both in Champasack as well as for the entire country. Champasack is traditionally one of the provinces with the highest education scores. The literacy gender gap was generally narrow, with high levels observed in Champasack. Primary enrollment rates in Champasack province were close to 99 percent but drop to 68.2 percent for lower secondary level education in spite of compulsory school attendance in primary and lower secondary grades. Higher secondary education and tertiary education enrollment further drops to only 37.8 percent and 36 percent (vocational school 16 percent, college and university 10 percent) respectively (see Figure 7). Enrollment rates continue to improve but should be drastically increased for lower and higher secondary education. Additionally, it is also the quality of education that must be enhanced. According to a World Bank survey (2014), education in Lao PDR does not sufficiently prepare graduates to join the workforce. For example, Lao adults with “more than a secondary education” in Lao do as well as primary educated adults in Viet Nam. The same survey also showed that a large number of firms in Lao reported that “an inadequately educated workforce” is either a major or a severe constraint to them compared to neighboring countries.

<sup>7</sup> 2017 Socio-economic Report, Pakse District

<sup>8</sup> Pakse, Xanasomboun, Bachiang, Pathoumphone, Phonthong



**Figure 7: Enrollment rates by level of education**



Note: tertiary education includes university students (dark blue) and vocational training (light blue)  
Source: (Department of Planning and Investment, Champasack, 2018)

92. Higher education can be obtained in Champasack through either the university or vocational education service providers. Champasack university has been established in 2003 and the faculties include science, agriculture and engineering. Currently around 5,000 students are enrolled and the university expects to increase the number of students to 10,000 by 2020. About 400 of them are studying courses or undertaking research related to agriculture, mostly in one of the 20 research centers. Additionally, there are 27 educational institutions offering education in IT, health services, agriculture and forestry, or other technical and vocational training. Two more technical/vocational schools are presently under construction.

93. A key challenge in the tertiary sector is currently the lack of funding for research and laboratories which are critical to strengthen its contribution to knowledge generation. Related to that, the quality of teaching and research must be improved to equip graduates with the tools to become productive workers. Also, curriculums must be enhanced so the skills and knowledge provided matches the needs and requirements of employers and the labor market in general. Some of this can be attained by developing linkages between the business community and academia. Linkages with foreign universities (from within the region), such as Ubon Ratchatani or existing linkages with Kasetsart University, should be utilized to undertake joint research as well as strengthening curriculum development. In fact, the University of Ubon Ratchatani has a strong interest in increasing ties with Pakse university to advance knowledge in agriculture and sciences.

## **b. Local economy**

### ***(i) Macroeconomic Perspective***

94. The Champasack province is a very dynamic region with economic growth for 2017 recorded at 8.12 percent compared to national economic growth of approximately 6.9 percent (ADB, 2017) (Department of Planning and Investment, Champasack, 2018). Income per capita increased since 2010 from USD 1,097 to USD 2,488 in 2017, which marks an annual growth rate of around 18 percent. However, as for the rest of the country much of this growth can likely be attributed to investments, which amounted to more than USD 3 billion in agriculture, industry, services and special economic zones (SEZ). The economic growth of Pakse in 2017 reached 10.5 percent and the GDP per capita was 2,065 USD.

95. The sectoral composition and growth contribution of the Champasack economy is detailed in Table 5:

**Table 5: Composition and drivers of growth of the Champasack economy**

	Contribution to GDP	Contribution to GDP growth
<b>Agricultural sector</b>	24.34 percent	2.6 percent
<b>Industrial sector</b>	34.97 percent	10.1 percent
<b>Services sector</b>	40.69 percent	9.97 percent

Source: (Department of Planning and Investment, Champasack, 2018)

96. The Champasack economy is undergoing a major transformation in terms of sectoral composition, away from agriculture towards industry and services. For example, compared to 2010, the agricultural sector decreased its GDP contribution from 40 percent to less than 25 percent, and increased the contribution of industry and services from 29 to 35 and 31 to 41 percent respectively. In Pakse district agriculture represented about 10.5 percent while industry and services represented about 36.3 percent and 53.2 percent respectively in 2017 (Department of planning and investment, Champasack province, 2017).

### **(ii) Employment**

97. In terms of employment on the provincial level, the agricultural sector still accounts for the large majority of employment (64.9 percent), followed by services (26.6 percent) and industry (6.9 percent). Unemployment is largely inexistent with the unemployment rate being recorded at 1.6 percent – of which much can be explained by frictional unemployment. However, the importance of agriculture has declined relative to other sectors, with increasing urbanization and alternative employment opportunities. In Pakse district, 60 percent of the population are occupied in trade, services, daily works and handicraft, 28 percent are government officers and only 12 percent are the farmers.

**Table 6: Employment data for Champasack province**

	Employment	Employment (in percent)
Total labor force (age 14-60)	426,316	100
Agricultural sector	276,680	64.9
Industrial sector	29,415	6.9
Services sector	113,400	26.6
Unemployed	6,821	1.6

Source: (Department of Planning and Investment, Champasack, 2018)

### **(iii) Sectors**

98. When considering economic aspects, Champasack province should not be viewed in isolation. Neighboring provinces of Salavan, Attapeu and Sekong are also linked economically, socially and culturally with Champasack. Pakse city, the capital of Champasack province, acts as the main linchpin for the whole Southern region. It is the center of the region for trade, services, tourism. With its infrastructure connectivity and related transport services (airport, buses, etc.) it is also the main transit town to the central and southern provinces and to neighboring countries. The province is also rich in natural resources like bauxite, copper, barite, peat, iron, lead, zinc,

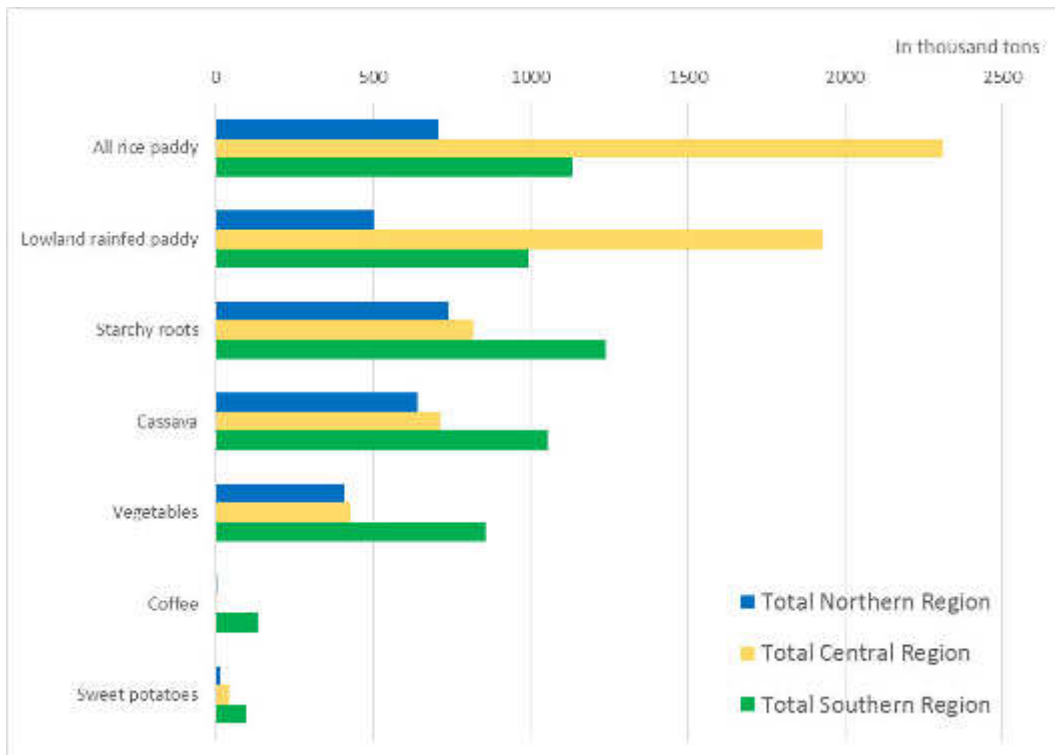
petroleum gas as well as hydropower (GIZ, 2009). The following section provides further sectoral information.

### Agriculture

99. The very fertile ground and favorable climatic conditions make the region a major agricultural producer within the GMS. For example, around the Bolaven Plateau a large share of Lao PDRs coffee as well as tea, cassava and rattan is produced. Other agricultural products are fruits and vegetables. Pakse has grown to a provincial market town where consolidation and first value added activities are taking place and there are close links to Thailand.

100. The importance of the whole Southern Lao region can be seen in Figure 8. In terms of agricultural production, the four southern provinces of Champasack, Salavan, Attapeu and Sekong are considered as one region (Southern region) because the catchment area for agricultural products is irrespective of provincial borders. The main crops produced in the Southern region are starchy roots, cassava, various kinds of vegetables, coffee and sweet potatoes. The Southern region produces also significant amounts of rice paddy, but paddy is relatively less important compared to other provinces.

**Figure 8: Agricultural production by crop and region, 2016 (in thousand tons)**



Note: Southern region includes the provinces of Champasack, Salavan, Attapeu and Sekong; Central region includes Vientiane Capital, and the provinces of Xiengkhuang, Vientiane, Borikhamxay, Khammuane, Savannakhet, Xaysomboun; The Northern region includes the provinces of Phongsaly, Luangnamtha, Oudomxay, Bokeo, Luangprabang, Huaphanh, Xayabury.

Source: (Ministry of Agriculture and Forestry Lao PDR, 2018)

**Table 7: Agriculture in Southern Lao PDR: Products, planted area and production volume**

Province	Total land area (in sqkm)	Estimated planted area	Output in tons (selected products)	Major products
Champasack	15,415	4,972	2.25 million tons	Coffee, maize, rice, cassava, soybeans, black and red bean, starchy, peanut, pig meat, beef/cattle & buffalo meat, poultry meat
Salavan	10,691	3,380	2.01 million tons	Coffee, maize, rice, cassava, soybeans, peanut, starchy, pig meat, beef/cattle & buffalo meat, poultry meat
Attapeu	10,320	1,094	0.39 million tons	Rice, maize, starchy, cassava, poultry meat
Sekong	7,665	997	0.27 million tons	Coffee, maize, peanut, starchy, cassava, pig meat, poultry meat
<b>Total</b>	44,091	10,443	4.92 million tons	

Note: Selected products include rice/paddy, maize, soybean, mungbean, coffee, peanut, black and red bean, starchy, cassava.

Source: (Ministry of Agriculture and Forestry Lao PDR, 2018), (JIRCAS, 2013)

101. Table 7 shows how important agriculture is for Southern provinces by contrasting estimated planted land area with total land area of the province. For example, more than 32 percent of land are dedicated to agriculture in Champasack and Salavan, and more than 10 percent in Sekong and Attapeu. Agricultural production of the Southern region is close to 5 million tons annually – with Champasack and Salavan claiming the lion’s share.

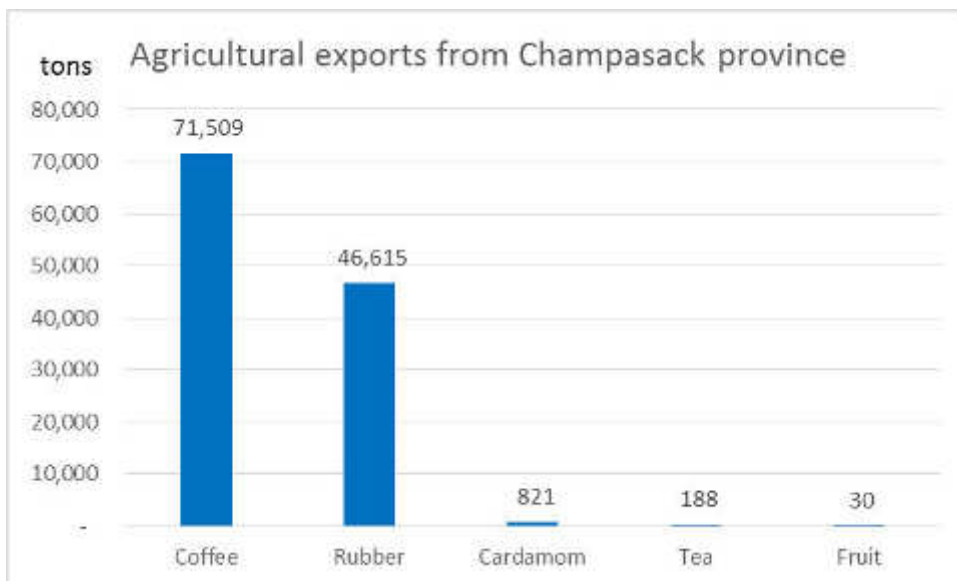
102. The Lao agricultural sector as a whole is undergoing a major transition from largely subsistence farming to commercial agriculture. Whereas some rural areas are still relying on farming as their main food supply, there are regions where commercial farming has been well-established, including in the Southern Lao provinces. Much of that transition has been driven by foreign investments or linkages with foreign buyers. Foreign buyers increasingly recognize the value of agricultural products being produced in Lao PDR. Together with an abundance of fertile land available for agriculture and relatively cheap labor, Champasack and neighboring provinces have become an attractive investment destination. This development was supported by well-functioning cross-border economic zones with Thailand where the strategic and operational interests of the two countries are well aligned (Abonyi & Zola, 2014).

103. For example, (private and foreign) investments in the agricultural sector in Champasack province alone amounted to USD 680 million (LAK 5,578.22 billion) over 181 projects (Department of Planning and Investment, Champasack, 2018).

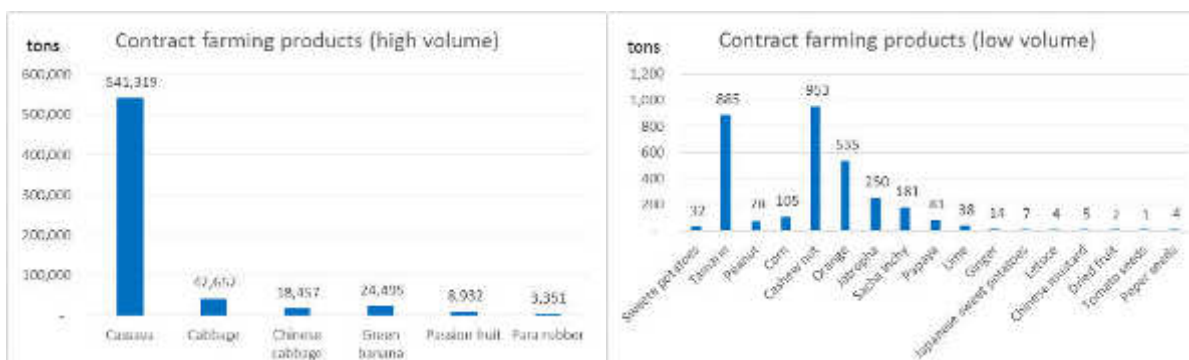
104. Agricultural products also dominate the current trade basket of Champasack province. Around 2/3<sup>rd</sup>s or USD 143.5 million of 2017 exports are agricultural, which represents a 24 percent increase compared to 2016. The large majority of export earnings are generated through coffee (USD 82 million) and contract-farming (USD 50 million). In volume terms, contract farming exports are very important to the Champasack region, as can be seen in Figure 10. Cassava exports alone amount to more than 540,000 tons per year, followed by cabbage (60,000 tons) and green bananas (24,000 tons). Cassava, especially organic cassava, is a relatively recent product being exported to Thailand. According to the Champasack chamber of commerce, exports of cassava are restricted through import quotas in Thailand. They could therefore be much higher. Also,

demand for organic cassava is larger than supply but most cassava, despite being organic, is exported as regular cassava as it is not certified.

**Figure 9: Agricultural exports from Champasack province 2017, in tons**



**Figure 10: Agricultural exports in 2017 (under contract farming arrangements), in tons**



Source: (Department of Planning and Investment, Champasack, 2018)

105. Trade between Lao PDR and neighboring countries has for long been dominated by so-called “gentlemen agreements”. These are informal contracts between buyers and sellers and worked relatively well in the past because they were established based on family relationships and/or trust. However, the increased complexity of trade and the transparency requirements of the rules-based trading system limit the use of “gentlemen agreements”.

106. The export of Lao agricultural products to Thailand through Chongmek is governed by an annual memorandum of understanding (MOU) between Ubon Ratchathani and Champasack provinces. The process was initiated in 2004 with the ACMECS agreement, which is used by the Thai government to promote regional trade and investment between Thailand and CLMV countries. As part of this, the Ubon Ratchathani provincial commerce office formulated a contract farming project in 2004 to operate within the ACMECS framework which acts as an umbrella framework for product-specific MoUs. The MoUs are annually negotiated (including the type of

products) between interested Lao and Thai companies that have registered with their respective provincial commerce offices as being interested in participating in cross-border trade. To participate in the contract farming program, Thai firms are obligated to provide seeds as credit in kind to Lao counterpart companies for on-lending to farmers for planting. This arrangement fulfills the Lao Government's criteria for contract farming using the '2+3' approach; wherein farmers provide land and labor ('2'), while the investors provide technology, credit, and market access ('3').

107. In the 2016 MoU were 45 products included, among them 20 organic vegetables. A total of 13 Lao companies from Champasack, Salavan and Attapeu provinces and 31 Thai companies were registered as counter parts (see Annex I, Table A I-1 for a list of companies). Under this MoU, 36 contract farming agreements and 39 business-matching agreements covering 45 products have been signed in 2016, including 2 contract farming agreements for 29 organic products.

### **Box 1: Coffee industry in Lao PDR**

Lao PDR has a coffee history of more than 100 years. Since the mid-2000s, Lao PDR is focusing on growing Arabica coffee with an emphasis on niche high-quality coffee (incl. fair trade and organic).

Currently, coffee production is located in 10 out of 16 provinces in Lao PDR, with a high concentration in the three Southern provinces, Champasack, Sekong and Salavan, widely known as the Bolaven plateau. Small and medium size farmers make up around 80 percent of coffee producers in Lao PDR. GIZ estimates that more than 300,000 people depend on coffee production in Lao PDR. Production volumes are approximately 30 million tons annually. This is double the amount from around a decade ago.

The inbound supply is organized via collectors/buying agents, procurement stations in selected villages as well as direct purchase at the farm gate. A key challenge in the consolidation of coffee cherries is to maintain quality and a consistent supply stream.

There are half a dozen or so of large players in the coffee export space. All of them observe one of the following three main business models:

- focus on high quality niche coffee (targeting higher price segments, support small-holder farmers, leverage organic production, etc.)
- focus on classic trading model (buy cherries from small-holder farmers and export as green beans)
- focus on vertically integrated plantations (large-scale plantations financed with FDI, additional sourcing from small-holder farmers, export of green beans and some roasted coffee)

Laos' small population, its relatively low purchasing power and relatively immature coffee culture make foreign markets significantly more attractive than the domestic market. Coffee exports are Lao PDR's most valuable agricultural product, earning more than USD 67 million in 2016. Yet, Lao PDR is a tiny player both regionally and globally. Lao PDR's main markets are Viet Nam (49 percent), the EU (24 percent), Japan (12 percent), Thailand (6 percent) and

the United States (4 percent). However, there is anecdotal evidence of large-scale coffee smuggling to Viet Nam, which is not included in the above figures.

There is a strong interrelationship between existing markets and supply chain structures, which are also reflected in part in the existing trade pattern. The majority of exports from Lao PDR enjoys little value-added and is exported as green beans in spite of incentives by the government to increase the value-added. As such, freshness is key and limits the distance coffee can travel (determined by the time from farm to market). Packaging and processing is done in and around Pakse.

In order to capture more of the value chain, better and cheaper access to finance is a critical corner stone together with developing direct linkages to overseas buyers, increasing product quality and consistency. In fact, the coffee sector lacks linkages with support and research institutions.

Sources: (GIZ, 2015), (Sisombat, 2014), (Motteux, 2017), (Emerging Markets Consultants, 2011), (UN COMTRADE, 2018), (International Coffee Organization, 2018)

### **Box 2: Example of contract farming in Lao PDR**

The Taniyama Siam-Advance Agro Company is a Thailand-Japan joint venture located in Thateng District, Sekong Province, Lao PDR. The Taniyama Siam Company has had a successful joint venture in Thailand for the production and export of vegetables to Japan for several years before deciding to expand their program to more fertile land in Lao PDR. Taniyama Siam took over the Advance Agro investment in Lao PDR in May 2007, investing approximately USD 1.88-2.19 million in a 62 ha, 30 years land concession. In 2009, the company was cultivating okra (*Abelmoschus esculentus*) on the land, which is processed at a small facility located at the site. The okra was processed, packaged, and chilled prior to export to Japan, via the cross-border check point at Vangtao and Bangkok International Airport. The facility processed approximately 500 kilograms of okra daily. The commodity was not organic but employed integrated pest management (IPM) technology and reduced application of pesticides. The operation utilized about 200 local laborers and 85 Lao technicians regularly. The target was to raise production to 2.5 tons per year to meet standing orders from Japan of one ton per day.

According to the project managers, the local laborers had become increasingly capable okra producers and were able to work without the intensive level of supervision that was required when the project began. The company expanded okra production through contract farming with local farmers using the laborers trained at the project, using the '2+3' approach. This allowed the company to use the land concession to experiment also with other crops, including asparagus and carrots - for export to the Japanese market.

Although the model was relatively self-contained, it provides a vision of future plantation-style agricultural production, Lao style; with on-site or local value-added processing for export, linked to producers trained in advanced agricultural production techniques by private agribusiness. Farmers who were trained in producing one or more crops at a land concession (or on land rented from local farmers who were then trained and paid to work their own land as company workers) soon realized that they are able to earn more by producing a crop under contract to a company than working as a daily laborer. In spite of changing the products few times, the straightforward Taniyama-Siam model has the potential to be replicated successfully elsewhere

in Lao PDR and demonstrates that Lao products can access some of the most restrictive markets at an internationally competitive price.

Some of the critical factors for success would likely include:

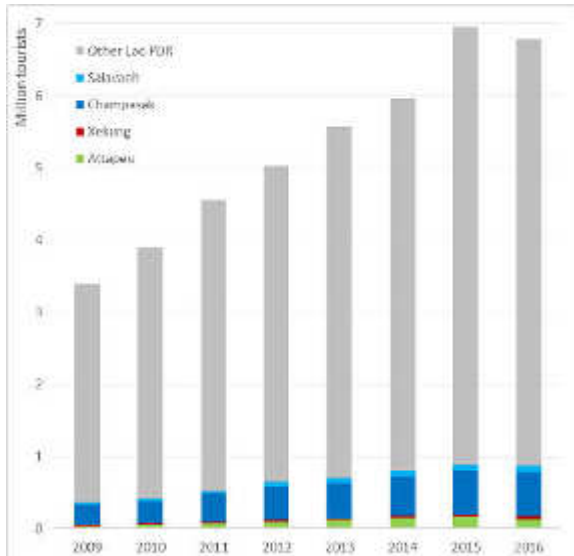
- Previous experience of the company with large-scale okra production in Thailand;
- Facility in obtaining a land concession in an area with fertile soils;
- Satisfactory road infrastructure to facilitate the transport of processed okra from Thateng District to the international airport in Bangkok; and,
- Japanese and Thai technical assistance was available for a reasonable period to train Lao laborers to cultivate a crop previously unknown to them. In fact, Lao laborers were trained for an extended period of time at the farm in Thailand to teach farmers the necessary skills.

Source: (Zola, 2009, pp. 34,35)

### Tourism

108. Tourism is already one of the top revenue earners in the country. Only the minerals sector generates more income than tourism (Ministry of Information, Culture and Tourism, 2016). The number of tourists to Lao PDR has been increasing sharply since 2009, from around 3.4 million visitors to 6.8 million visitors in 2016.

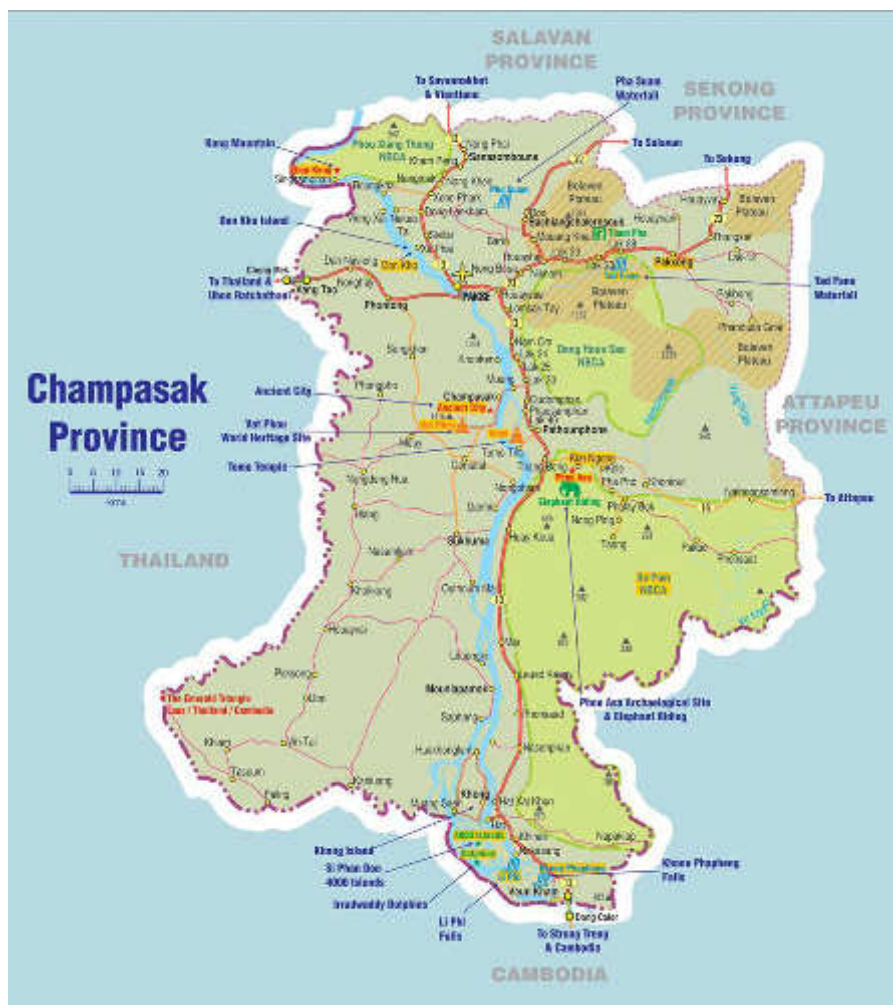
**Figure 11: International visitors to Lao PDR**



Source: (Ministry of Information, Culture and Tourism, 2016)



Figure 12: Tourism sites in Champasack



Source: (Lao National Tourism Association, 2018)

109. As can be seen in Figure 12, there are numerous interesting tourism sites in Champasack province. Yet, the share of the Southern Lao provinces (Champasack, Attapeu, Salavan, Sekong) in Lao tourism is relatively small with 13 percent (colored area of columns in Figure 11). But the Southern region is benefitting disproportionately from growth in tourist numbers. For example, Attapeu has quadrupled the number of tourists in the past 8 years, Salavan tripled, and Champasack and Sekong were able to double. In a generally growing tourist market in Lao PDR, those four provinces were able to increase their share from 11 percent to 13 percent within the same period (Ministry of Information, Culture and Tourism, 2016). Especially the improved infrastructure and enhanced accessibility of tourism sites around the whole Southern area has helped to grow the number of tourists.

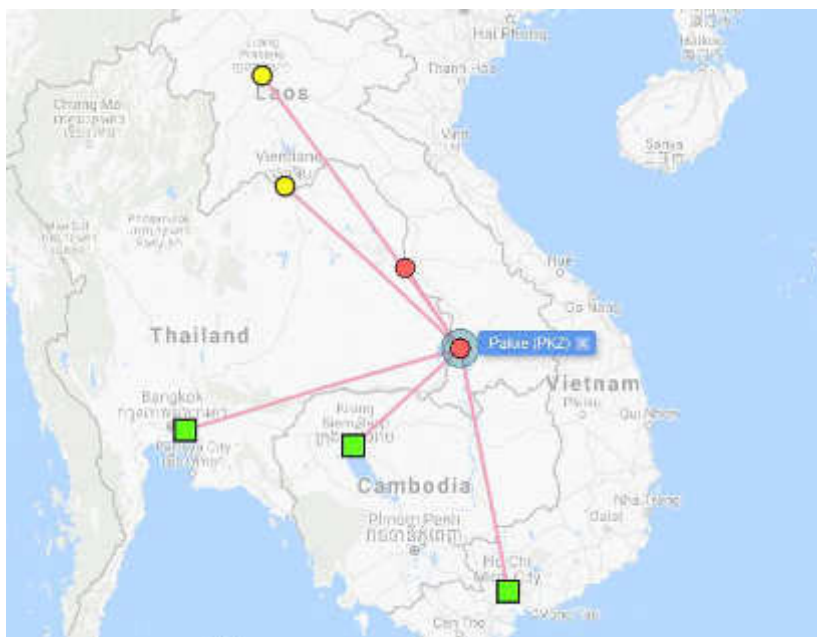
110. Although the number of accommodations and available beds has been decreasing at a low rate since 2014, all Southern provinces experience a high growth in guesthouses and restaurants. The number of hotels is decreasing slightly. Given current overall occupancy rates it suggests that existing accommodation is sufficient to absorb a significant growth in the number of tourists.

111. The age profile of tourists shows that they are either relatively young (age gap between 20-39 years) or relatively old (60 years and above). Visitors in Laos are also most interested in culture (70 percent), nature (67 percent), food and exploring a new destination (each 36 percent). At the same time, it should be noted that most tourists visit Lao PDR as part of larger tours. Around two thirds of all visitors visit Lao PDR in combination with neighboring countries (56 percent visit Thailand, 41 percent visit Cambodia, China or Viet Nam and 21 percent visit other Southeast Asian nations) (Ministry of Information, Culture and Tourism, 2016).

112. Given the travel profile of Lao tourists, the rich endowment in natural and cultural sites in the Southern Lao PDR and neighboring countries, as well as the central location of the Champasack region within the GMS, tourism development in and around Pakse/Champasack should not be viewed in isolation. The Southern part of Lao PDR has many attractive eco-tourism sites such as Si Phan Don (4,000 islands), the Bolaven Plateau, Vat Phou, the riverbanks of the Mekong, various historical sites and buildings in Pakse as well as some indigenous villages, all of which offer a very large potential for tourism development. Yet, developing tourism sites in Lao PDR alone may not be sufficient to fully reap benefits from tourism. Since most tourists visit Lao PDR in connection with neighboring countries, connectivity between tourism sites is of critical importance. This involves not only hard infrastructure connectivity (including last mile connectivity, restaurants, hotels, etc.) but also soft aspects such as visas, transport services and availability, hospitality services and others.

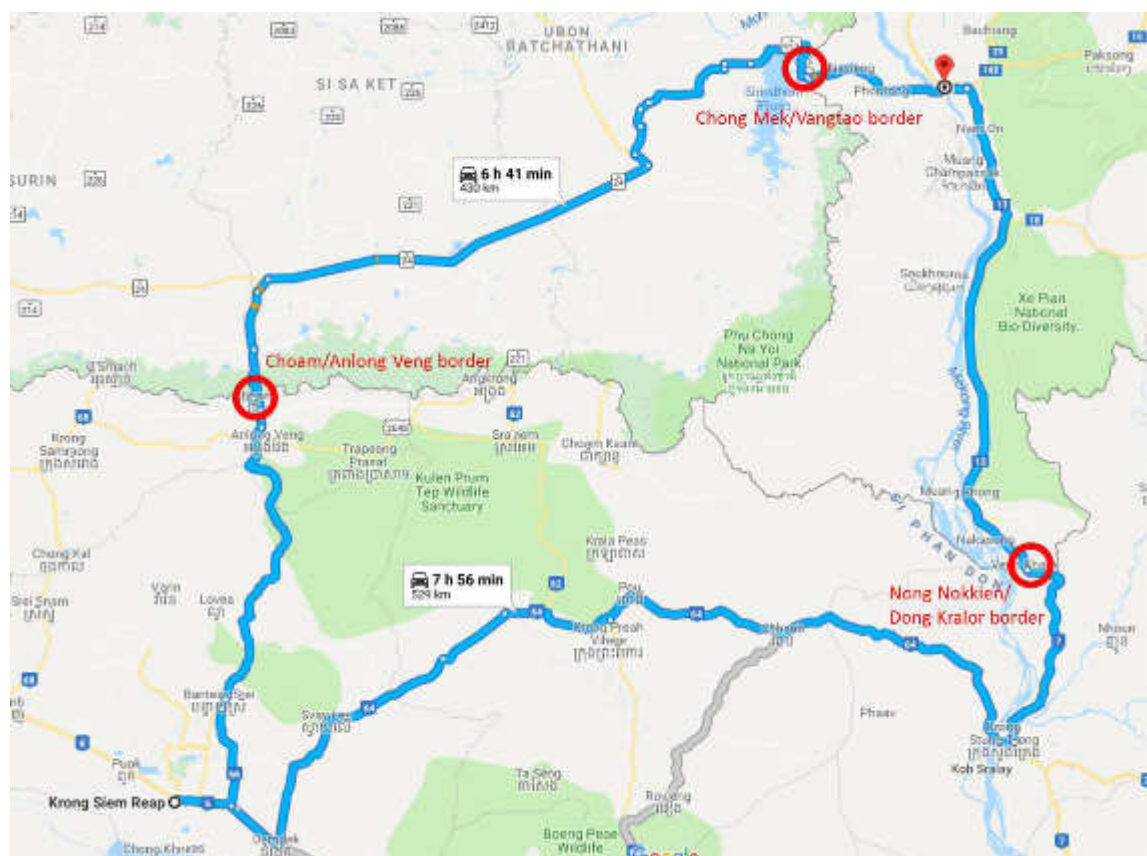
113. Currently the main ports of entry for tourism arrivals in the Southern Lao region are the borders with Thailand (Vangtao/Chong Mek – 229,133 arrivals) and Viet Nam (Phoukeua – 100,540 arrivals). Pakse airport and Nong Nokkien borders play currently only a minor role. This may well be attributed to the limited connectivity those two borders currently offer (see also Figure 13 and Figure 14). There could be potential for developing some kind of “ring road” between Thailand, Cambodia and Lao PDR with facilitated visa procedures, improved transport infrastructure and services, and other tourism services such as a common access pass to various tourism sites etc.

**Figure 13: Pakse airport connectivity**



Source: (FlightConnections, 2018)

**Figure 14: Route options from Pakse to Siem Riep**



Source: (Google maps, 2018)

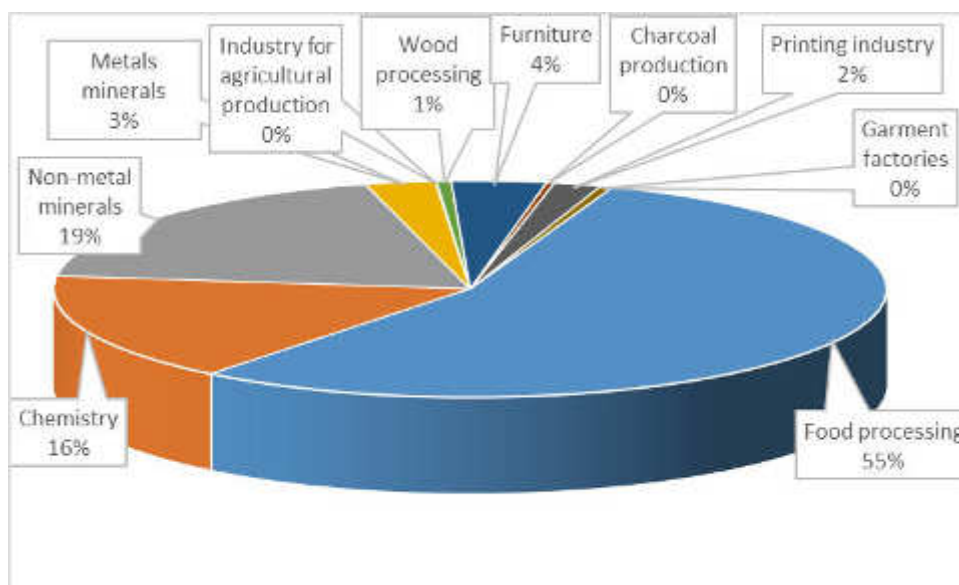
### *Manufacturing*

114. The manufacturing sector in Champasack province is relatively small by international standards. Yet, for Lao PDR it is the most important center for industrial activities in the South.

115. Over the past decade or so, the manufacturing sector has gained in economic importance (together with the services sector), largely fuelled by foreign investments. There is a total of 291 foreign enterprises registered in Champasack province. The large majority (203) are Vietnamese, with the remainder being Chinese (82) and Cambodian (1). Interestingly, there are no Thai companies registered in the province although strong business linkages exist with Thailand.

116. The greater Pakse area is the center of industrial activities as well as for value-added manufacturing in the Champasack province (to the extent this is done in Lao PDR rather than Thailand). As can be seen in Figure 15, the majority of firms in Champasack province are focused on food processing, followed by chemistry and non-metal minerals. With rising wages in Thailand and increasing productivity/competitiveness of Champasack province, food processing is one of the most promising sectors. The existing contract farming relationships could be at the heart of yet another level of cooperation in food processing. Cost advantages continue to drive (some) food processing activities from Thailand across the border to Lao PDR. For Lao PDR this means that Lao food processors will absorb more activities within the supply and value chain. The largest companies in Pakse are the factories of Beer Lao and Dao coffee.

**Figure 15: Composition of industrial sector in Champasack province 2017**



Source: (Department of Planning and Investment, Champasack, 2018)

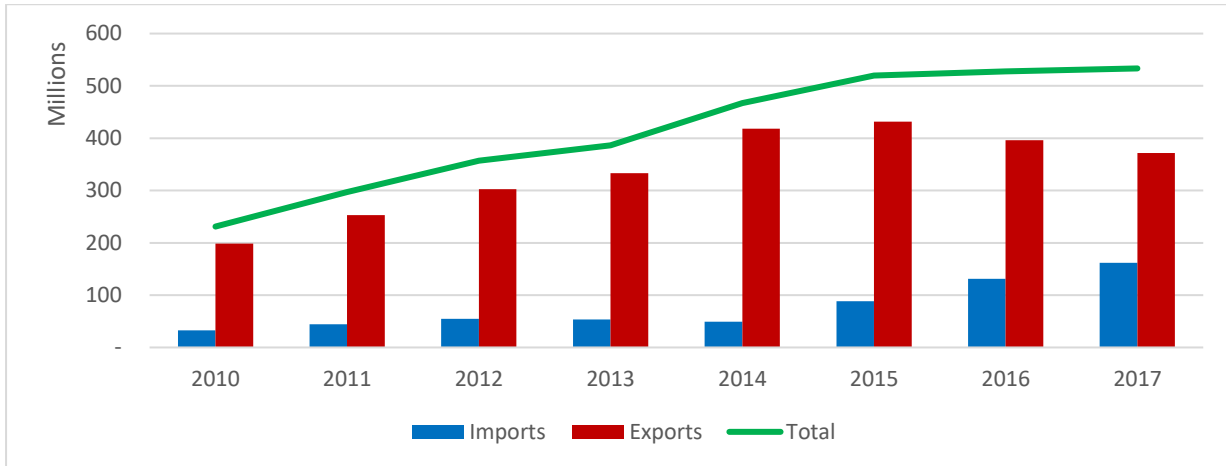
117. In terms of investments, Southern Lao PDR is benefiting from Thailand's plus one strategy where foreign investments source out some parts (usually simpler steps) of the production process. The objective of those investments is to reduce the impact of increasing wages in Thailand and other places. For example, there are a number of Japanese investments located along NR 13S and a new sub-development zone of the Champasak SEZ is presently being erected dedicated for Japanese investments. Many of these investments are linked to the automobile industry based in Thailand. Those investments have been ex-post included in the Pakse-Japan SME SEZ. Once the operations of the SEZ are in full swing, it is expected that the SEZ will be the main source of manufacturing activities in the province.

### *Trade and traffic*

#### Trade

118. As can be seen in Figure 16, total trade between Thailand and Lao PDR (via Chong Mek border) amounted to around USD 2 billion in 2017. Since 2010, trade has more than doubled. While in the beginning of the decade, the growth in trade was mainly driven by exports, in recent years trade growth was driven more by imports with exports slightly declining. Chong Mek border is one of the few borders where Lao PDR has a trade surplus. Currently exports account for approximately 70 percent and imports for the remaining 30 percent of trade (Department of Customs Thailand, 2018).

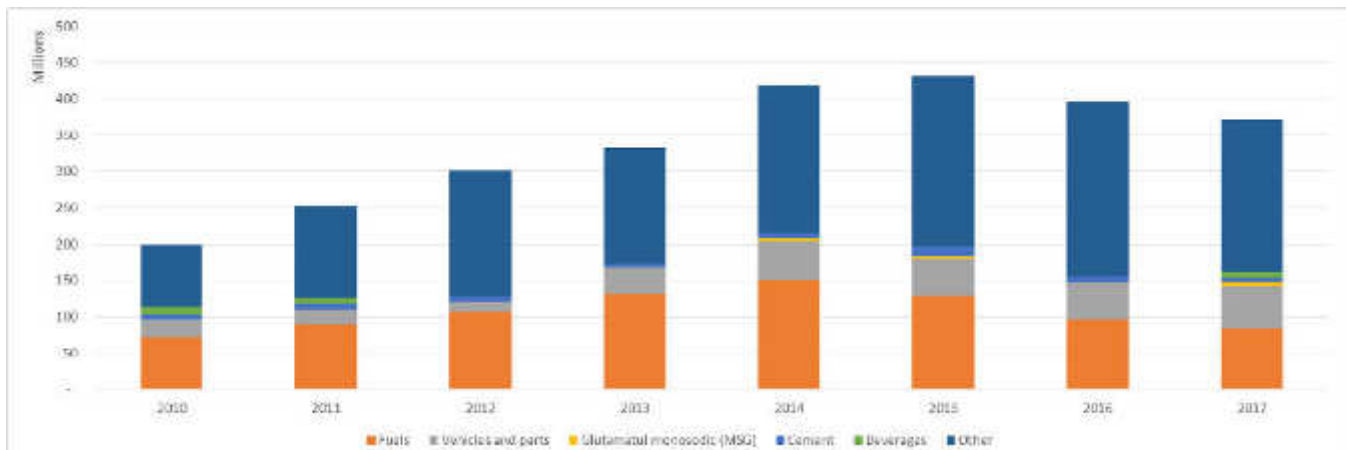
**Figure 16: Imports and exports at Chong Mek (Thailand) /Vangtao (Lao PDR) border, 2010-2017 (in million USD)**



Source: (Department of Customs Thailand, 2018)

119. As can be seen in Figure 17 (Lao imports), the share of other products on total imports has increased from 43 percent to 57 percent, indicating a diversification of the imports basket. Still the most dominant products are fuels as well as vehicles and parts. Together those two product groups accounted for 35-50 percent on average over the past years. (Department of Customs Thailand, 2018). A new product among the top-10 Lao imports is MSG and beverages have re-emerged after a 5-year absence period.

**Figure 17: Share of top-10 Thai exports (Lao imports) via Chong Mek/Vangtao border 2010-2017 (in million USD)**



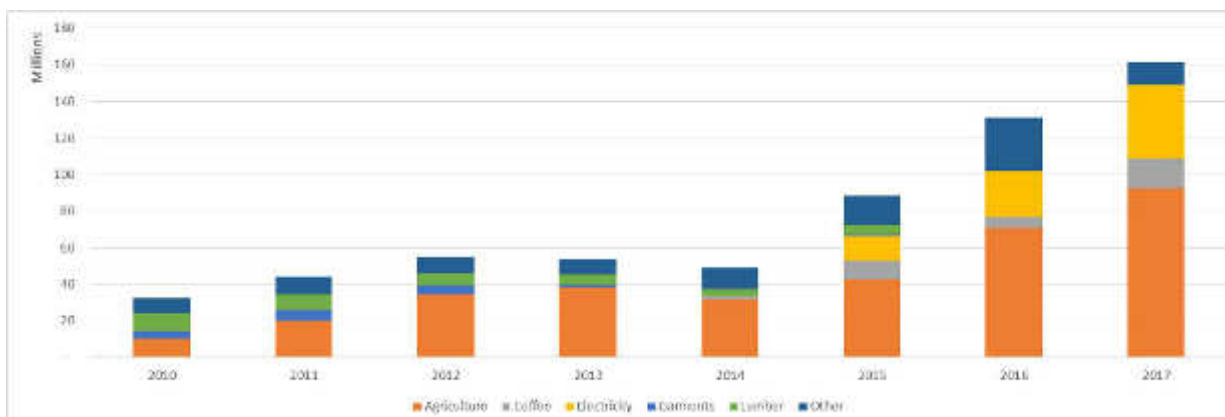
Note: above graph only considers products among top-10 exports of each year.

Source: (Department of Customs Thailand, 2018)

120. Figure 18 shows the evolution of the Lao exports in recent years. Generally, export concentration is on the rise with the export basket being constrained to only a few products including (various) agricultural products, coffee, and electricity. The export of Lao logs and lumber has ceased altogether with stricter enforcement of environmental protection rules and the exports of garments became relatively insignificant (outside the top-10 products). On the other hand,

electricity has emerged as a major export item for Lao PDR, making up around 25 percent of export value through Chong Mek/Vangtao border.

**Figure 18: Share of top-10 Thai imports (Lao exports) via Chong Mek/Vangtao border 2010-2017 (in million USD)**



Note: above graph only considers products among top-10 imports of each year.  
Source: (Department of Customs Thailand, 2018)

121. According to statistics from the department of planning and investment in Champasack, the single largest export commodity (in terms of value) is coffee (green beans, roasted, processed 3in1, or instant). There is also anecdotal evidence that there is large informal trade between Thailand and Viet Nam, especially in coffee that Viet Nam uses as blends for its robusta. Contract farming and rubber products account for 23 percent and 23.6 percent of all exports respectively (Department of Planning and Investment, Champasack, 2018).

### Traffic

122. The volume of goods being transported in the region has increased compared to 2016 by 11.7 percent to a total of 367,000 tons. At the same time, the number of trucks has reduced by 38 percent to 1,155.

123. The most frequented routes in the Southern region are the Lao North-South corridor (NR13S) as well as the road between Chong Mek and Paksong (Route 16E/W). NR13S connects mainly Pakse with Savannakhet and Vientiane and Pakse with the Lao/Cambodian border of Nong Nokkien. However, the route South of Pakse is used much less than the Northern part. Similarly, on route 16W the majority of international traffic takes place between Chong Mek and Pakse whereas traffic on route 16E are largely Lao trucks bringing goods from the Bolaven plateau to Pakse.

124. Most international transport is carried out by foreign vehicles, mainly Thai and Viet Nameese transport firms. The Lao transport sector has lost out because they are not able to compete with the more advanced fleets of their neighbors. Lao trucks are only used for the inbound supply chain whereas foreign trucks are used for the outbound supply chain.

### 3. Urban Master Plans and Peri-Urban Development

125. In a major development recognizing its importance, the town of Pakse acquired on 31 May 2018 the title of a “city” or “Nakorn”, the highest level of a town in Lao PDR at the same level as the capital of Vientiane. To honor its new status, Pakse announced its vision to become (i) a city emphasizing human resources development for science and technology; (ii) a commercial, services and tourism center; and (iii) a city with a clean and friendly environment; and (iv) a socially well- organized city.

#### a. Pakse Urban Strategy and Master Plan

126. A Pakse Urban Development Strategy to the year 2030 was prepared in 2011. The last Urban Master Plan for Pakse was prepared in 2001. A 2009 JICA study reviewed and updated the old master plan (JICA, 2010). A new detailed master plan is being finalized in 2018. The development strategy is partly based on the JICA study. It outlines some of the priority multi-sector investment needs for Pakse. The strategy is divided into 3 development phases -2011-2015, 2016-2020, 2021-2030-which have so far more or less guided the development of the growing town area of Pakse. However, several major urban, transport and environmental/ greening projects have been much delayed, mainly due to a shortage of funding. For instance, a third Xedon bridge, waste water treatment plants, the creation of urban parks, the development of Phou Salao as a tourist development zone, which were all targeted over the 2011 to 2015 period never happened although they are important for the development of the city.

127. During consultations for the preparation of the strategy, urban planning was found to be not well integrated with infrastructure planning and provision. Urban management skills were found to be weak and plans and regulations were not well enforced.

**Figure 19: Pakse and Surrounding Districts**



Source: Google

**Figure 20: Current Urban Area of Pakse**



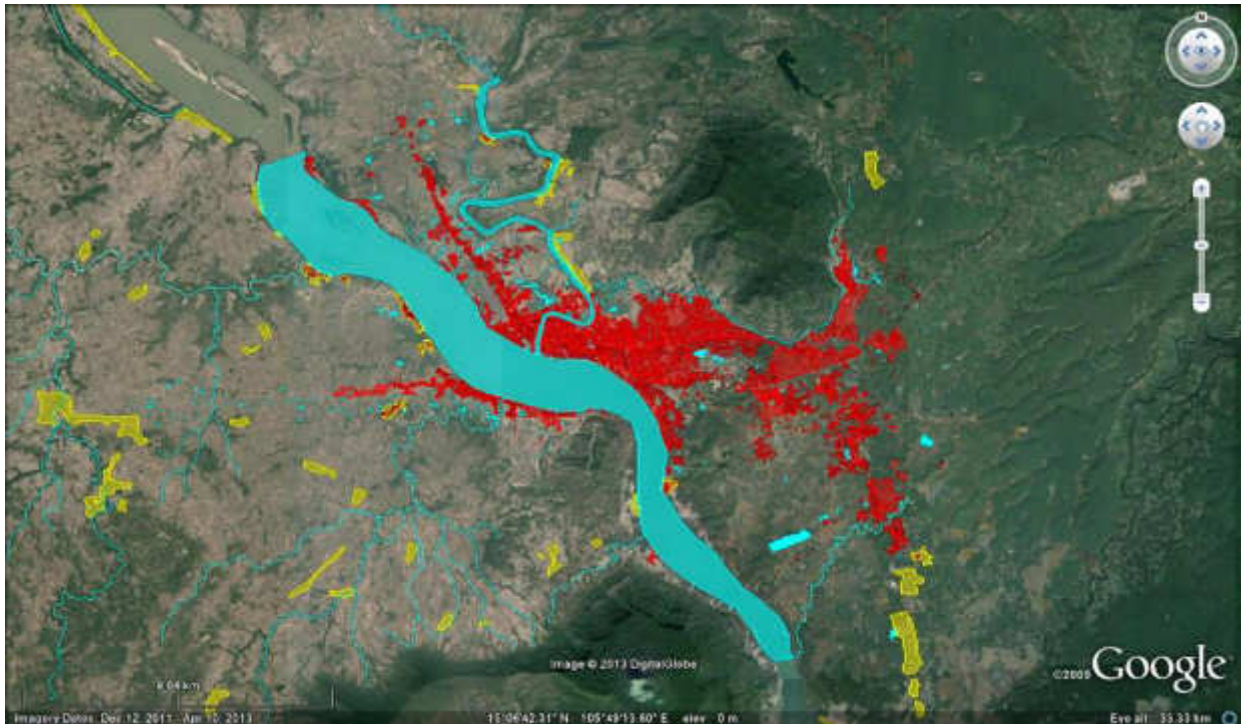
Source: (Google maps, 2018)

128. To understand the development of the city of Pakse as an emerging main GMS Border Economic Hub, it is important to look at the linkages of the Pakse urban area with its surrounding districts and its hinterland. The current Pakse urban area (Figure 20) is expected to expand significantly as it will impact and attract population from at least four surrounding districts, namely Xanasomboun (pop 67,790), Bachiang (pop 55,310), Pathoumphone (Pop 60,360) and Phonthong (pop 92,960). This will put substantial pressure on the current urban area of Pakse which is expanding to the northeast, east and southeast on the east side of the Mekong. Some urban expansion is also planned in Phonthong, the area west across the Mekong River near bridge (see Figure 22).

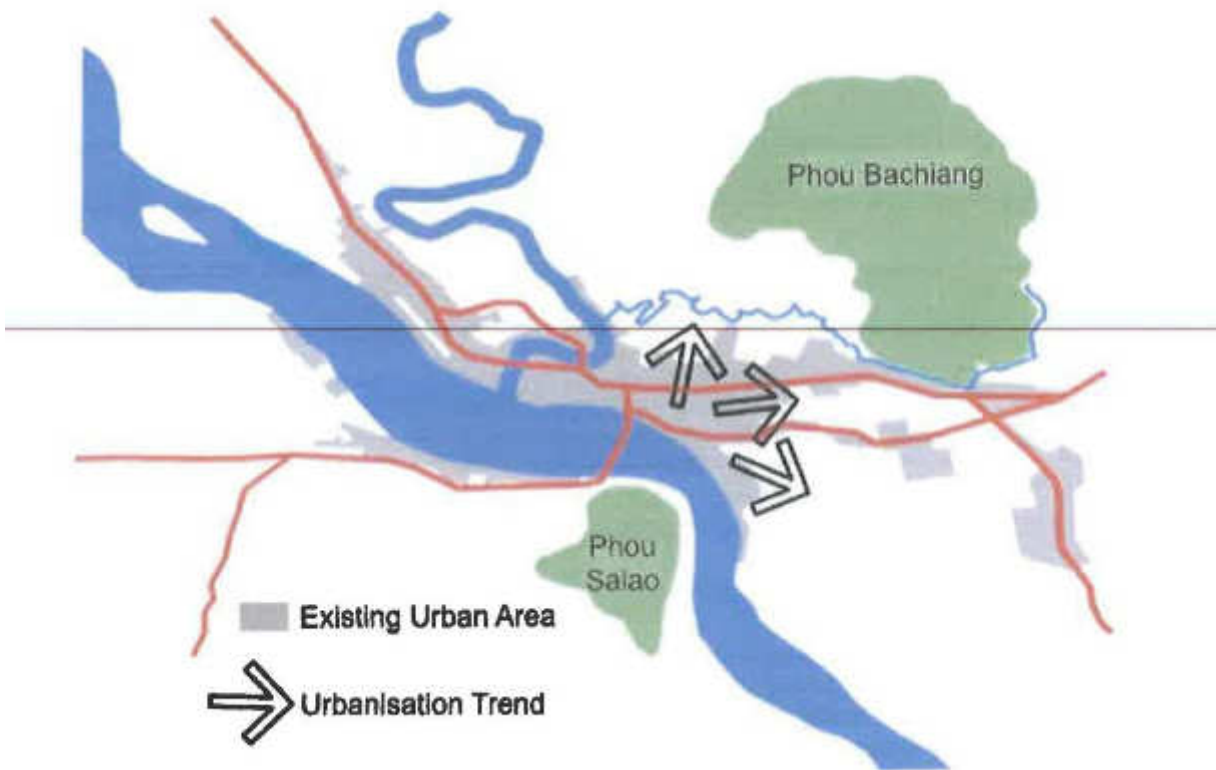
129. Figure 21 shows the current land use in Pakse. The red areas are settled areas. The Xedon river is clearly visible as well as the two mountains, Ohou Bachiang to the east side of the city and Phou Salao south across the Mekong river. The red area across the Mekong river is Phonthong.



**Figure 21: Current Land Use Activities**



**Figure 22: Urbanization Trends in Pakse**



Source: (GHK International, in association with Halcrow& Lao Consulting Group, 2011)

130. The development of Pakse as an economic hub is also very much linked to its connectivity with its direct hinterland –and lifeline-, the Bolaven Plateau area via road RN16 –also referred to a RN8B-, about 50 km southeast of the city in the Paksong district. While processing and packaging of some of the agricultural products take place in the Bolaven Plateau area, notably for coffee, most of the products currently transit through the town of Pakse either for further packaging/processing or for export to Thailand for further processing. As economic zones are also being set up in and around Pakse, more processing will eventually also take place in the Greater Pakse in the future. At the same time, services and logistics providers will also be Pakse based. All these developments will put increasing pressure on the urban area.

131. Currently because of the geography of the Pakse area and the existing infrastructure, all the transport operations of agricultural products from the Bolaven Plateau and from Salavan and Sekong provinces of Lao PDR go to Thailand cross the center of the city where the only bridge over the Mekong is situated and by road RN16 (RN8) to the Vangtao-Chongmek border and onwards to Ubon Ratchathani in Thailand. This is causing traffic congestion and adverse environmental impact. Similarly, traffic from the tourist areas south of Pakse to Thailand, central Lao and Vientiane uses road 13 which also crosses the center of the town.

132. Further the topography of Pakse which makes its beauty and attractiveness as a tourism hub also creates challenges to its development which have to be addressed if it is to continue on its path to become a GMS economic hotspot based on tourism, agro-industry, manufacturing and services. The challenges are both physical and environmental.

133. With regards to environmental issues, much of Pakse’s current urban area is susceptible to annual flooding during the rainy season along both the Mekong river and its confluent, the Xedon river which joins the Mekong in the center of Pakse. Southeast of the city where urban expansion is on-going –around the university area- ground elevation is higher and floods do not happen. Flood protection in most of the current urban area is essential. Reinforcement of riverbank protection to withstand a once in 30 years flood levels –currently it is 1:10 levels- is essential. Both ADB under the Pakse Urban Environmental Improvement project (PUEIP) and Korea Exim Bank are involved in the reinforcement of riverbank protection which will substantially reduce flooding risks once completed

134. The other topographical feature of Pakse is the proximity of mountains. The main old urban area is situated between the Phou Bachiang mountain –east of Pakse-and the Mekong river (Figure 22). The agriculture areas of the Bolaven Plateau in Paksong are east of the Phou Bachiang. The existing road from the Bolaven Plateau thus passes through the center of Pakse where the only Mekong bridge and the road to the Thai border is situated. To avoid congestion in the town and enhance its tourism attraction, the development plan for Pakse to 2030 proposes to build a “ring road” around Pakse (Figure 23). As part of the ring road, a by-pass around the Phou Bachiang mountain will be built and parts of it are already under construction under a BOT arrangement.

**Figure 23: Proposed New Roads (dotted lines)**

**Development Strategy Phase 2, 2016-2020**



Source: (GHK International, in association with Halcrow& Lao Consulting Group, 2011)

135. The ring road is an essential infrastructure to decongest Pakse and to provide better access to different economic zones being developed around Pakse (Pakse-Japan SME SEZ [high Tec Industry] in Figure 23); Champa City Specific Economic Zone (Huay Poun) next to airport north of the city (real estate, hotels, hospital, banking); Vangtao-Phonthong Economic Development Zone at the border with Thailand (industry/logistics in Figure 23).

136. Figure 24 shows the target transport infrastructure in and around Pakse by 2030. While the railway connection with Thailand is possible, the line is unlikely to be built as economic returns would probably be very low. The ring road will need to be built in stages. First, the second bridge over the Mekong would be built south of the current one, close to the new university area. A new city area is planned close to the university, including new government offices. The south bridge would also be the shortest way from the Bolaven Plateau and the Pakse high tech economic zone to Thailand. JICA is doing a pre-feasibility study for the second bridge.

137. The 3rd bridge north of the current bridge is essential to complete the ring road. It would in particular reduce the distance between the Salavan and Sekong provinces of Lao PDR to Thailand. The exports of agricultural products, cassava in particular, and fruit from these provinces would no longer have to cross Pakse on the way to Thailand. It would also help the development of the northern part of Pakse. This is also the area where the airport is currently

located, very close to the town center. There are in fact long term plans to move the airport out of the town center, thus freeing up prime land space.

**Figure 24: Major Projected Transport Infrastructure In and Around Pakse**

Development Strategy Phase 3, 2021-2030

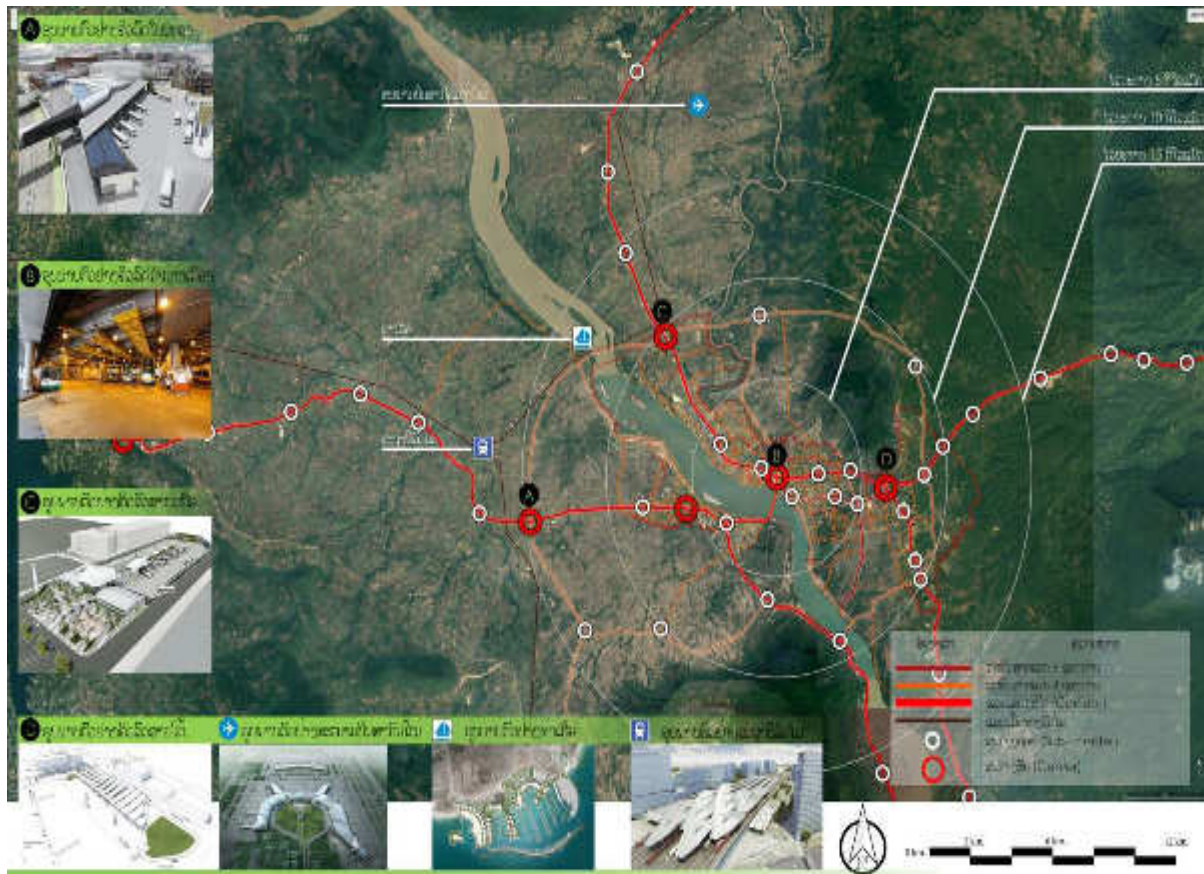


Source: (GHK International, in association with Halcrow& Lao Consulting Group, 2011)

138. Figure 25 show the revised master plan for Pakse City. Point A is area of Phonthong where the ring road around the city meets the RN8 road to the border with Thailand. Points B1 and B2 are transport stations in the old Pakse city center. Trucks will not be allowed in this area. Point C is the long-distance bus station linking to central and northern Lao PDR. A retail market and commercial mixed area will also be developed around this area. Point D is the transport center and bus terminal to the East and Southeast (Paksong, Cambodia and Viet Nam border). Agricultural market development will be promoted in this area as well as an outlet for industrial goods from the SEZs. The ring road is clearly visible. A number of access road from the old town center area to the ring road will also be needed.

139. The revised master plan includes the use of water transportation with 2 river ports for goods transshipment and passengers planned next to the two new Mekong bridges. Several other boat landings for tourists and residents are included in the master plan.

**Figure 25: Transport Plan for Pakse City**



Source: PWT Urban Mater Plan of Pakse City

140. During the preparation of the Pakse Urban Development Strategy, a series of consultations were held to identify other urban issues besides transport such as relocating the bus terminal out of the town center –this was done- and moving several wholesale market out of the town center to the periphery. This issue remains to be addressed.

141. Besides flood protection, the growth of the urban area towards the university area and north across the Xedon river, east of the Phou Bachiang area and across the Mekong river in Phonthong will require a significant expansion of the drainage system.

142. Waste water treatment is identified as a main concerned under the strategy. All the waste water from Pakse goes untreated in the Mekong and Xedon rivers, causing considerable environmental damage. Substantial investment is needed in waste water treatment. Depending on the landscape conditions, the master plan emphasizes community-based waste water treatment and ecological filters to be used before releasing the water in the rivers. UDAA is already experimenting with a small community-based waste water treatment project. Solid waste collection and management is also a priority in the revised urban master plan as the master plan projects the total population of Pakse at 596,387 by 2030.

143. As shown in Figure 26, the master plan identifies four specific targeted development zones in the city. These targeted zones are further divided in 24 smaller development zones.

**Figure 26: Map of Four Specific Development Zones in Pakse City**



Source: Improvement of Urban Master Plan of Pakse City, Champasack Province

144. Thahin-Houi Poun development zone –Zone A- is close to the current airport. This will be a new part of the city north of the old city in zone B. Along the Mekong river banks, the old community will be preserved partly for tourism. Real estate development will be targeted in the other parts of zone A. The Champa City Specific Economic Zone (Huay Poun) will also be located here.

145. Zone B is the old city center. Preservation of the old buildings, conservation and urban beautification, and the greening of public spaces will be the main features in this zone. It will be the main tourism and trade zone. Zone C is also a new extension of the city. It is the area where the new university is located. It is targeted for a new administrative zone and an economic and trade center. Zone D is Phonthong development zone. Besides the trade and logistics areas at the junction of the Pakse ring road and the road to the border with Thailand, it is a residential area and also an area for recreation and tourism services.

146. Pakse aims to become a “green City” during the 2nd phase of the urban strategy 2016-2020. A large Korea EXIM Bank supported flood protection project will significantly reduce the risk of floods and beautify the city by creating a riverside promenade and green space. However, a number of areas under the strategy were not addressed. A number of roads planned along the Mekong north of the Xedon river and along the Mekong southwards were not improved and sealed. Several roads around the city still need also to be sealed. During the rainy season, these roads are difficult to pass while during the dry season they create dust and pollution. The wholesale markets – wholesale fresh market and construction material dealers- located in the center of the town were not relocated as planned.

147. To make it a green city, the strategy proposes to develop urban parks close to the city center and transform the wood covered mountain areas of Phou Bachiang and Phou Salau as recreational areas. Finally, the city also comprises several heritage buildings which would be of interest for tourism. In spite of available space, little progress has been made in the greening of

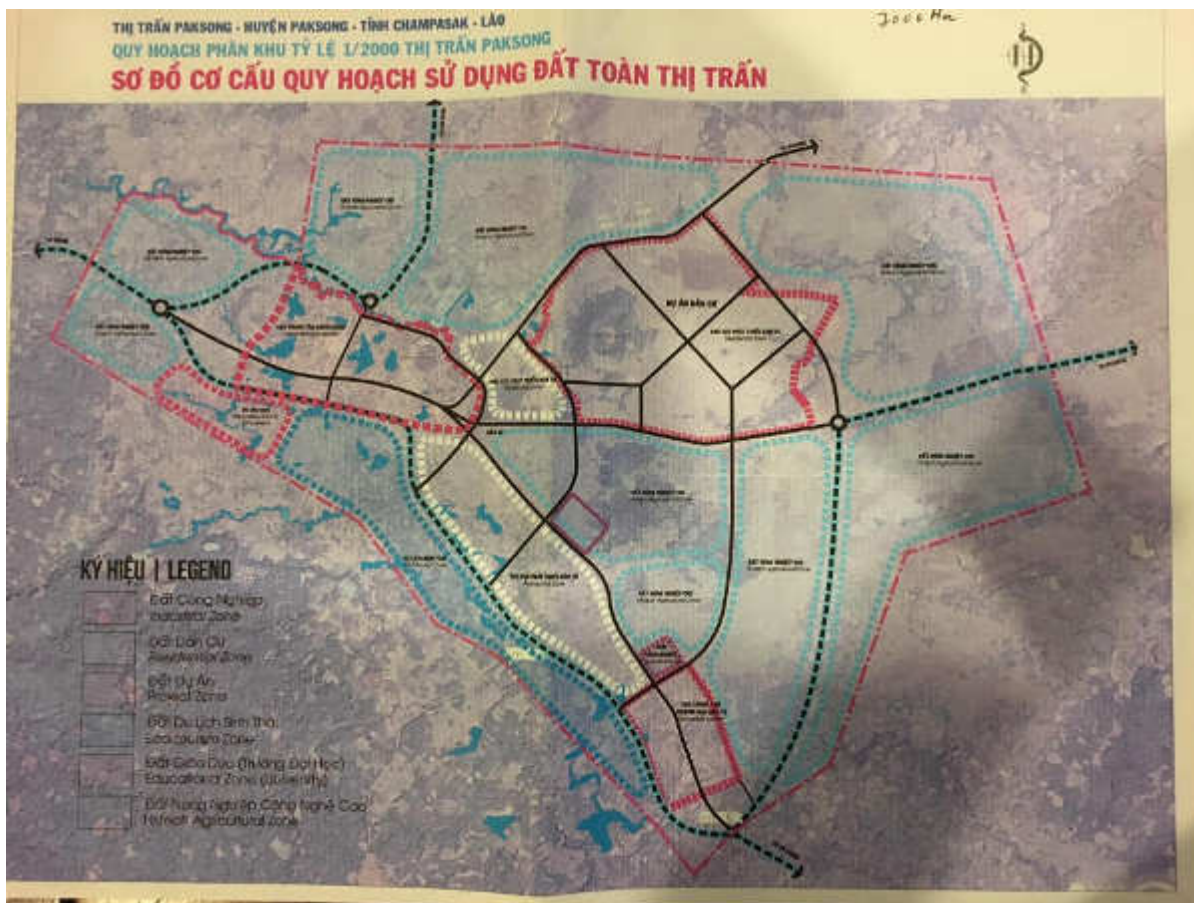
the city so far. Road signage remains poor and the heritage buildings unmarked. Much potential is there to improve the attractiveness of Pakse as a vibrant tourism center.

**b. Pakse Peri-Urban Developments: Pakse Hinterland Links**

148. Pakse is closely linked to its hinterland which is rich and varied in terms of agriculture, agro-industry and tourism.

149. The Paksong district on the Bolaven Plateau (Figure 28) about 50 Km east of Pakse by road 16 is both a very rich agricultural area and well-known ecotourism area. It is the main center of economic activity in the Champasack Province of Lao PDR where the large Lao coffee industry is based. Thanks to its cooler climate, a variety of high quality vegetables are also produced on the Bolaven plateau, most of them for exports to Thailand and other high-end markets such as Japan.

**Figure 27: Paksong Master Plan**



Source: (Department of Public Works and Transport, Champassack, 2018)

150. The last master plan for Paksong area dates from 2000. An updated master plan is under preparation and has received grant support from Viet Nam. Paksong town itself will be developed as a residential and administrative small town while the areas around Paksong and the Bolaven plateau have been zoned as agricultural areas, tourism areas (e.g. around Tad Yeuang at Km 40) and protected areas. Some hydropower projects are also being developed in the area. Many of the rural roads on the Bolaven Plateau remain unpaved making their passage difficult most of the time as it rains throughout the year on the plateau.





road is essential for the protection of the Vat Phou complex and for access to the south of Champasack province and Cambodia on the west site of the Mekong.

154. The fourth hinterland area of Pakse is south along Road 13 all the way to Cambodian border 160 km south of Pakse on the east side of the Mekong. Many agro-industries are based along the road mostly linked to the Thailand market. Close to the Cambodian border, a major tourism area is centered around the Mekong River with many islands on the river, the biggest one being the main tourist island of Done Khong, 120 km south of Pakse. The town of Khong is the district capital and a major tourism center. Much of its urban infrastructure has deteriorated and needs rehabilitation. Recently, the Thai government built a water supply for the island. A master plan is available for the town of Kong.

155. The area is famous for tourism and is known as 4,000 islands with the spectacular Khonepapheng waterfalls, 10 km north of the Cambodia border. A Chinese company is studying the possibility of building a tourism related special economic zone close to Khonepapheng.

#### 4. Environment, Landscaping and Natural Resources Planning

156. Due to its late economic and urban development, the province of Champasack is relatively spared by environmental damages until now. Water is abundant (Mekong, and tributaries Se Kong, Xedone, etc.), soil fertile (Bolaven plateau, Mekong's alluvial plain), and biodiversity rich. Forest areas represent 66.65%<sup>9</sup> of the 15,350km<sup>2</sup> total province's area. Several environmentally sensitive natural sites are listed in Table 7 below:

**Table 8: Major environmentally sensitive natural areas in Champasack province**

Name	Surface area	Districts	Institutional characteristics
Dong Hua Sao	1,100km <sup>2</sup>	Paksong, Pathoumphone and Bachiangchaleunsouk	Natural Protected Area UNESCO world heritage site since 1993
Beung Kiat Ngong wetland	23.6km <sup>2</sup>	Pathoumphone	RAMSAR site since 2010
Mekong Channel from Phou Xiang Thong to Si Phan Don	373.2km <sup>2</sup>	Mostly Khong and Sanasomboun	Important Bird and Biodiversity Area (Bird Life International)
Phou Xiang Thong	1,200km <sup>2</sup>	Sanasomboun (and KhongXedone / Lakhonepheng Districts in Salavan)	Natural Protected Area (since 1993)
Dong Kalo	414km <sup>2</sup>	Khong and Pathoumphone	Important Bird and Biodiversity Area (Bird Life International) since 2003
Dong Khanthung	1,915 km <sup>2</sup>	Mounlapamok and Sokhouma?	Important Bird and Biodiversity Area (Bird Life International)
Xe Pian natural protected area	2,400km <sup>2</sup>	Pathoumphone and Khong (and Sanamxay district in Attapeu province)	Natural Protected Area

<sup>9</sup> Incl. a large part of plantations/production forests. According to the Lao Forest Law (1996), five categories of forests are defined: i) Protection ii) Conservation iii) Production iv) Regeneration v) Degraded.

<b>Name</b>	<b>Surface area</b>	<b>Districts</b>	<b>Institutional characteristics</b>
Fish sanctuaries (Mekong river)	N/A	Khong	Fish Conservation Zones (each of various sites)
Si Phan Don (four thousand islands)	150km <sup>2</sup>	Khong	No status (encompassed by other areas indicated in this table)
Vat Phou UNESCO World Heritage Site and buffer zone	390km <sup>2</sup>	Champasack	UNESCO World Heritage Site since 2002

Source: Investigations Consultant Team

157. Supported by development partners, a significant number of recent studies focused on these sites critical to tourism attractiveness<sup>10</sup>, however not necessarily leading to enhanced regulatory protection measures aside from cases such as Champasack Cultural and Landscape Master Plan (2016).

158. Yet, activities potentially harmful to a fragile environment have rapidly developed recently: hydropower, agriculture, road traffic and roads expansion, more massive tourism representing additional anthropic pressure on ecologically fragile areas, etc. Expected sprawl of urban / town areas and SEZ and IPZ development potentially threatens quality of soil, water, air, ecosystems, natural landscape. Other issues relate to solid waste management, water effluents, land occupation and encroachments of protected zones, soils sealing, increased water demand, overexploitation of fishing resources, and the needs of construction materials (quarries, sand extraction from rivers)

159. Champasack is eventually not among the most climate change vulnerable provinces today (mostly droughts and storms), but studies expect longer droughts in the future<sup>11</sup>. Yet initial vulnerability to climate change may, in the coming decades, cumulate with environmental damages due to local economic growth to establish durable adverse situations, for example increasing water usages conflicts. If not controlled, some flourishing economic activities represent serious environmental threats: coffee production (pesticides, fertilizers), brewery (water discharges), hydropower (water release, green gas effects) and mines (water runoffs, soil pollutions), tourism, transport and logistics. Several years ago, UNESCO eventually threatened classifying Vat Phou World Heritage Site as endangered site, in particular due to road projects<sup>12</sup>.

<sup>10</sup> See for example: i) Kaysone Chansina, Bounthom Sisoumang, Chansamone Vongphaisit, and Keuangkham Sisengnam, 2017, Trade-off Analysis: Tourism and Environmental Quality in Si Phan Don, Champasack Province, Lao PDR, EEPSEA Research Report No. 2017-RR22. Economy and Environment Program for Southeast Asia, Laguna, Philippines.ii) UICN, 2012, Management plan of the Beung Kiat Ngong Ramsar site, Pathoumphone District, Champasack Province, Lao PDR, 2013 -2017 iii) J.W. Duckworth and R.J. Timmins, 2014, The Significance of the Beung Kiat Ngong Ramsar Site (Champasack Province, Lao PDR) and its Surroundings for Biodiversity Conservation Results of Bird and Mammal Surveys and Implications for Site Management, UICN (International Union for Conservation of Nature and Natural Resources) iv) UNESCO, Lao PDR, Vat Phou Champasack World Heritage Office, 2016, Champasack Cultural Landscape Master Plan.

<sup>11</sup> Ministry of Natural Resources and Environment's Department for Disaster Management and Climate Change (DDMCC) and the World Food Programme with technical support from the USAID Mekong ARCC project, 2016, Lao PDR Clear – Consolidated Livelihood Exercise for Analyzing Resilience. Note: The seismic activity is apparently relatively low in Southern Laos. Santi Pailoplee and Punya Charusiri, 2017, Analyses of Seismic Activities and Hazards in Laos: A Seismicity Approach, Terr. Atmos. Ocean. Sci., Vol. 28, No. 6, 843-853, December

<sup>12</sup> UNESCO, 2012, Vat Phou and Associated Ancient Settlements within the Champasack Cultural Landscape (N481)/Vat Phou et les anciens établissements associés du paysage culturel de Champasack (République

160. Provincial public institutions dedicated to environment protection remain weak (financially, and institutionally), although the establishment of the MONRE and provincial DONRE (2011) enables now a more coordinated management of critical sectors<sup>13</sup>. Measures were already taken, for instance regarding forestry and urban sectors (PUEIP) or wetlands protection<sup>14</sup>.

161. Taking advantage of the increased revenues from the present economic growth, Champasack province can mitigate/avoid in advance environmental damages also at the potential expense of some driving forces of its economic development: organic farming, high quality agriculture production, landscape attractiveness, living conditions. Concrete actions are necessary: significant budget allocation and staffing (MONRE, DONRE and District Office of Natural Resources and Environment), and increased awareness: i) among decision makers of challenges at stakes; and ii) among residents and business community of the necessity to adopt more environmentally friendly behaviors (incl. for residents to accept increased solid waste collection or waste water tariffs and for enterprises to commit their environmental and social responsibility). Lao Government and ODA could continue supporting: i) environmental knowledge acquisition, including monitoring<sup>15</sup> to measure effectiveness of policies and mitigation measures; ii) enforcement of regulation, incl. regulatory measures with demonstrative value<sup>16</sup>, iii) both coercive and pedagogical mechanisms targeting offenders. The GOL provides already in some cases planning and strategies framework to act along this direction (e.g. its recent agro-biodiversity program)<sup>17</sup>.

162. Tackling environment and biodiversity issues<sup>18</sup> does not depend on the provincial authorities only. For instance, national protected areas and integrated water resources planning are under the MONRE (respectively Department of Forest Resources Management<sup>19</sup> and Department of Water Resources<sup>20</sup>). This is eventually a plus for Champasack:

- A ministry can eventually better challenge the reluctance of other stakeholders (ministries, business lobbies, etc.) to support or accept environmental protection constraints, possibly to implement specific mechanisms (e.g. trust funds for conservation)

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démocratique populaire lao) (N 481) 15-21 February 2012/15-21 février 2012, 36 COM, Mission report, WHC 12/36. COM/7B. Add. Efforts of Champasack province, supported by France, have enabled to head off this threat.

<sup>13</sup> Land management, water resources, biodiversity, pollutions, disaster prevention...

<sup>14</sup> For instance, establishment of a provincial RAMSAR Secretariat

<sup>15</sup> Hydrology, hydrobiology, pollution load measurement, or update of species/habitat surveys, determination of ambient pollutions, ecological corridors...)

<sup>16</sup> As Himachal Pradesh (the only Indian state at this stage), in Himalaya region, did in India with respect to minimum water release for HPP.

<sup>17</sup> MAF, 2016, Lao PDR, National Agro-Biodiversity Programme and Action Plan II (2015-2025), December.

<sup>18</sup> See Lao PDR, 2016, Fifth National Report to the United Nations Convention on Biological Diversity

<sup>19</sup> Cf. Global Association for People and the Environment, 2016 Protected Area Governance and Equitable Access in the Lao PDR. *"The GAPE was implemented the Xepian NPA Co-Management for Improved Livelihoods and Biodiversity Conservation Project, as a member of the CMLN, in cooperation with the Champassak and Attapeu Provincial Department of Forest Resources Management, in southern Laos"* (p. 7).

<sup>20</sup> This Department is not the only one concerned. ADB TA noted that The NERI (National Environmental Research Institute), the DPC (Department of Pollution Control), and the DEP (Department of Environmental Promotion). See ADB, ADB, 2016, Lao People's Democratic Republic: National Integrated Water Resources Management Support Project (Cofinanced by the Government of Australia and the Spanish Cooperation Fund for Technical Assistance), Technical Assistance Consultant's Report, December.

- Visibility of projects and initiative is important to raise additional ODA funds or to mobilize expertise/fund raising capacities of specific organizations such as UICN, UNEP, UNESCO, MRC, IBA21 and also environmental associations.<sup>22</sup>
- To make sense, several relevant initiatives in Champasack should associate several provinces (Salavan, Sekong, Attapeu), also Thailand and Cambodia<sup>23</sup>, which implies strong commitment of central administration (in particular the MONRE).

## 5. Infrastructure and public utilities

163. Pakse is situated by the Mekong and Xedon rivers, on the country's primary National Road No 13 South that connects northern and southern provinces of the country. NR13 South, NR16 and Salakiew Road are the main roads in the urban area of Pakse. There are no ring roads or by pass roads in Pakse to prevent congestion in the city center.

164. Pakse has an International airport that offers flights to Bangkok, Siam Riep, Ho Chi Minh, Savannakhet, Vientiane and Luang Prabang. The flights are operated by 2 airlines, Lao Skyway (only to Vientiane) and Lao Airlines.

165. The city has no formal organized transport services but there are tuk-tuks and small pick-up that provide an informal transport services in the urban area of Pakse. Local bus services primarily serve outlying villages in adjacent districts. Several national and international bus routes pass through or terminate at the two bus stations of Pakse, Northern Bus Station is located about 7 km north of Pakse along the NR13 South and the Southern Bus Station is located about 8 km south of Pakse along the NR 13 South.

166. The major past and on ongoing projects for urban development of Pakse can be summarized as follows:

- 1998-2000: ADB assisted Secondary Towns Urban Development Project had contributed to building of the new roads, improving the road surface conditions and side drains in much of the central area, the functioning of the storm water drainage system by the creating of interconnected drainage networks for all major catchment of the urban areas.
- 2014 to present: Pakse Urban Environmental Improvement Project (PUEIP) supported by ADB will contribute to improving the solid waste management system, strengthening flood protection and drainage, reinforcing riverbank protection along the Xedon River, improving solid waste management and sanitation in communities, and strengthening provincial urban planning and services. The PUEIP has been addressing some of the priority urban issues in Pakse. An important contribution of the PUEIP is the strengthening of provincial urban planning and services and the capacity for project implementation. These are important foundations for any follow-up multi-sector support by ADB. The project component on community-driven urban environmental improvements is also significant, particularly for O&M which is an area of concern for the maintenance of the drainage system. The project is about 67% completed by May 2018.
- 2016-2021: Mekong River Integrated Management Project supported by Korea EXIM Bank with low interest loan for the construction of an embankment along the Mekong

<sup>21</sup> Parks are commonly managed by a management board where the provinces are represented.

<sup>22</sup> In Champasack for instance, the Center for Protection and Conservation of Freshwater Dolphins or the GAPE mentioned above.

<sup>23</sup> Preah Vihar and Stung Treng in Cambodia, Phu Chong Na Yoi and Pha Taem National Parks in Ubon Rathchahani

and Xedon Rivers with the total length of 16 km, a 2 km road –an urban promenade– and a 10.6 ha public park along the rivers and a drainage system. The total cost of the project is US\$65 million of which US\$53 million is contributed by Korea Exim. The Korea Exim Bank is also considering a second phase flood protection project starting in 2020/2021 along the Xedon river.

167. Pakse still lacks adequate infrastructure systems to serve the fast-growing economy of the city. The existing infrastructure conditions such as feeder roads in the villages and drainage systems are not well maintained for the urban services and urban utilities.

168. The current solid waste management system is being operated by Green Champa Company that provides solid waste collecting service in 28 villages out of 42 villages in Pakse. Daily waste generation in Pakse is about 100 tons but only 60 to 70 tons of solid waste are being collected per day and dumped at the landfill located about 17 km north of the city, at Ban Yong, Sanasomboun District. The landfill is managed by UDAA and it is being upgraded with the support from ADB and is expected to be completed in 2018. The uncollected waste together with hazardous and hospital waste remains in the urban areas and is burned, widely dumped or buried at road sides, into drains and into vacant land.

169. Water supply system in Pakse is being operated by Champasack Provincial Nampapa (PNP) that was established in 1971. In 2012, PNP Champasack province has service area in three towns: Pakse, Phonthong and Khong. Water consumption covered service area 68%.

170. Pakse has no waste water treatment plant. The increased amount of waste water from households and toilets is being discharged directly into road side drains connecting to the main drains and then to the Mekong and Xedon rivers or public areas without treatment. Black water from the latrines is being treated onsite in septic tanks or channel directly to the side drains.

171. As the city is expanding the main challenges that Pakse faces in the coming years are as follows:

- Capacity of UDAA to regulate urban operation and management,
- Capacity of UDAA in solid waste management and to expand solid waste collection service to cover wider area beyond existing area of coverage and Pakse district;
- Development is mainly concentrated in the city center, along the Mekong River and around Dao Heuang Market;
- Lack of site drain in the villages to channel storm water into the main drain
- Uncontrolled land use along the main roads for commercial purposes in the city center;
- Traffic congestion associated with trucks transporting goods from southern provinces to domestic and regional as well as international markets
- Capacity of UDAA to maintain the existing infrastructure and utilities.

## **6. Local institutions**

172. The basic functioning of the local administration in Lao PDR is defined by Law on Local Administration (2009). Central ministries assume most regulatory work and they closely guide planning process<sup>24</sup>. Urban development as a whole remains largely a matter of the ministerial

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<sup>24</sup> For instance, DHUP of MPWT (urban planning), Department of Pollution Control (toxic waste and effluents), MONRE's Department of Environmental and Social Impact Assessment, MIC for business activities, MEM for hydropower, MAF for agriculture and rural development, MICT for tourism and cultural heritage, etc. Ministries also

affairs but this is possibly going to change due to the urban policy orientation encouraged by the GOL. With respect to local development, the key non-technical ministries remain the MOHA (local administration, public servants, registration and management of civil society organizations)<sup>25</sup>, the MOF (taxes, customs, fees, public expenses and tariffs, public debt management, disbursements and repayments, etc), and the MPI (public investments, SEZ, PPP, ODA, etc.). Ministries have the expertise and largely control budgets; they will remain powerful driving agents of urban and regional public infrastructure development, including economic growth and cross-border trade.

173. At the sub-national level, the executive power is with the provincial governments<sup>26</sup> although important decisions require the support/instruction of the central government<sup>27</sup> and some of them the Provincial People’s Assemblies’ approval (e.g. public services tariff setting; change in administrative boundaries or status, etc.). Provincial departments<sup>28</sup> prepare the provincial decision, each of them designated as the main line administration for a given subject (see Table below). Yet:

- The decision process at provincial level takes commonly the form of committees (as at central level), chaired by one Vice Governor. Their appointed members are heads or deputy heads of the main concerned departments/agencies or District’s governments. Committees are officially established by the Governor’s decision. Each of them deals with specific matters (procurement, projects, SEZ, etc.), in principle facilitating exchanges of information and communication between institutions. Their recommendations are validated by the provincial government.
- The role of Governor’s office is critical to prepare decision making, since it is involved in the coordination of the different departments, administration staff management, relation with districts’ government, etc.

**Table 9: Main Provincial Agencies Responsible for Economic Development**

Areas	Lead Departments (Provincial-level) and, when existing, offices (District-level)
International relation and partnership	Department of International Relations
ODA Projects	Each Department concerned + Planning and Investments
Construction / building permits	Department of Public Works and Transport
Sand extraction	
Urban planning	
Housing (urban)	
Airports	
River banks	
Roads, bridges and tunnel	
Transport and logistics	

manage directly special funds (e.g. Road Management Fund, under MPWT). MPWT is also responsible for logistics, inland water transport and air transport / airports (Civil Aviation Authority). There are no home affairs administrations at sub-national levels.

<sup>25</sup> A Law on Civil Servants is under preparation, to succeed to Decree 82/PM on Civil Service (2003) in particular to grant to promote merit and to improve civil servants’ status regulation (150,000 persons concerned directly, 2% of the Lao population).

<sup>26</sup> One Chairman + two or three Vice Chairmen/women

<sup>27</sup> The leeway of Champasack province vis-à-vis the central government is said larger, for historical reasons (Pathet Lao’s history).

<sup>28</sup> Similar to those existing in other provinces, institutional arrangements in Champasack province was described along several ADB-supported projects with a focus on sectors concerned (urban services, flood control and tourism, tourism. For instance: Pakse Urban Environmental Project, TA 7567-LAO, Pakse Urban Environmental Project Loan 2876-LAO and Grant 0297-LAO.

<b>Areas</b>	<b>Lead Departments (Provincial-level) and, when existing, offices (District-level)</b>
Other urban services tariffs	Department of Public Works and Transport / UDAA (authority)
Disaster Management	Department of Natural Resources and Environment Natural Resources and Environment
Water resource protection and protection of natural resources	
Protected areas	
Soil, air, water protection	
Land management permitting and registration	
Customs Affairs	Department of Finances
Taxes and fees	
Public budgets and debts	
Food processing	Department of Industry and Commerce
Business promotion	
Business licensing and registration	
Urban water supply	Nam Papa (public corporation)
Socio-economic planning	Department of Planning and Investments (+ each Department concerned)
Industrial Zones	
Investments promotion	
PPP	
Labor and safety at work	Department of Labor and Social Welfare
Women Affairs	Department of Labor and Social Welfare /Lao Women Union
Education/universities	Department of Education and Sport
Research and Development	Department of Sciences and Technology
Vocational Training	Department of Education and Sport / Department of Labor and Social Welfare
ICT and e-governance	Department of Posts and Telecommunications
Hydropower	Department of Energy Management + Electricity of Laos (public corporation)
Mining	Department of Energy Management
Cultural Heritage Protection, museums	Department of Information Culture and Tourism
Tourism	
Media	
Agriculture and green agriculture	Department of Agriculture and Forestry
Forestry	
Small rural infrastructure (septic tanks, small roads, etc.)	
Irrigation	
Drinking water and food quality	Department of Health
Health, hospitals	

Source: Consultant Team

174. Champasack province is divided into 10 districts. Districts play a critical role in the mobilization of villages and communities. District's Chiefs (called Mayor in the case of the urbanized Pakse district) assume executive responsibilities, assisted by their own administrative office. District administration is also composed of specialized offices (e. g. Public Works and Transport, Planning and Investments, etc.) reporting also to their respective provincial departments. Districts are responsible of public services locally, mostly managed in house with limited resources<sup>29</sup>. They prepare their own five-year development plans to fit with provincial

<sup>29</sup> In Pakse District, PUEP implementation recently enabled a more comprehensive understanding of the UDAA.



SEDP. Few have their own specific sector plans, unless prepared with ODA support (e.g. Paksong urban plan prepared with the support of HCMC [Viet Nam], and Champasack (District) Cultural and Landscape Master Plan prepared with French assistance (and approved in 2016)<sup>30</sup>. Under districts are villages, of which heads are appointed by the District's Chief/Mayor. As in other provinces, mass organizations play an important role in the daily life of districts and villages residents<sup>31</sup>. Communities' participation is also strengthening with the support of community organization but less active than other countries (e.g. Philippines or India).

175. All sub-provincial entities lack financial resources – although some donors strongly support improvements by implementing micro financed-based solutions such as District Funds (experience supported by the World Bank) or Village Development Funds<sup>32</sup>. In particular, five districts should benefit of rapid economic development opportunities (table below):

**Table 10: The Main Districts Driving Development in Champasack province**

<b>District</b>	<b>Main justification</b>
Pakse	Pakse urban area as the core economic center of the province and possibly in Southern Laos
Phonthong	Expected development of the EZ and cross-border activities
Paksong	Expected continuing development of agriculture, hydropower, tourism and mining development
Khong	Tourism development (four thousand islands) and Khonphapheng SEZ
Champasack	Development of Vat Phou tourism spot

Source: Consultant Team

176. In Laos, the decentralization process has been at work for many years. Following the Three-Built Directive on Devolution (2012), or Sam Sang<sup>33</sup>, provincial people's Assemblies have been established (following the Law on Provincial People's Assembly (2015)). The major urban centers of the country are planned to be transformed into cities or municipalities, depending on criteria defined by the Regulation on City and Municipality (2009). Pakse was recently transformed from a "secondary city" into a city (as Luang Prabang and Kaysone Phomvihane/Savannakhet). Expected outcome of establishing cities is to optimize the organization of the local

<sup>30</sup> Lao PDR, UNESCO, Vat Phou Champasack World Heritage Office, 2016, Champasack Cultural Landscape Master Plan, approved on February 18th, 2016 by the Champasack Provincial Government decision n°188, concerning the urban planning review of the Champasack World Heritage Site.

<sup>31</sup> i) Lao Front for National Construction (LFNC): ethnic minority groups, religious affairs, ii) Lao Women's Union (LWU): community-level socioeconomic development work, poverty reduction and increasing women's knowledge and skills through vocational training and micro business development, iii) Lao Federation of Trade Unions (LFTU): workers' rights and education, and iv) Lao People's Revolutionary Youth Union (LYU): vocational training, handicraft development. See ADB, Civil Society Brief, 2011, Lao People's Democratic Republic.

<sup>32</sup> See for instance: Bounthom Sisoumang, Vute Wangwacharakul\*and Visit Limsombunchai, 2013, Operation and Management of the Village Development Fund in Champasack Province, Lao PDR, Kasetsart J. (Soc. Sci) 34 : 335 – 349.

<sup>33</sup> Followed by Decree No. 9/PMO 2012, three amended laws (on State Budget [2015], on Government [2015], on Local Administration [2015]), one law (on Provincial People's Assembly [2015] and one regulation (Regulation on City and Municipality [2009] still under draft form, and one law under review (Investment Promotion Law [2009]). It also led to the amendment of the Constitution (2015).

administrations (by merging or decreasing the number of staff of departments/offices). Some responsibilities shall be transferred from provincial to city level, in particular regarding urban services and facilities. The process has commenced for the management of solid waste (UDAA's President is presently also the Mayor of Pakse<sup>34</sup>). Part of revenues from fees and taxes presently transferred to provincial budget should be directed to the city budget. The position of provincial authorities regarding its change of status will depend on the progress of the reform of the national public finance management system, in particular the fiscal revenues redistribution mechanism<sup>35</sup>, and at the provincial level, on solutions to make future city financing systems sustainable.

## **7. Capacity Development (local administrations and provincial/district government)**

177. The future of UDAA is an important challenge for Pakse. National-wide UDAA-system established to make urban services more autonomous and integrated<sup>36</sup> (water supply excluded) encounters in most provinces severe financial difficulties due to low administered tariffs for services, limited service coverage and difficulties to recover bills for services delivered. In Pakse, the UDAA's staff numbers (35) are considered as insufficient to assume assigned missions, in particular in the perspective of urban expansion<sup>37</sup>. Staff capacity enhancement is at stake, but UDAA has benefited from the support of several development partners (e.g. GIZ, Korea) and presently from the ADB (PUEIP, e.g. current preparation of a corporate development plan, or 6-month internship of two UDAA's staff in Rayong (Thailand) to improve solid waste management skills). UDAA expressed however training needs in fields where it still lacks much experience such as greening and urban beautification and the management of medical waste. Other challenges for UDAA-Pakse are the technical knowledge improvement of its senior managers and decision makers, and its capacity to make professional positions it will offer attractive to young talents<sup>38</sup>.

178. The experience accumulated by UDAA-Pakse should make it a key local institution regarding:

- Technical and economic regulation of PPP arrangements for solid waste collection, and possibly for the management of the landfill presently upgraded (PUEIP, end of works expected this year).
- Solid waste collection in areas not encompassed by PPP arrangements and provisions of other services not contracted out (urban greening, O&M of drainage system, septic tanks management).
- Urban beautification and greening in public spaces to upgrade city tourism attractiveness, not excluding PPP arrangements in specific areas<sup>39</sup>.

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<sup>34</sup> This is often the case in Lao PDR (e.g. Luang Prabang, Thakhek)

<sup>35</sup> Luang Prabang has faced for many years the same situation. AFD, 2017, Evaluation Review of the Urban Development and Management Program in Laos (2009-2016), May. This capacity development Program had for objective cultural heritage and urban management implemented in Luang Prabang and in Vat Phou Champasack, in line with the long-lasting cooperation between Lao PDR, France and UNESCO. See also ADB, 2018, GMS CDTP-4, Draft Final Report, March (Paksan and Thakhek). One interesting example is the objection of the MOF to establish a Cultural Heritage Fund in Luang Prabang, expectedly to be fed by revenues of entrance fees to the world heritage site (as in Hoi An, Vietnam) although permitted by the Cultural Heritage Law (2005). Similarly, there is no evidence that any Tourism Fund, permitted by the Tourism Law (2005), has ever been established in Laos (there is a Tourism Promotion Fund but it seems not much active).

<sup>36</sup> Commonly in Laos: solid waste, drainage, public lighting, street cleaning, beautification and greening.

<sup>37</sup> TA 8989, Pakse, interview UDAA, management staff, March 2018.

<sup>38</sup> Presumably this should comprise more attractive salaries

<sup>39</sup> As experimented in Luang Prabang above the confluence of Nam Kham and Mekong.

- City planning/design of small infrastructure, with the support of external consultants, with provincial urban and Greater Pakse planning remaining under the responsibility of DPWT.
- Interactions between urban services management, landscaping and urban cultural heritage protection under the guidance of DPWT, DONRE and DICT (possibly UDAA can benefit of the experience of the Vat Phou World Heritage Office of Vat Phou and of the Luang Prabang World Heritage Department and UDAA of Luang Prabang<sup>40</sup>).
- Management focusing more on quality of services and customers management to increase the willingness to pay of residents.

179. UDAA is however not the only organization needing capacities strengthening. In a perspective of GMS “vision”, in particular centered on urban development of Pakse and Paksong, and on economic poles in Champasack province, this progress reports suggests a number of capacity development needs as listed and roughly justified in Table 11.

**Table 11: Tentative long list of capacity development topics in Champasack province**

	Topics	Main justification at this stage	Remarks
A	INTERNATIONAL COOPERATION AND BUSINESS DEVELOPMENT		
A1	Support to coordination of ODA in the province	Monitoring of ODA and strengthen inter-agency dialogue at the provincial level (PIU) and with multiple donors in compliance with the Vientiane Declaration	Close interaction with MPI needed (application of Vientiane Declaration)
A2	Support to develop a more efficient business investment promotion based on understand of the identification of targeted groups <sup>41</sup> of enterprises and on the understanding of the markets / business evolutions	A share understanding of the business dynamics is necessary with for purpose to better understand the needs of investors’ needs and to approach them more pro-actively (see PPPD also)	Possibly with the support of the Trade Development Facility (Multi-donor Trust Fund), German, Japanese, Thai, Korean cooperation.
A3	Planning and management capacities enhancement for SEZ and IPZ management and core business area (Greater Pakse)	To strengthen capacities of relevant provincial agencies, SEZ management boards to deal with SEZ development (e.g. multi-utilities PPP as in Thailand), including criterions required from developers and tenants (see PPPD also)	Possibly with the support of the Trade Development Facility (Multi-Donor Trust Fund), JICA, KOICA and TICA
A4	Strengthening foreign language abilities at the provincial and district levels (vocational training)	For purpose to strengthen performance of economic and public officers and local businesses (English, possibly Chinese)	Connections with UN agencies and with British Council or similar organizations
B	URBAN AND INFRASTRUCTURE		
B1	Awareness to smart city and green cities adapted to the situation of city and towns in Champasack. Possibly a white paper can be approved	Needs to make decision makers aware of potentialities of the two concepts, based on a review of international practices and with perspective to pave the way for relevant decision/ investment process	Korea supports this aspect

<sup>40</sup> See AFD, 2017, op. cit.

<sup>41</sup> sectors, nationality, size, financial constraints, etc

Topics		Main justification at this stage	Remarks
B2	Infrastructure and development project management and implementation capacities	Need to capitalize experiences of implementation and to improve practices (decision chain, staffing and training, etc) by developing Management Information System within the administrations (to include progress in developments of data digitalization and GIS)	ADB and the World Bank
B3	Urban and regional planning (with urban-rural connectivity aspects) strengthening	Urban planning remains based on simple zoning disregarding connectivity aspects, regional / international dimension, and innovations (smart city, e-governance, etc.)	CDIA, all donors potentially
B4	Provincial integrated solid waste strategic management plan	The coupling of emergence of SEZ, urban development (districts towns) and tourism agricultural production makes necessary a comprehensive plan at the provincial scale and not limited to towns	Possibility of cooperation with Ubon Ratchathani.
B5	Greening and beautification of Pakse urban area to include identification of remarkable buildings (Champasack kingdom, French colonial and Sino-Portuguese style) and market rehabilitation	Need to make Paske an attractive place if possible by combining greening ecosystems and ponds development with flood management and with Ecological-based services.	Opportunity of cooperation with Ho Chi Minh City, the AFD, and with the department of World Heritage of Luang Prabang and WHO of Champasack District
B6	Implementation of corporate development plan prepared by UDAA (solid waste, drainage, waste water, etc.)	The plan presently under finalization will certainly face with difficulties to implement it (to be linked with PPP arrangements)	
B7	PPP arrangements in the urban and road sectors, not limited to financing investments (e.g. DBO contracts, or management contracts)	PPP attempts are not much successful so far whereas opportunities for arrangements are there.	
C	ENVIRONMENT AND NATURAL RESOURCES		
C1	Protection of biodiversity, water bodies, soil and air and enforcement of regulation and environmental monitoring	HPP projects, in particular small hydropower plants, potential impacts of tourism and trade (roads constructions braking ecological corridors, air pollution, sand extraction caused by building activity, etc)	All specialized public agencies (MRC, UNEP, UICN) and organizations (Conservancy International, etc) with the support of ODA funds (GEF, French Environment Global Fund, etc.)
C2	Strengthening capacities to regulate cumulated impacts of HEE, in particular minimum water release or e-flows	Expected multiplication of HEE in the provinces. A baseline is needed in a first stage to measures risks and vulnerability of the environmental and social milieu	Dept. of Energy Management and DONRE. Possibly a cooperation to be developed with India <sup>42</sup>
C3	Strengthening of capacities to protect international heritage and RAMSAR sites	Protection of the Xe Pian natural protected area UNESCO heritage site and Beung Kiat Ngong wetland	DONRE and Pathoumphonng District

<sup>42</sup> Himachal, Anurachal, Uttarakhand. Also the support from other countries like Norway or Switzerland

Topics		Main justification at this stage	Remarks
		RAMSAR sites and development of their buffer zones	Connection to be established with UICN and possibly UNESCO
D	SPECIFIC SUPPORT OT DISTRICTS: TOURISM AGRICULTURE AND INDUSTRIAL DEVELOPMENT		
	Strengthening of capacities		
D1	Paksong District: urban planning implementation, plantations, agricultural and agribusiness, environmental monitoring in general (water resources, deforestation, etc.)	Hydropower and biological agriculture, urban development of Paksong town and interconnectivity with surrounding villages and Pakse.	FAO and other donors
D2	Strengthening of capacities of Champasack District: cultural heritage, tourism and environment, IPZ	Protection of the World Heritage Site of Vat Phou (site + buffer zone in accordance with UNESCO definition), possibly extended to areas located outside the buffer zone	Connection to be established with UNESCO Bangkok
D3	Strengthening of capacities of Khong District: Tourism and environment (Xe Pian natural protected area), services to Khonphapheng SEZ and local business development	Continuation of support provided donors to tourism development. Strong need to prevent damages to ecosystems and natural areas (waters, wetlands, forests, soil)	Possibly a cooperation to be developed with Guangxi or Guangdong provinces. For Si Phan Don, connection to be established with IUCN and possibly UNESCO
D4	Strengthening of capacities of Pathoumphonng District: Tourism and environment (Xe Pian natural protected area) and local business development	Continuation of support provided donors to tourism development. Strong need to prevent damages to ecosystems and natural areas (waters, wetlands, forests, soil)	Possibly a cooperation to be developed with Guangxi or Guangdong provinces. Connection to be established with IUCN and possibly UNESCO
D5	Strengthening of capacities of all districts concerned and provincial administrations regarding economic, trade, financial and social development of SEZ, e.g. value chain, sector structuring, foreign trade, business rationales, etc.	Lack of experience and knowledge of most public officers of business development, sector structuring and economic opportunities at stake in the province	Possibly support from GIZ, JICA and possibly TICA and China.

Source: Consultant Team

## 8. Provincial International Cooperation and Official Development Assistance (ODA)

180. Champasack has joined international cooperation initiatives involving provinces of neighboring countries:

- In 2010, Champasack Province became a member of the Cambodia-Laos-Viet Nam (CLV) Triangular Development<sup>43</sup>
- The Development Cooperation of provinces along the EWEC between Laos-Thai-Viet Nam (eight provinces, incl. three from Laos).

<sup>43</sup> Projects were presented for funding such as i) Modernization of Nong Nok Khien International Checkpoint (3.8 million USD) ii) Construction of Asphalt Road 7828 connecting Ban Seth-Ban Sod-Ban Napakieb, Khong District, Champasack Province to the Cambodia border (35 Km, 8.2 million USD). See: Champasack Province, Department of Planning and Investment, 2017.

181. In addition, regular meetings take place annually between Champasack and Ubon Ratchathani governments focusing on economic and cross-border aspects. They enable reviewing current problems and agreeing about solutions. However, in the urban sector, exchanges between public agencies remain limited. In the solid waste sector for instance, opportunities of cooperation could be considered between city-municipality (*Tesaban/Nakhon*) of Udon Ratchathani or between DOST/ UDAA-Pakse and the National Center of Excellence for Environmental and Hazardous Waste Management of Ubon Ratchathani University<sup>44</sup>. Similarly, cooperation with HCMC could be strengthened, for instance regarding urban greening/beautification, areas where HCMC has accumulated significant experience<sup>45</sup>.

182. International cooperation significantly contributes to public investments in Champasack province. Whereas public investments represented 119.05 billion LAK in 2016 (14.2 million USD), ODA reached 133.76 billion LAK (16 million USD) whereas foreign direct investments represented 731.6 billion LAK (87.5 million USD)<sup>46</sup>. Since the late 1990s, Champasack province has benefited from a large number of ODA projects. 70 projects (past, ongoing or expected) are listed in appendix AII-1, generally based on information made available by development partners or Lao authorities. The main results of the review of this list can be summarized below.

- 11 countries and 3 multilateral donors are involved in Champasack province. ADB is a major donor in the province, targeting urban infrastructure (solid waste, drainage, water supply, community access roads), health, tourism and agriculture. Aside from a large number of small grants from JICA or the Japanese Ministry of Foreign Affairs allocated to health or economic studies, significant Japanese grants were provided to road and bridge sectors, including the Pakse bridge over the Mekong (50 million USD) and national road n°13 in different provinces (76 million USD by the end of the 1990s). Interestingly, and whereas it supports many industrial studies in Asia, the Japanese government has not supported the Pakse-Japan SEZ project (see below). Korean aid is increasingly active. Significant support was provided by Korea in recent years (flood protection), and much more is expected in the near future, in particular in Pakse. The World Bank remains a major donor but its projects are often multi-province (36 million USD grant and 25 million USD loan currently), with the priority sectors being agriculture, natural resources, and health. The World Bank, traditionally involved in water resources projects, supports agencies such as the Mekong River Commission Secretariat (MRC-S) for projects encompassing partially the Champasack province.
- Grants, commonly of a limited amount, largely dominate the aid in terms of number of initiatives. Multilateral agencies, as well as specific international organizations like the IUCN or the MRC-S often mobilized bilateral funds (of countries sometimes not mentioned in the table such as Sweden, Spain or Finland), in particular to support environmental studies or community development. JICA also financed studies

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<sup>44</sup> Tiammanee Weerasak, Sompop Sanongraj, 2015, Potential of Producing Refuse Derived Fuel (RDF) from Municipal Solid Waste at Rajamangala University of Technology Isan Surin Campus, Applied Environmental Research, 37 (2): 85-91. The choice of Rayong as internship place for UDAA's staff was possibly motivated by the international reputation of Rayong's solid waste management experience. Cooperation with both Thai cities is expectedly compatible. With Ubon Ratchathani, it could focus on industrial, toxic and medical waste whereas with Rayong it could more focus on organic waste compost and energy production plants. For a more comprehensive presentation of solid waste management in Thailand, see Kullacha Tanakwang and Napaporn Tangtinthai, 2015, Overview of Municipal Solid Waste Management in Thailand, power point presentation.

<sup>45</sup> Champasack province has also official relations with Danang and the province of Binh Duong (this later was interested in plantations).

<sup>46</sup> Champasack Province, Department of Planning and Investments, 2017, Implementation of the Socio-Economic Development Plan as of September 2017, Plans for 2018; Vision for 2030 and 10-year Development Strategy (2016-2025).

(sometimes called preparatory surveys) related to Champasack, but rather focused on economic aspects such as SEZ or hydropower.

- China, Thailand and Viet Nam have provided some funds and/or assistance. Until now, the Chinese public support remains limited (agriculture [one cooperation with Guangxi Province], and electricity) compared with its commitments in Northern Laos. Thailand provided only one grant in Khong District (water supply) and a technical assistance to Paksong District (health; medical centre). HCMC has supported the preparation of master plan of Paksong, and Danang has granted in recent years 1 million USD for social security and health<sup>47</sup>.
- As mentioned, most past loan projects have targeted several Lao provinces simultaneously. But several urban projects now focus on Champasack province. Targeted areas are mostly Pakse and Paksong Districts, in a lesser extent Champasack and Khong Districts and marginally Phonhong, Sanasomboun, Pathounphone and Mounlaphamok Districts. Projects, basically focusing on rural development and urban water, tend to diversify covering specific agricultural productions (coffee, aquaculture, quality and labeling) and, increasingly, urban development (with strong environmental aspects), planning, tourism, cultural heritage and health.
- Germany and France have financed particularly innovative (and complementary) initiatives in Champasack. The former (via GIZ) supported Public Private Partnership Dialogue (PPPD) and microfinance, and the second (AFD; French Ministry of Foreign Affairs) has supported capacity development combining cultural heritage protection and town development. However, the aid of the two countries in Champasack is limited today, although this may change in the future<sup>48</sup>.
- India's development aid shows a growing interest in Southeast Asian countries (Myanmar, Cambodia, Laos) including to Champasack (cultural heritage protection [Vat Phou temples] and energy and trade [EWEC]). Justifications are multiple from Indo-Khmer cultural heritage protection<sup>49</sup> to expertise in hydropower or integration between Southeast Asian and South Asian economies. This gradual interest might transform into a more significant commitment of Indian public aid (and business community) in the future.

**Table 12: Summary Table of Development Projects in Champasack Province of Lao PDR**

Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
Energy	World Bank	Provincial Grid Integration Project	Champasack Province	36,000,000 USD *	1992-1999 Completed
		Southern Provinces Rural Electrification	Champasack Province	34,700,000 USD *	1998-2004 Completed
	Ex-Im Bank of India.	Southern Provinces Transmission Development II	Champasack Province	33,000,000 USD	2009-Ongoing

<sup>47</sup> Vietnam Investment Review, 2016, Champasak Route Reopens, 28 Oct.

<sup>48</sup> See AFD, 2017, op. cit.

<sup>49</sup> The former kingdom of Chams was called Champa and some historians have established links between present Champasack (formerly Bassac) and Champa areas of influence (cf. Pierre Lintings, 1972, Permanence d'une structure monarchique en Asie: le royaume de Champassak, Revue Française d'Histoire d'Outre-mer, Tome 59, n°216, 3e trimestre. pp. 411-431; Old Cham people was also deeply influenced by the Indian culture.

Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
	Japan Development Cooperation Agency (JICA)	Project for Extension of Selabam Hydropower Plant in Lao PDR (Study)	Sanasomboun District	N/A	2008 Completed
Tourism	Asian Development Bank	GMS Mekong Tourism Development Project	Champasack Province	12,590,000 USD *	2003-2008 Completed
		GMS Sustainable Tourism Development Project	Khong District (Siphandone Ban Hang Khone, Don Khong Island)	10,000,000 USD *	2009-2013 Completed
		Greater Mekong Sub-region Tourism Infrastructure for Inclusive Growth Project	Khong, Champasack and Paksong Districts (Greater Vat Phu, Four Thousand Islands, Bolaven Plateau)	40,000,000 USD *	2014-2019 Ongoing
	French Ministry of Foreign Affairs	Enhancing Cultural Heritage of Southern Laos	Vat Phu World Heritage Site , Champasack District	1,000,000 EUR	2007-2012 Completed
		Enhancing the value of Cultural Heritage in Southern Laos	Vat Phu World Heritage Site, Champasack District	370,000 USD	2013-2016 Completed
	French Development Agency (AFD)	Urban Planning and Development Project in Luang Prabang and Champasack	Champasack Town and Vat Phu World Heritage Site, Champasack District	500,000 EUR	2013-2019 Ongoing
	Swiss Agency for Development and Cooperation (SDC)	Champasack Tourism Business Promotion Project	Champasack province	?	2013-2016 Completed
Environment	World Bank	Forest Management and Conservation Project	Champasack Province (Sepian area, 240,000ha)	8,700,000 USD *	1994-2000 Completed
		LAO PDR - Mekong Integrated Water Resources Management	Champasack Province	25,000,000 USD *	2017-N/A
		Integrated Water Resources Management	Champasack Province	534,000 USD *	2012-2014 Completed
	Asian Development Bank	National Integrated Water Resources Management Support Project	Champasack Province	3,900,000 USD *	2014-2015 Completed
		Pakse Urban Environmental Improvement Project (1)	Pakse District	3,250,000 USD *	2012-2021 Ongoing
		Pakse Urban Environmental Improvement Project (2)	Pakse District	24,250,000 USD *	2012-2021 Ongoing
	German Federal Ministry for Economic Cooperation and Development (BMZ)	Management and sustainable use of fisheries and aquatic natural resources in Siphandone	Kong and Mounlapamoke districts, Champasack province.	506,809 USD	2017-2019 Ongoing
	Japan Development Cooperation Agency (JICA)	The study on groundwater development for Champasack and Salavan provinces in Lao PDR	Champasack Province	N/A *	1995 Completed
		Project for the Improvement of School Environment in Champasack and Savanakhet provinces	Champasack Province	1,108 billion JPY *	2010 Completed



Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
	Korean International Cooperation Agency (KOICA)	Feasibility Study for waste water treatment and Community Participation	Pakse district	5,000,000 USD *	Planned
	Economic Development Cooperation Fund of Korea	Mekong River Integrated Management Project	Mekong river bank, Pakse and Phonthon Districts	53,000,000 USD *	Planned
	EXIM Bank of Korea	Xedon river project	Riverbank protection, flood control, ferry	69,000,000 USD *	Planned
Education	Asian Development Bank	Strengthening Higher Education Project	Pakse District (Champasack University)	24,800,000 USD *	2009-2016 Completed
		Strengthening Technical and Vocational Education and Training Project	Champasack Province	23,000,000 USD *	2010-2017 Completed
	AUSaid - Australia (co-financed with UNICEF)	Early Childhood Development	Champasack Province	N/A *	1992-2006 Completed
	Japan Development Cooperation Agency (JICA)	Improving Science and Mathematics Teacher Training	Champasack Province	N/A *	2004-2013 Completed
	Action with Lao Children (Japanese NGO)	Enhancement of Utilization of Books at Primary and Secondary Schools	Champasack Province	N/A	?
	Japan	The Construction of Nonghoi Lower Secondary School in Champasack Province	Sanasomboun District	102,616 USD	2014 Completed
	Japan	The Project for Construction of an Primary School in Luangso Village, Champasack	Champasack Province	60,929 USD	2013 Completed
Agriculture	World Bank	Laos - Upland Agriculture Development Project, Provincial Grid Integration Project, and the Forest Management and Conservation Project	Champasack Province (Bolaven Plateau)	20,200,000 USD *	1989-1998 Completed
		Mekong Integrated Water Resources Management Project Phase 1	Champasack Province	26,000,000 USD *	2012-2018 Ongoing
	Asian Development Bank	Sustainable Natural Resource Management and Productivity Enhancement Project	Khong and Paksong District	700,000 USD *	2009-2014 Completed
		Sustainable Natural Resource Management and Productivity Enhancement Project (project 37579-032)	Khong and Paksong District	35,000,000 USD *	2009-2016 Completed
	French Development Agency (AFD)	Appui régional à la reconnaissance des Indications Géographiques en Asie du Sud-Est	Bolaven Plateau	1,500,000 EUR *	2012-2017 Completed
		Promotion et reconnaissance des Indications Géographiques au Laos, au Cambodge et en Birmanie	Bolaven Plateau?	N/A *	Planned
		Programme de Renforcement des Capacités Commerciales de la filière café lao	Bolaven Plateau	1,500,000.00 EUR *	2010-2015 Completed

Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
		Feasibility study for a commercial capacity strengthening projects of coffee sector in Lao	Paksong District	? *	2015 Completed
	Guangxi Province (China)	Guangxi-Champasack Experimental Base for Chinese New Fruit and Vegetable Varieties,	Champasack Province	N/A	N/A
Health	World Bank Loan (Loan P163949)	Lao PDR Health Governance and Nutrition Development Project	Champasack province	10,000,000 USD *	2017-N/A Ongoing
	Asian Development Bank Grant 0172	Health Sector Development Program	Champasack province	10,000,000 USD *	2009-2012 Completed
	Japan Development Cooperation Agency (JICA)	Project for Improving Quality of Health Care Services	Champasack Province	N/A	2016-2021 Ongoing
		Project for Strengthening Training Institutions for Health Workers	Champasack Province	546 Million JPY *	2014 Completed
		Project for the Improvement of District Hospitals (Phase1,2,3)	Champasack Province	1,221 Billion JPY *	2006-2007 Completed
	Organization of International Support for Dental Education (Japan)	Project for cultivate of preventive infection specialists including oral infection for the staff of Lao National University faculty of medicine and referral hospitals.	Champasack Province	81,160 USD *	2006-? ?
	The Volunteers Group to Send Wheelchairs to Overseas Children (Japanese NGO)	Supply of Children's wheelchairs for the National Rehabilitation Centers in the Lao PDR	Champasack Province	346,244 JPY *	2009-? Completed
	Médecins du Monde Japan (MdMJ)	Lao PDR Pediatric Project	Champasack Province	N/A	N/A
		Capacity-building on pediatrics at district hospitals and health centers to encourage villagers to utilize health services	Champasack Province	102,358 USD	2015 N/A
	Japan	The Project for Construction of Sanasomboun District Hospital, Champasack Province	Sanasomboun District	93,153.00 USD	2010-2011 Completed
	Japan	The Project for Construction of Medicines Warehouse for Champasack Province	Champasack	78,354.00 USD	2005-2007 Completed
	EXIM Bank of Korea	Champasack Hospital	Pakse District	75,000,000 USD	Planned
Thailand International Cooperation Agency (TICA), Ministry of Public Health, Ubon Ratchathani prov. Chiang Rai Prov.	Paksong Hospital/Medical Service Centre	Paksong District	N/A	2015-? Ongoing	
Infrastructure	Asian Development Bank Loan 1525	Secondary Towns Urban Development Project	Pakse District	33,500,000 USD	1997-2005 Completed

Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
	Japan Development Cooperation Agency (JICA)	Project for Reconstruction of Bridges on the National Road Route 13 (phase 2)	Champasack Province	7,649 billion JPY *	1997 Completed
		Project for Construction of Pakse Bridge	Pakse District	5,446 billion JPY	1997-2000 Completed
		Construction of the Drainage System and the Repository at Vat Phu Archaeological Site	Champasack District	N/A	2001-2003 Completed
	Overseas Economic Cooperation Fund (OECF) of Japan	Lao Nippon Bridge	Pakse District Phonthong District	48,000,000 USD	1997-2000 Completed
	Japan	The Project for Construction of Bridge in Nason Village, Champasack Province	Sanasomboun District	81,750 USD	2010-2011
	Japan	The Project for Construction of Rural Road in Nason Village, Champasack Province	Sanasomboun District	48,450 USD	2010-2011
	EXIM Bank of Korea	?	7 Districts incl. Paksong and Pakse	40,000,000 USD *	Planned
	Ministry for Foreign Trade and Development Cooperation (Netherlands)	N/A (DRIVE projects?)	Pakse District	30,000,000 EUR	Planned
	Neighboring Countries Economic Development Agency (NEDA) Thailand	Water Supply Construction Project for Five Districts in Lao PDR	Khong District	310 millions THB *	2013-? Ongoing
	People's Committee Ho Chi Minh City (Viet Nam)	Master plan of Pakson	Paksong District	N/A	2016 Completed
Others	German Federal Ministry for Economic Cooperation and Development (BMZ)	Management and sustainable use of fisheries and aquatic natural resources in Siphandone	Kong and Mounlapamoke districts, Champasack province.	506,809 USD	2017-2019 Ongoing
	German Technical Cooperation Agency (GIZ)	Regional Economic Integration of Laos into ASEAN, Trade and Entrepreneurship Development	Champasack Province	6,400,000 EUR	2014-2017 Completed
	European Union (main contributor)	Eat Greener - Changing Food Consumption Patterns: A Sustainable Approach towards Economic Development in Lao PDR	Champasack Province	1,238,069 EUR	2014-2018 Ongoing
	Japan Development Cooperation Agency (JICA)	Preparatory Survey on Industrial Development in the Lao PDR	Champasack Province	N/A	2010 Completed
		Project for Modernization of Equipment for Transition to New CNS/ATM system	Champasack Province	533 million JPY	2013 Completed
		Project for Strengthening Management Capacity of UXO Lao	Champasack Province	N/A	2015-2018 Ongoing

Sectors	Donors	Project	Targeted Areas in Champasack	Amount	Status
	Japan Mine Action Service (JMAS)	Humanitarian Unexploded Ordnance (UXO) Clearance in Paksong District, Champasack Province	Paksong district, Champasack	88,364.00 USD	2012-2014 Completed
		Japan helps UXO clearance in Attapeu and Champasack provinces	Champasack province	1,402,947 USD *	2012-2014 Completed

(\*): Total amount identified (only a minor part or a component targeted Champasack)

183. This brief review is not exhaustive, and more investigations would be needed, in particular to determine more accurately financial volumes having benefited Champasack and the location of projects areas in the province. The objective is likely neither to make Champasack province development depending too heavily on foreign aid, nor to put Champasack province in the challenging situation to implement an excessive number of ODA projects simultaneously. A strong coordination between development partners<sup>50</sup> eager to support the development in Champasack should help combining efficiently their supports (topics and planning) to make sure that financing of new public infrastructure is balanced by the support to enhance provincial/districts' capacities to operate and maintain them, to ensure PPPD and PPPs (see below). The increasing role of new Asian donors which have more specific approaches should be considered in the coordination process<sup>51</sup>. Whatever, and until now, ODA funds have largely benefited northern Laos and Vientiane. This should encourage the GOL to mobilize international aid to Southern Laos' development with Champasack as a focal (not exclusive) beneficiary province.

184. ADB can encourage the MPI and the Lao National GMS Secretariat to coordinate support of donors' community to Champasack, complemented by a direct dialogue with the World Bank, Korea, Thailand (TICA has expressed its interest in principle for initiatives in Champasack provinces<sup>52</sup>, and NEDA<sup>53</sup>), France (AFD) and Germany (GIZ and possibly KfW), and with other international organizations<sup>54</sup>. A dialogue between this donor community and regional cooperation mechanisms involving Thailand, Viet Nam and Cambodia could focus on tourism, road infrastructure, trade, agri-business, environment, vocational training and more generally joint initiatives in all fields.

## 9. Private Sector Investments Opportunities and Public Private Partnership Dialogue (PPPD)

### a. General

185. PPPs are widely promoted by the GOL. The regulatory framework for PPP was until now the Electricity Law (1997)<sup>55</sup>, the Investment Promotion Law (2009), the Decree on the

<sup>50</sup> A general coordination exists in Lao PDR, but limited to the main donors and the objective of discussions is presumably not specifically Champasack or Southern Laos moreover in a GMS perspective.

<sup>51</sup> See Koica Development Institute, Asia Foundation, 2011, Emerging Asian Approaches to Development Cooperation. This document interestingly focuses on aids provided by India, China and Korea.

<sup>52</sup> TICA, interview with the Director General, Bangkok, May 2018

<sup>53</sup> A similar approach of TICA and NDA was initiated, so far with encouraging results, by the ADB regarding the development of Mae – Sot / Myawaddy corridor (GMS CDTP-3).

<sup>54</sup> CDIA, MRC Secretariat, GEF, UICN, EU, and large INGOs and Foundation active in the health, local governance and environmental sectors (Asia Foundation, Konrad Adenauer Stiftung, Bill Gates Foundation (e-governance), Korean Development Institute, Conservancy International, WWF, Nature Conservancy, etc.

<sup>55</sup> For hydropower

Implementation of the Investment Promotion Law (2012), the Decree on Procurement of Public Goods, Works and Maintenance and Services (2004), its implementation rules (2004), and the amended Investment Promotion Law (2017). A specific regulation for PPPs (PPP decree; initially a law was expected) is still under preparation (Decree on PPP and work supported by the ADB)<sup>56</sup>. As in Viet Nam, PPP Decree enactment takes a long time in Laos (7 versions of the text were circulated in 2015). The enactment of this Decree is expected to be a driving force of PPP arrangements.

#### **b. PPPs in Local Infrastructure**

186. Aside from services since a long time delegated to private service operators (regional and national bus transport, ferry transport, taxi and informal public transports), the situation with PPPs in infrastructure in Champasack is globally similar to what happened elsewhere in Laos. Successful experiences remain limited in number.

187. So far, TA 8989 has identified four main PPP initiatives in Champasack:

- 45-years BOT contract on NR 16 (based on road upgrading) signed in August 2011 with the Douangdy Bridge and Road Construction Company for the highway section linking Pakse town to Vangtao-Chongmek border crossing. Since 2016, the price is 20,000 LAK for a single trip and 40,000 LAK for a return.
- BOT for the road section linking Pakse town to Vat Phou World Heritage Site (NR 14A signed in October 2008 with the Douangdy Bridge and Road Construction Company).
- In April 2017, the Champa Clean Sole Company, a local company, expressed its interest to assume domestic solid waste collection in Pakse town. In its initial business plan, Champa Clean expected the extension of its service to other provincial districts and the acquisition of a hundred of trucks.
- Contract agreement signed in 2012 with the Gning Soksay Company on Vat Phou World Heritage Site. The company collects site's entrance fees, operates shops, parking and restaurant at the gate; Part of the funds collected is transferred to the World Heritage Office (under Champasack District's authority).
- Most of these PPPs were arranged for infrastructure in/or around Paske. Good connections between private partners and public decision makers have helped.
- Many of these PPP arrangements have encountered difficulties. The last contractual arrangements for the solid waste sector in Pakse have not been implemented and several previous attempts have also failed. For instance, in 2011, another company signed a collection contract for solid waste but it was cancelled in 2012. In 2011, also the Kamthay General Agriculture and Trading Company was expected to build a solid waste processing plant (concession agreement with the Mayor of Pakse). The contract was finally abandoned even before having started due to unstable revenues of the private partner and its limited access to external funding. The recent arrangement planned with Champa Clean encounters problem of revenue collection. The service is assumed in 28 villages only due to residents' reluctance to pay for the service (the agreement stipulated solid waste collection in the 41 villages of Pakse town). Regarding roads and highways, fees collected to access to the Pakse-Vangtao-

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<sup>56</sup> ADB, Governance and Capacity Development in Public Sector Management Program – Subprogram 1. See also ADB, 2014, Lao PDR – Public Private Partnership Policy (Grant 0309 LAO)

Chongmek border crossing were denounced by residents and eventually discussed at the National Assembly<sup>57</sup>.

- All private partners concerned were so far local companies, as usual in Lao PDR for small or medium scale projects. Interestingly, no Thai private company apparently approached the government to manage solid waste in towns of the Champasack province, whereas they did in Luang Prabang, Houayxay or even Luang Namtha. In Pathoumphone District, Chinese investors have proposed an arrangement to collect recyclable waste (computers, batteries, etc.) but the project has not yet materialized. As in Thakhek for instance, solid waste management in Champasack does not attract private/corporatized companies already experienced in this sector (such as GAEA or CINTRI from Cambodia, or Viet Nameese URENCOs).
- PPP experiences for local infrastructure are still at the early stage in Laos but local authorities have often and improperly viewed PPPs as the solution to the lack of public funds<sup>58</sup>. The PPP regulatory framework is still weak and the financial sustainability of many arrangements remains questionable, for instance in the solid waste sector mainly due to insufficient revenues collected by the private operator. The situation is similar in Cambodia. Most private investors, often contractors, have little experience in PPPs and may expect too much from initial good connections with public authorities without estimating correctly the impacts of the risk they take (lack of experience of service operation (O&M), administered tariffs, reluctance of residents to pay for a not necessarily needed service (e.g. in the case of domestic waste, illegal dumping, burning or burring are alternatives).
- In 2018, Champasack provincial government has become more cautious vis-à-vis PPP arrangements for infrastructure. For instance, the PUEP upgraded landfill will be managed by UDAA directly, which also assumes solid waste collection. According to the DPWT, the plan to delegate to the private setor O&M of the future ring road around Pakse has been, for the time being, abandoned.
- TA 8989 has not identified small-scale or very small PPPs (possibly taking the form of community-based initiatives). Possibly, a significant number of households benefit from revenues of services such as electricity selling, water selling, septic tanks emptying, or even solid waste collection, and of course local transport, playing therefore an important role to balance absence of public services locally.

### **c. Business Community Economic Development and Industrial Zones**

188. Champasack province hosts growing economic activity. The local private businesses are active, represented by Lao national-wide companies like the Lao Beer factory or the Dao Group (coffee, bottled water), and a significant group of local SMEs. Local enterprises are not only active in agribusiness and tourism, but also in other sectors (wood processing, wood furniture, construction, import and export, banking, fertilizers. Moreover, the province counts an increasing number of foreign investors attracted by the geographical location and natural resources (mines, hydropower, quality of soils for plantations) and by reasonable labor costs. The business community, composed by at least 11 professional associations, including the provincial Chamber

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<sup>57</sup> Laotian Times, 2018, Road Users Call for End to Tolls in Champasack, Tuesday, April 24 (from Vientiane Times). <https://laotiantimes.com/2016/11/23/road-users-call-end-tolls-Champasack/>

<sup>58</sup> The water sector offers so far limited opportunities: Water supply is on the way of corporatization and provincial Nam Papas have so far little interest for PPP arrangements.

of Commerce, is organized and actively involved in international business dialogue (e.g. ACMECS contract farming mechanisms).

189. Presently, the information gathered by TA 8989 on industrial zones is limited and fragmented. The media and studies do not provide much quantitative and updated information about existing zones' development arrangements. Several industrial and trade zones are not yet active and at construction stage (e.g. Vangtao-Chongmek).

**Table 13: Tentative planned and existing industrial zones in Champasack province**

Name (ha; district)	Status/business	Progress	Status
Champa City Specific Economic zone (58ha; Pakse District)	Not yet active Residential development, trade, services and recreation park	MOU under negotiation	Developed by LTV Construction Co., Ltd (local company) 70% and local government (30%) with purpose of developing real estates, hotel, hospital, etc.
Vangtao-Phonthong (Chongmek) Economic Development Zone (253ha; Phonthong District)	Not yet active Export oriented processing, services and recreation park	Concession agreement (99 years)	Established on May 12, 2016 located at Lao-Thai border area, developed by Douangdy Bridge and Road Construction Co., Ltd 70% and local government 30% with purpose of developing logistics, services, border market and industrial park.
Four Thousand Islands New Area (9,846 Ha) Khong District)	Not yet active Tourism infrastructure and hotels, possibly airport,	Project approved by the central government in 2015	Established on 30 June 2018, developed by the Laos Maha Nathi Sithandone (Hong Kong) Investment Co., Ltd (80%) and LTV Road and Bridge Construction Sole Co., Ltd (local company 30%) with purpose of developing tourism, services, real estate, hotels, hospital, banking, etc.
Pakse-Japan SME SEZ (195ha; 10-13 Km from Pakse District) on NR13 South	Active Car industry (sub-contractors), re-exportation activities (to Japan or Thailand).	Est. in 2015. Concession agreement (50 years)	Xaysana Group, San TVC Consultants, Nishimatsu Construction (20%), Lao National Committee for SEZ, Champasack Province SEZ Investments: 62 million USD expected
Pathoumphone (1,245ha; Bachieng IPZ Chalouensouk District) <sup>59</sup>	Active 45 factories in 2009 (beer, wood, fertilizers, etc.). Industry, housing and commercial center.	IPZ	Viet Nameese developer interested in 2008-2009 and feasibility study made by Viet Nameese consultants for the development of 584 ha <sup>60</sup>
Sanasomboun District Zone (606ha ; Sanasomboun District)	Presumably Active <sup>61</sup>	IPZ	N/A

<sup>59</sup> Source: Nippon Koei Co. Ltd, International Development Centre of Japan, MINTECH Consultants Inc., 2010, Preparatory Survey on Industrial Zone Development in the Lao People's Democratic Republic, Final Report, Part II – Industrial Estate Development in Vientiane Capital, Savannakhet and Champasak, June. MOIC -JICA

<sup>60</sup> Ibid.

<sup>61</sup> According to: The Industry and Commerce Department, Champasak Province, 2014, Potentials and Investment Promotion in General Business (Champasak Province).

Name (ha; district)	Status/business	Progress	Status
Phonetong District Industrial Zone (753 ha, Phonetong District)	Presumably Active <sup>62</sup>	IPZ	N/A
Champasack Lao Service Industrial Park (10 Km from Pakse with total area of 800 ha).	N/A	Established in 2015	Developed by Lao Service Co., Ltd (local company 70%) and local government (30%) with purpose of developing industrial park.

Source: Authors with the aid of various sources

190. Champasack provincial authorities have now a significant experience of PPPD. This dialogue contributed to investments and trade development<sup>63</sup>, and was permitted by the support of central government and donors (e.g. the GIZ in the 2000s<sup>64</sup>). It was also motivated by business opportunities represented by the economic development of Thailand and southern Viet Nam. Some successful efforts can be listed<sup>65</sup>:

- Simplification of investments procedures (one window service)
- Simplification of business registration procedures (one window service)
- Taxes and business incentives
- Annual MOU signed by the provincial governments of Champasack and Ubon Ratchahani to serve as umbrella to Lao and Thai companies to initiate/implement agreements in the framework of ACMECS mechanisms resulting in regular exchanges between the DOIC of Champasack) and the Department of Commerce of Ubon Ratchahani.
- Support from the provincial government to allocate ODA to investments benefiting to business activities (e.g. ADB support to finance central market in Paksong, AFD to support coffee production, etc.)
- The establishment of a provincial public-private committee
- External communication, including documents in English<sup>66</sup> or participation to international events

191. Yet, further results fitting with objectives to support sustainable development (combining economic, social and environmental aspects) and to improve local governance can be expected from a strengthened PPPD. This dialogue should not be limited to meeting with each major investor separately. It should mobilize both provincial and district governments and the highest levels of the provincial administrations on the one hand, and the business partners as a community. PPPD does not mean only discussions, but should be oriented toward problem solving and public-private initiatives (labeling, geographic indications, joint projects, charts of conduct, etc. Three examples:

<sup>62</sup> Ibid.

<sup>63</sup> World Bank, 2009, Scoping Study on Cross-border Agribusiness in the Lao PDR: Focus on Champasak Province, financed by the Trade Development Facility of the Multi-donor Trust Fund (TDF-MDTF), final report, August.

<sup>64</sup> See: Champasak Province, 2009, Investments Opportunities in Laos 2009-2010, promotion document in English prepared by the DPI with the assistance of the German cooperation.

<sup>65</sup> More comprehensive description of some of these experiences is provided in: World Bank, 2009, quoted above.

<sup>66</sup> See: The Industry and Commerce Department, Champasak Province, 2014 (op.cit.)



- By increasing the knowledge of the public parties about business functioning locally, PPPD should facilitate a better adjustment of government’s expectations (from private investments) to effective (investment) capacities and plans of the private sector, making provincial plans more achievable.
- Present zonings being dominated by a sector-based approach (industrial, agriculture and tourism), PPPD should pave the way for more “integrative” and sector-crossing initiatives (e.g. circular economy-oriented measures, integrated provincial-level solid waste management, logistic centers, etc.).
- PPPD should help anticipating concretely the link between i) industrial zones/SEZ development and urban/rural planning; and ii) development outside these zones (including by adopting scenario-based approach) (migrations and availability of labor force (incl. immigration from other provinces or countries) and relocation of some factories already settled in the province). Complementary public investments are needed to make industrial zones/SEZ economically, socially and environmentally viable (e.g. ITC infrastructure, education facilities, vocational training, security, specific safeguards for ethnic groups, etc.)<sup>67</sup>.

192. The concrete orientation to strengthen the existing PPPD in Champasack could result of a specific study. At this stage, an initial list of subjects, topics and outcomes expected is presented in Table 14.

**Table 14: Potential Aspects of a Strengthened PPPD in Champasack**

<b>Awareness subjects</b>	<b>Examples of topics</b>	<b>Expected outcomes</b>
Evolution of key sectors for Champasack long-term economic development (agribusiness, hydropower, tourism, etc.)	Technological innovation and impact on workforce, competition, quality control, logistic services, business planning, corporate governance, financial management, environmental printing, supply chains, skills, etc.	To facilitate a more pro-active attitude to attract sustainable investments (and sustainable investors), and to provincial economic expectations/strategies with impacts of these investments on environment, urbanization, education or social (inc. ethnic groups)
PPP options for industrial projects	Legal and financial aspects, key performance indicators, regulation mechanisms: Special Purpose Vehicles, DBO, leasing, concession contracts, BOT, joint venture governance, etc.	To strengthen the capacities of provincial and district authorities to negotiate fair PPP arrangements with the private sector (e.g. SPV, management contract, etc.)
Opportunities provided by joint initiatives to increase sectors performance and ownership of business initiatives by local authorities and residents	Social and environmental responsibility of enterprises locally, quality labeling (e.g. hotels, tourism agencies, etc.)	To better conciliate general and private interests in the province, to strengthen acceptability of projects by the population

<sup>67</sup> For instance, there is no evidence any study work exists regarding the overall impacts in the province of the 10 billion USD expected in Khonephapheng on urbanization process, immigration dynamics (from rural areas, other provinces or from abroad). A feasibility study has been delivered to the MPI by the (expected at this stage) Chinese developer, but no information about the scope and content of this study was made public or disseminated among the existing local business community (as part of a consultation mechanism).

Awareness subjects	Examples of topics	Expected outcomes
Knowledge of business management expectations and needs	Critical aspects to ensure the profitability of the business with respect to material and immaterial facilities existing or planned in the province (infrastructure, schools, complementarities with university of Pakse, recreational areas, ICT and e-government, etc.)	i) to better combine industrial and trade strategy with both urban and environmental plans; ii) to adapt detailed planning of infrastructure and facilities with business needs (e.g. Pakse as service business center, and districts main towns as sub-centers when relevant); iii) to identify opportunities of industrial zones development to make surrounding residents accessing to services when possible (water, solid waste management, etc.) in particular in poor districts
Business management practices	Human resources management, staff motivation and incentives, management information systems, etc.	To identify transferable methods/tools/experiences to improve public administrations/agencies management (e.g. UDAA, Nam Papa, etc.)
Communication tools and transparency	Consultation process with the business community, more systematized, provincial stands during commercial events, e-communication, multi-language interactive website of the province,	To increase economic stakeholders' visibility of public decisions and plans (for them to adapt their business plan) To develop a more pro-active identification of the type of investors needed by the province
"Public Public Partnership Dialogue"	To make sure the central government support and participate to PPPD, and as far as possible suggest Salavan, Sekong and Attapeu provinces (possibly Savannakhet) to also stimulate PPPD	To limit/manage competition between provinces to attract investments, to take advantage of their respective assets and to protect/support them

Source: Consultant Team

#### d. PPP and PPPD in hydropower

193. The Investment Promotion Law (2009) promotes PPPs in the hydropower sector (concession agreements) to complement functions assumed by Electricité du Laos, the national public operator<sup>68</sup>, for generation (through its subsidiary EDL-GEN), transmission and distribution. Small grids are operated by provinces. The multiplication of IPP (Independent Power Providers) in Champasack is a recent trend compared with other Lao provinces. Today, a large number of hydropower plants projects (HPPs) are targeted by MOUs or PDAs (Project Development Agreements). The Lao demand for electricity is growing fast, at a rate estimated in 2013 at 15-18% per year by 2021<sup>69</sup>. In Champasack, most HPP are located in Paksong and Khong District. Champasack economy should have access to a sufficient power supply in the future if current economic/industrial projects announced are to be implemented without significant delays. Generation of electricity to satisfy demand in Champasack would fit with the GOL policy to balance export/re-import power by encouraging generation to satisfy domestic demand and to reduce

<sup>68</sup> Lao Holding States Enterprise (LHSE) finances projects in equity.

<sup>69</sup> Asian Development Bank, 2013, Lao People's Democratic Republic, Energy Sector Assessment, Strategy and Roadmap, 2013 Update.

dependency on Thailand for electricity<sup>70</sup>. According to a tentative list of HPP private developers in Champasack province, 15 foreign companies have expressed interest for HPP. They are from Thailand (7 out of 15, including large group's subsidiaries like B-Grimm, Italian Thai Asian Corp., Charoen Energy and Water Asia Co. Ltd)<sup>71</sup>, from Japan (Kansai Electric Power Co. and NEWJEC Co), from Malaysia, Korea or China. Apparently, few of these companies commit in different projects simultaneously and related MOU are dominantly recent (2014 onwards). Thai companies are particularly committed in large HPP (in terms of installed capacity expected). Lao private companies, such as SV Group, or Daoheuangsong Road-Bridge Irrigation Construction Import-Export Co Ltd, are rather involved in small HPP (less than 6-7 MW).

194. Hydropower, as mining<sup>72</sup>, is often considered separately from trade, urban and rural developments or tourism<sup>73</sup>. Assessment of the cumulated economic impacts (in particular local employment and revenues, less the possible environmental and social costs, salaries scales in the business sector, potential water conflicts between hydropower, and agriculture usages) of hydropower development would need further investigations. Construction phase of large HPP and electricity transportation facilities may stimulate local employment and business and stimulate locally investment in complementary businesses. Once commissioned however, hydro-power plants are not labor intensive. Notoriously, HPPs represent a great environmental concern. In Champasack large internationally-financed HPPs and large HPPs are more strictly controlled and developers have more resources to comply with environmental safeguards. One major environmental threat would certainly come from a massive and uncontrolled development of small hydropower plants. The growing number of HPPs in Champasack makes relevant supporting any further structuring of a hydropower business professional group as a mandated interlocutor for authorities<sup>74</sup>, in particular for small plants developers. This should be a matter of discussion between authorities and hydropower business developers/operators about impending issues (e.g. compensations for non-minimum water releases, deforestation, local redistribution of revenues from generation in Champasack, etc.).

195. Hydropower development on a PPP basis represents an opportunity to strengthen not only the Lao-Thai economic dialogue involving Champasack and Ubon Ratchathani provinces but also inter-provincial dialogue in Laos, in particular between Champasack and Attapeu provinces (e.g. management of river basins and ecosystems).

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<sup>70</sup> "Looking at electric power circumstance in Laos, such circumstance that the country has no alternative but to rely on import electricity from neighboring Thailand due to its transmission line network which is divided into three regions, northern, central and southern regions and insufficient electricity supply to domestic demand has permanently been continuing. The conditions of current power purchase agreement between EDL and Electricity Generating Authority of Thailand (EGAT) are, therefore, favorable to EGAT and tariff of import electricity is set at higher rate than tariff of export electricity. Consequently, it affects adversely to profit and loss results of EDL (...). The Lao government is investigating to dissolve this unbalanced contract in the future from the viewpoint of energy security and improvement of balance of international payments of the country. Since it is important in order to do that to enhance electric power supply system within the country so that it shall not rely on import electricity from Thailand, the country is trying to interconnect the divided domestic transmission line network in Laos as well as to promote development of domestic power sources which are currently lacking (...). Because import of electricity from neighboring countries became exceeding the export and electricity supply/demand in Laos has continued to be tight since 2007, the business plan was changed from sale to Thailand to sale to domestic market in Laos as strongly requested by the government of Laos in 2008". Source: JICA, Kansai Electric Power Inc. NEWJEC, 2015, The Preparatory Survey on Xe Katam Hydropower Plant Project in Lao PDR, Final report, MEM; October.

<sup>71</sup> HHTC: Houay Ho hydropower plant (152 MW installed capacity) in Champasack and Attapeu. HHTC is partner of Suez Energy (60%) and EDL (20%)

<sup>72</sup> Essentially bauxite in Boloven plateau with firms from China (e.g. China Nonferrous Metal Mining Co.). Japan and Vietnam expressed interested in future concession contracts (gold in Sukuma, and iron in Patoumphone).

<sup>73</sup> This is less the case with rural development if one considers the rural electrification projects financed by several international donors in Southeast Asia.

<sup>74</sup> There are other examples, e.g. in Himachal Pradesh (India)

## 10. Border Economic Zones in Champasack Province

196. SEZ development in Lao PDR has started relatively late compared to neighboring countries. The objective of SEZ development in Lao PDR is to promote FDI and local investment in target areas to reinforce economic growth across the country, foster job creation, promote skills development and technology transfer especially in rural areas, as well as contribute to revenue generation of the government (SEZ Promotion and Management Office, Ministry of Planning and Investment, 2016).

### a. SEZ Management Structure at the National Level

197. In Lao PDR, the responsibility of special economic zones (SEZ) development has recently shifted from the Lao National Committee for Special Economic Zone Development and Management under the Government office to the SEZ Promotion and Management Office (SEZO), Ministry of Planning and Investment (MPI). Figure 29 depicts the management structure of SEZ management in Lao PDR on the national level.

**Figure 29: National level SEZ management structure**



Source: (SEZ Promotion and Management Office, Ministry of Planning and Investment, 2016)

198. At the central level, MPI is leading SEZ management together with other line Ministries as appropriate. MPI is also responsible for the approval of the SEZ as well as the negotiation of the incentive terms to be offered in the SEZ, i.e. tax incentives, land policy, etc. Most relevant are the Ministry of Public Works and Transport (MPWT), Ministry of Industry and Commerce (MoIC), Ministry of Natural Resources and Energy (MoNRE) and few others. A central role is taken by the SEZ Promotion and Management office representing the link between national and local

government agencies as well as the SEZ management/economic board, which largely represents the SEZ shareholders.

199. The governor's offices coordinate local government policies including municipal services. All licenses and permits, also for SEZ investors, are issued at the local level. The SEZ management has the authority to set-up one stop service (OSS) offices to reduce red tape for investors. Generally, OSS have the permission to issue land use right lease license, enterprise registration certificate, seal registration certificate, import-export certificate, construction license, environmental impact certificate, management of citizens and labor, tax payment. Any other licenses from line ministries have to be obtained from relevant offices outside the OSS. Implementation of the OSS' is mixed, with some zones having active OSS' (i.e. Pakse-Japan SME SEZ) and others not.

200. The development of the zones is usually the responsibility of private sector companies. Those companies can be either Lao, foreign or a mix between the two. Each zone establishes its own management structure.

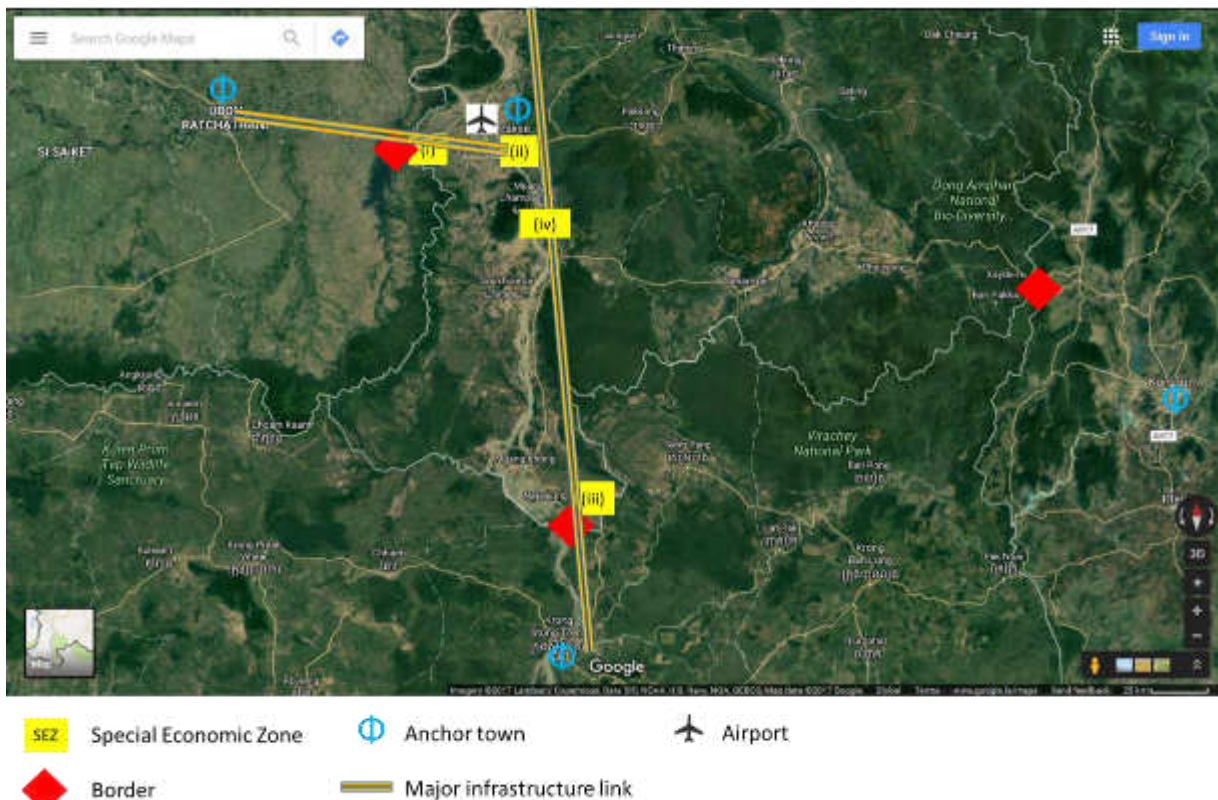
201. The developer must plan, build and operate the infrastructure in the zone, although in some zones public utilities are offered (i.e. power supply, wastewater treatment, solid waste collection, etc.). Where public utilities are not offered, it is also the developer's responsibility. From field interviews to many SEZs in Lao PDR it became also apparent that there is little coordination between national and local government agencies on SEZ development issues. For example, SEZs are often times disconnected from local development plans while at the same time the environmental and social costs of SEZs have to be borne by the surrounding municipalities such as solid waste collection including hazardous and toxic waste, wastewater treatment, pollution, congestion, etc.

#### **b. Special Economic Sub-Zones in and around Pakse**

202. In Champasack province, there are a total of five sub-zones (see also Figure 26), each with a different purpose, different stage of development, and most importantly, development potential:

1. Vangtao-Phonthong Economic Development Zone
2. Champa City Specific Economic Zone (Huay Poun)
3. Four Thousand Island New Area
4. Pakse-Japan SME Special Economic Zone
5. Champasak Lao Service Industrial Park.

Figure 30: Map of Pakse area



Source: Authors adapted from (Google maps, 2018)

**(i) Vangtao-Phonthong Economic Development Zone**

203. The Vangtao-Phonthong EDZ is located on Route 16W close to the Lao/Thai border. The Vangtao SEZ has been approved by the government in 2016. It is a joint venture between a private Lao company (70 percent), Douangdy Road and Bridge Construction Company, and the Lao government (30 percent provided in land). The Lao government is represented by the ministry of planning and investment. The SEZ board consists of the

- Provincial investment promotion agency
- Provincial department of tourism
- Department of environment
- Local government representatives

204. The objective of the SEZ will be to develop the area as a tourism, shopping, light manufacturing and logistics hub, taking advantage of its location at the Lao/Thai border. For example, the investor plans to build a hotel, shopping mall incl. duty free shop as well as logistics and light manufacturing focusing on agro-processing. As part of this, the entire border area is going to be redesigned including a new border facility, which will be located further inland on the government-owned land next to the SEZ. Also, a new road will likely be built to facilitate cross-border traffic through the new border facility.

205. The total land area of the SEZ is 253 ha of which 70 ha will be developed in the first phase. Currently the investor is still surveying the land and designing the area. No infrastructure development has started yet. Resettlement and land clearing process has been initiated.

206. In terms of utility services, the SEZ is planning to use public infrastructure and services for electricity (EDL will likely build a substation in the area), water supply and possibly fiber optic internet. Waste water treatment and solid waste management is likely to be provided by the SEZ.

### **(ii) Champa City Specific Economic Zone (Huay Poun)**

207. Champa City SEZ is located in the center of Pakse city, next to the Pakse airport with a total land area of 58,343 ha. To date, no formal management structure has been established since the project is still under negotiation with the Lao government. The SEZ will focus on residential development, hotels, parks, etc. The low-lying land makes the area prone to flooding and presents a major challenge for SEZ development. The source of flooding is both the surface run-off from nearby hills/mountains as well as the close proximity of the area to Mekong and Xedon rivers. The fluctuation of the Mekong river between dry and rainy season is between 10-15 meters. In spite of river embankment protection, the problem of flooding might continue to persist.

208. Utility services and infrastructure including water supply, wastewater treatment, solid waste management, etc. will be provided by the city of Pakse because of the close proximity of the SEZ to the city.

### **(iii) Four Thousand Island New Area**

209. The Four Thousand Island New Area is located at the Lao/Cambodian border (see Figure 32) and is one of Lao PDR's most popular tourist destinations. The area features not only Khonphapheng waterfall, one of the largest in the world, but also an area known as "4,000 islands". The entire project is still in its infancy stage. In 2017, the government of Lao PDR signed a MoU with the Chinese company Guangdong Yellow River Industrial Group to conduct a feasibility study to develop the Khonphapheng area. To date, the project has been approved by the district and provincial authorities but still requires approval from the national government. According to the deputy governor of Champasack province Mr. Buasone Vongsongkhone, the concession agreement is likely to follow only after the national government has approved the project (Vientiane Times, 2018). To date, no formal management structure has been established since the project has not been finally approved.

210. According to various media reports, the investment volume in the zone would be USD 10 billion of which USD 9 billion would be spent on infrastructure development (Vientiane Times, 2018). The total size of the area is not yet finally determined. Whereas the company estimates that around 9,000 ha are needed, the provincial authorities have allocated more than 7,000 ha for the potential development, which would be divided into four zones (Xinhua Net, 2017).

211. The project would develop an entire city built around tourism development. This would include hotels, restaurants, a trade center and other tourism-related businesses. In the first phase of the project (2018-2025), the company would focus on building the necessary infrastructure including roads, water supply and drainage. The second phase may include an airport and other larger infrastructure (Xinhua Net, 2017).

### **(iv) Pakse-Japan SME SEZ**

212. The Pakse-Japan SME SEZ (PJSEZ) was formally established in December 2015. There are four shareholders: (i) the Lao national committee for SEZ, Champasack province SEZ, (ii) Xaysana group, (iii) Savan TVS Consultant Co. Ltd., and (iv) Nishimatsu Construction Co. Ltd. The management right is held by Nishimatsu Construction although its share is only 20 percent. The SEZ is located approximately 14 km South of Pakse along the NR13S.

213. The zone offers a number of incentives to its investors, including:

- 30 years land lease
- Tax incentives (corporate profit tax exemption for 10 years starting with the first year of profits, and 8 percent or 10 percent thereafter)
- Personal income tax at 5 percent
- Exemption on import and export duties
- One stop service operated by the department of planning and investment of Champasack province
- One stop service support to investors in English and Japanese languages.

214. The total development area of the SEZ is 195 ha. When establishing the zone, a number of existing foreign investments were retrospectively included as part the SEZ to allow those companies to take advantage of the incentives provided. The development of new land of the SEZ area will take a phased approach. In the first phase, a total of 66 ha will be developed. The first 13 ha have already been completed in December 2017. More land will be developed in line with investments in the zone. The zone is currently constructing a rental factory as well as a canteen which are scheduled to be finished mid-2018.

215. The zone targets specifically Japanese SMEs where at least one shareholder must be a Japanese national. To date, 10 companies have committed to invest in the PJSEZ, 3 of them are investing in the newly developed land area and 7 others have invested outside the new development area because they invested prior to the area being developed. Some of the investments have taken place as part of the Thailand plus one strategy and are integrated into Thai-Japanese supply chains whereas others supply goods directly to Japan or the domestic market. The zone aims to secure 2-3 additional investments each year. According to the management, there is lots of demand from Japanese firms but they only accept applications from SMEs in order to contain wage pressures. In order to supply zone investors with the workers needed, the SEZ has signed a MoU with the Champasack Technical Vocational College, which provides 3 year technical and vocational courses. By absorbing workers in SEZ factories and providing opportunities in Champasack it is expected that the previous braindrain (to Thailand and Vientiane) ceases. For higher management staff position the SEZ aims to recruit directly from Champasack University. However, many university graduates are looking mainly to work in the public sector.

216. For utility services, they are planning to use a mix of public services/infrastructure and SEZ-specific services. For example, for power supply, the investor makes a direct contract with the local electricity provider but the necessary infrastructure (power lines, etc.) will be provided by the SEZ. In the future EDL may establish a substation nearby the SEZ. For water supply they are currently using an on-site water tank, which may need to be expanded as zone investments grow. This is also true for a wastewater treatment plant which will be added in the future. Solid waste management services are scheduled to be added in the future. Currently firms in the SEZ do not produce toxic waste.

217. In terms of logistics, all tenants are currently using exclusively Laem Chabang port although the distances to the Viet Nameese port of Ho Chi Minh city or Da Nang are 150 km and 260 km shorter respectively. But Laem Chabang offers currently a better value proposition (shipping services connectivity, cost and lead time of land transport services, and convenience). For example, transiting cargo through Cambodia is cumbersome and expensive.

#### **(v) Champasack Lao Service Industrial Park**

218. The Champasack Lao Service Industrial Park was established on 29 August 2015 with a total area of 800 ha located on the NR 13 about 10 km south from the city. It is developed by Lao



Service Co., Ltd (local company) with 70% of the capital and the local government with 30% with the purpose of developing an industrial park.

## **11. Development Linkages of SEZs with the Local Economy**

219. The SEZs in and around Pakse differ substantially in terms of size, investment, scope, development progress and potential. Some of the special economic zones could significantly contribute to employment, economic and social development of the greater Pakse area by providing linkages between the local economy and international markets. This is particularly true for agro-processing and development of tourism sectors. To fully take advantage of the benefits such development would bring, a cluster-approach involving the entire Southern Lao region including neighboring countries should be considered.

220. To develop successful clusters, there are three main components needed: (i) infrastructure, (ii) cluster-support, and (iii) finance (Lindfield, 2017). Cluster development occurs at the international/cross-border, national and local levels and involves all stakeholders – public and private. In terms of infrastructure provision and financial institutions, current practice in the region is relatively developed, if not yet adapted to corridor development. However, institutions for cluster support and cross-national coordination are less developed (Lindfield, 2017, p. 8). This became also apparent during consultation with relevant stakeholders, including public and private sector.

221. For example, among the SEZs there is much improvement needed in establishing, managing and operating SEZs. The Pakse-Japan SME SEZ seems to be the most advanced at the moment in terms of development concept and progress. The careful planning and rationale, i.e. in terms of what type of investments will be permitted in the zone (i.e. in order to contain wage pressures), as well as the phased implementation approach to bolster funding throughout the investment suggests a longer-term view.

222. The Four Thousand Island New Area has only completed the feasibility study at this stage. Given the high sensitivity of the area in terms of environmental impact, the optimistic estimates on tourism numbers (15 million to Khonphapeng by 2050 which is more than 3.5 times the current tourism numbers for the entire Lao PDR and 2.5 times the Lao population), there seem to be large risks in the development of infrastructure – both from an environmental protection and tourism/aesthetic point of view. The investment amount of USD 10 billion is extremely high.

223. Vangtao-Phonthong Development Zone is currently in the beginning stages of development. The work on the infrastructure has just started. There is some potential for border tourism development i.e. for the duty-free shopping etc. as well as for light-manufacturing, especially in agro-processing. However, it seems that a clear development concept and trajectory is still lacking at this stage. Evidence from around the GMS and beyond suggests that zones without a clearly-defined development focus and purpose tend to be not very successful to guide cluster development. For example, there is little coordination between national and local/provincial government authorities as well as between technical agencies. The lack of coordination among government agencies leads in some cases to mixed messages to investors and creates uncertainty. Zones could be approved by the national government while local or provincial authorities may not be capable of providing even basic public services to those zones. As a consequence, SEZs approved by the national government are often operating outside the local development context in spite of their development impact being felt directly by the local community (i.e. economic and social dynamics of the city, infrastructure services and development incl. wastewater treatment, solid waste management, etc.).

224. Additionally, a stronger bond needs to be formed between the private sector and educational institutions to better match the skills of graduates with the needs of the private sectors, especially in manufacturing and services. In addition, research and development, especially in agriculture, could play an important part enhancing agriculture in the entire region.

225. On the international level, cooperation and coordination to bolster cluster development between the neighboring provinces of Ubon Ratchathani and Champasack is much more developed than elsewhere between Lao PDR and Thailand, best exemplified in the annually negotiated MoU on contract farming. Cooperation in the academic level seem to start forming. There is an existing partnership between Champasack university and Kasetsart university in Bangkok. The University of Ubon Ratchatani is keen to develop a stronger relationship with Champasack university, particularly in agro-processing and sciences. However, cooperation on the policy level including on provincial development strategies should be fostered to ensure a more complementary development between provinces.

226. Linkages between Lao PDR and Cambodia are currently very weak. Although the province of Stung Treng could be considered as an extension of Champasack province to the South (similar to the extension of Salavan, Sekong and Attapeu), a much more strategic approach would need to be taken to take advantage of the close proximity of Cambodia. This includes coordination and cooperation beyond day-to-day challenges at the border but a strategic dialogue involving the governments of Lao PDR at the policy level, but also facilitating transit cargo from Lao PDR to of Ho Chi Minh City ports.

## **12. Greater Pakse Area Project: Multi-Sector Investment Priorities**

227. From the detailed analysis presented above and from discussions with the provincial authorities of the Champasack Province, Pakse city officials and representatives of the private sector, a tentative number of areas were identified which could be considered in a future multi-sector CTDP for Pakse city.

228. The development of the city of Pakse as an economic hotspot is centered around Pakse becoming a tourism hub for the southern part of Lao PDR and at the same time a hub for agro-industry and trade with Thailand. To achieve both of these objectives, first, the provision of adequate urban services is important. Second, key transport infrastructure must be developed. Third, human resources capacity development needs have to be addressed.

229. Hence suggested interventions could be grouped around a number of areas as follows:

### **1. Urban Services**

- (i) Completion of the on-going drainage system for expanding urban areas of the city. The PUEIP is contributing significantly to the development of the urban drainage system. However, with the expansion of the city to development zones A and C in figure 26, completing the construction of the drainage system should be included in a follow up project.
- (ii) Construction of water treatment facilities in core city areas. All the waste water generated by the city of Pakse is discharged without treatment in the Mekong and Xedon rivers. Community based treatment facilities or ecological filter systems should be developed under a PUEIP follow up project. UDAA is already testing a small pilot project.
- (iii) Support for solid waste sorting is needed and a materials recovery facility is needed at the new landfill developed under PUEIP.

### **2. Economic Development Support**

- (i) The Pakse city by-pass is an essential infrastructure to support the development of the city as a tourism and agro-industry and trade hub. The by-pass will be built in phases. Parts of the by-pass east of the Mekong River is already under construction. The Government of the Netherlands will finance the bridge over the Xedon river northeast of the city. The Government of Japan is studying the construction of the first bridge (most probably south of the city, close to development area C in figure 26). Parts of the by-pass and/or the new connecting roads to the city center should be part of a Pakse CTDP project.
- (ii) The Bolaven Plateau and the Paksong area are very important areas for the development of the city of Pakse as a tourism and agro-industry hub. Most roads in the Paksong area are not paved and difficult to pass during the rainy season. Most producers of coffee and other crops in the area are small holders which have difficulties reaching markets. It is proposed to include the construction of some priority asphalted feeder roads in Paksong (Ban Phoudamkuan-Ban Houixan-Paksong town-Nongsay check point (44 km); Ban Houi Chiat-Ban Khot Noi-Ban Houixan-Ban Katouat-Junction R16A (38.13 km); Junction 16A-Ban Nong Ee OY-Ban Nong PhaNouan-Ban Houichpot (13.44 km); Junction 16A-Ban Thong Ka long (7.52 km)).
- (iii) On the west side of the Mekong River, road 14A is the main road south (up to the Cambodian border). However, it passes close to Vat Phou. Due to the whole area around Vat Phou being declare a World Heritage site, the road cannot be expanded to accommodate increasing traffic including for tourism. Road 14B also goes south but at some distance west of Vat Phou. Road 14B is a vital road for trade and tourism west of the Mekong. It needs however significant improvement. It is a possible component for a Pakse project.
- (iv) The border crossing facilities and infrastructure at Vangtao on the Lao PDR side of the border with Thailand need improvements. It may need to be considered in a Pakse follow-up project.

### 3. Heritage City

- (i) Pakse possesses an old historical town and many old heritage buildings which are not well recognized. To develop the city heritage of Pakse, some investments are needed to beautify the city. The Korean supported development of a river side promenade and park will be an important improvement. It is proposed to include in a potential Pakse city project modern street lighting, road signage, rehabilitation of access roads, greening of some old city areas.

### 4. Capacity Development

- (i) The planning and management capacity of the Champasack Province SEZ authorities have been found to be weak. Supporting SEZ management capacity should be an important component of any future Pakse project.
- (ii) UDAA is actively seeking to upgrade and modernize its urban management capacity by seeking to develop IT based systems (development of data digitalization, databases and GIS based systems). This should be supported. At the same time and as noted earlier in this report, UDAA is understaffed while its assignments are expanding. The physical facilities of

UDAA are insufficient and an additional building will be required. It is proposed to include such a building under a potential new project.

- (iii) Finally, it is proposed to support the expansion of the Pakse University, possibly through an agreement with Ubon Ratchathani University. This could be done through co-financing with TICA for instance

**Table 15: List of Persons Met in Lao PDR**

<b>Name</b>	<b>Position</b>
Mr. Khamphonh Nouansengsy	President, Lao National Committee for Special Economic Zone, Champasack Province Special Economic Zone
Mr. Bounyong Sounthone	Vice President of Board Committee Lao National Committee for Special Economic Zone, Champasack Province Special Economic Zone
Mr. Khampadith Keodouangdy	Vice President, Douangdy Company Group
Mr. Toshihiro Mochizuki	Director/General Manager Pakse-Japan SME SES Development Co., Ltd
Mr. Chongaeng Inthisane	Project Coordinator and Purchaser Lao Nishimatsu Construction Co., Ltd
Mr. Bounthiem Thiasakha	Deputy Director, Planning and Investment Department of Champasack Province
Mr. Souliya Nafeuangvilay	Chief of General Planning Sector, Planning and Investment Department of Champasack Province
Mr. Soukkhaseum Pakdimanivong	Director General, Department of Public Works and Transport of Champasack Province
Mr. Bounnao Fongkhamdeng	Deputy Director of DPWT, PUEIP Project Manager
Mr. Jang Jeongho	Team Leader, PE, Executive Director, ISAN Corporation
Mr. Soulivanh Sawathasinh	Governor of Pakse District, Champasack Province
Mr. Kouthong Chanthavong	Vice President of UDAA
Mr. Sinxay Keopaseuth	Chief of Planning and Investment, Pakse Governor Office
Ms. Mala Chanthalam	Deputy Director, Champasack Provincial Department of Information Culture and Tourism
Mr. Soulichack Philadeng	Deputy Director, Provincial Education Department
Mr. Kethkeo Chaluankham	Head of Asset Management and Construction Department, Champasack University
Mr. Sombath Sengphansong	Director, the Champasack Department of Industry and Commerce
Mr. Souksavay Keoounsy	Deputy Director, Tax Department, Champasack Province
Mr. Khonesavanh Vannavong	Secretary General, Champasack Province Chamber of Commerce and Industry
Ms. Inpeng Samuntee	President, Paksong Development Export-Import Co., Ltd, Board member of Champasack Province Chamber of Commerce and Industry
Mr. Viladeth Nalongsak	President, Champasack Rice Mill Association, Board member of Champasack Province Chamber of Commerce and Industry
Gerardo P. Manuel	Team Leader, Pakse Urban Environmental Improvement Project
Mr. Kriangkrai Mekvanich	Deputy Managing Director, Paksong Highland Co., Ltd.

## **B. Dong Dang – Lang Son (Viet Nam)**

### **1. Introduction**

#### **a. Background**

230. Lang Son City and its sister town of Dong Dang are very crowded border towns due to heavy traffic to and from China. They have the potential to benefit both economically and socially from their Border Gate Economic Zone (BGEZ) status. The BGEZ is an increasingly important node on the North-South Economic Corridor and trading route connecting Southern China from Nanning in Guangxi Province, through Pingxiang, into Lang Son Province in Viet Nam and onto Hanoi and the deepsea port facilities at Haiphong. Lang Son will be linked to Hanoi 140 km away by an expressway.

231. Development in Pingxiang, on the Chinese side of the border, is already advanced, and led by inclusive city planning, combining economic development, with new housing, essential public facilities and infrastructure. Already, several economic zones are developed, operating and supported by public and private investments. The essential strategic transport infrastructure, including new motorway and passenger and freight rail lines are under construction. At the same time, Lang Son/Dong Dang has the potential to be a strategic hub for agricultural products and industrial exports from Vietnam and other ASEAN countries to Southern China. It is a key border crossing for China's industrial and consumer goods exports to Vietnam and other GMS and ASEAN countries. Unfortunately, this potential has not been realized, even though Vietnam has the advantage of significantly lower labor costs compared with China (see Figure 31).

#### **b. Aims and Objectives**

232. This report provides a broad appreciation of the BEZ and the associated urban-rural communities, focused on Lang Son City and Dong Dang Town and describes the problems holding back growth and the opportunities for better economic and social development in the future. A range of proposals are put forward, along with an indication of the implications for institutional development, investment programming and capacity building. The objective is to provide an inclusive program framework on which to build for the future.

#### **c. Stakeholder Consultation**

233. The report responds to series of discussions with government officials from: (i) Lang Son Province, Lang Son City, Dong Dang Town and from the local BGEZ authority in Viet Nam; and (ii) Pingxiang City in the Guangxi Zhuang Autonomous Region (GZAR) and from the BGEZ authority in China. These discussions took place in two stages, the first back in 2017 and the second in late April 2018, providing direct support for the preparation of this DFR.

**Figure 31: Lang Son Province: Location and Districts**



## 2. The Border Gate Economic Zone

### a. The Policy Context

234. The Lang Son Province of Vietnam shares a 231km border with the GZAR. The main border city is Lang Son, the capital of the province about 15 km from the main border gate area, about 150 km from Hanoi and 200 km from Nanning, the provincial capital of Guangxi Province. There are altogether 12 border crossings between the two provinces. Only three of the crossings have official recognition for the conduct of cross border trade. They are all located in the Dong Dang - Lang Son BGEZ. The BGEZ was started in the late 1990s, but it was not until October 2008, that its status was formalized by the Prime Minister in accordance with Decision No: 138/2008/QĐ-TTg. The BGEZ is a main pole in the Northern Region Focal Economic Quadrangle of Vietnam (Lang Son-Hanoi-Haiphong-Quang Ninh). The BGEZ is one of nine key economic zones selected for the concentration of development investment from the state budget for the period 2016-2020 as prescribed in Official Document No. 2236/TTg-KTTH dated December 8, 2015 of the Prime Minister. The others are: (i) Mong Cai BEZ, Quang Ninh Province; (ii) Lao Cai BEZ, Lao Cai Province; (iii) Cao Bang BEZ; (iv) Cao Treo International Economic Border-Gate Zone, Ha Tinh Province; (v) Cha Lo BEZ, Quang Binh Province; (vi) Lao Bao Special Economic-Commercial Zone, Quang Tri Province; (vii) Moc Bai BEZ, Tay Ninh Province; and (viii) An Giang Province BEZ. At that time, the Prime Minister requested the allocated investment capital amount

for the 9 BEZs be no less than 70% of the investment support funds from the central budget under annual and 5-year plans for the period 2016-2020.

235. The BGEZ (According to the Adjusted Planning Scheme/Decision No. 1055/QD-TTg dated July 8, 2010) has an area of approximately 39,400ha, covering (i) Lang Son City; (ii) Dong Dang Town; (iii) Thuy Hung, Phu Xa, Bao Lam, Thach Dam, Hong Phong, Tan Lien, Song Giap, and Binh Trung (part) communes in Cao Loc District; (iv) Tan Thanh and Tan My communes in Van Lang District; (v) Van An (part) commune in Chi Lang District; and (vi) Dong Giap commune in Van Quan District.

236. Recently the policy context was strengthened by the Prime Minister's Decision No. 52/2008/QD-TTg approving the scheme for the "Master Plan Development of Vietnam's Border-Gate Economic Zones up to 2020", in the context of (i) "sustainably developing the border-gate economy and economic zones in association with building and developing friendly, stable and sustainable political relations between Vietnam and China, and (ii) increasing international cooperation and attracting domestic and overseas investment through border-gate economic zones".

237. There are some specific objectives regarding the Viet Nam/China BGEZs. In terms, specific to Lang Son they are:

- Build and develop the BGEZ as a trade, service and tourist center in the northern mountainous region and key points along the Hanoi-Lang Son-Nanning corridor and strengthen development cooperation.
- Make effective use of natural conditions and geographic position in developing trade and domestic and international services, to boost economic development and economic restructuring of the BGEZ in Lang Son province.
- Develop border-gate BGEZ investments in association with planning and developing border related urban and rural residential areas and arranging and settling inhabitants of communes along Vietnam-China border.
- Improve the road linkages from the BGEZ in Lang Son province to China's inland, border gates and the BGEZ equivalent in Pingxiang, to better promote development/connections within the region and nationally and internationally.
- Prioritize investment in completing essential infrastructure, within the context of BGEZ master plans and development programs.

#### **b. Key Features and Spatial Dimensions**

238. The wider BGEZ dimension includes two distinct planning concepts; (i) Non-Tariff Zones, and (ii) Tariff Zone.

239. There are three Non-Tariff Economic Zones (EZs)/Cross Border Gates, in Lang Son Province facilitating international trade. They are: (i) Huu Nghi, (ii) Coc Nam; and (iii) Tan Thanh. In the Non-Tariff Zones, government has proposed the following main types of activities that maybe developed: (i) production of export goods and goods for on-spot consumption; (ii) trade in goods (import-export, border-gate transfer, temporary import for re-export, distribution of goods, stores, and retail supermarkets etc; (iii) commercial services (inspection, sorting, packing, transportation, preservation, delivery of goods in transit etc); and (iv) investment promotion, trade promotion, product introduction, trade fairs, representative offices of domestic and foreign companies, (financial institutions, banks etc). As of now, in each of the EZs there are a number of activities including transshipment, trading, duty free shops, logistics services, and some

agricultural product packaging. Unfortunately, all three border gate crossings are characterized by under-development, high levels of vehicular congestion and consequential operational inefficiency and environmental pollution (air quality).

240. The Tariff Zone covers the whole of the remaining area of the BGEZ and includes: industrial-warehouse zones; industrial processing zones, administrative zones and the associated supporting residential areas with schools, health facilities, public open space and recreation areas, tourism, agriculture and forestry, plus areas given over to national defense and security. Notably, the Tariff Zone includes several proposed industrial and processing zones. They include: (i) the Ho Hong Phuong Industry Cluster close to Dong Dang, (ii) the Kho Da-Maa Meo Processing Zone close to Tan Thanh, and the (iii) the Hop Thanh industrial cluster along road 1B and the Dong Banh industrial zone along road 1A.

241. The Non-Tariff Zone, which includes the Tan Thanh Trade and Services Center is targeted to reach 810 ha in 2020 and 1,350 ha in 2030. The Tariff Zone areas are anticipated to reach 1,355 ha by 2020 and 2,075 ha by 2030.

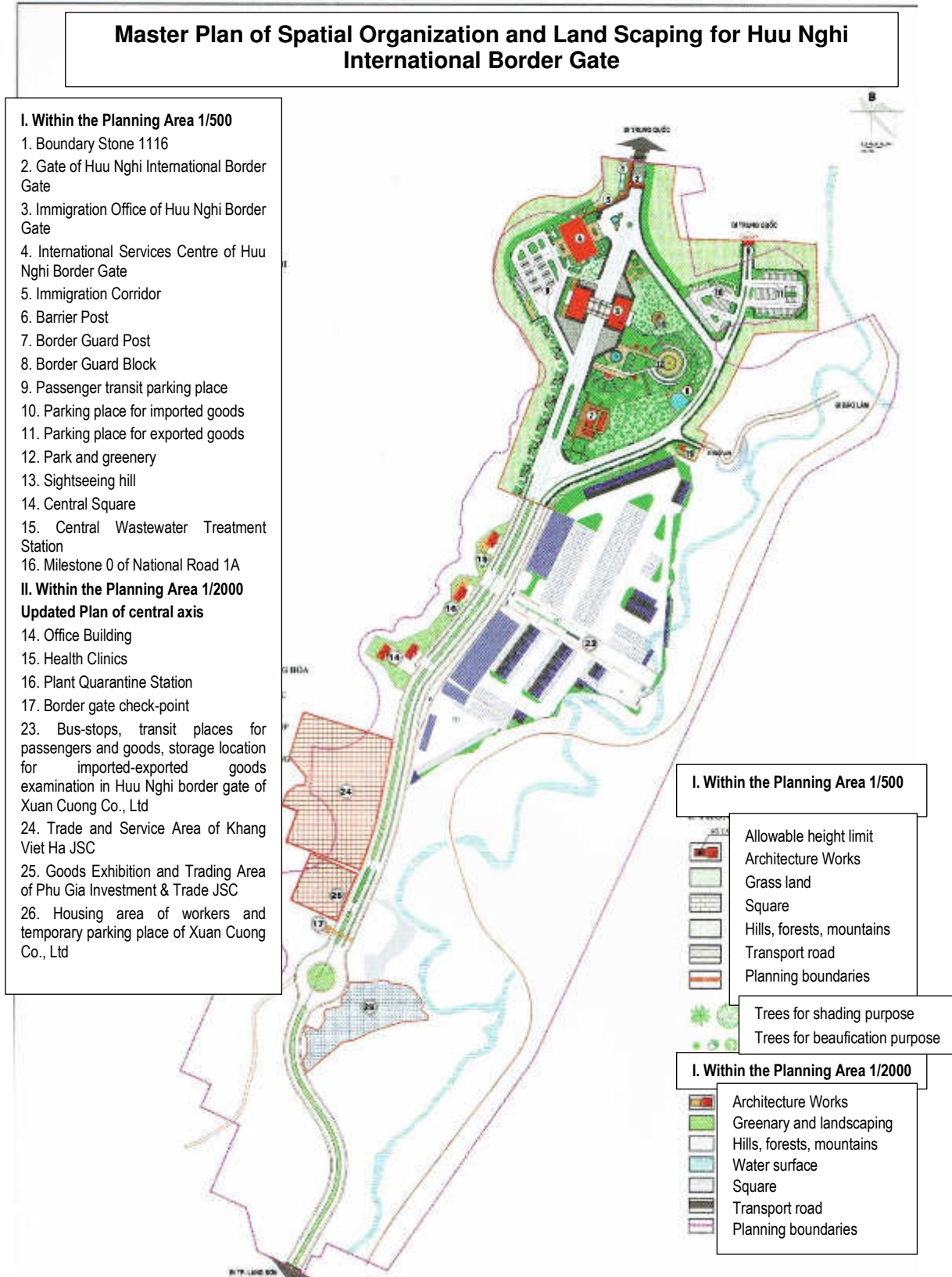
#### **(i) Huu Nghi Border Gate**

242. The Huu Nghi EZ covers approximately 124 ha and is divided into 3 zones, including the border gate area/control points, trans-shipment facilities and the administrative offices. Figure 32 illustrates the current and proposed land uses at this border gate and Figure 33 provides urban design visioning. Historically freight and passenger traffic shared a single access tunnel, but a new trucks lane was completed at the end of 2017 and this has improved the situation. This is the main border gate for pedestrians/passengers, including Viet Nam workers entering China and for tourists. Flows for pedestrians/passengers are now easier, more comfortable and safer. Unfortunately, severe traffic congestion still remains, as there is only one lane used for trucks entering China. Extensive truck queuing is normal. This results in: (i) operational inefficiencies and unnecessary economic costs for the truck companies; (ii) unnecessary air pollution from standing vehicles and road/pedestrian safety issues; and (iii) tunnel capacity not optimized. On the basis of the consultant team's observations, steps can be taken to increase the number of control points to eliminate or to at least reduce the congestion. There are also concerns that the current arrangements for transshipment are somewhat temporary in nature, such that further extensions and upgrading the standards of provision will be necessary in the medium-term. This should be planned for.

243. By contrast, the border gate/control point facilities in the Pingxiang Integrated Free Trade Zone are more spacious and multiple, such that from observation are efficient and not liable to long queuing.



**Figure 32: Huu Nghi International Border Gate: Existing and Proposed Facilities**



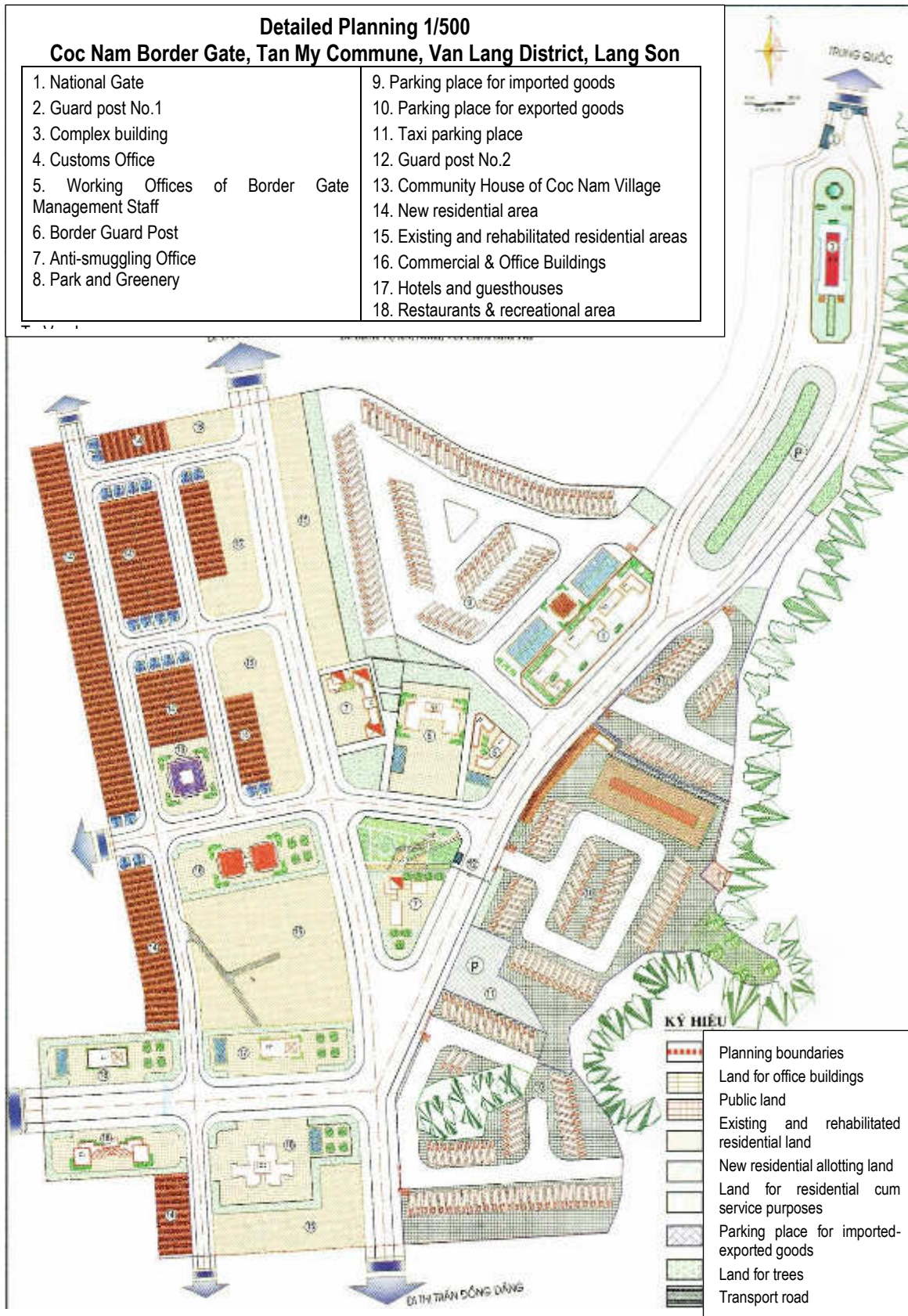
**Figure 33: Huu Nghi International Border Gate: Panorama**



**(ii) Coc Nam Border Gate**

244. The Coc Nam EZ covers just 20 ha and includes border services/control point and transshipment facilities, potential bonded warehousing and some processing activities. Figure 34 illustrates the current and proposed land uses for the area. This border gate combines border gate controls, with transshipment, where the principle activity is centered on re-loading goods from container trucks or similar onto purpose designed small trucks and transferring goods into China. This is a specialized business for small traders from China, enabling beneficial tariff free entry of goods from Viet Nam. Based on the observations of the consultant team the border gate facilities are overloaded and congested. The transshipment operations are cramped and operate around a small warehouse unit. There is queuing at a single lane control point before the tunnel and significant delays occur. Like Huu Nghi, this border crossing is characterized by operational inefficiencies, unnecessary air pollution from standing vehicles, and a tunnel capacity which is not optimized. Additionally, the access road from the border gate area traverses some already built up areas, including residential properties, where air and noise pollution and road safety issues are relevant and will be worsened as use of this border gate increases. It is noted that new parking space for transshipment has recently been completed, but this is unlikely to be sufficient in the medium and long term. The Master Plan for this border gate shows further expansion land, mainly earmarked for additional vehicle parking and transshipment. This will help ease the site's operational problems, but will do little to optimize tunnel usage levels and risks a worsening vehicle queuing situation, unless more control points are squeezed into the border gate area.

**Figure 34: Coc Nam International Border Gate: Existing and Proposed Facilities**



### **(iii) Tan Thanh Border Gate**

245. The Tan Thanh EZ covers some 120 ha and is divided into 2 zones. Zone I is for import-export activities, bonded warehouses and duty-free shops. Zone II is for administrative activities, some trading in agricultural and forestry products and for residential purposes. Figures 35 and 36 illustrate the current and proposed land uses for the area. Cross-border traffic is dominated by container trucks, mainly bringing fruit and vegetables from Viet Nam and other originating countries, into Southern China. Much of this produce is refrigerated. The border crossing is also notable for small quantities of China to Viet Nam trade, which is conveyed “old style” by porters. Immediately to the south of the border gate in Viet Nam is a significant informal settlement. Immediately to the north of the border gate in China is an established urban area, of a mixed land use character, including permanent residential and commercial properties. This includes a very large “Russian” style hotel, which fills the valley at the border control point. The current and increasing flow of trucks on both sides of the border are not environmentally compatible with these land uses, which together with the narrow valley form are very restrictive on the potential expansion of the border gate facilities in situ.

246. Of the three international border gate areas, this one has the most problems, which are summarized as follows:

- The single lane control point seriously restricts the flow of trucks across the border from Viet Nam into China, causes major queuing up to several kilometers long, which in turn results in operational inefficiencies and unnecessary economic costs for the trucking companies, and unnecessary air pollution from standing vehicles and road/pedestrian safety issues.
- The environmental disruption to the established communities on both sides of the border gate, caused by excessive road traffic noise and air pollution is not sustainable.
- The principle road connection from the border gate to the strategic road network (Highway A1) in the vicinity of Dong Dang is inadequate and adversely affects established residential areas.

247. In Pingxiang, action has been taken to overcome some of these problems, by moving most of the trucking operations onto vacant land areas set apart from sensitive land uses. At the same time to improve connectivity China has built a new four lane road passing the mountainous terrain through 2 sets of tunnels, reaching Viet Nam just north of the current Tan Thanh border gate. This would decongest the current Tan Thanh border gate. To complete this alternative cross border route requires significant investment on the Viet Nam side of the border. Here, it is understood an agreement between China and Vietnam is being negotiated but there have been long delays possibly due to border security considerations.

Figure 35: Tan Thanh International Border Gate: Existing and Proposed Facilities

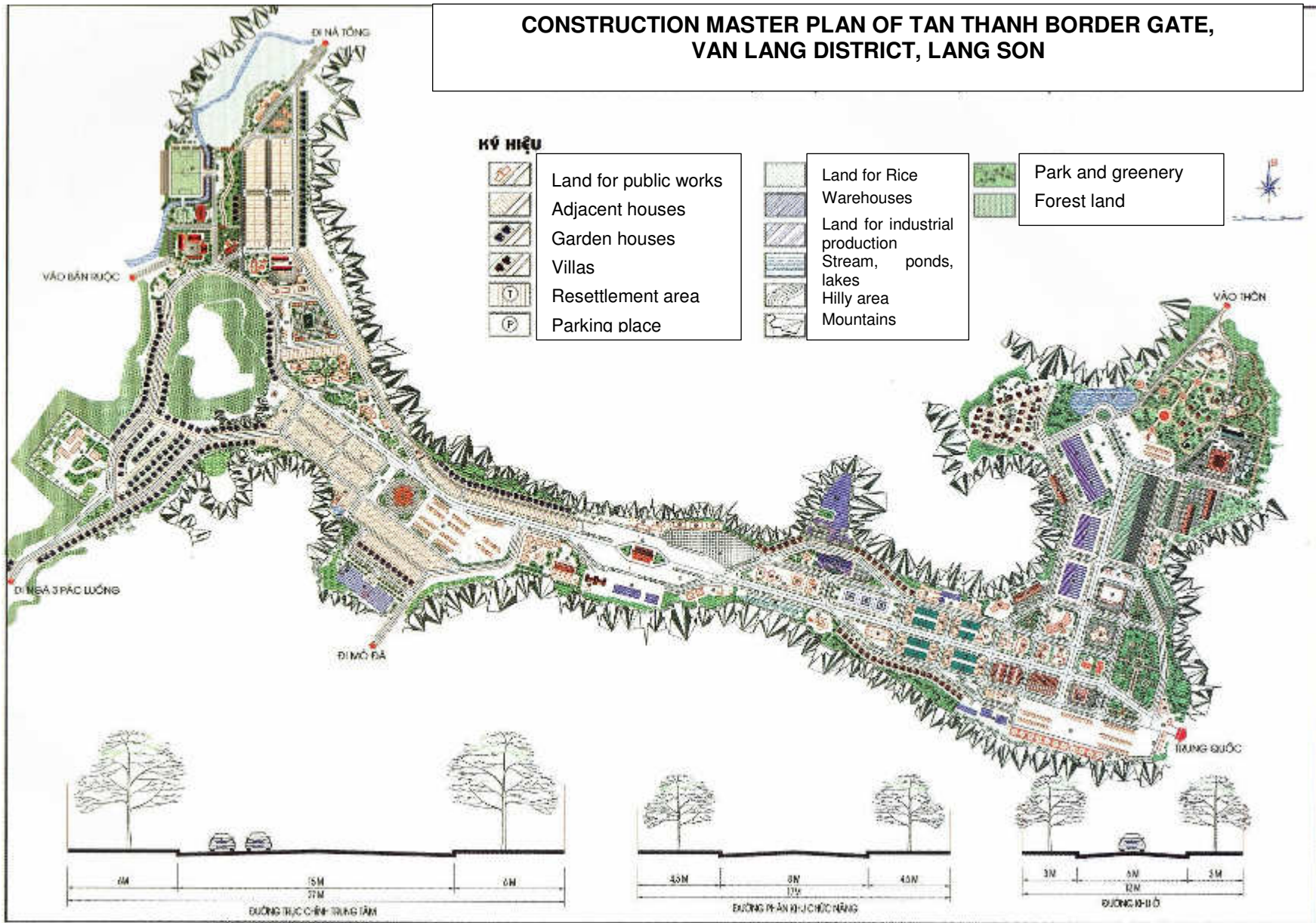
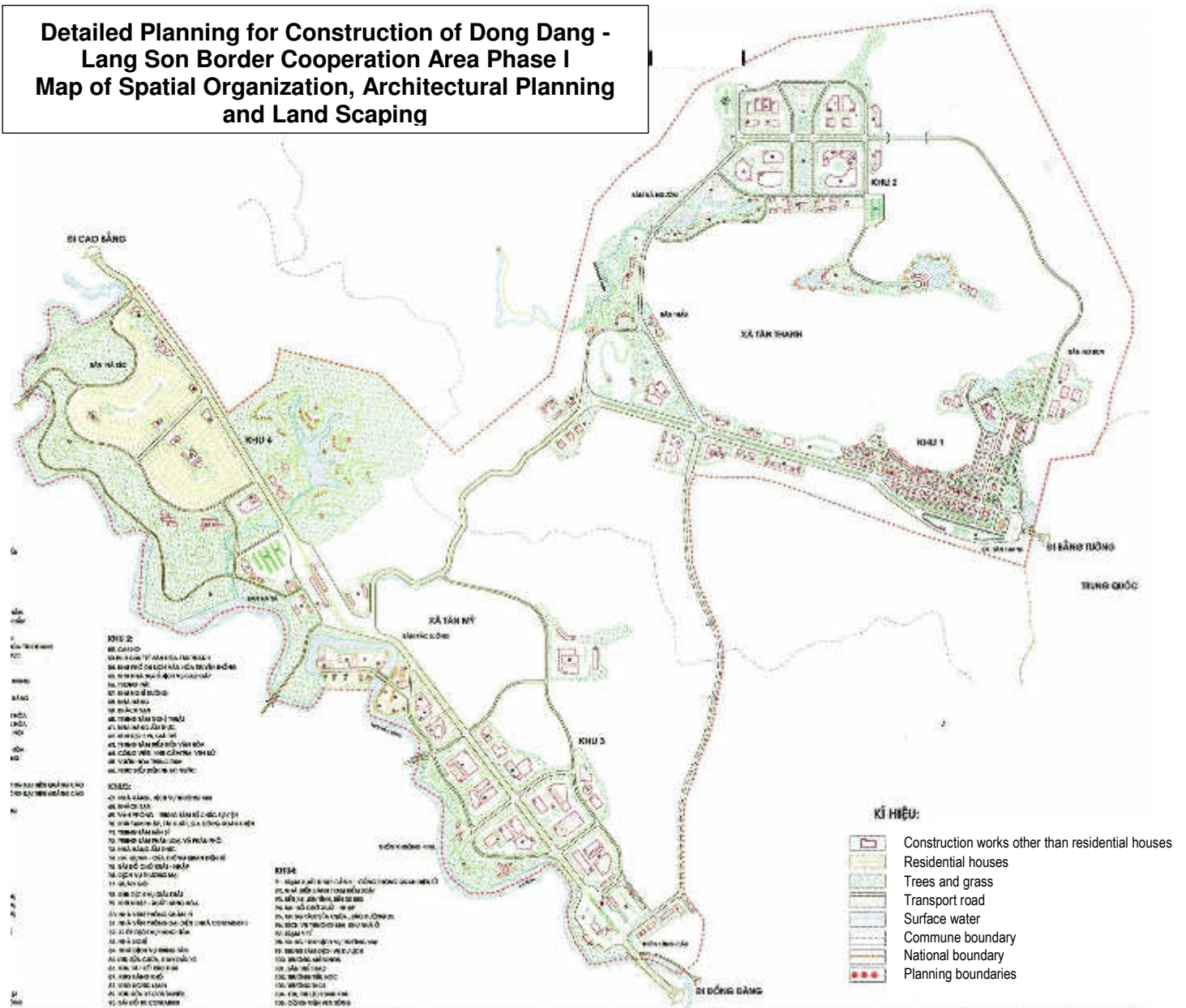


Figure 36: Tan Thanh International Border Gate Economic Concept Plan

**Detailed Planning for Construction of Dong Dang - Lang Son Border Cooperation Area Phase I  
Map of Spatial Organization, Architectural Planning and Land Scaping**



**Legend:**

**Area 1 (KHU 1)**

1. Vietnam - China Boundary Stone
2. National Gate
3. Park and Statue inside the Border Gate
4. Recreational Club
5. Post Office
6. Thai Duong Company Ltd.
7. Hotel
8. Sai Gon Plaza Hotel
9. Pho Nui Supermarket
10. Product packaging area
11. Product completion area

12. Hotel
13. Lang Son Cultural Festival Area
14. Tan Thanh Goods Supply Centre
15. Hostels & restaurants
16. Investment Bank
17. Taxation Department
18. Vietnam - China Commercial Centre
19. Central Market
20. Food company and banks
21. Park

22. Warehouse for temporarily imported goods for re-export
23. Warehouse for temporarily imported goods for re-export
24. Hanoi Transportation JSC
25. Warehouse for temporarily imported goods for re-export
26. Thai Duong Joint-Venture Company
27. Hanoi Transport Agent
28. Tan Thanh Communal People's Committee
29. Commercial service, representative office, advertising area
30. Commercial service, representative office, advertising area

32. Warehouse and freights
33. Insurance Office
34. Trade Centre
35. Financial Service Centre
36. Medical Equipment Company Hung Ha Ltd., Co Tung Lam Ltd., Co Tan Thanh Water Station
37. Tan Thanh Bus-stop
38. BEZ Management Board
39. Commercial and Service Area
40. Commercial and Service Area
41. Commercial and Service Area

42. Hotel
43. Office Building for rent
44. Exhibition Centre
45. Park
46. Restaurant, Souvenir, Service centre
47. Hostel
48. Temple
49. Customs Office
50. Commercial and Service Area
51. Border Guard Office Building

**Area 2 (KHU 2):**

- 52. Casino
- 53. Tan Thanh Recreational Area
- 54. Traditional Culture and Tourism Street
- 55. High standard hotel and service area
- 56. Memorial Statue
- 57. Recreational Area
- 58. Restaurant
- 59. Hotel
- 60. Arts centre
- 61. Restaurant
- 62. Recreational service area
- 63. Cultural performance centre
- 64. Mountain-foot park and camping site
- 65. Central park
- 66. Water performance axis

**Area 3 (KHU 3):**

- 67. Restaurant, commercial service area
- 68. Hotel
- 69. Office – Event Organization Centre
- 70. Area for temporarily imported goods for re-export, processing, completion
- 71. Wholesale centre
- 72. Goods classification and supply centre
- 73. Restaurant
- 74. Customs Office – Automated Cargo Clearance System
- 75. Parking place for import-export goods
- 76. Commercial service area
- 77. Restaurant
- 78. Foods & Beverage shops
- 79. Import-Export Area
- 80. Office of Management Board
- 81. Container Representative Office
- 82. Kiosks
- 83. Hostel
- 84. Central service house
- 85. Car repairs and maintenance service area
- 86. Solidwaste collection area
- 87. Dry goods warehouse
- 88. Refrigerated warehouse
- 89. Container vehicle washing area
- 90. Container vehicle parking area

**Area 4 (KHU 4):**

- 91. Immigration Office - Automated Clearance System
- 92. Operation Building of Check-point
- 93. Interprovincial Bus-stop.
- 94. Parking place while waiting for import-export
- 95. Car repairs and maintenance service area
- 96. Commercial service and residential area
- 97. Health clinics
- 98. Commercial service centre
- 99. Tourism service centre
- 100. Preschool
- 101. Sports stadium
- 102. Primary school
- 103. Lower secondary school
- 104. Eco-tourism area
- 105. Riverside park

### c. Economic Development Characteristics and Potentials

248. The challenges for the Dong Dang-Lang Son BGEZ developing as an economic hotspot are multiple and need to be tackled with a clear development strategy. While exports through the border gates have been increasing significantly over the past decade, most of the exports from Viet Nam to China originate from other parts of Viet Nam or other GMS countries. Exports are mainly agricultural products, tropical fruits, forestry products, marine products and some minerals. Exports in 2017 are estimated at US\$ 2.7 billion, up from US\$2.4 billion in 2016. In 2011, exports amounted to US\$970 million only (see Table 16). However, in 2017 only US\$114.5 million goods value originated from Lang Son province. Imports from China have been fluctuating year on year and amounted to US\$1.95 billion in 2017, compared to US\$ 1.7billion in 2016. Main imports are consumer goods, automobiles and automotive components as well as machinery, equipment and chemicals. In terms of tonnage there were some 7,756,000 tons transported cross border in 2016 of which 100% are non-public. 99% are transported by road and only 1% by rail.

**Table 16: Lang Son Province - Exports and Imports (Million US\$)**

	2014	2015	2016	2017
Exports	1,472	1,633	2,400	2,700
Of which Local Exports	125	118	172	114.5
Imports	1,851	2,467	1,730	1,950

249. The most common products exported from Viet Nam through to China at the Dong Dang/Lang Son border crossing are agricultural, fruit and marine products, which are exported unprocessed and in bulk form. Processing, sorting and packaging are so far mainly done in China. However, Viet Nam has a comparative advantage as its labor costs are competitive compared to those in China. A strategy is needed to tap the resources of the province and process them for export to China. Lang Son has good potential in the timber industry, organic agriculture, herbal/medical plants, fruit production, and livestock sectors. The development of these local resources and their processing for the Chinese export market would bring significant benefits to the Dong Dang-Lang Son BGEZ. Many Vietnamese migrant workers are employed both in Pingxiang and in Chongzuo. With good planning and incentives together with infrastructure investments, processing, packaging and logistics investments they could be attracted to the planned industrial zones in the BGEZ. For the industrial zones, the availability of land and its development is particularly important to attract investors. This points to the need for greater prioritization of serviced land availability for industrial, business and logistics companies to locate.

250. The formation of industrial and agriculture clusters is at an early stage. For instance, the Dragon Automobile company, a Chinese-Vietnamese joint venture, invested US\$50 million in a small automobile assembly plant in the Tan Thanh border gate zone. This example shows the importance of cross border communications between provincial and municipal authorities, border zones authorities and importantly private sector representatives. While cooperation between customs and border security authorities appears to be good, cooperation on border economic zones development remains insufficient partly because of different management systems in China and Viet Nam.

### d. Institutional and Regulatory Dimensions



251. Vietnam is both a relatively centralized and decentralized country. Along the years, central ministries have concentrated their prerogatives on policy, strategies, national plans consolidation of sub-national plans, methodological aspects, standards and norms, enforcement of regulation and inspections. They also oversight the activities of provincial departments and district offices but the number of provinces concerned has made this supervision difficult, which may change in the near future (re-centralization) with the progress of e-management within administrations. Whatever, Vietnam cannot be considered as decentralized as China, in particular when border affairs are concerned.

252. The scope of TA 8989 relates to the responsibilities of more than 12 ministries. Overlaps of responsibilities and tasks between administrations are among the causes of the length of the decision process at both national and local levels. This was for instance the case for the implementation by the DPI of incentives to the business community in Lang Son<sup>75</sup>.

253. Other national organizations which are stakeholders are: i) the Office of the Prime Minister, preparing decisions regarding all relevant matters (e.g. ODA projects) of national interest; ii) multiple inter-ministerial commissions established to deal with cross sector issues such as climate change and natural disasters; iii) and the State Bank of Vietnam regarding the regulation of the banking sector and monitoring the exchange rate.

254. State-controlled companies are first rank stakeholders of the national economy, though most were corporatized or equitized and “deregulated” over the past 15 years. Many of these firms are in a difficult financial situation although they can still contribute in a significant way to local development in Lang Son province such as the Vina Group which is already active.

255. National regulations<sup>76</sup> ranks urban areas in accordance with economic and demographic criteria (the latest being Decree No. 42/2009/ND-CP). The decentralization process in Vietnam took a rather pragmatic form following two State Budget Laws (1997 and 2002) which have resulted in a greater autonomy of provinces and major cities. After the 2008 financial crisis, and because of the public deficit and indebtedness, the MOF tried to regain a greater control over public expenses of local governments by systematizing on-lending for ODA loans to finance provincial/municipal projects.

256. The GOV has for long been supportive of PPPs for infrastructure. Yet, PPPs have not much developed aside from the power sector<sup>77</sup>. In some sectors, such as water supply, corporatization followed by equitization became a substitute for PPPs. The regulation for PPPs has changed over the years in Vietnam. Decree 15/2015/ND-CP and 30/2015/ND-CP were replaced this year by Decree 63/2018/ND-CP which is expected to represent a more attractive regulatory framework. PPPs in BEZ is made possible by the new regulation.

#### **e. Local Institutional Context in Lang Son**

257. Provincial Peoples’ Committees (PPC) (one Chairman and 3 or 4 Vice Chairmen) form the provincial-level executive power. The Chairman reports directly to the Prime Minister. Provincial

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<sup>75</sup> TA 8989: Interview, Lang Son Province, May 2018.

<sup>76</sup> Here understood as composed of the Constitution, laws (submitted by the GOV and approved by the People’s National Assembly), national decrees (signed by the Prime Minister), Decisions (of the Prime Minister with more general purposes on a specific points), circulars/joint circulars issued by ministries

<sup>77</sup> Duane Morris noted in 2018 “From 1990 to 2016, the country completed 84 PPP projects amounting to US\$16.2 billion, with 79 percent of the projects in the energy sector. However, since the issuance of the PPP pilot programme in 2011, no PPP project has been signed under this framework. Compared with regional neighbours, foreign investment in infrastructure in Vietnam is lagging behind”. See: Will a new PPP law pave the way for Vietnam’s infrastructure? <https://blogs.duanemorris.com/vietnam/2018/06/19/will-a-new-ppp-law-pave-the-way-for-vietnams-infrastructure/>

Peoples' Assemblies endorse decisions of the provincial government regarding daily life of people (e.g. water tariffs increase). The provincial government closely oversees activities of provincial departments, although these later report in parallel to their own line ministry. Provinces issue their own regulation as long as these later fit with national ones. In practice, provincial regulations are specific to local affairs and are decisions issued by the Chairman of the PPC or Provincial Assemblies. Commonly, districts comply with provincial regulations.

258. BGEZs are under the nominal authority of the MPI. Established by decisions of the Prime Minister, they are managed by a Management Board principally under the authority of the provincial Government (and also MPI and MOIT). In Lang Son, one single management board is responsible of the four main BGEZs, (covering Tan Thanh, Coc Nam, Huu Nghi, and Chi Ma [export processing zone] border gates). This reflects a concern for a more integrated management including public services, urban-BEZ harmonized development and logistics aspects. The Management Board is an autonomous organization. It has its own budget and prepares and implements a master plan once approved by the Prime Minister. The Lang Son – Dong Dang BGEZs are organized into 3 management centers. The Management Board's income is composed of fees paid by tenants while expenses are management costs and costs of services provided to tenants. In the four BGEZs, services provided to enterprises involve both private and public operators (e.g. the provincial water supply company)<sup>78</sup>.

259. Operating revenues gathered by the Lang Son – Dong Dang BGEZ Management Board are channeled to the State budget. In accordance with Decision 53/2001/QĐ-TTg of the Prime Minister, and in return of this channeling system, the central government participates financially to the development of BEZs. Such financial commitment was eventually re-affirmed by Decree 29/2008/ND-CP (article 29). This important point requires further financial investigation to determine to what extent state budget financial support (and that of international donors such as KfW) has also stimulated the development of PPPs in the Lang Son urban area.

260. Prime Minister's Decision No. 52/2008/QĐ-TTg approving the scheme of "Master Plan Development of Viet Nam's Border-Gate Economic Zones up to 2020" emphasizes the link between BGEZs and i) initiatives in the infrastructure sector, in particular roads; ii) spillover effects expected of this development on the local socio-economic environment and natural environment (preserved forests); iii) links with security aspects.

261. The Lang Son provincial government is a member of a Vietnamese-Chinese Border Committee which meets regularly. Limited information is available about this Committee, including about the role of national and sub-provincial agencies. Presumably, important aspects of bilateral relations between Lang Son and Guangxi province require mostly the involvement of central ministries.

262. Lang Son city has the status of a provincial capital city (Thành phố trực thuộc tỉnh). The town's council and government (town's people's committee) are assisted by city offices technically supervised by their line provincial department. Commonly, town administrations have limited capacities but provincial capitals must prepare their own SEDP and urban plans, which they do with the assistance of the provincial DOC and/or external support. Lang Son City People's Committee reports directly to the provincial government. Like provinces, cities administrations have their own divisions, which report mainly to their provincial line departments (e.g. the Urban Management Division in Lang Son city which reports to the provincial DOC). In Lang Son (as in Mong Cai), the city's own resources are not enough to assume tasks such as urban or environmental planning, or enforcement of the environmental and land use regulations.

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<sup>78</sup> Several years ago, drainage and waste water collection was done in house by the Management Board.

263. Lang Son Water Supply and Drainage Company produces 11,000m<sup>3</sup> of water (85% of the urban needs) in the provincial capital city<sup>79</sup>. As mandated by national regulations, the former provincial water company was equitized. It is now a joint stock company (staff 420, and 30% of the shares are owned by the staff), although the provincial government remains the most powerful shareholder (51%). A waste water treatment plant (5,260m<sup>3</sup>) financed by the KfW should be commissioned soon. It will be managed by the Lang Son Water Supply and Drainage Company together with the newly constructed sewers under this project as well. The service is also delivered by the company in the BGEZs. URENCO Lang Son, (to be equitized by 2020), has been contracting out solid waste collection for a long time to a private operator, the Hui Huang Cny, which also manages the landfill<sup>80</sup>. This company is the major operator for solid waste collection in Lang Son city and also in the four BGEZs. Lang Son Power Company, a subsidiary of Northern Power Corp. (public EVN group), provides electricity in the province.

264. Dong Dang is the main town of Cao Lac district bordering Lang Son city administrative boundaries. Dong Dang town's government presently reports to the District government but its status should be upgraded soon so that the town will report directly to the provincial government. Cao Lac District administration has very limited capacities (budget and human resources) and focuses on priority areas (e.g. the Economic Management Division). The district is governed by a People's committee and residents elect a People's Council. The District peoples' committee chairman directly reports to the provincial government. In Dong Dang, water supply is provided by the provincial Lang Son Water Supply and Drainage Company but O&M drainage might be contracted to another private entity. Solid waste is collected by a cooperative and dumped on a private landfill, presumably the one managed by the Hui Huang Cny.

265. Described arrangements in both urban areas and BGEZs fit with the policy of the GOV regarding public services management. They also involve the Vietnamese private sector, possibly supported by Vietnamese banks. Institutional/contractual arrangements should be reviewed in depth. Apparently, an effort is made to conciliate both increasing responsibilities of the private sector, urban service area extension, and inclusion of BGEZs in one single service area. Yet, one remaining concern is the capacity of operators to invest in further facilities such as the extension of water supply service, and future connections to sewerage facilities (in particular in areas which are prone to floods).

### **3. Lang Son / Dong Dang: The Overview**

#### **a. Socio-Economic Factors<sup>81</sup>**

266. The total population in Lang Son Province was 768,671 in 2016 and evenly distributed between males and females. The province is still mainly rural in nature, with approximately 80% (616,766) residing in the rural areas and 20% in the urban areas (151,905). The majority of the urban population is located in either Lang Son City (94,863 persons in 2016), or Dong Dang Town. The breakdown between urban and rural dwellers has remained more or less constant over the last 5 years (2011-2016) and thus it can be assumed that rural to urban migration is not a significant factor. Slow economic development in the BGEZ, will be a key factor in discouraging in migration to Lang Son City and Dong Dang Town from the rural hinterland and from elsewhere (eg Hanoi/Bac Giang).

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<sup>79</sup> Water supply and sanitation in rural areas is under the responsibility of the MARD (and DRAD at provincial level) which has set for long a subsidy system for tube wells, very small piped networks and septic tanks.

<sup>80</sup> PURR – Partnership for Urban Resource Recovery, 2014, Initial Assessment of Sludge Management and Context in Five Cities: Son La, Lang Son, Hoa Binh, Bac Ninh, and Ba Ria, July

<sup>81</sup> Socio-Economic Statistics are from the Lang Son Statistical Yearbook 2016, the Dong Dang BGEZ Master Plan or the Lang Son Provincial Socio-Economic Plan (2016-2020) unless otherwise stated,

267. Surprisingly, poverty rates across the province appear to be increasing in recent years (2013-2016), where there are significantly higher levels of poverty in the rural areas than the urban areas (subject to further statistical ratification). This is in marked contrast to the situation at national level, which indicates steady progress in the reduction of poverty levels. At the same time the unemployment rate has increased marginally across the province. The overall unemployment rate in 2016 was 1.89% and there was a marked difference between the recorded unemployment rates between the urban and rural areas. The urban rate was 4.48% and the rural rate 1.37%. Again, this maybe an indicator of slow economic development in the BGEZ area.

268. Population growth across the province over the 5 years period up to 2015 is steady at approximately 3.3%. Based on natural increase population forecasting then there is an expectation of 785,741 by 2020 and 837,599 by 2030. Population growth rates in the urban areas are higher at some 6.6% over the same 5 years period, such that the population total for 2020 is 158,501 and for 2030 is 178,447. The natural increase population growth figures are in marked contrast to the population forecasts contained in the Dong Dang – Lang Son Master Plan, which suggest population levels of 230,000 for 2020 and 330,000 for 2030 for the BGEZ area only. These are target populations based on full implementation of the Master Plan, which based on development progress so far seem unduly optimistic and could lead to the kind of unnecessary investment in transport and utilities infrastructure that is so common in Viet Nam cities and towns. We suspect that the real future population figures will be somewhere between the natural increase and target-based population forecasts. This matter should be considered again as part of our recommended Master Plan review, such that government investment programming can be more realistic. Table 17 provides a comparative summary of population factors over time.

**Table 17: Population Forecasts**

<b>Natural Increase Population</b>	<b>2015</b>	<b>2020</b>	<b>2030</b>
Lang Son Province	760,640	785,791	838,615
Urban Population	149,380	158,501	178,447
Rural Population	611,260	627,427	611,260
<b>Target Based Population Forecast (Dong Dang Master Plan)</b>			
BEZ Area	193,961*	230,000	330,000

\* Estimate based on Master Plan 2010 source.

269. The average annual GRDP growth rate of Lang Son province in the period 2011-2015 is 8.65%, in which: (i) agriculture and forestry increased by 3.62%; (ii) industry-construction by 9.86% (industry increased by 8.84% and construction increased by 11.47%); and (ii) services increased 10.76%<sup>82</sup>. In general terms, growth rates have hit the targets set in the provincial Five-Year Socio-Economic Development Plan for 2016-2020, for all sectors. The GRDP of the agricultural sector expectedly remains low. The average per capita income reached VND 32.4 million in 2016 which as can be anticipated is lower than the average for Viet Nam.

270. Finally, Lang Son province has a large number of ethnic minority groups. The Kinh people represent 15% of the population, residing by tradition, mostly in cities, whereas, the rest of the ethnic minority population are composed of the Nungs, the Dao, the Tay, the Mong, the Ngai and the San Chai groups. The provincial government is keen to protect the material cultural heritage of the ethnic groups. At the same time, there should be increasing opportunities for the ethnic minorities to benefit from increased provincial and cross border tourism. Sustainable economic development of this type should benefit the ethnic minorities optimizing their capacity to generate

<sup>82</sup> Five-Year Socio-Economic Development Plan for 2016-2020 of Lang Son Province

revenues and create jobs locally (eg tourism bio-agriculture) and at the same time protect local values.

271. Further details related to socio-economic characteristics are shown in the Information Tables in Annex I.

## **b. Environment**

272. The province is mostly a mountainous area and still 80% covered by forests. The only protected area of the province is the 3,000 ha Huu Lien Nature Reserve (limestone forest), located in Huu Lung District, established in 1997 and today under the responsibility of the provincial government. It was listed as a Special-use Forest Area of 10,640 ha by the Ministry of Agriculture and Rural Development (MARD) in 2010. Soil erosion due to deforestation and land use changes is a significant environmental threat according to recent study based on remote sensing data<sup>83</sup> which shows the districts of Binh Gia, Dinh Lap and Trang Dinh to be badly affected.

273. According to the results of annual environmental monitoring in Lang Son province and the results of surveys conducted, air and water quality are generally good and within acceptable limits and recognized standards at provincial level. However, significant local pollution problems affect some areas and this includes: (i) dust and noise pollution in limestone exploitation areas; (ii) vehicle emissions from heavily trafficked roads, particularly associated with heavy goods/container trucks using the national highway and the border gate areas. Most of the trucks are second hand and therefore potential causes of pollution. The potential scale of the vehicle emission problem can be gauged by the fact that there were 326,401 cross border goods vehicle trips in 2016<sup>84</sup>; (iii) watercourse pollution and ground contamination, including the urban areas and the rural areas, is common and may be from a number of sources, including industrial and business waste discharges, agricultural waste and urban waste via untreated discharges from residential and commercial properties. For instance, from visual inspection, a failed storm-water drainage system at Dong Dang results in serious watercourse pollution in the built-up urban area. There is regular garbage collection in the urban/built-up areas, including Lang Son City and Dong Dang town, but this is not supported by a comprehensive solid waste management plan, geared to full waste minimization principles. It is further understood that the central landfill site in Cao Loc District is a potential source of watercourse pollution and ground contamination.

274. Action has been taken to achieve environmental compliance from polluting industry, directly discharging wastewater into river/stream courses. At present, there are a number of seriously polluting facilities in the province. They include the Vinh Thinh Chemical Factory/Huu Lung Town and a cluster of pesticide depots (identified in Decision No. 64/2003/QD-TTg dated April 22, 2003 of the Prime Minister) and 5 other seriously polluting facilities (as identified in Decision No. 1200/QD-UBND dated August 23, 2013 of the PPC). Of these facilities, up to two have complied through the introduction of pollution treatment measures. The rest have received approval of pollution treatment projects by the Provincial Peoples Committee (PPC) but are waiting for the state budget support funds (according to the regulations, the support level is 50%)<sup>85</sup>.

275. Lang Son province including Lang Son City is crossed west to east by the Ky Cung River, which flows from China, such that low lying land is highly vulnerable to floods and in the case of extreme events, such as the Rammasun typhoon in July 2014, 5 persons were killed in Lang Son

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<sup>83</sup> TU University of Agriculture and Agroforestry, 2017, Application of remote sensing data and GIS technology to mapping soil erosion in Lanf Son province. Study carried out by GFA and supported by the GIZ. <http://girc.tuaf.edu.vn/index.php?com=bai-viet&at=3>.

<sup>84</sup> Dong Dang-Lang Son BEZ Management Board.

<sup>85</sup> Director of Department of Natural Resources and Environment of Lang Son Province.

City (Ky Cung floods). Flash floods combined with landslides also cause of damage and casualties in the rural hinterland.

276. The shortage of planned and serviced development sites provision in the BEZ and the lack of effective development control and enforcement is resulting in scattered urban fringe development, which detracts from the areas attractive landscape setting and can be an additional pollution source. This is prevalent in land areas adjacent to the national highway in the vicinity of Lang Son City and Dong Dang Town and towards the border gate areas. The land between Lang Son and Dong Dang is particularly vulnerable to uncontrolled land uses, including cross-border truck parking and servicing areas. This area provides opportunity to retain a “green belt” environment between the two urban areas, but this will not be possible if uncontrolled development of this is type is allowed to expand.

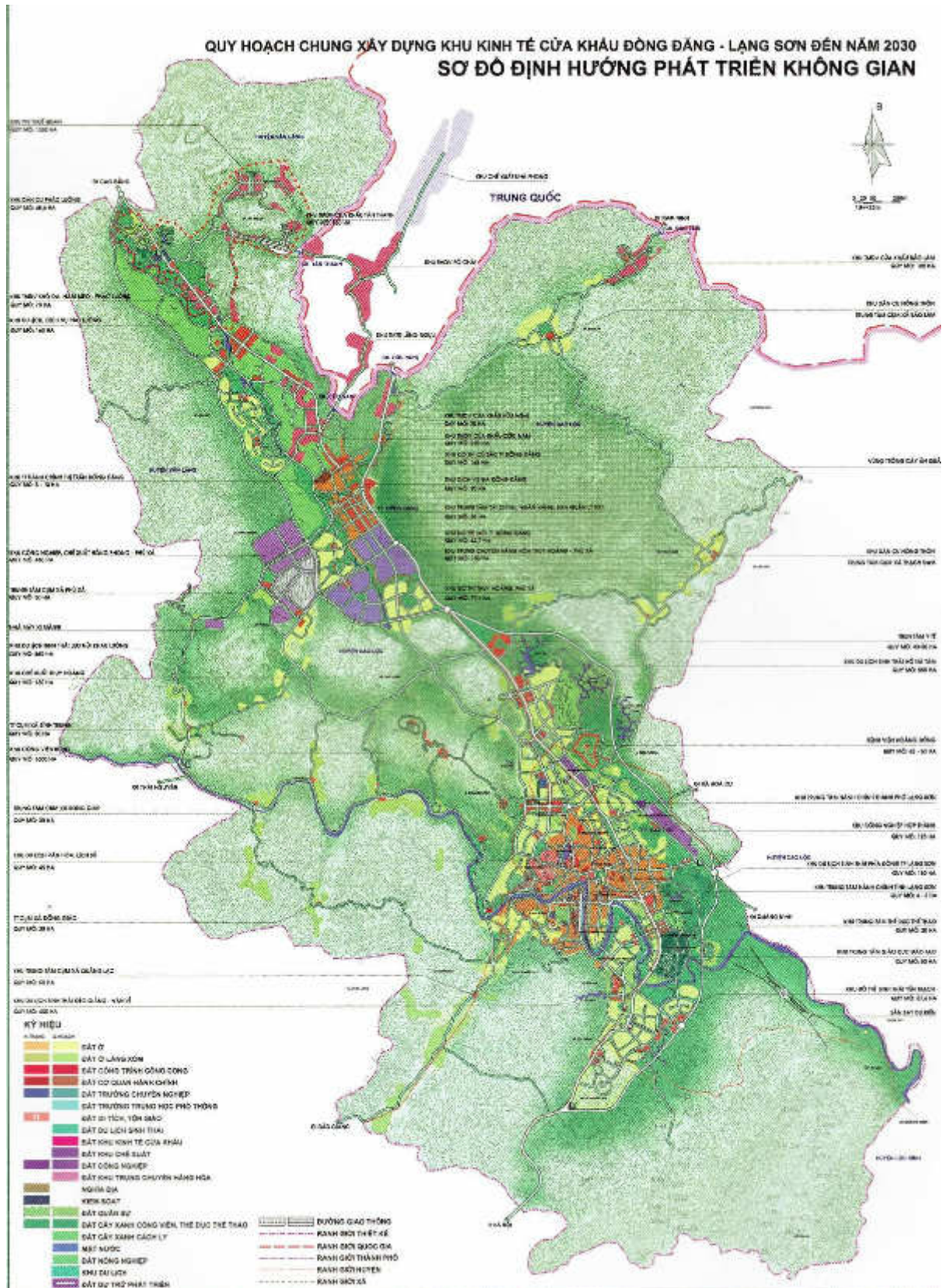
### **c. Spatial Planning: The Dong Dang-Lang Son BGEZ Master Plan to 2030**

277. The Dong Dang-Lang Son BGEZ Master Plan (see Figure 37) is an ambitious plan hinged around a linear urban structure, responding to the existing and planned strategic road and rail transport routes and access to China. Significantly the ongoing works to complete the upgrade of the national highway from Hanoi to Lang Son/Dong Dang are scheduled for completion by end 2018, through a number of public-private sector partnerships (PPP) managed by the Department of Transport. Both the existing and planned urban development is located within a valley setting. Outside the valley floor, the mainly mountainous land constrains urban development.

278. The broad development perspective behind the Master Plan, includes:

- Building a region with high economic growth rate and socio-economic infrastructure with an economic structure of trade, services, tourism and industry, small scale and handicraft industries, agriculture, and forestry.
- Creating a vibrant trading environment in the border region of the two countries to promote economic and trade exchanges between Lang Son (Vietnam) and Guangxi (China) and with other countries in the region.
- Developing modern, quality, competitive and attractive urban areas and other functional areas and upgrading the existing urban areas.
- Protecting the environment and ensuring sustainable development on the basis of respect for the protection of natural systems such as rivers, lakes, green areas and natural ecosystems of the region.
- Promoting building and development in association with the consolidation of national security and defense and the protection of national sovereignty.
- Adopt a practical development strategy that works within the constraints of the land fund for construction and human resource capacities. This should include minimizing the requirements for compensation and clearance.

Figure 37: Dong Dang-Lang Son BGEZ Master Plan to 2030



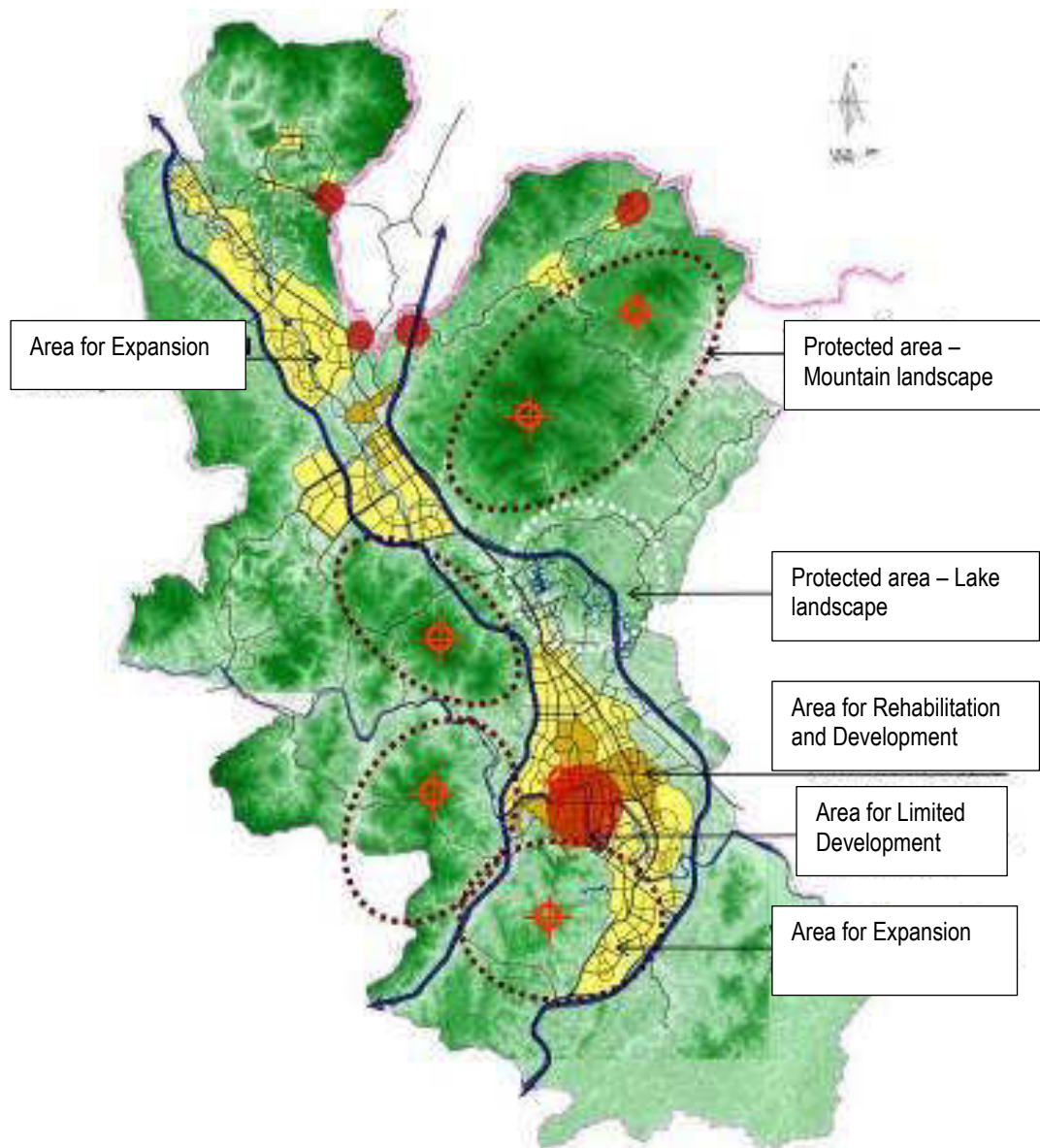
279. At the heart of the Master Plan are 3 core land use components: (i) The Border Gate Development and Upgrading Proposals; (ii) Economic Development Proposals hinged on a number of land allocations for industrial and business development; and (iii) Housing Development to support the proposed economic development, plus a range of new and improved public facilities and local utilities infrastructure. Additionally, the master plan is supportive of the aims and objectives for tourism development province wide with several notable tourism sites located within the BEZ.

280. The Master Plan, which encompasses the whole of the BEZ, has a land use area of 39,400 ha. Within the Tariff Area, 3,260 ha are allocated for civil and border gate uses, 1,800 ha for green parks and ecological areas, 1,725 ha for tourism areas, and the remainder for non-civil purposes, including agriculture and forestry in the mountain areas. The majority of the proposed industrial/business land allocations are situated in an around Lang Son City and Dong Dang, Town, which subject to good supporting infrastructure will be ideally located close to the border gates. The Master Plan gives priority to the Ho Hong Phuong Industrial Park (Hong Phong Commune) with an area of 440 ha. The industrial park is planned to prioritize processing of export goods, construction materials production, and agricultural product processing. Additionally, a freight forwarding area (Phu Xa) of 160 ha is proposed in Thuy Hung commune, incorporating a system of warehouses and on-spot customs control facilities to ensure convenient customs clearance. It is proposed to gradually move small factories and industrial facilities out of the urban parts of Lang Son City and Dong Dang town, including the relocation of non-conforming uses, such as electronics and telecommunications, as part of this process. Another area (Hop Thanh Industrial Cluster-125 ha) is proposed as the location for construction materials industries and export goods processing. It is understood that first priority will be the development of Ho Hong Phong Industrial Park, although this has yet to be financed.

281. Ambitious levels of new housing are proposed around both Lang Son City and Dong Dang Town and there is some existing evidence of market demand. The Vin Group for instance have invested in new housing and commercial development. The housing will be located in several mixed-use urban expansion areas mainly scattered around Lang Son City and also Dong Dang (see Figure 38). The Master Plan also proposes the upgrading and renovation of the urban villages that are located in the BGEZ area.



**Figure 38: Urban Expansion Areas**



282. It is of course proposed to support urban expansion with public facilities, to at least Viet Nam government standards for schools, vocational training, health and social services and public recreation and sports. In the education and healthcare sectors stakeholders have identified shortfalls in facilities provision and standards of service delivery as significant priorities that should be addressed as part of a comprehensive plan for the whole of the BGEZ area.

283. At the same time the Master Plan includes proposals for the renewal of the outworn urban areas including the hub of commercial, cultural and government administration uses in Lang Son City.

284. The Master Plan confirms government's aim to radically upgrade the full range of public facilities, including: (i) New Administrative/Political Complex's in Lang Son City and Dong Dang town; (ii) Provincial Education Complex; (iii) Vocational Training Center(s); (iv) Medical Hospitals/Medical College and Clinics Provision/Upgrading; (v) Regional Sports Center; and (vi) Sports Facilities and Green Parks Upgrading.

285. Provision and programming of utilities infrastructure is lagging behind existing needs and to support the planned development areas in the Master Plan. Regarding the existing urban areas (Lang Son City and Dong Dang Town), it is understood that the water supply is stable for the urban areas within the BGEZ, but not to drinking water standards. Within the Lang Son urban area, a sustainable wastewater management scheme, funded by KFW (Germany) will be constructed in 2018, which we understand is orientated towards the existing urban areas, rather than the proposed new areas. The system will include full reticulation and a wastewater treatment plant and will be operated and maintained by the existing water company. Unfortunately Dong Dang Town remains reliant on the provision of septic tanks at best for wastewater management/treatment, or direct discharge of liquid waste into a variety of urban drainage systems feeding into natural stream courses. A scheme to improve the situation through a previous ADB project in Dong Dang town is only partially successful, such that polluted water from residential properties and shops still drains into a nearby stream course. In turn this has destroyed both local ecology and the recreational value of the stream course. Based on stakeholder discussions in Lang Son the privately managed solid waste management collection service works well in the Lang Son City urban area and a high percentage of domestic garbage reaches the landfill site. In Dong Dang Town the solid waste collection service is managed by a cooperative and their performance is not satisfactory, such that collection is well below 100% and the collection methods are described by the Town officials as unhygienic. Localized illegal garbage dumping is common. Local officials are also concerned that the Dong Dang slaughter house is unhygienic and a source of pollution. Finally, there are concerns in both Lang Son and Dong Dang about local flooding and flood risk generally.

286. As referred to above, population forecasts for the BGEZ area have a target of 220,000 persons by 2020 and 330,000 persons by 2030. The equivalent working age population in 2020 is forecast at 120,000 and at 175,000 in 2030. High worker participation rates are assumed at around 90%. Employment numbers in the 3 main employment related groups are forecast to rise in the period up to 2030, but the rise in numbers in the agriculture sector will be slower than for the industry and construction sector and the services and non-business administration sector. Thus, agriculture's percentage share is expected to drop to 25% by 2030 (see Table 18).

**Table 18: Population Growth and Employment Characteristics by Sector (2015-2030)**

Population and Employment Factors	2015	Projected	
		2020	2030
Total population of BEZ	193,961	230,000	330,000
Working-age population	100,576	120,000	175,000
Total workers/employees in principle economic sectors	91,653	109,000	158,000
<b>Employment Sector (workers)</b>			
Agriculture, forestry and fishery	32,553	34,900	39,500
Industry, small and handicraft industry and construction	25,046	32,700	55,300
Service, commerce, non-business administration	34,092	41,400	63,200

#### **d. Economic Growth Potential – Tourism**

287. Tourism growth potential spreads across the BGEZ and the wider context of the province and it is growing. By discussion with the provincial Tourism Department (DoT) we are informed that tourism numbers reached 2.7 million in 2017. Tourist arrivals are mainly from within Viet Nam and increasingly from China, although many of the Chinese tourists are merely passing by on their way to higher profile destinations, including Hanoi and Ha Long Bay. Tourism peaks during religious festivals.

288. The principle tourism interests are: (i) cultural heritage, with specific reference to ethnic minorities; (ii) religious and heritage tourism in Lang Son City and the rural hinterland, including ancient temples and traditional villages; and (iii) mountain scenery and adventure tourism (eg caving). The improving strategic transport communications by road from Hanoi and by road and rail in China (including high speed rail) will provide more impetus for the growth of the provincial tourism industry. The DoT have indicated that this potential should be seen in the context of environmental, historical and cultural sustainability, such that local urban and rural populations will be beneficiaries. There are some key themes proposed by DOT, including: (i) optimizing the potential for community tourism in rural areas, including rural economy participation and homestay concepts; (ii) optimizing the potential to link community tourism with “green agricultural concepts” (iii) optimizing the potential for private sector investments in a public-private partnership (PPP) format in planned environments. Here it is understood the Sun Group have an interest in the proposed Hoang Gia/Na Tam Lake Ecological Tourist Area (180 ha); (iv) creating and marketing tourism opportunity better to the Chinese market and to achieve more overnight/short stays and in the longer term to tap private car tourism. DoT have indicated a number of priority areas for tourism development which are listed in Table 19.

289. Specific areas to be developed as tourism centers are (i) Pac Luong tourism and service area (160 ha) including: 18-hole golf course, trade and service zone, entertainment zone, and ecological villa zone; (ii) Dong Dang international tourist and trade fair complex, including the Mau Temple spiritual tourist zone (30 ha); (iii) Na Tam Lake service and tourism zone (550 ha) including a 32-hole golf course, high-grade resorts, and international trade/service center; (iv) Giang Van Vi mountain ecological tourist area (400ha), and (v) the Cultural and historical tourism area of Mac Dynasty Citadel/Tam Thanh - Nhi Thanh caves

290. There are a number of constraints experienced by the DoT, principally: (i) lack of good tourist accommodation to respond to potential demand, especially during peak periods; (ii) the need to increase resource capacity/skills and investment capacity to implement and facilitate more tourism development; (iii) the freedom to implement income generation capacity mechanisms, such as tourism facility surcharging; and (iv) the capacity to develop and implement better marketing and investor strategies. In this regard, it is noted that the existing Tourism Master Plan (2010) is now under revision and should provide impetus for the expansion of the tourism sector in the BGEZ and the wider provincial context.

#### e. Public Investment

291. Relevant investment in public facilities and hard infrastructure are included in the Socio-Economic Development Plan (2016-2020) and the Master Plan of 2010. Further details are set out below in Table 19.

**Table 19: Public Facilities and Infrastructure Provision**

<b>Border Gate Projects</b>
1. Non-Tariff Area: Tan Thanh Border-Gate to Hang Chu (500 ha) - Phase I Economic Cooperation Zone Construction.
2. Transshipment Area: Thuy Hung and Phu Xa (160 ha) – Site and Service Provision
3. A-Trade and Service Centers at Huu Nghi and Coc Nam Border Gates (150 ha) B-Trade and Service Centers in Lang Son City and Dong Dang Town
<b>BGEZ Industrial Parks</b>
1. A-Ho Hong Phong Industrial Park, Phase I (180 ha) – Site and Services Provision B-Hop Thanh Industrial Clusters – Site and Services Provision
<b>New Housing/Community Development and Resettlement Housing</b>
1. Resettlement Planning and Construction such as on-site resettlement area for the Non-Tariff Area (Pac Luong).

2. New Urban Areas New Urban Areas – Comprehensive Planning and Development: (i). Lang Son City (South) - South Hoang Dong, Hoang Van Thu; and (ii) Dong Dang - Thuy Hung and Tan My.
<b>Tourism Development</b>
1. Tourism and Service Areas: (i) Hoang Gia Tourist and Service Area/Na Tam Lake Ecological Tourist Area (180 ha); (ii) Giang Van Vi Pass Ecological area; (iii) Mac Dynasty Citadel Area; (iv) Tam Thanh - Nhi Thanh Caves.
<b>Public Facilities</b>
1. Lang Son City - Political and Administrative Center
2. Dong Dang Town – Political and Administrative Center
3. BGEZ Administrative Center – Thuy Hung New Urban Area
4. Professional Schools Provision (80 has)
5. Health Facilities – Renovation of Existing Health Facilities
6. Health Facilities – New Provincial General Hospital (700 hundred beds)
7. Health Facilities – New Medical College (40-50 has)
<b>Roads Infrastructure and Traffic Management</b>
1. Lang Son - Bac Giang Expressway Completion (Lang Son Province)
2. Other Strategic Road Connections
3. Renovation of National Highways 1B, 4A and 4B (parts) – strengthening links to cross border zones and mountainous areas
4. Selected Provincial Roads Upgrading
5. Border Corridor Road Security Upgrading
6. Urban Roads Upgrading and Junction Improvements Priorities
7. Public Car/Vehicle Parking Provision
<b>Public Transport</b>
1. Lang Son - New Southern and Northern Bus Stations and Renovation of Eastern Bus Station
2. Dong Dang – New Bus Terminal
<b>Railways</b>
1. Hanoi-Lang Son Railway Upgrading (Lang Son/Dong Dang Sections)
2. Lang Son Railway Station Upgrading
3. Dong Dang Border Gate Railway Station
<b>Waterways</b>
1. Ky Cung River Bank Upgrading and Riverside Park/Walkway Provision
<b>Utilities Infrastructure</b>
1. Integrated Solid Waste Management Phase 1 - Lang Son City
2. Integrated Solid Waste Management Phase 1 - Dong Dang Town

#### 4. Capacity Building and Financial Aspects

##### a. Capacity Building Aspects

292. It is possible at this stage to provide some recommendations. One key assumption is that the link between BGEZs and local/provincial developments should be the backbone of capacity building initiatives. In order to take the economic and social benefits of strengthened governance, a participatory approach needs to be at the center of capacity building.

293. The Lang Son – Dong Dang BGEZ Management Board needs to upgrade capacities of staff to promote investments (communication), improve decision making processes and undertake administrative tasks (digitalization of data and mapping, monitoring tools, etc.). Board members and managers should be made aware of innovative management methods to ensure simplification of procedures when possible, of methods to ensure participative and

inclusive approaches, of better understanding of international trade, business finance and business management. Understanding of result-based approaches to measure effectiveness of projects and strategies should be particularly supported. Possibly, reforms of the internal organization of the Management Board to ensure a more optimal functioning could be considered.

294. The local public decision makers and their administrations (province, district and towns concerned) should benefit from capacity building by focusing on those in charge of key aspects raised in this report such as: urban planning and urban plans implementation, transport planning, urban design (pedestrian areas, earmarking of remarkable buildings, etc.), tourism promotion in a perspective of urban-rural connection improvement, and organization of sustainable community-based agriculture. Specific support related to PPP arrangements<sup>86</sup> would be particularly opportune, including the strengthening of capacities to regulate the private operators. It is important to introduce methods to make participatory processes more effective (including with regard to protection of natural and cultural heritage) and to improve public officers' knowledge of business management and funding mechanisms. Last but not least, project management capacities must be improved, possibly to incite the provincial authorities to develop a management unit for ODA projects (see example of Lao Cai province).

295. Structuring the business community locally is important. Problem-solving approaches and capacities for business community to make their structural needs understood by public agencies is critical to stimulate public private dialogue. Subjects of a common interest for investors such as vocational education, corporate responsibility, performance of public services, effectiveness of administrations locally, and complementarities between businesses (e.g. specific circular economy-oriented initiatives) could be major areas for the strengthening of the business community.

296. Practical forms of knowledge acquisition should be given the priority to complement traditional training sessions focusing on concepts and methodologies, in particular to train trainers as highlighted in Lang Son<sup>87</sup> or workshops to fuel policy dialogue. Examples include production of planning tools (e.g. urban traffic management plans and schemes), management tools (data base and mapping, communication tools with phone applications), pilot demonstration projects (pilot lighting of remarkable buildings, tourism-dedicated public space arrangements and pedestrian sections), joint initiatives with Pingxiang or Guangxi province in tourism or educational sectors) and pilot awareness campaigns.

## **b. The Financial and Implementation Perspective**

297. Vietnam is now much aware to limit its public debt. This represents an important obstacle to the mobilization of the governmental funds to support the development of the BGEZ and Lang Son, in particular to develop their infrastructure and to hire additional staff.

298. ODA has been available to Lang Son province, mostly composed of multilateral financing, in particular through the ADB and the World Bank, and German financing. Most of projects have dealt with relatively basic infrastructure, in particular in the road and water sector. ODA still represents an opportunity to finance further projects but, due to i) the increasing costs of ODA for Vietnam; ii) the necessity for Lang Son to pay back loans; and iii) the MOF policy to restrain public indebtedness, Vietnamese authorities must be much supportive to any project at a very high level to make sure a further ODA project will be accepted. Capacity building may be accepted more easily if it is a standalone grant (e.g. CDTA).

299. Vietnamese firms and banks (public or private) are key economic players in the provincial economic development (Sun Group, Vingroup, FLC Group, DH Chu Milk, etc.). The local business community, including SMEs could be mobilized to comply with the principles of

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<sup>86</sup> Not only for infrastructure. PPP can also target urban public areas such as parks, museums, etc. for instance.

<sup>87</sup> TA 8989, Interview DPI Lang Son, May 2018.

corporate social and environmental responsibilities, particularly those in the agribusiness, tourism business or located in areas where the smallest ethnic groups are settled. Options to stimulate environmental responsibilities could also be considered by establishing a trust fund, similar to the Vietnam Green Credit Trust Fund (targeting SMEs and investments in clean technologies for energy), but dedicated to enterprises based in provinces where BGEZs are supported by the GOV but targeting a broad scope of investments to limit social and environmental negative impacts. Similarly, a trust fund for tourism could be established, financed by fees collected from foreign visitors crossing the border. Banks such as the Vietnam Development Bank could be approached for support. Vietnamese commercial banks could be mobilized in Lang Son, with the support of MOC and DOC, to promote the housing sector, in particular social housing resilient to floods and environmentally friendly (e.g. energy saving). Increasing the capital of present private or equitized public services providers is also an option to be considered by Vietnam's financial institutions and development partners (private sector operations of the ADB, Proparco of AFD, etc).

300. PPPs should be encouraged. In Lang Son city, Dong Dang and the BEZs, an integrated approach could combine services in the urban areas and in the BEZs. Positive perspectives regarding operating revenues (high proportion of large businesses among service users) could encourage arranging concession-type contracts with a higher return on investment for the private parties by keeping at the same time tariffs affordable to low-income residents served. An in-depth feasibility study is necessary, for instance to improve the present arrangement for solid waste collection. Possibly, under an umbrella agreement, specific contracts could be arranged with concerned institutions to cover an integrated area (Lang Son city, Dong Dang town and BGEZs)<sup>88</sup>, and possibly extended to the treatment of hazardous waste and recycling in a perspective of circular economy at the provincial level.

## **5. The Development Framework**

### **a. Problems and Opportunities**

301. Collectively, this appraisal of the BGEZ, has highlighted the relative strengths and weaknesses of the area as they currently stand and with specific reference to the Border Gate Areas, Lang Son City, Dong Dang Town and the rural hinterland. Most of the baseline economic and social conditions for development are good, but in comparison to Pingxiang in China progress has been very slow. There are lessons to be learnt from the China example. In our view success is hinged around 3 key principles: (i) an inclusive Master Plan as the foundation for phased development and investment programming; (ii) commitment to public funding as the catalyst to optimize the value of private sector investment; and (iii) commitment to parallel funding of housing development and a full range essential support land uses to ensure the essential conditions to secure rapid economic growth are in place (see Table 20).

302. The BGEZ has a number of strengths, including an economically attractive location (as demonstrated by its Chinese counterpart). There is a long-established cross border and transshipment business environment, where there is the potential to expand and diversify into other border related activities. There is already evidence of private sector interest, but access to land is difficult. As stated above, the cost base for Vietnamese labor is significantly less than for the employment of Chinese labor. The completion of the upgraded national highway connection from Hanoi to Lang Son/Dong Dang will further enhance investment opportunities. But stakeholders in the BGEZ have suggested a number of weaknesses which have constrained development and investment, including poor strategic transport infrastructure (road and rail), low skills base, lack of support housing and public facilities provision, and lack of sustainable urban utilities (i.e. water supply, wastewater management facilities/land drainage infrastructure and poor solid waste management).

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<sup>88</sup> See experiences of PPP in the solid waste sector with "syndicats intercommunaux" in France for instance.

303. Further details regarding the operational aspects and problems directly related to cross border issues, based on the experience of the ADB Multi- Tranche Financing Facility Guangxi Regional Cooperation and Integration Promotion Investment Program are shown in the *Box Box 1: Border Gate Activities – Problems and Opportunities* below.

**Box 1: Border Gate Activities – Problems and Opportunities**

*The diagnostic provided in the sector assessment on industry and trade for the ADB Multi-Tranche Financing Facility Guangxi Regional Cooperation and Integration Promotion Investment Program gives a candid assessment on some of the issues relating to border area development between Guangxi and Vietnam. “Developing the border areas of the PRC and Viet Nam has been identified as a priority for regional cooperation, particularly by improving cross-border connectivity and promoting cross-border economic activities. However, opportunities for cooperation have not been fully tapped, resulting in inefficient transport and trade operations and unrealized economic growth potential in border areas.*

*The main causes are: (i) most investment projects depend on national investment, and given limited local government resources and competing priorities, only a few projects proposed under provincial plans can be realized; (ii) government investments have focused on physical infrastructure improvements, especially transport infrastructure, but trade and investment facilitation has lagged behind; (iii) attracting investment for SMEs in border areas is difficult because of their weak capacities, lack of access to bank credit, and lack of managerial staff and skilled labor; (iv) cross-border financial transactions are costly, risky, and time-consuming; and investments face perceived political risks such as currency inconvertibility and non-transferability, expropriation, government breach of contractual obligations, and other material adverse government actions including change of law and regulations, and negation or cancellation of licenses and approvals; (v) there are difficulties in adopting new information and communication technology (ICT), such as e-commerce, for improving logistics and accessing markets at and beyond borders, due to lack of common ICT infrastructure and e-commerce platforms; (vi) gaps exist in cross-border connectivity, such as the lack of expressways linking the economic centers in Viet Nam with Guangxi as well as the low density and poor conditions of feeder roads in the border areas, particularly those linking the border economic zones (BEZs) on both sides of the border; and (vii) key infrastructure and services are lacking in BEZs, and implementation of the bilateral memorandums of understanding on joint development of BEZs has been slow. A holistic approach is needed to address constraints related to physical connectivity as well as soft aspects of regional cooperation including trade facilitation, SME development, and cross-border financial services. Capacity building should also be part of this approach to raise awareness of the opportunities and benefits of the BEZs, to strengthen local authorities’ capabilities to plan and implement complex projects successfully”.*

304. In our view, slow progress in the implementation of the BGEZ Master Plan lies in the constrained institutional and financial capacity of national and local governance to achieve on-ground action. There are three fundamental weaknesses to be addressed: (i) organizational constraints; (ii) financial constraints and; (iii) skills deficiencies and resource capacity. In the context of the recent policy initiatives, (including Prime Minister’s Decision No. 52/2008/QD-TTg approving the scheme of “Master Plan Development of Viet Nam’s Border-Gate Economic Zones up to 2020”) it is hoped that real opportunities can be created to speed up development and investment of the BGEZ and at the same time achieve better results from the collaboration process with the Chinese authorities (see *Box 2: The Policy Context*). Opportunities for organizational and regulatory reform, increased financial support and greater cooperation with private sector interests should be on the agenda, along with investment in the capacity building

and training that will be required to support the BGEZ and the local governments in a more ambitious agenda. It may also be opportune to look at the prospect of political unification for Long Son City and Dong Dang Town and selected communes into a single city level administration, better reflecting the inclusive nature of the Master Plan and investment programming for the BGEZ. But, at the same time planning and development opportunity will need to be set in the context of the political sensitivity of the border location with China.

**Box 2: The Policy Context**

*9 focal border-gate economic zones (including the Lang Son – Dong Dang BEZ) are given priorities in development investments from State budget sources for the period 2016-2020. The allocated investment capital amount for the 9 focal border-gate economic zones is to be no less than 70% of the investment support funds from the Central budget under annual and 5-year plans for the period 2016-2020.*

*The Prime Minister assigned the Ministry of Planning and Investment (MPI) to host, in cooperation with the Ministry of Finance, to build plans on allocation of the Central budget for border-gate economic zones, in conformity with the principle of centralized options available to the focal border-gate economic zones, in accordance with current regulations, prioritizing investments in the types of works with urgent need, to bring about immediate results, stimulating the development of these zones.*

*The Prime Minister requested provinces and central cities to act in compliance with the principle of centralization in development investments in the selected focal border-gate economic zones, and to use the allocated Central budget resources in accordance with purposes and current regulations, and keep up with disbursement and construction schedules. At the same time, localities should take the initiative in arranging local budgets and mobilizing other sources of legitimate capital funding along with the central budget funds to invest in border gate zones.*

305. For the time being and on the simple assumption that the BGEZ is to some extent successful, then economic growth will bring with it both advantages and dis-advantages. On a positive note the BGEZs can provide new employment opportunity and have the potential to address “women in employment issues” and the needs of the urban poor and under privileged for instance. But this may in turn create in-migration from the rural areas which will be difficult to predict and manage, potentially leading to social inequality and deprivation. To this extent government will need to be “ahead of the game” in terms of low cost housing, or informal housing areas will occur.



**Table 20: Lang Son/Dong Dang BGEZ: Strengths, Weaknesse, Opportunities and Threats (SWOT) Analysis**

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Economic Development and Competiveness	<p>1. There is a long-established cross border and transshipment business environment which provides an economic baseline on which to expand further and diversify into other border related activities.</p> <p>2. There is known interest from private sector investors (eg Sun Group/ Vin Group) in the tourism and residential and development markets.</p> <p>3. BEZ status has the potential to be the catalyst in realizing the full economic potential of Lang Son/Dong Dan.</p> <p>4. Competitiveness through local urban and rural hinterland population with a relatively low-cost base.</p> <p>5. The BEZ and its rural hinterland have extensive natural and man-made attractions on which to expand tourism.</p> <p>4. The upgraded national highway connection from Hanoi to Lang Son/Dong Dang will enhance investment opportunities.</p>	<p>1. The nature and scale of the existing regional transport infrastructure (road and rail) has historically not been sufficient to attract significant additional economic activity/investment.</p> <p>2. The absence of a modern railway for both passenger and freight traffic.</p> <p>4. Increased rates of economic growth will place additional pressures on the need for significant increases in investment capital in public facilities and urban infrastructure, which has historically lagged behind urban growth.</p> <p>5. Existing urban and rural hinterland population with a relatively low skills base, not matching the needs of potential employment opportunities in the manufacturing/logistics/service and tourism sectors.</p>	<p>1. Local Economic Development Planning (supporting a Master Planning Review) can provide an inclusive hard and soft sector approach to optimize the planning and development of the BEZ.</p> <p>2. The BEZ is able to offer (i) a wide range of development incentives and enabling mechanisms to optimize the value of additional economic investment and be more competitive than Pinxiang and other Viet Nam BEZs.</p> <p>3. The BEZ should prioritize the development of serviced development land to attract: (i) cross border diversification, including free trade areas; and (ii) serviced land industry, storage/logistics and service companies in managed environments.</p> <p>4. The improved transport infrastructure to Pingxiang from Southern China (eg high speed train) will enhance economic opportunities in the BEZ, including tourism.</p>	<p>1. Government, does not facilitate essential investment in border trade infrastructure and serviced land.</p> <p>2. The BEZ is unable to attract private sector investment in key economic development projects (eg Hai Phong Industrial Park port) and other essential facilities (eg residential development and high-profile public facilities) such that economic growth is stalled.</p> <p>3. The value of tourism in achieving economic development is over rated and the growth targets cannot be achieved.</p> <p>4. There is over-reliance on Chinese investment, implying exposure to economic and social exploitation.</p>

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Equity and Social Cohesion	<p>1. Potential economic growth will provide new employment opportunity for the existing urban population and in the rural hinterland, thus raising standards of living and spending power.</p>	<p>1. Economic growth will create additional pressures for the provision of affordable housing for both the existing population and newcomers and for a range of community and recreation facilities and services to meet Viet Nam standards, which may be difficult to provide.</p>	<p>1. Better BEZ implementation of the BEZ to its optimal growth levels should further increase new employment opportunity and address in part “women in employment” issues and the needs of the urban poor/under privileged.</p> <p>2. Better BEZ implementation and population growth, will provide more opportunity for improvements in the education and health sectors, including public and private investment in relevant vocational training, matching the needs of investors.</p>	<p>1. Essential government investment in housing, community services and utilities infrastructure may not keep pace with the rate of urban growth, resulting in additional socio-economic threats, including the spread of informal housing and urban-rural degradation.</p> <p>2. Insufficient government and private sector investment in vocational training, directly constrains employment growth for local people and the BEZ potential to attract private sector led investment in new industry.</p> <p>3. The socio-economic pattern in the rural hinterland may be disrupted by urban influence such that there are social problems in traditional village communities, including the large ethnic minority population.</p>
	<p>1. The attractive nature of (i) mountain and valley landscapes ; and (ii) the historic buildings, temples and traditional villages in parts of the BEZ and its rural hinterland have the potential to attract inward</p>	<p>1. The provision of sustainable wastewater collection/treatment and solid waste management in the BEZ is partial, such that environmental quality is often low. Watercourse pollution and ground contamination is common.</p>	<p>1. Implementation of the BEZ should provide better opportunity for inclusive planning and investment, supported by comprehensive and timely provision of essential urban infrastructure/urban services and</p>	<p>1. Essential government and private sector investment in infrastructure and utilities services may not be able to keep pace with the rate of economic growth resulting in additional threats to the quality of the urban</p>

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Environmental Quality	investment, mainly in the tourism sector.	<p>2. Increased rates of economic growth will result in additional threats to the quality of the urban environment.</p> <p>3. The shortage of planned and serviced development sites provision in the BEZ and the lack of good development control is resulting in scattered urban fringe style development, which detracts from the areas attractive landscape setting and maybe an additional pollution source.</p>	<p>climate change effects moderation.</p> <p>2. This in turn should facilitate planning and investment for the existing and planned urban areas, which can optimize economies of scale.</p>	<p>environment and the rural hinterland.</p> <p>2. Insufficient investment in climate change adaptation will place riversides and other low-lying areas at risk from periodic flooding.</p>
Governance, Institutional and Financial Capacity	<p>1. The structure of governance in Lang Son Province/BEZ provides a recognized baseline for managing the development of the BEZ, Lang Son City, Dong Dang Town and the rural hinterland.</p> <p>2. The Master Plan provides the context for inclusive planning and development of BEZ, Lang Son City, Dong Dang Town and the rural hinterland and sets the context for medium-term investment programming.</p>	<p>1. The capacity of the BEZ administration, and the local government units (provincial, city and town levels) is constrained by:</p> <ul style="list-style-type: none"> <li>• Skills deficiencies/low staff numbers.</li> <li>• Financial constraints.</li> <li>• Organizational Constraints.</li> </ul> <p>2. The capacity of the BEZ administration, and the local government units (provincial, city and town levels) is constrained by a lack of vertical integration in government to ensure national and provincial policy and planning alignment.</p>	<p>1. Political recognition of the value of cross border BEZs providing a context for reform in governance, and setting integrated organizational and financing reforms as the foundation for Master Planning implementation and investment financing.</p> <p>2. Potential unification of Long Son City and Dong Dang Town and selected communes into single city level administration, better reflecting the inclusive nature of the Master Plan and investment programming for the BEZ.</p>	<p>1. That the Weaknesses in BEZ and local/national government coordination are not sufficiently addressed at policy level and financial investment levels are not adequate to secure Master Plan implementation.</p> <p>2. The forecast potential for BEZ based growth and associated economic development, including industrial, business and tourism as proposed in the Master Plan is over-optimistic, such that investment in hard and soft infrastructure is wasted.</p>

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
		<p>3. The capacity of the BEZ administration, and the local government units (provincial, city and town levels) is constrained by a shortage of investment finance.</p>	<p>3. Political recognition leading to increased national government financing for BEZ investment.</p> <p>3. Policy flexibility in the application of PPPs and the application of financial and other incentives to secure private sector investment.</p>	<p>3. Private sector investors are not impressed by what is on offer are reluctant to invest.</p> <p>4. Government concerns regarding cross border security constrains some aspects of potential BEZ investment.</p>

## b. Development Programming and Priorities

306. This assessment above has illustrated a wide range of issues that should be addressed to ensure higher development and investment levels leading to better economic performance in the BGEZ and a more sustainable and prosperous environment for Lang Son City, Dong Dang Town and the rural hinterland. Specifically, the assessment has confirmed the need for at least four pre-conditions.

- **Inclusive Planning**, is a “must factor” in achieving sustainable development in the BGEZ – Implications for ADB investment imply a selective multi-sectoral approach to lending. Single sector investment in hard infrastructure alone is not likely to produce best “value for money” results.
- **Incremental Planning and Investment**, ensuring affordability, cost efficiency, and optimizing resource capability in building development program momentum. Adopting a use scarce resources and investment capital on an “only when it is needed” basis is implied.
- **Institutional Restructuring, Financing and Capacity Building**, to ensure government agencies are able to maximize private sector investment potential, including optimal partnership arrangements. Understanding the key role of government as the facilitator is essential.
- **Stakeholder Participation** as an essential commodity to ensure investment, commitment and beneficial effect. Working on a daily basis with investors and project affected communities is a key to sustainability.

307. In response we have prepared a broad-based Program Framework (see Table 21: Program Framework for the BGEZ for the Lang Son/Dong Dang BGEZ which provides guidance on the activities and projects we are recommending for implementation in the short and medium-term. The Program Framework is structured to reflect the needs of the Border Gate Areas and Lang Son City, Dong Dang Town and the rural hinterland. It specifically leaves out some proposals contained in the BGEZ Master Plan and Socio-Economic Plan as longer-term speculative investments for later consideration depending on BGEZ progress in the short and medium-term. For instance, it is not necessary to include all the Master Plan proposals for industrial/business parks and or new urban zones in the Program Framework, because at best they can only be long-term investments. We therefore recommend that the need for some of these development zones areas be reconsidered as part of a Master Plan review. In this way, negative environmental land blighting can be reduced by re-zoning to another more sustainable land use, for agriculture for instance.

**Table 21: Program Framework for the BGEZ**

Potential Project		Description
<b>Strategic</b>		
ST1	Master Plan Review (inclusive of Strategic Local Economic Development Plan and Medium-Term Investment Program)	Reviewing the spatial planning framework for Lang Son/Dong Dang BEZ in the context of BEZ economic potential and the needs and aspirations of Lang Son City, Dong Dan Town and the wider provincial context. Incorporating a Local Economic Development Plan as the central driver of the Master Plan Review. Translating the Master Plan into a realistic Medium-Term Investment Program (10 years period).
ST2	Local Government Reform	Revise the pattern of local governance to better reflect the BEZ area, including the unification of Lang Son City and Dong Dan as a single City entity.
ST3	Freight Rail Upgrading	Complete an integrated rail connection from the China border into Viet Nam with emphasis on freight capacity. This will provide better connectivity from the border area to Hanoi/Haiphong and potentially Ha Long.
ST4	Tourism Development Strategy Implementation: (i) Capacity Building/Training and (ii) Private Sector and Community Participation.	Essential Groundwork, to ensure better Strategy implementation concentrated on programs to ensure better capacity in the provincial and local tourism offices, to enable and attract more participation from potential private sector and community investors.
ST5	Tourism Development Service Centers: Pak Luong, Dan Dong, Na Tam Phan Lake, Khou Luom Mountain, and Giang Van Vi Mountain.	Design and implementation of provincial tourism development projects, optimizing private sector and local community investment and O&M capability. Utilization of PPP and PCP mechanisms.
ST6	Agricultural Development Strategy – Capacity Building and Private Sector Intervention	Public/Private Sector Cooperation to transmit green agricultural policy and practice into financially viable investment at production source and through the agriculture related value chain. This may lay emphasis on: (i) organic farming and crop production; and (ii) sustainable livestock farming and processing, both emphasising links with China markets through non-tariff cross border agreements.

<b>Border Economic Zone</b>		
BEZ1	Development Review and Optimal Development and Financing Strategy	Review BEZ development planning and investment potential for improved resourcing/financing in the context of recent national policy changes and ensure optimal private sector investment. Prepare revised strategy to: (i) secure rapid public and private sector investment in the border gate/non-tariff areas; and (ii) capacity building and training in support of marketing and management capacity in the BEZ.
BEZ2	Border Zone Development Priority 1 – Huu Nghi Crossing	Planning, design and implementation of essential cross border facilities upgrading to overcome unsustainable operational conditions and to accommodate other land uses, including free trade area facilities.
BEZ3	Border Zone Development Priority 2 – Coc Nam Crossing	Planning, design and implementation of essential cross border facilities upgrading to overcome unsustainable operational conditions. Consider the feasibility of closing and re-locating the border gate facilities to a more sustainable existing/new border gate point.
BEZ4	Border Zone Development Priority 3 – Tan Thanh Crossing	Planning, design and implementation of essential cross border facilities upgrading to overcome unsustainable operational conditions and to accommodate other land uses, including free trade area facilities. Consider new highway route in tunnel from Pingxiang and better highway connection to the national highway.
BEZ5	Hong Phong Industrial Park	Planning, design and implementation of serviced and managed 1 <sup>st</sup> Industrial Park supporting BEZ development as part of a package of incentives to attract private sector industrial, business and logistics development.
<b>Lang Son/Dong Dang</b>		
LD1	Tourism Development Service Centers: Pak Luong, Dan Dong, Na Tam Phan Lake, Khou Luom Mountain, and Giang Van Vi Mountain.	Planning, design and implementation of tourism centers, providing new facilities and infrastructure as required. Working closely with private sector and community interests in the provision/O&M of tourism facilities and optimizing the use of PPP and PCP arrangements. Project investment to emphasize tourism promotion and management training and use of ASEAN standards.

LD2	Agricultural Development Strategy – Capacity Building and Private Sector Intervention.	Review the potential for business agriculture, optimizing packaging and processing opportunities and the value chain economy, with specific reference to cross border trade potential. Prepare an integrated plan to improve performance in the agricultural economy in the BEZ rural hinterland and elsewhere in the province.
LD3	Urban Roads Development and Border Zones Connections	Planning, design and implementation of urban highways network including: (i) border zones links to strategic highway network and urban areas; (ii) urban areas – primary roads system; (iii) road links to new development areas and internal primary roads provision.
LD4	Public Transport Upgrading and Bus Station Development	Planning, design and implementation of new bus station facilities in Lang Son.
LD5	Vehicular Parking Provision	Provision of off-street public vehicle parking areas in urban core locations and tourism development sites.
LD6	Strategic Public Services Provision, including: (i) Education and Health Services Provision; and (ii) New Sports and Recreation Facilities.	Planning, design and implementation of strategic public facilities, including proposed education complex, regional hospital and sports center, serving the whole BEZ and the province.
LD7	Poor Alleviation: Resettlement Policy and Program	Policy and program development to ensure resettlement of communities displaced by BEZ development and the replacement of temporary housing, in new locations close to employment opportunities and the urban areas generally.
LD8	Housing Opportunity in Urban Areas	Design and implement Housing Opportunity Projects in Lang Son City and Dong Dang Town in accordance with the Master Plan and real demand factors. Government will act as the facilitator for private sector partnerships to provide new housing.
LD9	Education Sector: Upgrading Education Standards and Schools Provision	Design and implement plan for better educational attainment and new schools provision in Lang Son City and Dong Dang Town.



LD10	Vocational Training	Review and implement revised approach to vocational training to better match needs of economic development in the BEZ, optimizing the relevance of private sector interests. Construct new vocational training college as appropriate.
LD11	Public Health Sector: New Facilities Provision and Renovations of Existing Facilities	Design and implement plan for better educational attainment and new schools provision in Lang Son City and Dong Dang Town.
LD12	Elderly Care Service Planning and Upgrading	Accelerate the reform of public elder care institutions and support governance/community stakeholders in setting up better elderly care in Lang Son City and Dong Dang Town.
LD13	Provision of Abattoir	Design and provision of centralized abattoir facilities (and closure of slaughterhouse not meeting public health standards).
<b>Lang Son City</b>		
LS1	Solid Waste Collection/Disposal Sanitary Landfill Development/Upgrading.	Prepare and implement an integrated plan for solid waste management, incorporating waste minimization principles for application across the BEZ, incorporating private sector and community participation potential. Ensuring sustainable design and practices at the landfill site and upgrade as appropriate.
LS2	Urban Vehicular Parking Provision	Provision of off-street public vehicle parking areas in urban core locations and tourism development sites.
LS3	Urban Poverty Alleviation	Urban and rural poverty review and preparation of plan and proposals to eliminate urban poverty and generally raise living standards for low income families.
LS4	Capacity Building and Training: (i) Good Governance; (ii) Gender Action Planning; and (iii) Infrastructure and Public Facilities O&M.	Prepare Capacity Building and Training Plan to support better governance and community development.
<b>Dong Dang Town</b>		

DD1	Water Supply and Wastewater Management Supply, Collection and Treatment Facilities. Planning and Development (option to include Border Zone Areas)	Planning, design and implementation of integrated provision of urban utilities serving new development areas, (including the border gate areas) and making up for deficiencies in the existing urban areas.
DD2	Solid Waste Collection/Disposal Sanitary Landfill Development/Upgrading.	Prepare and implement an integrated plan for solid waste management, incorporating waste minimization principles for application across the BEZ, incorporating private sector and community participation potential. Ensuring sustainable design and practices at the landfill site and upgrade as appropriate.
DD3	Urban Poverty Alleviation	Urban and rural poverty review and preparation of plan and proposals to eliminate urban poverty and generally raise living standards for low income families.
DD4	Capacity Building and Training: (i) Good Governance; (ii) Gender Action Planning; and (iii) Infrastructure and Public Facilities O&M	Prepare Capacity Building and Training Plan to support better governance and community development.
<b>Good Governance</b>		
GG1	Stakeholder Participation Knowledge Platform Development Pilot Project(s)	Upgrade and further develop knowledge-based information systems and develop a variety of E-based and non-e-based mechanisms to ensure stakeholder awareness and participation in good governance. A project may be financed and piloted across in the BEZ and introduced incrementally, responding to stakeholder priorities.
GG2	Capacity Building and Training	Strengthening Capacity in Governance at both Provincial and Local Levels
GG3	Public-Private Partnerships	Public-Private Initiative to Prepare a Project to Structure a Provincial Business Community Aware of Corporate Social and Environmental Responsibilities
GG4	Provincial Communications Strategy	Participatory Process (Residents/Ethnic Groups, and Business Community) in the Implementation of Spatial (Urban, BGEZ, Rural) Plans and SEDP.

308. In the context of the consultant team’s restricted depth of investigation it is recognized we may not have included all the desirable activities and projects that should be included in the Program Framework, but it is anticipated that most are. We recommend the potential hard and soft sector components, which might form the foundations for an inclusive short-term Priority Investment Program. The recommendations are shown below in Table 22: Priority Investment Program for the BGEZProject specific notes regarding each of the recommended priority activities are included in the Table 21 above.

**Table 22: Priority Investment Program for the BGEZ**

<b>Priority Project</b>	
<b>Strategic Planning and Good Governance</b>	
GG1	Strengthening Capacity in Governance
ST1	Master Plan Review (inclusive of Strategic Local Economic Development Plan and Medium-Term Investment Program)
ST4	Tourism Development Strategy Implementation: (i) Capacity Building/Training and (ii) Private Sector and Community Participation
<b>BEZ Related</b>	
BEZ 1	Development Review and Optimal Development and Financing Strategy
BEZ 2	Border Zone Management Capacity Review
BEZ 3	Border Zone Development Priority 1 – Huu Ngi Crossing
BEZ 4	Border Zone Development Priority 2 – Coc Nam Crossing
BEZ 5	Border Zone Development Priority 3 – Tan Thanh Crossing
BEZ 6	Ho Hong Phuong Industrial Park
<b>Lang Son/Dong Dang</b>	
LD3	Urban Roads Development and Border Zones Connections
LD8	Housing Opportunity in Urban Areas (Phase 1)
LD10	Vocational Training Review and College Development
LS1/DD1&2	Urban Utilities Upgrading and New Development (Water Supply, Wastewater Management and Solid Waste Management).
LS3/DD3	Urban Poverty Alleviation
LD2	Tourism Development Service Centers: Pak Luong, Dan Dong, Na Tam Phan Lake, Khou Luom Mountain, and Giang Van Vi Mountain.

## **C. Mong Cai (Viet Nam)**

### **1. Introduction**

#### **a. Background**

309. The Mong Cai Border Gate Economic Zone (MCEZ) includes the whole of Mong Cai City and a significant part of Hai Ha District. The MCEZ is an increasingly important economic corridor hub and trading route connecting Guangxi Province and South China with Viet Nam. It is characterized by potentially strong road and rail transport links to Hanoi (315 kms away) and Ha Long Bay, the deep-sea port facilities at Haiphong (216 kms away) and other planned seaport facilities in the province. The average annual GRDP growth rate of Mong Cai City in the period 2011-2015 was 8.65%,

310. Dongxing, on the Chinese side of the border, is an established city, which has prospered through its cross-border location and where the realization of strong economic growth is supported by new housing, with essential public facilities and utilities infrastructure. The concept of inclusive city planning is the setting for the implementation of the Border Economic Zone (BEZ) concept, which is operative and supported by public and private investments. The essential strategic transport infrastructure, including the strategic highway connections and freight rail are in place. A high-speed passenger rail connection is under construction.

311. Mong Cai is a vibrant city reflecting its cross-border status and where recent and current improvements to the cross-border gate facilities reflect its development potential. There already large-scale overseas investments in textile manufacturing in the Hai Yen Industrial Park and the Hai Ha Seaport Industrial Park. The ambitious Master Plan for the MCEZ, acknowledges this potential, setting out a comprehensive plan for the expansion of cross border trade facilities, industrial and business development, tourism and the essential supporting housing, public facilities, transport and utilities infrastructure. At the same time the MCEZ is one of a series of economic zones and industrial park investments in Quang Ninh Province, including the Van Don Economic Zone, which includes proposals for airport/air terminal facilities (see Figure 39).

312. The MCEZ has a 50km coastline. There are 7 ports, 9 domestic river ports, and border checkpoints of various kinds. 3 of the border checkpoints cater for international land based cross border traffic. There is another international cross border facility in Hai Ha District at Bac Phong Sinh, but this is relatively remote and located outside of the MCEZ. The entire economic zone's natural area is about 121,197 ha, of which the land area is about 66,197 ha and the sea surface area is 55,000 ha.

#### **b. Aims and Objectives**

313. This report provides a broad appreciation of the MCEZ and the associated urban-rural communities, focused on Mong Cai City and Hai Ha District and describes the current issues affecting the

314. area and the opportunities for accelerated economic and social development in the future. A range of proposals are put forward, along with an indication of the implications for institutional development, investment programming and capacity building. The objective is to provide an inclusive development framework on which to build for the future.

#### **c. Stakeholder Consultation**

315. This Border Zone Report responds to series of discussions with government officials from: (i) Quang Ninh Province, Mong Cai City and from the MCEZ authority in Viet Nam; and (ii) Dongxing and from the BEZ authority in China. These discussions took place in two stages, the first in late 2017 and the second in early April 2018, providing direct support to the preparation of this DFR.

**Figure 39: Quang Ninh Province: Industrial Parks and Economic Zones**



## 2. The Border Zone

### a. The Policy Context

316. Quang Ninh province shares a border with Guangxi Zhuang Autonomous Region (GZAR) in China. The border city of Mong Cai is located adjacent to the international border, separated from Dongxing by the Ka Long river and its sea access. In addition to the 3 operating international border crossings between Mong Cai and Dongxing, two more are proposed. All three of the border crossings have official recognition for the conduct of cross border trade. Historically this has operated mainly through the existing Bac Luan Bridge Border Gate. It was later followed by use of boats to make the Ka Long river crossing and this is now added to by the Floating Bridge Border Gate Crossing. In September 2015 (Prime Ministers Decision No 1626/QĐ-TTg) approval was given for the “Overall Plan for the Construction of the Mong Cai Border-Economic Zone up to 2030

and a Vision for 2050". This allowed for the pilot implementation of the Mong Cai Border Economic Cooperation Zone (CBEZ), which is proposed to be a focal point of foreign economic relations and direct cooperation between Quang Ninh Province and the GZAR. The September 2015 initiative included 8 other border economic zones. They are: (i) Dong Dang- Lang Son BEZ, Lang Son Province; (ii) Lao Cai BEZ, Lao Cai Province; (iii) Cao Bang BEZ; (iv) Cao Treo International Economic Border-Gate Zone, Ha Tinh Province; (v) Cha Lo BEZ, Quang Binh Province; (vii) Lao Bao Special Economic-Commercial Zone, Quang Tri Province and (viii) Moc Bai, Tay Ninh Province. At that time, the Prime Minister requested allocated investment capital amounts for the 9 BEZs to be no less than 70% of the investment support funds from the central budget under annual and 5-year plans for the period 2016-2020.

317. The MCEZ covers (i) the entire area of Mong Cai City including 17 administrative units, namely: Tra Co, Tran Phu, Ka Long, Ninh Duong, Hai Yen, Hai Hoa, Binh Ngoc and Hoa Lac wards, plus Hai Tien, Van Ninh, Hai Dong, Quang Nghia, Vinh Thuc, Vinh Trung, Hai Son, Hai Xuan, and Bac Son wards; and (ii) Hai Ha District including the Industrial - Seaport Zone EZ; plus Quang Ha Town, Quang Thang, Quang Minh, Quang Trung, and Cai Chien communes.

318. In the context of the Prime Minister's Decision, the MCEZ's primary aim is to develop the area as a center for economic growth, commercial development, tourism, the services industry and seaport development as part of the coastal economic belt in the Bay of Tonkin and the focal point of the economic corridor of Kunming (China) to Hanoi - Hai Phong - Mong Cai - Fangcheng (China). With all the advantages of a coastal site (including land border-gates and seaway border-gates), the MCEZ is in a strong geo-political and geo-economic position as one of the direct and important bridges in promoting cooperation with ASEAN countries. This is a point of convergence, the main gateway for economic exchange between Vietnam's provinces and cities and China's southern coastal provinces and cities, as well as in the cooperation process within the ASEAN Free Trade Area - China via international land border-gates, seaway border-gates (eg Van Gia Seaport) and the proposed Hai Hai Deep-water Seaport, which we understand will be accessible for vessels of up to 150,000 DWT. The MCEZ is also recognized as an important area in terms of national security and defense.

319. There are some objectives regarding the Viet Nam/China BEZs. In terms, specific to Mong Cai they are:

- Build and develop the MCEZ as a trade, service, industrial, and tourist center in the corridor and strengthen development cooperation in the Viet Nam-China coastal corridor.
- Prioritize investment and development of the: (i) planned border gates related transshipment and free trade facilities; and (ii) planned industrial and business development as proposed in the approved Master Plan.
- Make effective use of the areas' attractive landscapes, including the coastline and offshore islands to boost the potential for sustainable tourist development in and around the MCEZ.
- Develop border-gate MCEZ investments in association with planning and developing related urban residential areas and the essential supporting public facilities, transport and utilities infrastructure.
- Improve the strategic road and rail linkages from the MCEZ to Ha Long Bay, Haiphong and Hanoi in Viet Nam and the connections into Dongxing in China, leading to better connections within the region, nationally and internationally.

- Prioritize investment in completing essential infrastructure, within the context of approved MCEZ Master Plan and the associated development programs.

320. So far, the MCEZ has attracted 20 FDI projects with a total registered capital of USD 1,106 billion. We are informed by the MCEZ management authority that they are intending to pursue some 40 other priority projects in various sectors including transport infrastructure, trade services, health-care, education; power, water supply and drainage, environmental protection, agriculture and industry.

#### **b. Border Zone Collaboration**

321. One area which will need to be examined is improving the consultation mechanisms between the public and private sectors both within Vietnam and between Vietnam and China. There are some specific consultation mechanisms already in place but we are informed they are not sufficient and/or business oriented enough. There is a Border Management Board which coordinates, between Vietnamese and Chinese interests, including regular dialogue at provincial level meetings for the MCEZ through the Department of Planning and Investment (DPI), and the provincial and Dongxing counterparts. The Quang Ninh PPC also meets with its Dongxing counterpart once a year to discuss big investment projects affecting both sides of the borders.

322. On the basis of the consultant team's stakeholder consultations, it is understood that the central governments are not maximizing the full potential for coordination and liaison. Apparently, issues are tasked under different agencies and the information is not always shared. According to Nanning officials in China, both sides are active and eager to cooperate, yet Vietnamese central government officials are not sufficiently proactive and have in the past lacked funding to improve cross border cooperation and investment. For instance, the common customs area, cross border and free trade areas have been slow in getting central government approvals from the Vietnamese side.

#### **c. Key Features and Spatial Dimensions**

323. The three key international border crossings which facilitate international trade are: (i) City Center/Bac Luan River Bridge; (ii) Floating Bridge Crossing; and (iii) 2nd Sino-Vietnam Bac Luan Bridge. Beyond this, the design and implementation of proposals for the 4<sup>th</sup> and 5<sup>th</sup> cross border river bridges are not yet known.

##### **(i) City Center/Bac Luan Bridge**

324. This is the first formal border gate crossing across the Ka Long River, connecting Mong Cai and Dongxing and its design reflects an earlier economy, which was based around small trucks, bikes and pedestrians. Typically, pedestrians and cyclists cross the border/bridge carrying bags of goods by hand or in hand carts. This situation makes it very difficult for the container trucks to use the border gate and capacity is low. By comparison, Pingxiang (see part 3.4 above) truck traffic is often in excess of 1,000 per day, whereas in Dongxing it is 200 trucks per day<sup>89</sup>. Tourist trade is increasing with a new free trade shopping facility at the Dongxing border gate. This crossing has been a major constraint to the development of cross border traffic and the associated benefits for economic development, but will of course soon be replaced by a new river bridge crossing (2nd Sino-Vietnam Bac Luan Bridge), which forms the 1<sup>st</sup> phase of the Mong Cai Border Gate Economic Zone (BGEZ). Once the new cross border facility is open, it is expected that the City Center/Bac Luan Bridge cross border facility will be pedestrians, cyclists and light vehicles only.

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<sup>89</sup> Information supplied by the Wantong Dongxing Logistics Company.

### **(ii) Floating Bridge Crossing**

325. This border gate combines border gate controls, with transshipment activities, where the principle activity is centered on re-loading goods onto purpose designed small trucks, transferring goods into China. This is a specialized business for small traders from China, enabling beneficial tariff free entry of goods from Viet Nam, which is mirrored at the Long San (Coc Nam)/Pinxiang border gate. Fruits and seafood are the most common products for cross-border transfer using the floating bridge, linking to storage/sorting facilities on both sides of the river. This activity was previously carried out by river boats that ferried the goods across the Ka Long river. This is now largely replaced by the floating bridge, although the old boat port facility is still operative, providing an alternative to the floating bridge. The floating bridge is 144 meters by 12 meters wide, which was a \$1.98 million investment plus a further \$3.3 million for the fruit inspection/transshipment facilities. An additional market facility to support a Border Citizens Trade facility is located on the Dongxing side of the river. The business investment model is a public-private partnership.

### **(iii) The Mong Cai Border Economic Cooperation Zone (BECZ)/ The 2<sup>nd</sup> Sino-Vietnam Bac Luan Bridge 2 Crossing**

326. At the time of writing, this much awaited new cross border gate facility is almost ready for operation and will connect the Dongxing Cross Border Cooperation Zone, with the BECZ. The new Bac Lun Bridge 2 crossing over the Ka Long River is completed and the supporting cross border gate facilities are nearing completion. This will include an inter-sectoral control area (53.26 ha), incorporating office buildings, and a customs inspection area. Once operative one of the major constraints to cross border trade will have been overcome and significant increases in container truck traffic are anticipated.

327. The BECZ has a total an area of about 1,350 hectares. This is the trade area between Vietnam and China, and between ASEAN and China, which will be developed into a focal point of foreign economic relations and direct cooperation between Quang Ninh (Vietnam) and Guangxi (China). The draft Master Plan for the whole area illustrates an inclusive mixed-use development. including: (i) a production and processing for export area; (ii) a cross-border free trade area; (iii) an international financial area; (iv) a modern logistics area; (v) a cross-border tourist area; (vi) an international exhibition fair area; and (vii) other urban uses, including residential/commercial development and supporting public facilities/green areas.





#### **d. Economic Development Characteristics and Potentials**

328. The composition and volume of border trade is growing as government policies and infrastructure are improving. In 2010, border trade from/to Quang Ninh with China reached US\$ 4,235 million or 59.3 percent of total Vietnam-China border trade, up 3 times compared to 2006. From 1996-2001 MCEZ average annual economic growth was 15-17 percent with an export market expanded to 70 countries and territories. In 2013, exports reached \$1.85 billion, 2.12 times higher than that of 2005 and imports reached \$1.05 billion, 3.1 times higher than that of 2005. The main exports are rubber, seafood, cashews, fruit, electronics, footwear while the main imports are plastics, wood products, machinery, automobiles and chemicals. Import/export activities contribute significantly to the province's budget, with over USD 87.7 million per year.

329. Border services and trade have so far contributed 50% of the province's GDP. In 2017 the total value of import and export goods in Mong Cai city reached USD 5,200 million, in which, import tax reached USD 19.6 million. Total revenue from transportation and loading activities reached USD 26.3 million. Non-public (cargo) volume reached 631,000 thousand tons in 2014, where there was an interesting split between road based at 273,000 tons (43%) and river/coastal based at 358,000 tons (57%). It is anticipated the balance will change in favor of road traffic, once: (i) the new border control point in the BECZ is operative in 2018; and (ii) completion of the new Mong Cai-Ha Long expressway in the medium term. The numbers of mainly trucks crossing the border in 2017, was perhaps conservatively placed at 18,449 vehicles

330. Quang Ninh Province has been importing large amounts of high quality equipment and technologies supporting investment in large projects, accelerating the pace of production, improving the competitiveness of products, and reducing risks of environmental pollution. Trade in services has also been growing rapidly. The MCEZ has advantages of proximity to seaports and river ports that need infrastructure and services investments for SMEs and for small border traders in order to realize their full potential across diverse economic sectors of industry, aquaculture, agriculture, and tourism. This also includes investments and capacity development for services and facilities in logistics, banking, business marketing and better coordination and collaboration between businesses and government at all levels. There is now evidence that trade activities in the MCEZ are taking place on a significant scale, in the context of the approved Master Plan. The mega scale Hai Ha Texhong Industrial Area in the Hai Ha Seaport Industrial Park is a superb example. It is this regard lower labor costs in Mong Cai are attractive for Chinese textile investors and for the seafood/fruit trades.

#### **e. Institutional and Regulatory Dimensions**

##### **(i) Mong Cai BGEZ Development in a Provincial Context<sup>90</sup>**

331. The regulation of MCGEZ in Vietnam is composed of a succession of Decrees and Decisions of the Prime Minister: Decree 29/2008/ND-CP<sup>91</sup>, Decree 164/2013/ND-CP<sup>92</sup>, and the recent Decree 82/2018/ND-CP<sup>93</sup>. Establishment of BGEZs or industrial parks is made by Decisions approved by the Prime Minister which defines the administrative area of the zone,

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<sup>90</sup> General institutional and regulatory arrangements at the national level can be found in the Lang Son case study in this report.

<sup>91</sup> Providing for Industrial parks Export Processing Zones and Economic Zones.

<sup>92</sup> "Amending and supplementing a number of articles of the Government's Decree No. 29/2008/ND-CP of March 14, 2008, on industrial parks, export-processing zones and economic zones"

<sup>93</sup> "On the Management of Industrial Parks and Economic Zones

including urban areas. A Law on Special Administrative and Economic Zone (SAEZ) is under discussion at the National Assembly but its approval has been delayed due to some controversial aspects. This law will however only concern three SAEZs (Van Don in Quang Ninh, Phu Quoc Island in Kien Giang and Bac Van Phong in Khanh Hoa ) but its consequences on further regulation of SEZs in general may be important, in particular in the case of MCEZ: According to the directions given by the Standing Committee, the head of a SAEZ would be directly under the control of the Prime Minister but would have full authority on both economic activities and administrative activities within the zone. This might mean a loss of power of provincial and city government in these areas

332. Three main areas have emerged as emerging powerful economic poles in Quang Ninh province: i) Ha Long; ii) Cam Pha District; iii) Mong Cai BECZ, and iv) Van Don SAEZ. All these areas benefit – or are expected to benefit – from massive Vietnamese and international investments (e.g. Texhong Group from Hong Kong in Hai Ha industrial zone, including the provision of power). In addition, the province could attract important public or private investments from Japan in the south<sup>94</sup> (deep sea port in Cat Ba, development study for Dam Nha Mac area, south of Ha Long<sup>95</sup>) and China in the north (Mong Cai). Finally, Quang Ninh is a coastal province which raises critical economic challenges in areas such as, among others, the Ha Long Bay UNESCO World Heritage Site, the Bai Tu Long national park, and the future of fisheries and aquaculture.

333. Quang Ninh cannot be compared with most other Vietnamese provinces such as Tay Ninh, Lao Cai or Lang Son. Since 2005-2008, its development raised specific and important interrelated institutional challenges<sup>96</sup>:

- Use of state-controlled large enterprises and increasing equitization to support national and local economic development,
- Strong economic interactions between the Vietnamese and Chinese private sector groups,
- Financial leeway for the national budget to support local development,
- Governance of territories with the co-existence of i) traditional administrative structures (provinces, districts, towns, etc.), and ii) new institutional frameworks to manage specific zones, in particular economic zones<sup>97</sup>,
- National security concerns, and international relations, in particular with China,
- FDI support to public private initiatives and stimulus to the development of Vietnamese groups (for which Quang Ninh is likely a key area to invest massively, for example: Vision Transportation Group, Hai Dang JSC, and Sunny World Property Development Corp,
- Support to PPPs in the infrastructure sector and consequently the concern for the authorities to keep control over the management of services,
- Environmental concerns in particular coastal and marine ones,

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<sup>94</sup> In the mid-2000s, JICA has supported massively road and bridge infrastructure in both Hai Phong and South of Quang Ninh, in particular to facilitate economic links with Hanoi

<sup>95</sup> SE Corporation, Nomura Research Institute and alii, 2014, Study on Development of Dam Nha Mac Area, prepared for the METI, the JETRO, Nippon Koei, Ernst & Young Shin Nihon

<sup>96</sup> For instance, following the proposal of China to finance the Expressway Van Don – Mong Cai with a loan from the Ex Im Bank of China, the Vietnamese government finally opted for a BOT.

<sup>97</sup> Not only: the protection of sensitive natural areas, terrestrial coastal and marine, is also concerned.

- Political and diplomacy: recent protests against FDI arrangements (and the future SAEZ Law) in targeted investments in Quang Ninh,
- Asian context: the development model of SEZ is strongly influenced by the Chinese experience and also possibly by experiences of countries like Thailand or India.

334. Quang Ninh province generates substantial revenues for the national budget (and the country), traditionally resulting from mining or tourism. The BGEZ and SEZ are an attempt to benefit from revenues from alternative sources such as manufacturing and textile or more diversified services. Expectations regarding return on investments and economic and financial benefits for the province are strong. One question is what will happen if the investments planned do not realize, or if they are finally not profitable. These public financial aspects (tax and non-tax revenues, allocations of financial gains/loss to these different types of budgets) need a combined institutional/public finance analysis.

335. Disconnect the situation in MCEZ from this provincial context is difficult. What is happening since a decade in Quang Ninh is of a primary importance for Vietnam and the institutional challenges are multi-dimensional (international, national and local). Strategic projects in Quang Ninh may even result in difficult discussions between ministries (e.g. in 2016 between the MOF and the MOT over the Chinese financing support to construct the Van Don – Mong Cai highway), and also between the central and the provincial government.

#### **(ii) Institutional Situation and Challenges in Mong Cai**

336. Decision 19/2012/QĐ-TTg, states that the 121,197 ha of MCEZ wide area encompasses:

- The whole city of Mong Cai, including 8 urban wards and 9 (rural) communes
- Hai Ha Industrial Park - sea port in Hai Ha District, including Quang Ha Township and 8 of the 15 rural communes of Hai Ha District.
- 55,000ha of sea surface (45% of the surface of the MCEZ)

337. In accordance with Decree 29/2008/ND-CP, the main authorities concerned are the Prime Minister, the MPI which coordinates with other ministries when relevant, and the Provincial Government. The Prime Minister approves major initiatives, such as the Master Plan (Decision 52/2008/QĐ-TTg<sup>98</sup>). MPI has the primary responsibility of the development of EZs, in particular to prepare adjustments of regulatory aspects, to propose budget allocations, to coordinate with main ministries concerned, to prepare Master Plans and investment promotion. Other ministries have decisive functions, in particular the MOHA, the MOIT, the MOF, the MPS, the MOC and the MONRE. For instance, any EZ project is submitted to the MOHA to organize an EZ Management Board prior to submission to the Prime Minister for approval. Similarly, the MOF formulates financial mechanisms related to EZs.

338. According to the classification system, Mong Cai is a city of third rank. The city government expects this status to be upgraded (rank 2) by 2020. This shall give the municipal government a greater autonomy vis-à-vis the provincial government. One challenge is to keep a close relationship between the triangle composed by: i) The city government; ii) the provincial government; and iii) the MCEZ Management Board. Merging Mong Cai city and Hai Ha District can also be considered as a future option. An increasing role of the MCEZ may be appropriate to limit the number of institutions to ensure locally a performing public administration and management.

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<sup>98</sup> “Approving the Scheme of Master Plan on Vietnam’s Border Gate Economic Zones Development by 2020”

339. The Mong Cai water supply company (5,400m<sup>3</sup>/d, produced from resources from Ka Long River), a branch of the Quang Ninh Clean Water JSC equitized in 2013, provides the water service in the city. Since 2016, this operator has eventually got a growing autonomy within Quang Ninh Clean Water JSC. Solid waste drainage and waste water is under the city Urban Environment Company (URENCO). One challenge for URENCO is to be equitized as required by the national regulation whereas profitability of its main activities is low. Water and solid waste services are likely not provided in all wards and communes of Mong Cai. Electricity is supplied by the Quang Ninh Power Company Ltd (a joint venture). Hai Ha District owns an Irrigation and Transport Centre which assumes solid waste collection in Quang Ha. They are disposed in a dumpsite in Quang Nghia commune. In the town, water supply is operated by the Quang Ninh Clean Water JSC.

340. The MCEZ is headed by the Chairman of the Provincial People's Committee (PPC). In principle, the Board reports directly to the later, and to the Prime Minister through the MPI. The MCEZ Management Board can arrange contracts for services to be delivered to companies and is remunerated for these services. In practice, the board requires essentially the provincial government's support for decisions, but national administrations can interfere when they estimate the national interest at stake. The provincial government has enough resources to mandate directly foreign consulting firms to advise it regarding strategic decisions, such as the provincial economic plan or presently the future of Van Don SAEZ<sup>99</sup>.

### **3. Mong Cai - Hai Ha: The Overview**

#### **a. Socio-Economic Factors<sup>100</sup>**

341. The total population in the MCEZ was 126,599 in 2014. The MCEZ has steadily urbanized over the medium-term and in 2014 some 60% of the total population (75,600) was classified as urban. The majority of the urban population is located in Mong Cai City and in 2014 the population stood at approximately 100,700 persons.

342. At provincial level, there was a steady decrease in the poverty rate, over the period 2013-2016 from 4.60% to 3.22% overall. There are striking differences between the urban and rural areas. The poverty rate in the urban areas, is low and in 2016 was 2.20%. In contrast the poverty rate in the rural areas is higher at 3.96%. Allowing for the MCEZ's more remote location, in comparison with the Ha Long area it is anticipated that the poverty rates in the MCEZ area will be higher.

343. Population growth across the MCEZ over the 5 years period up to 2015 was steady at approximately 1.1% per annum. It is suspected that in the period 2015 to the present day that the resident population is rising faster as a result of the early MCEZ investments, but the statistical base to support this is not currently available. Based on natural increase population forecasting there is an expectation of 134,954 persons by 2020 and 149,800 persons by 2030. The natural increase population growth figures are in marked contrast to the population forecasts contained in the MCEZ Master Plan which suggest population levels of 177,000-200,000 persons for 2020 and 340,000-350,000 persons for 2030. The majority of the population growth will of course be located in the new urban areas proposed in the Master Plan. By 2020, the urban population is estimated to be 124,000 persons, compared to 53,000 persons in the rural area and by 2030 comparative numbers are 293,000 for the urban population. These population forecasts are based

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<sup>99</sup> AVSE Global, 20128, Van Don Special Administrative and Economic Zone (Van Don SAEZ), Quang Ninh Province. Note: AVSE is a consulting firm based in Paris, France. Consultants mobilized were Vietnamese.

<sup>100</sup> All statistics quoted in Part 3 of the report are from the following sources, unless separately indicated: (i) Quang Ninh Statistical Yearbook 2016; (ii) Mong Cai City Statistical Yearbook 2012 – 2014; (iii) Socio-Economic Development Master plan of Quang Ninh province to 2020, with a vision till 2030; and (iv) Socio-Economic Development Master Plan of Mong Cai BEZ to 2020, with a vision till 2030.

on full implementation of the Master Plan, but in practice Master Plan implementation is not running at the pace forecast. We suspect the real future population figures will be somewhere in between the natural increase and target-based population forecasts at the milestone years of 2020 and 2030. Table 23 provides a comparative summary of population factors over time.

**Table 23: Population Forecasts for the MCEZ**

<b>Population Forecast</b>	<b>2014</b>	<b>2020</b>	<b>2030</b>
Natural Increase Population	126,599	134,954	149,800
MCEZ Master Plan (Target Based)	126,599	177,000-200,000	344,000-350,000

**b. Spatial Planning – The Master Plan for Mong Cai Border Economic Zone to 2030, with a Vision to 2050**

344. The MCEZ related Spatial Master Plan (see Figure 40) was approved in 2015. The Master Plan (and the MCEZ) is driven by an intent to be an open international commercial center with development processing and manufacturing industry and diverse tourism products. There are 3 priority sectors driving the plan. First and foremost, making the MCEZ a gateway for international trade. Secondly, making the MCEZ a destination for shopping, exploring culture and eco-tourism and last but not least making the MCEZ a center for the processing and manufacturing industry, including (i) textiles, food and beverage processing; (ii) components for auto manufacturing; and (iii) wood and furniture.

345. The MCEZ concept is specifically mandated to create smaller Economic Zones (EZ) within the MCEZ boundary, where favorable investment and business environments are created and a range of investment and financial incentives can be offered to developers and industrialists. To this extent, the Master Plan is organized into five development areas: (i) Zone A: Mong Cai City (dynamic center); (ii) Zone B: Hai Ha Area (dynamic center); (iii) Zone C: New Administrative, General Services Center (the nucleus); (iv) Zone D: Southern Sea/Island Tourism Area (southern area); and (v) Zone E: Border trade and new rural development area (northern area). In each area, the Master Plan promotes a number of functional subdivisions including the BECZ area, industrial parks, financial center, urban areas, residential areas and other functional areas (see Figure 41).

Figure 40: The Master Plan for Mong Cai Border Economic Zone to 2030, with a Vision to 2050

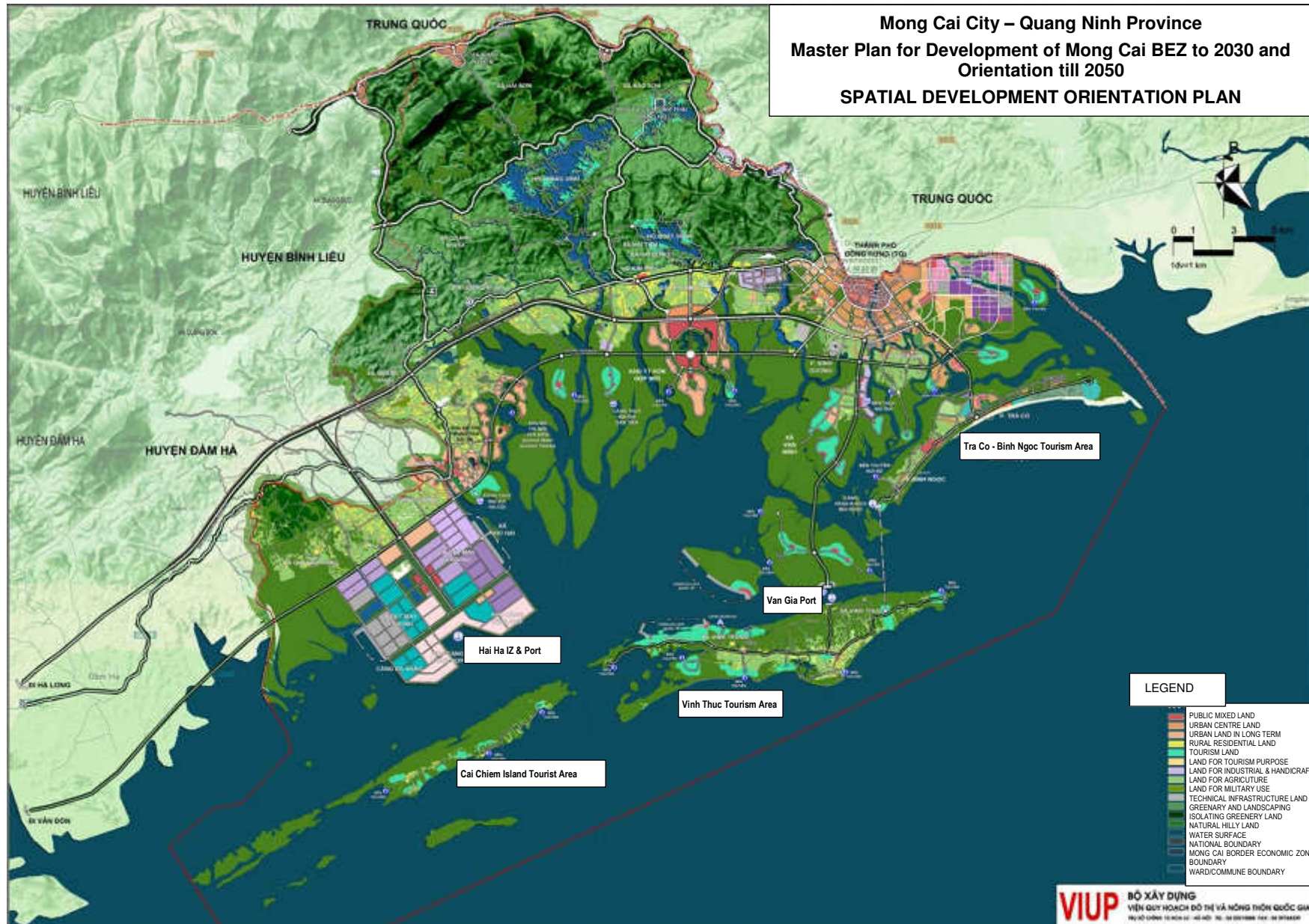
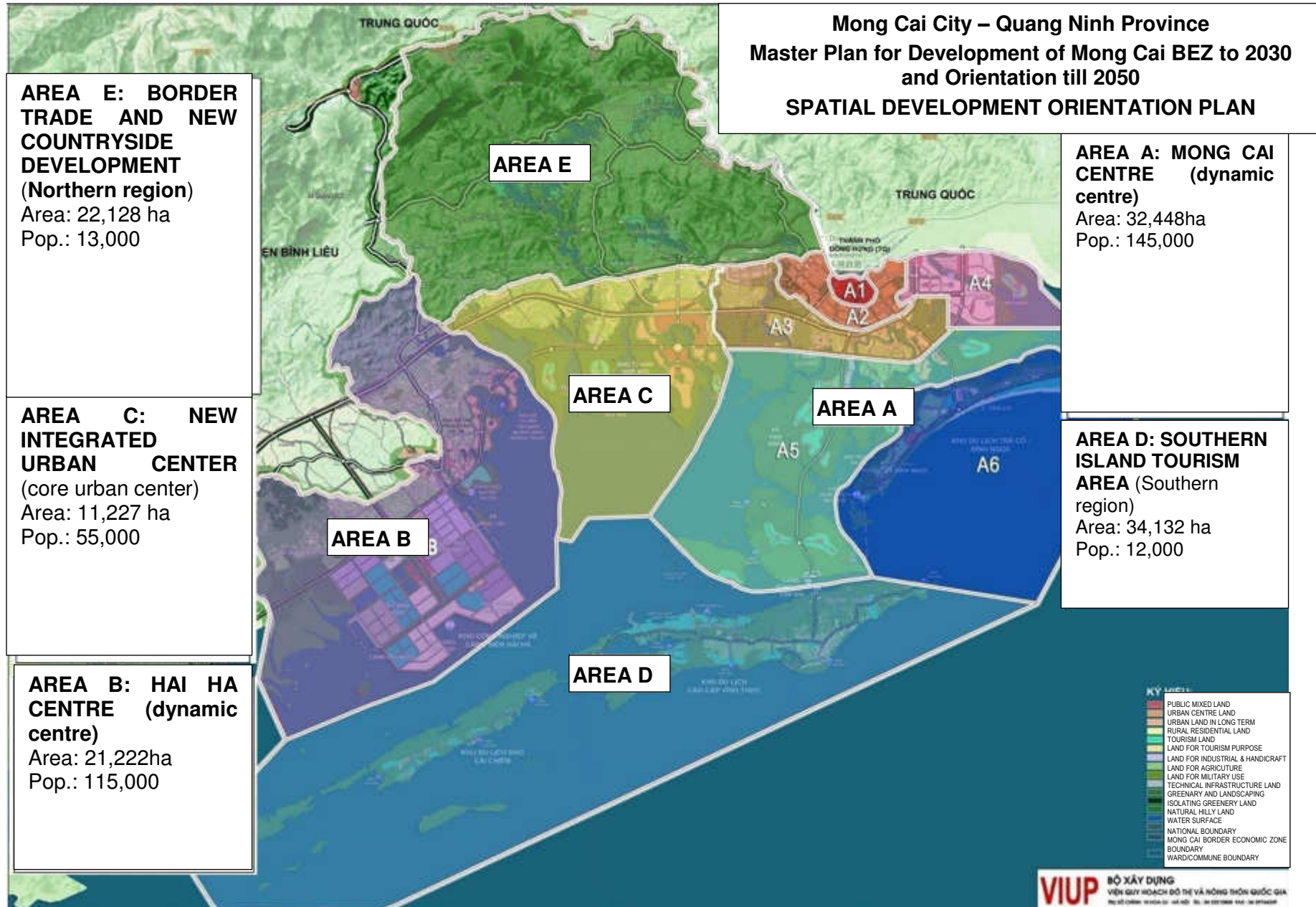


Figure 41: Spatial Development Orientation Plan



346. At the heart of the Master Plan are 3 core land use components: (i) The Border Gate Development and Upgrading Proposals; (ii) Economic Development Proposals hinged on land allocations for industrial and business development; and (iii) Urban and Housing Development to support the proposed economic development, plus a range of new and improved public facilities and local utilities infrastructure. Additionally, the master plan is supportive of the aims and objectives for tourism development province wide, taking into account several notable tourism sites which are located within the MCEZ.

347. The Master Plan contains a number of key land allocations to assist economic development. This includes the BECZ, which is described above and at least two other key economic development related projects:

- **Hai Ha Seaport Industrial Park:** This mega project covers an area of 4,988ha, including 5 communes (Quang Dien, Quang Phong, Phu Hai, Quang Trung and Cai Chien in Hai Ha District. This is a multi-sector Industrial Park, intended to include heavy and light industries such as thermal power, textile and textile auxiliaries. Phase 1 (660 ha) is under construction and includes the Texhong Industrial Park which is substantially serviced and partly occupied, including a very large textile factory. The proposed Hai Ha Seaport which is associated with the Industrial Park has not yet commenced, although it is understood there are potential investors.
- **Hai Yen Industrial Park:** This is a smaller site which is partly occupied. The site area is 182.42 ha. This is a diversified industrial park, which is intended to accommodate at least consumer goods production, textiles, agro/aquaculture and forest products processing, and construction industry related business uses. An international textile company occupies a large lot in this industrial park.

348. Ambitious levels of new housing are proposed on new land areas situated mainly around the Mong Cai City built up area, between Mong Cai City and the Hai Ha Seaport Industrial Park and in the BECZ. It is of course proposed to support urban expansion with public facilities, to at least Viet Nam government standards for schools, vocational training, health and social services and public recreation and sports. At the same time the Master Plan includes proposals for the renewal of (i) the outworn urban areas in Mong Cai City, which are the hub of commercial, cultural and government administration uses; and (ii) to continue the upgrading and development of the riverside parks. The Master Plan also confirms government's aim to develop a range of new strategic public investments, in Mong Cai City and its surroundings, including: (i) International University; (ii) Vocational College; (iii) International Hospital; (iv) International Exhibition Center; (v) City Sports Complex; (vi) City Museum; and (vii) Mong Cai markets Upgrading.

349. A key aspect of the Master Plan is its support for the optimization of tourism value, which is spearheaded by three main interests. The first priority is the development of the Tra Co Beach area for sustainable tourism. This will be centered on upgrading the beach area, providing essential utilities infrastructure (including improved water supply, wastewater management and sustainable solid waste management), climate change protection, environmental upgrading and better spatial planning as a context for private sector investment. Eco-tourism is another Master Plan priority and this is proposed to be concentrated around: (i) the offshore islands; and (ii) the 5 lakes and mountains. It is also intended to optimize the commercial value of tourism through development of an "Outlet Complex Shopping Center(s)" potentially at Tra Co Beach and/or downtown Mong Cai City.

350. The key tourism markets are likely to be from within Viet Nam and cross border from China. The potential exploitation of these markets will be significantly improved by planned improvements to the strategic road and rail networks in both Viet Nam and China. The proposed airport for the Van Don EZ may also improve the attraction of the MCEZ as a tourism and business destination. However there are a number of constraints commonly experienced in the development of relatively new tourism destinations, principally: (i) lack of good tourist



accommodation to respond to potential demand, especially during peak periods; (ii) the need to increase resource capacity/skills and investment capacity to implement and facilitate more tourism development; (iii) the freedom to implement income generation capacity mechanisms, such as tourism facility surcharging to the private sector, thus increasing government income with the intention of offsetting government investment costs in essential public facilities, utilities infrastructure and environmental management/climate change remediation costs; and (iv) the capacity to develop and implement better marketing and investor strategies.

### c. Public Investment

351. A list of potential programs and projects supported by the Mong Cai PPC and the Hai Ha District PPC are listed below in Table 24.<sup>101</sup>

**Table 24: Public Facilities and Infrastructure Provision**

<b>Transportation Infrastructure Construction Projects</b>
Hai Ha – Mong Cai railway (to connect Hai Ha seaport industrial zones with Dongxing and Phong Thanh Port, China).
Ha Long – Mong Cai railway.
Hai Ha Seaport construction (Phase I).
Port construction projects: Hai Ha port (Phase II), Cai Chien (Hai Ha), Vinh Thuc and integrated port in Hong Mieu and Cai Chien Island.
Renovating and upgrading Hai Ha – Mong Cai Border beltway, economic security and defense ports on islands.
Heliport (for both civilian and military flight);
Construction of integrated port in Hon Mieu and Cai Chien island.
<b>Tourism, Services and Trade Projects</b>
Construction, renovation and upgrading shopping centers in Mong Cai and Hai Ha
Planning and construction of Mong Cai, Hai Ha residential areas.
<b>Industrial Projects</b>
Completing infrastructure, construction and production factories in Hai Yen industrial zone.
Construction of infrastructure in Hai Ha industrial zone (Phase I).
Construction of infrastructure in Hai Ha industrial zone (Phase II).
<b>Public Utilities, Infrastructure and Facilities, Environment, Security and Defense Projects</b>
Construction of water supply station (clean water) in Quang Minh, Quang Phong, Cai Chien, Tai Chi commune;
Development of water supply system in residential areas in Mong Cai city and Hai Ha seaport industrial parks;
Construction of waste water treatment plants for Mong Cai city and Tra Co – Binh Ngoc tourism area.
Construction and upgrading reservoirs and irrigation canal system.
Construction of water drainage systems and sewage pumping stations.
Construction and upgrading of dike system Hai Xuan, Binh Ngoc, Hai Tien, Hai Dong, Vinh Thuc, Vinh Trung communes and sea embankments.
Construction of canal system supplying water for aquaculture.
Construction of waste treatment area in islands and border area.
Upgrading electricity supply infrastructure (grid system and transformer stations).
Upgrading of infrastructure (transportation, electricity) for new rural areas.
Introducing mobile clinics in remote communes;
Investment in cultural institutions for communes/wards/towns.

<sup>101</sup> Potentials and Investment Opportunities in Mong Cai Border Gate Economic Zone Booklet

Investment in upgrading, building and modernizing of radio systems from the municipal level to the grassroots level in Mong Cai city and 9 communes in Hai Ha district.
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Construction of parks with green space to meet local needs.
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Construction of information center and scientific and technological information trading platform.
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#### **4. Implementation Aspects**

##### **a. Capacity Building**

352. The link between the MCEZ and local / provincial developments should be the backbone of capacity building initiatives. An overall priority should be to upgrade public capacities to take initiatives where the private sector will not be interested to invest and to better anticipate/manage/remediate negative external effects of rapidly growing businesses.

353. Based on a review of past capacity building assistance, an assessment of both the MCEZ-MB Mon Cai city and Quang Ha Town Hai/Ha District would be a first step to support initiatives targeting facilitation of functional interactions between these three entities. The Mong Cai MCEZ-MB possibly needs enhancing its staff's capacities to achieve administrative tasks (digitalization of data and mapping, monitoring tools, etc.). Board members and managers should also be made aware of innovative management methods to ensure simplification of procedures when possible and of PPP mechanisms to finance specific areas in the MCEZ. They should also acquire a better understanding of housing and public service of residential areas.

354. Mong Cai City should benefit from capacity building by focusing on key aspects raised in this report such as urban planning and urban plans implementation, transport planning, urban design (pedestrian areas, earmarking of remarkable buildings, etc.). Strengthening the capacities of URENCO to enhance cost control, customer management and key performance indicators-based management to monitor service performance when provided by private operators, would be particularly relevant.

355. Practical forms of knowledge acquisition should be given the priority in order to complement traditional training sessions focusing on concepts and methodologies or workshops to fuel policy dialogue and stimulate institutional innovations. Examples could be the production of specific planning tools (e.g. solid waste management plans including all categories of waste in the MCEZ), management tools (development of data base and mapping, management information system, etc.), pilot demonstration projects (e.g. pilot integrated coastal management plans on a limited scale, DEWATS in rural communes), joint initiatives with Dongxing or Guangxi province in tourism or educational sectors), and pilot participative experiences.

##### **b. Financial and Implementation Perspectives**

356. A rapid review of ODA projects in the province shows there are many in particular in the energy and road sectors. Few have however directly targeted Mong Cai. In the future, the pressure on both the national budget and public debt management, and possibly the reluctance of the GOV to accept loans from certain countries and development partners, might erode the possibilities for ODA to finance large projects.

357. The economic dynamism in Mong Cai should lead to an increasing number of PPP arrangements (basically with Vietnamese firms) to finance infrastructure. The Traco Group, for instance, is expected to get involved in waste water and solid waste services. PPP projects are under consideration for the Van Don Expressway (bidding process is expected soon) and also for power provision in the industrial park by the developer, Texhong Hai Ha Industrial Park Co<sup>102</sup>. Vietnamese groups such as Viglacera (developer of Ha Yen Industrial Park near the

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<sup>102</sup> The international airport in Van Don is a BOT arranged with Sun Group which is also the developer of the SAEZ

border) or the Sun Group are also potential investors in local infrastructure. In the Socio-Economic Development Master Plan (2014)<sup>103</sup>, PPPs in road infrastructure are projected. Vietnamese banks are also active in Mong Cai (such as the VIDIFI<sup>104</sup>). Finally, the Master Plan also highlights the need to develop PPPs in the vocational education.

358. Should the private sector become a major service provider to factories established in the BGEZ, it would be worth considering how the services delivered can be extended to residential areas. Such extension would be challenging for investors -this requires experience and management can be costly- but this should be possible for instance by developing WWTPs to treat both domestic and already pre-treated industrial effluents<sup>105</sup>. The feasibility of a multi-utility approach where the operators simultaneously manages different services, should be considered. The option of a Special Purpose Vehicle to manage the economic zone, as promoted in Cambodia or Myanmar, can also possibly be considered.

359. In Mong Cai, supporting project construction and O&M financing by stimulating the current dynamism of the private sector's involvement in the management of public infrastructure is relevant for development partners. Financial support to equitized operators could target water supply, solid waste, waste water, small scale infrastructure and specific tourism projects. For instance, capital in equity, collateral, specific credit lines managed by Vietnamese commercial banks could be considered.

360. Another option for ODA could be to focus on the possible adverse effects of rapid economic development, in particular on the environment. Among institutional-oriented proposals, support could be given to integrated coastal management (ICM), as already proposed in Hai Phong, Ha Long and Bai Thu Long five years ago<sup>106</sup>. ICM could take the form of a contractual arrangement between public authorities, private companies and representatives of residents based on a trust fund or a similar mechanism.

361. For a possible future ODA urban development project, lessons from GMS CDTP-2 in terms of implementation should be considered. It is recommended that the provincial authorities to be the executing agency. Such arrangement would fit with the national regulatory framework for ODA project which the Quang Ninh provincial government has experience in. Mong Cai City could be designated as the implementing agency, and the present PMU under GMS CTDP-2 could be extended, with an additional 2 two PIUs (one in Quang Ha District and one at the Mong Cai - Hai Ha BGEZ-MB). Depending on the scope of the project, an alternative option relevant in the long-term could be to have the Mong Cai - Hai Ha MCEZ Management Board as PMU, but it lacks ADB and urban projects experience.

## **5. Development Framework**

### **a. Problems and Opportunities**

362. Table 25 below interprets the identified problems and opportunities in the form of a Strengths, Weaknesses, Opportunities and Constraints (SWOT) Analysis.

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<sup>103</sup> Socio-Economic Development Master Plan for Mong Cai Economic Zone to 2020 with Vision towards 2030.

<sup>104</sup> Vietnam Infrastructure Development and Finance Investment JSC.

<sup>105</sup> A similar project was considered in Nghi Son Economic Zone (Thanh Hoa province) in 2012-2013.

<sup>106</sup> Feasibility study financed by the French Fund for Global Environment.

**Table 25: Mong Cai EZ: SWOT Analysis**

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Economic Development and Competiveness	<p>1. There is a long established cross border and transshipment business environment which provides an economic baseline on which to further expand further and diversify into other border related activities.</p> <p>2. There is known interest from private sector investors in expanding cross border and transshipment activities, in selected industrial sectors and in the tourism sector.</p> <p>3. EZ status has the potential to be the catalyst in realizing the full economic potential of Mong Cai City/Hai Ha District.</p> <p>4. Mong Cai is already able to offer serviced development land in a managed environment to cater for the manufacturing and services sectors.</p> <p>5. Competitiveness through local urban and rural hinterland population with a relatively low employment cost base.</p> <p>6. The attractive landscapes of the offshore islands/beaches</p>	<p>1. The nature and scale of the existing regional transport infrastructure may not be sufficient to attract to attract significant additional economic activity/investment.</p> <p>2. The strategic road connection from Mong Cai to Ha Long is far from ideal and the absence of a modern railway for both freight and passenger traffic will continue to constrain investment.</p> <p>3. Existing urban and rural hinterland population with a relatively low skills base, not matching the needs of potential employment opportunities in the manufacturing/logistics/service and tourism sectors.</p> <p>4. Increased rates of economic growth will place additional pressures on the need for significant increases in investment capital in urban infrastructure, which has historically lagged behind urban growth.</p>	<p>1. Local Economic Development Planning (ie Development and Financing Review can further optimize approach to optimize the inclusive planning and investment of the MCEZ.</p> <p>2. The BGEZ will provide the opportunity of serviced development land in a managed environment to cater for cross-border, transshipment and logistics. Importantly it can develop free trade concepts closely allied to the border.</p> <p>3. Mong Cai is ideally located to exploit the economic potential for cross border and transshipment activities between Viet Nam and China.</p> <p>4. Important strategic transport links and facilities should come “on-stream” in the short to medium term, which will overcome a key weakness of relative remoteness. This includes: (i) Ha Long-Mong Cai Expressway; (ii) Mong Cai-Dongxing Rail; (iii) Van Don Airport; and (iv) High speed road</p>	<p>1. The GoV does not complete essential investment in regional transport and border trade infrastructure, with particular reference to rail upgrading and airport provision (Van Don Airport).</p> <p>2. The GoV is unable to attract private sector investment in key development projects (eg Hai Ha Seaport) and essential facilities such as housing development, international schooling, vocational training and health facilities.</p> <p>3. The value of tourism in achieving economic development is over rated, such there is difficulty in attracting the hotel sector and therefor the targets cannot be achieved.</p> <p>4. There is over-reliance on Chinese investment, implying exposure to economic intrusion and vulnerability.</p>

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
	and the mountain/lakes provide an excellent base on which to expand tourism.		and rail links across Southern China into Donxing.	
Equity and Social Cohesion	1. Potential economic growth will provide new employment opportunity to the existing urban population, rural hinterland and for migrants.	1. Economic growth will create additional pressures for the provision of affordable housing for both the existing population and newcomers and for a range of community and recreation services to meet Viet Nam standards, which may be difficult to provide.	1. Enhanced implementation of the MCEZ to its optimal growth levels should further increase new employment opportunity and address in part “women in employment” issues and the needs of the urban poor/under privileged.  2. Better implementation of the MCEZ coupled with population growth, will provide more opportunity for improvements in the education health and recreation sectors, including public and private investment in relevant vocational training, matching the needs of investors.	1. Uncontrolled in-migration from the rural areas in Quang Ninh province and from elsewhere will be difficult to predict and manage.  2. Essential GoV investment in housing/community services and utilities infrastructure may not keep pace with the rate of urban growth, resulting in additional socio-economic threats.  3.The socio-economic pattern in the rural hinterland may be disrupted by urban influence such that there are resultant social problems in traditional village communities and for offshore island communities.
	1. The attractive nature of the coastal and mountain landscapes can form a strong baseline for attracting inward migration and investment.	1. The provision of basic infrastructure services, such as clean water supply is poor in many offshore island and mountain area locations.  2. The provision of sustainable wastewater treatment and solid waste management has not	1. Implementation of the MCEZ should provide better opportunity for inclusive planning and investment, supported by comprehensive and timely provision of essential urban infrastructure/urban services and climate change effects moderation.	1. Essential GoV investment in infrastructure services may not be able to keep pace with the rate of economic growth resulting in additional threats to the quality of the urban environment, and the offshore island/adjoining coastline.

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Environmental Quality		<p>been realized properly, even at Tra Co Beach.</p> <p>3. There is insufficient attention to drainage and flood protection, such that climate change adaptation is largely not addressed.</p> <p>4. Increased rates of economic growth will result in additional threats to the quality of the urban environment, to the offshore islands and to the mountain and lakes areas.</p>	<p>2. This in turn should facilitate planning and investment for the existing and planned urban areas, which can optimize economies of scale.</p>	<p>2. Insufficient investment in climate change adaptation will place the coastline and other low elevation areas at risk from storm surge and periodic flooding.</p> <p>3. The existing mangrove forests may be under threat from planned urban development.</p>
Governance: Institutional and Financial Capacity	<p>1. The structure of governance in Quang Ning province provides a recognized baseline for managing the planning and development of Mong Cai. There is a proven capability in other parts of Quang Ninh province and with particular reference to Ha Long.</p> <p>2. The specialist unit(s) managing and promoting the MCEZ have an office presence in both Ha Long and locally in Mong Cai to provide expertise and continuity in the planning, design and implementation of economic zones and industrial parks.</p>	<p>1. The capacity of the Mong Cai City and Hai Ha District administrations are constrained by:</p> <ul style="list-style-type: none"> <li>• Skills deficiencies/low staff numbers.</li> <li>• Shortage of finance.</li> <li>• Organizational issues.</li> </ul> <p>2. Inadequate land use planning/development controls are in place to prevent unsustainable urban development.</p>	<p>1. Ongoing political recognition of the value of cross border MCEZs providing a context for optimal Viet Nam/China coordination and joint investment in the BGEZ Cooperation Zone and elsewhere in the MCEZ.</p> <p>2. Ongoing reform in governance, and setting integrated organizational and financing reforms as a better foundation for Master Planning implementation and investment financing.</p> <p>3. Potential unification of Mong Cai City and Hai Ha District into</p>	<p>1. The forecast potential for industrial based growth and tourism expansion as proposed in the Master Plan is over-optimistic, such that investment in hard and soft infrastructure is wasted.</p> <p>2. That GoV does not invest in essential capacity building within Mong Cai City and in high caliber resources and soft infrastructure to implement the MCEZ master plan over time.</p> <p>3. The MCEZ master plan is not supported by stringent land use/development controls to prevent unsustainable urban and rural development.</p>

GREEN CITY AGENDA	STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
	<p>3. The specialist unit(s) managing and promoting the MCEZ are familiar with working closely with private sector investors (and the funding agencies) in the planning, design and implementation of economic zones and industrial parks and in the development of the tourism sector. They have familiarity in the application of PPP and PCP mechanisms etc.</p>		<p>single city level administration, better reflecting the inclusive nature of the Master Plan and investment programming for the MCEZ.</p> <p>4. Policy flexibility in the application of PPPs and the application of financial and other incentives to secure private sector investment.</p> <p>5. Implementation of the MCEZ should increase the capacity of Mong Cai City to address a range of social-economic-environment issues affecting the existing urban area (eg solid waste management).</p>	<p>4. Government concerns regarding cross border security constrains some aspects of potential MCEZ investment.</p>

## b. Development Programming and Priorities

363. The above assessment has illustrated a wide range of issues that should be addressed to ensure better development and investment leading to increased economic performance in the MCEZ and a more sustainable and prosperous environment for Mong Cai City, Hai Ha District, the offshore islands and the rural hinterland. Specifically, the assessment has confirmed the need for at least four pre-conditions.

- **Inclusive Planning**, is a “must factor” in achieving sustainable development in the MCEZ. The nature of MCEZ Master Planning, the breadth of the investment program and its organization and marketing, provide a good match with the philosophy of inclusive planning. Implications for ADB investment, imply flexibility, where there can be a confidence that focused sector-based project development can fit comfortably into a broader and sustainable policy context.
- **Incremental Planning and Investment**, ensuring affordability, cost efficiency, and optimizing resource capability in building development program momentum. Adopting a use scarce resources and investment capital on an “only when it is needed” basis is implied. Project identification and investment program development in Mong Cai/Hai Ha is ambitious, even the long list of projects identified by the MCEZ authority (Table 24) for the period 2015-2020 is extensive. Resources will be stretched and good prioritization is needed.
- **Institutional Restructuring, Financing and Capacity Building**, to ensure government agencies are able to maximize private sector investment potential, including optimal partnership arrangements. Understanding the key role of government as the facilitator is essential and confirmed by the nature and characteristics of the MCEZ’s investment program.
- **Stakeholder Participation** as an essential commodity to ensure investment, commitment and beneficial effect. Working on a daily basis with investors and project affected communities is a key to sustainability.

364. In response we have prepared a broad-based Program Framework (see Table 26) for the MCEZ which provides guidance on the activities and projects we are recommending for implementation in the short and medium-term (up to 10 years). The Program Framework is structured to reflect the needs of the whole of the MCEZ and specifically, Mong Cai City, Hai Ha District, the offshore islands and the rural hinterland. It specifically leaves out some proposals contained in the MCEZ Master Plan as long-term program investments (plus 10 years) depending on MCEZ progress in the short and medium-term. For instance, it is not necessary therefore to include all the Master Plan proposals for new urban zones in a medium-term Program Framework.



**Table 26: Program Framework: Mong Cai Border Gate Economic Zone (MCEZ)**

Potential Project		Description
<b>Strategic</b>		
ST1	Master Plan Review (inclusive of Strategic Local Economic Development Plan and Medium-Term Investment Program)	Reviewing the spatial planning framework for the BGEZ in the context of an updated economic development scenario and the needs and aspirations of Quang Ninh Province, Mong Cai City and Hai Ha District including: 1. Local Economic Development Plan as the central driver of the Master Plan Review 2. Tourism Development Strategy Review 3. Agricultural Development Strategy Review 4. Medium-Term Investment Program Review (10 years period)
ST2	Local Government Reform	Revise the pattern of local governance to better reflect the BGEZ area, including the unification of Mong Cai City and Hai Ha District as a single City entity.
ST3	Van Don-Mong Cai Expressway Section (Ha Long-Mong Cai)	PPP project to construct Expressway from Van Don to Mong Cai, as part of the link to Ha Long Bay (and onto Haiphong).
ST4	Strategic Freight and Passenger Rail Upgrading (Ha Long-Mong Cai)	Review Rail Planning Strategy and potential for viable rail development (Haiphong/Ha Long-Mong Cai-Dongxing) for freight and passengers. Potential emphasis on upgrading for freight traffic and Phase 1 connection: Hai Ha Seaport and Industrial Zone – Mong Cai – Dongxing and connecting to China Rail.
ST5	Agricultural Development Strategy – Capacity Building and Private Sector Intervention.	Review the potential for business agriculture, optimizing packaging and processing opportunities and the value chain economy, with specific reference to cross border trade potential. Prepare an integrated plan to improve performance in the agricultural economy in the BGEZ and its rural hinterland and elsewhere in the province.
<b>Border Gate Economic Zone (BGEZ)</b>		
MCEZ1	Development Review and Optimal Development and Financing Strategy	Review BGEZ development planning and investment potential for improved resourcing/financing in the context of recent national policy changes and ensure optimal private sector investment. Prepare revised strategy to: (i) secure rapid public and private sector investment in the Border Gate Economic Cooperation Zone (BGEZ) and; (ii) Hai Ha Seaport Industrial Park and Seaport.
MCEZ2	Border Zone Development Priority 1 – Border Economic Cooperation Zone (Mong Cai/Dongxing)	Border Economic Cooperation Zone (BECZ) - Phase 1 (700 ha) mixed land use area for PPP investment. This should preferably respond to a Master Plan review to ensure: (i) optimal land use mix and arrangements; and (ii) international quality layout planning and urban design principles/controls. The emphasis of this project will be on provision of government planned serviced land to facilitate private sector investment and PPP initiatives to implement the BECZ proposals.

MCEZ4	Border Zone Development Priority 2 - Hai Ha Seaport Industrial Park Development (4,998 ha)	Further development and strengthening of the Industrial Park Infrastructure. Medium to long-term highways and utilities infrastructure investment. Government facilitation and PPP investment.
MCEZ5	Border Zone Development Priority 3 – Hai Ha Seaport	Development and investment of Hai Ha Seaport. Short to medium-term development and construction of new strategic seaport adjoining the Industrial Park. Private sector investment is envisaged.
MCEZ6	Hai Ha – Mong Cai Coastal Road	Strategic road connection across the BGEZ, between Hai Ha and Mong Cai connecting principle urban land uses as proposed in the BGEZ Master Plan and including the Hai Ha Seaport Industrial Park and the BECZ.
<b>Mong Cai/Hai Ha</b>		
MH1	Tourism Development Planning and Development: Tra Co Beach Tourism Area	Phased planning and development of the Tra Co Island with emphasis on beach related areas, to include: (i) Tra Co Master Plan Review; (ii) Implementation and Financing Program Development, (iii) Public Facilities and Utilities Infrastructure. Emphasis on government facilitation and basic infrastructure supporting private sector investment in tourism accommodation and facilities.
MH2	Tourism Development Planning and Development: Offshore Islands Tourism Areas	Phased planning and development of selected outer islands, including Vinh Thuc with emphasis on beach related areas, to include: (i) Vinh Thuc Master Plan Review; (ii) Implementation and Financing Program Development, (iii) Public Facilities and Utilities Infrastructure. Emphasis on government facilitation and basic infrastructure supporting private sector investment in tourism accommodation and facilities.
MH3	Urban Settlement Planning and Housing	Master Planning, design and implementation of integrated urban areas, including housing, commercial development, public facilities, including education and health provision and recreation/sports in the form of: A: New urban communities including: (i) Border Economic Cooperation Zone (BECZ); (ii) Hai Yen Urban Area; (iii) Hai Xuan Commune; and (iv) Mong Cai/Hai Ha Integrated Urban Area, which will support BGEZ development feasibility; and B: Mong Cai Urban Area Renewal including, Bac Luan Riverside, Government will generally act as the facilitator for private sector investments and/or PPP initiatives to provide new housing.
MH4	Urban Renewal – Mong Cai Riverside Park	Riverside landscape upgrading and walkway expansion, coupled with flood protection matching climate change standards. Extension of previous ADB CTDP2 project component.

MH5	Education Services	Scope proposed development to include: 1. Education Sector: Upgrading Education Standards and Schools Provision 2. Mong Cai International University - Major new facility to support Mong BGEZ development needs. Design and implementation options are private sector investment or a PPP initiative.
MH6	Vocational College	Major new facility to support Mong Cai BGEZ industrial, business and services development (5 has). Design and implementation options are solely private sector investment or a PPP initiative.
MH7	Health and Medical Services	Scope proposed development to include: 1. Public Health Sector: New Facilities Provision and Renovations of Existing Facilities 2. Mong Cai International Hospital - Major new facility to support BGEZ development needs. Design and implementation options are private sector investment or a PPP initiative.
MH8	Mong Cai – Markets Upgrading	Mong Cai Markets 1 & 2 Upgrading - Design and implementation options are private sector investment or a PPP initiative.
MH9	Culture, Trade and Service Facilities	Scope of proposed development to include: 1. International Exhibition Center (Mong Cai City) 2. City Sports Complex (Mong Cai City) 3. City Museum (Mong Cai) 4. Mong Cai Markets Upgrading (Markets 2 & 3)  Major new facilities to support Mong Cai BGEZ promotion and development. Design and implementation options are solely government investment, private sector investment or a PPP initiative.
MH10	Urban Roads Development and Border Zones Connections	Development of new urban roads and drainage infrastructure and upgrading of the existing to facilitate BEZ development, urban expansion and urban/rural area renewal.
MH11	Public Transport Upgrading and Bus Station Development	Priority for East Mong Cai Bus Station.
MH12	Urban and Tourism Vehicular Parking Provision	Provision of off-street public vehicle parking areas in urban core locations and tourism development sites.
MH13	Solid Waste Collection and Disposal Upgrading and Sanitary Landfill Development	Prepare and implement an integrated plan for solid waste management, incorporating waste minimization principles for application across the BEZ, incorporating private sector and community participation potential. Ensuring sustainable design and practices at the proposed new landfill site in Quang Thanh Waste Landfill and upgrade as appropriate.

MH14	Water Supply and Wastewater Management Supply, Collection and Treatment Facilities. Planning and Development (option to include Border Zone Areas)	Expansion of water supply and wastewater management geographical coverage and treatment facilities for new development areas, tourism development areas (eg Tra Co Beach) and existing urban and rural settlements.
MH15	Urban and Rural Poverty Alleviation	Urban and rural poverty review and preparation of plans and proposals to eliminate urban poverty and generally raise living standards for low income families covering: (i) existing population of Mong Cai City and Hai Ha District; and (ii) migrant population serving the expanding employment needs and opportunities in the BGEZ.
MH16	Poverty Alleviation: Resettlement Policy and Program	Policy and program development to ensure resettlement of communities displaced by BEZ development and the replacement of temporary housing, in new locations close to employment opportunities and the urban areas generally.
MH17	Elderly Care Service Planning and Upgrading	Accelerate the reform of public elder care institutions and support governance/community stakeholders, in setting up better elderly care in Mong Cai City and Hai Ha District.
<b>Good Governance</b>		
GC1	Capacity Building & Training: (i) Good Governance; (ii) Gender Action Planning; (iii) Infrastructure and Public Facilities O&M	Prepare Capacity Building and Training Plan to support better governance and community development.
GG2	Stakeholder Participation Knowledge Platform Development Pilot Project(s)	Upgrade and further develop knowledge-based information systems and develop a variety of E-based and non-e-based mechanisms to ensure stakeholder awareness and participation in good governance. A project may be financed and piloted across part of the BGEZ and introduced incrementally, responding to stakeholder priorities.

365. In the context of the consultant team’s restricted depth of investigation, it is recognized we may not have included all the desirable activities and projects that should be included in the Program Framework, but it is anticipated that most are. We have recommended the potential hard and soft sector components, which can form the foundations of an inclusive short-term Priority Investment Program which are shown in Table 27. Project specific notes regarding each of the recommended priority activities are included in the Table 26 above.

**Table 27: Priority Investment Program for the Mong Cai/Hai Ha MCEZ**

<b>Priority Project</b>	
<b>Strategic Planning and Good Governance</b>	
GG1	Strengthening Capacity in Governance
ST1	Master Plan Review (inclusive of Strategic Local Economic Development Plan and Medium-Term Investment Program)
ST3	Van Don-Mong Cai Expressway Section (Ha Long-Mong Cai)
ST4	Strategic Freight and Passenger Rail Upgrading (Ha Long-Mong Cai)
ST5	Agricultural Development Strategy – Capacity Building and Private Sector Intervention
<b>MCEZ Related</b>	
MCEZ1	Development Review and Optimal Development and Financing Strategy
MCEZ2	Economic Zone Development Priority 1 – Border Economic Cooperation Zone (Mong Cai/Dongxing)
MCEZ5	Border Zone Development Priority 3 – Development and investment of Hai Ha Seaport.
MCEZ6	Hai Ha – Mong Cai Coastal Road
<b>Mong Cai/Hai Ha</b>	
MH1	Tourism Development Planning and Development: Tra Co Beach Tourism Area
MH2	Tourism Development Planning and Development: Offshore Islands Tourism Areas
MH3	Urban Settlement Planning and Housing - Phase 1
MH6	New Vocational Training College
MH13	Solid Waste Collection and Disposal Upgrading and Sanitary Landfill Development
MH14	Water Supply and Wastewater Management Supply, Collection and Treatment Facilities. Planning and Development (option to include Border Zone Areas)
MH4	Urban Renewal – Mong Cai Riverside Park
MH15	Urban and Rural Poverty Alleviation

## **D. Poipet - Bavet (Cambodia)**

### **1. Introduction**

366. While Poipet and Bavet are 530 km from each other (via Phnom Penh), they share some major common characteristics which support their inclusion in a single future multi-sector CTDP. They also share similar institutional challenges.

367. Both municipalities are at strategic border points of Cambodia with its main economic partners, namely Thailand and Viet Nam, along the main GMS Southern Economic Corridor (SEC). Poipet is about 400 km northwest of Phnom Penh while Bavet is located 125 Km east of Phnom Penh.

368. As both the economies of Thailand and Viet Nam develop, the Southern Economic Corridor itself will increasingly become a key strategic GMS corridor as trade between Thailand and Viet Nam grows and also as both countries relocate some of their most labor-intensive industries to Cambodia. To make the corridor efficient, both border points need to operate effectively.

369. The relocation of investments from both Thailand and Viet Nam will be the main driving force behind the development of both border towns as GMS economic hotspots. But being at the borders of Cambodia and close to major transport hubs and advanced industry clusters in Thailand and Viet Nam make Bavet and Poipet also attractive locations for investments from other countries. Bavet has already been particularly successful at attracting significant foreign investment in its industrial zones mainly because of its proximity to Ho Chi Minh City air and maritime transport hubs.

370. Until recently, Poipet has benefitted much less from foreign direct investment inflows for a number of reasons including past border security issues with Thailand and poor cross border infrastructure. However, this situation will change dramatically. Indeed, Thailand is currently building a major four lanes road by-pass of Aranyaprathet, the town opposite Poipet on the Thai side of the border, and developing a large new border gate south of Poipet. At the same time, the railway link with Thailand has now been re-established although not yet over the whole distance to Phnom Penh. The new railway line will be a major boost to the supply chains in the GMS and will become an important connection for freight transport between Cambodia and Thailand.

371. These new transport infrastructures will bring major changes to Poipet. Already over the past few years, 2 new border economic zones have been set up attracting several Thai and Japanese investors. Poipet is close to Thailand's transport hubs, Laem Chabang deep-sea port (250 KM) and Suvarnabhumi (300 KM). It is also only just over 200 km away from Thailand's industrial clusters south of Bangkok. Finally, it is estimated that a little over 1 million Cambodian migrant workers are present in Thailand. With the major improvements in border crossing infrastructure in Poipet raising its attractiveness to foreign investors, in particular those from Thailand, some of these Cambodian workers are likely to return home for employment. This is already happening together with internal Cambodia migration to the Poipet area.

372. Finally, it is important to note that both Bavet and Poipet were very small border trade localities only two decades ago. For Poipet, the 1998 population census shows a population of 43,366 which increased to 89,549 according to the 2008 census, and is currently over 100,000. After long being a war zone –cross border trade only opened in 1993-, the growth of the border locality first started with the construction of several hotels, restaurant, gaming establishments and commercial buildings close to the border line, before investments in border economic zones started in 2014. As a result, the locality grew because of migration from neighboring towns and provinces in Cambodia and from border towns in Thailand. Sisophon about 49 Km away on

Highway 5 is the capital of the Banteay Meanchey province where Poipet is located. It was the main urban center of essentially an agricultural area. Poipet has now overtaken Sisophon in terms of population.

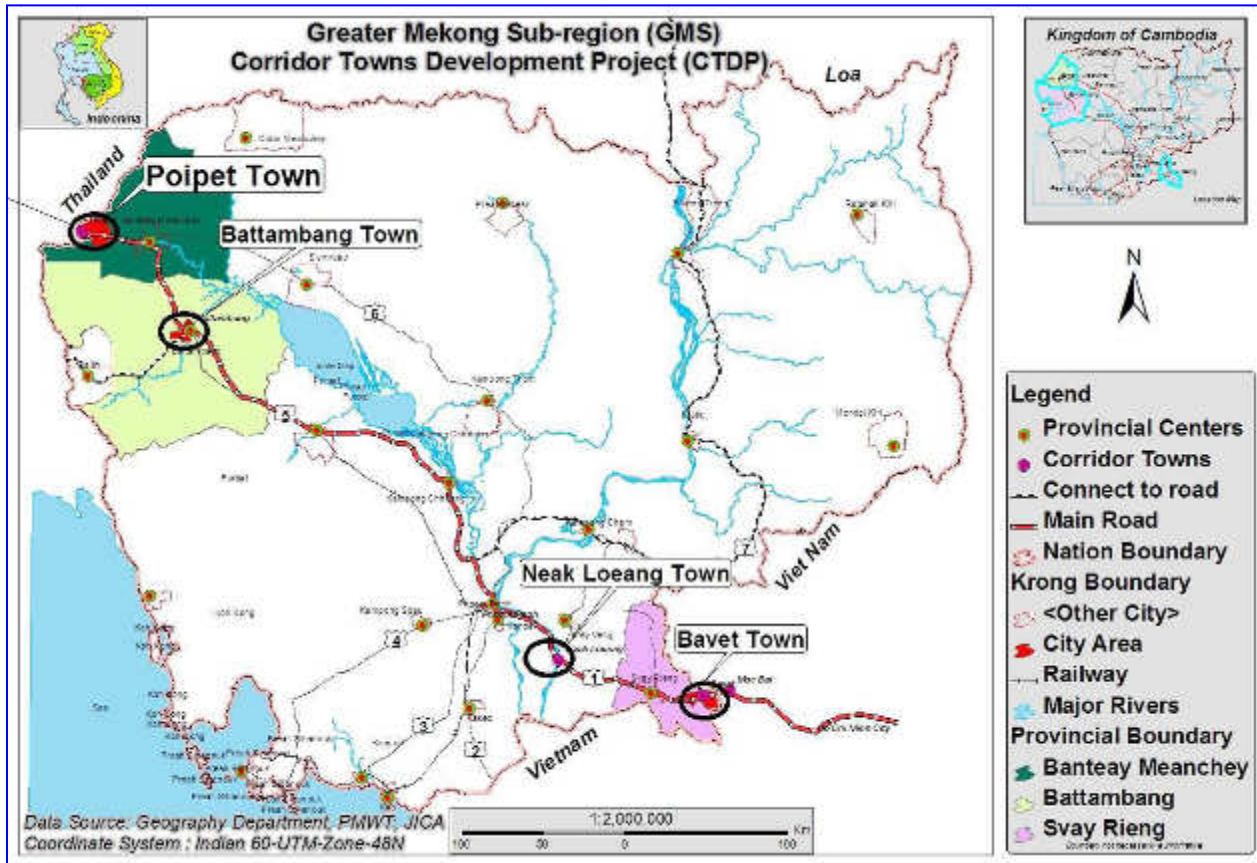
373. Similarly, Bavet was a small commune until 2008 when it became a municipality. It is located in one of the poorest provinces of Cambodia, the Svay Rieng province with its capital Svay Rieng located 48 Km away. As Poipet, Bavet initially developed due to the construction of several casinos, before its favorable location close to Ho Chi Minh City turn it in a major special economic zone area in Cambodia<sup>107</sup>. Not surprisingly, the huge population growth in both Bavet and Poipet linked to fast economic growth driven by foreign investment and tourism has put severe strains on both municipalities' urban and transport infrastructure as well as on the quality of life of their population

374. Finally, it should be noted that during the March 2018 6<sup>th</sup> GMS Summit, Prime Minister Hun Sen from Cambodia put the emphasis on "the initiative on urbanization and smart city" as a new vision for the next stage of GMS cooperation. At the Leaders' Retreat, he stated that that "this new initiative could be implemented in the context of our three core objectives of promoting economic connectivity, improving competitiveness, and building community, by emphasizing particularly on economic corridor development, spatial planning, and cross-border special economic zones in key potential corridors and border cities of the GMS". Similarly, at the recent 8<sup>th</sup> ACMECS summit held in Bangkok in June 2018, the emphasis was placed on the development of the Southern Economic Corridor, and the development of the new border crossing between Cambodia and Thailand at Poipet was discussed by the prime ministers of both countries.

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<sup>107</sup> Together with Phnom Penh, Sihanoukville and Poipet.

Figure 42: Strategic Locations of Bavet and Poipet



## 2. Poipet

### a. The Border Zone

#### ***(i) Border Gates***

375. The current border crossing facility between Cambodia and Thailand at Khlong Loeuk-Poipet is heavily congested and in the middle of the town surrounded on the Cambodia side by hotels and casinos with no land available for cargo inspection or transshipment. Pedestrians – tourists and border traders- push carts, cars and trucks all cross paths, making the border area and the “no man’s land” in Cambodia where the casinos are located a very crowded place. Cambodia immigration and customs facilities are after the “no man’s land” casino area. Finally, the rehabilitated railway line uses the same space, just passing in front of some of the casinos before passing a new railway bridge financed by Thailand over the border line.

376. Currently, trucks have to cross the town to reach inspection and transshipment facilities a few kilometers inside Cambodia for customs clearance and transshipment. As a result, many trucks park along the main national highway 5 in the town area, causing much inconvenience for traffic and inhabitants. A large new dry port facility –PVN Poipet Dry port- capable of handling about 600 trucks a day opened over the past year about 6 km from the border gate, and is partially used. Authorities are hoping to eventually close all the other transshipment facilities located in the main town area.

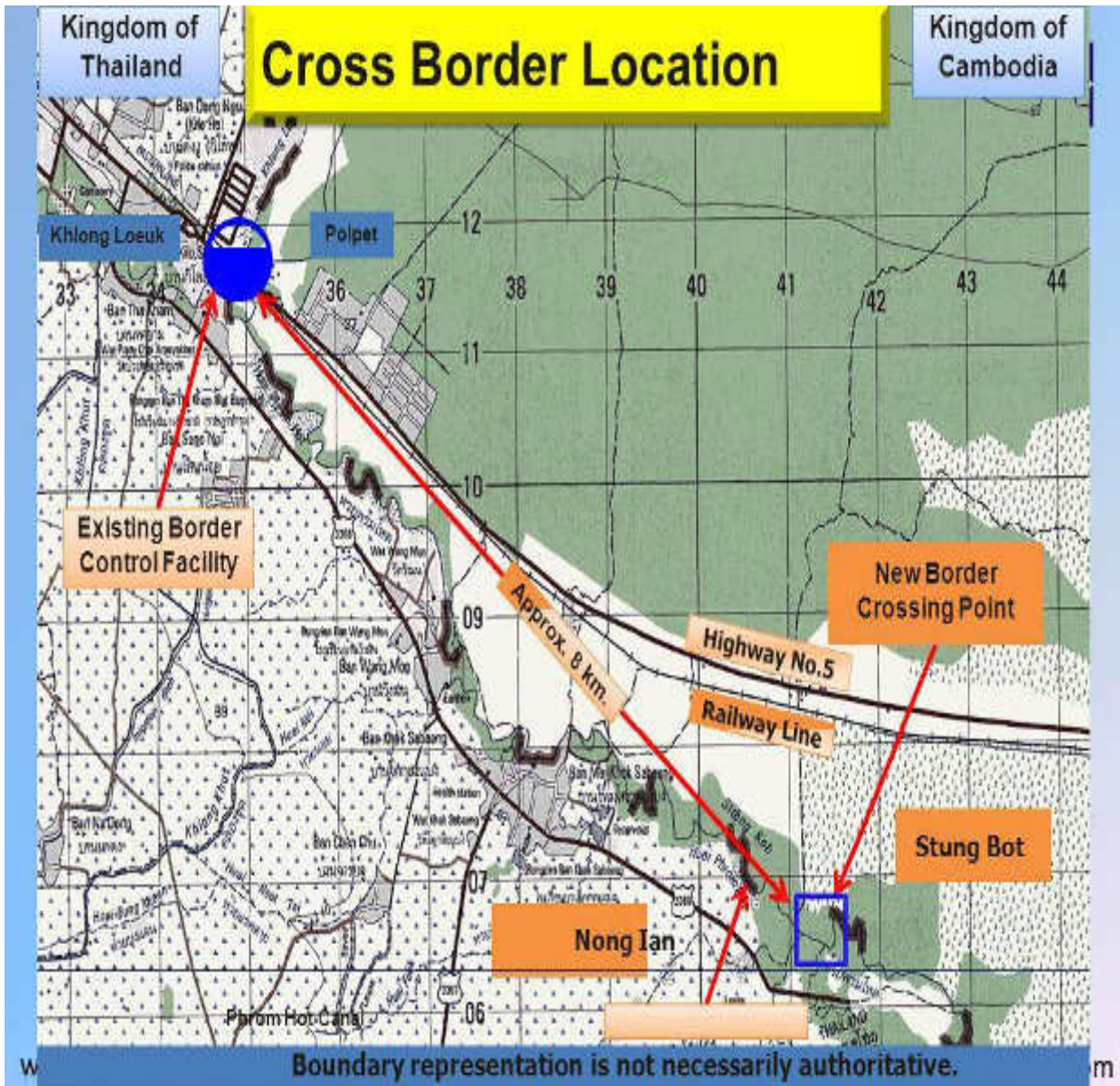


377. However, during the 3rd Cambodia-Thailand Joint Cabinet Retreat on 7 September 2017, the Cambodian and Thai prime ministers agreed to expedite work on the construction of the new Stung Bot (Cambodia) - Nang Ian (Thailand) international border checkpoint and in particular the cross-border bridge –over a small stream-, the connecting roads, the border facilities and related infrastructure. Thailand is building a large by-pass of Aranyaprathet from AH1 –the road to Bangkok- to the border at Nang Ian. It is also building the border bridge. Finally, Thailand will provide a loan of \$45 million to Cambodia to build the road connection from Stung Bot to Highway 5 in Cambodia and for border administrative buildings. The new border facility is scheduled to open end of 2018.

378. As shown in Figure 43, it is located about 8 Km from the current border point, well out of the town area. Given the current congestion in Poipet, a new urban area including administrative buildings, trade and storage facilities is likely to develop close the new border gate. The area is also close to the main special economic zones' area under development in Poipet. These zones are located across Highway 5 coming from the new border gate.

379. The opening of the new large Stung Bot-Nong Ian border point together with its state-of-the-art transport infrastructure will obviously be a major game changer for the Poipet border area. It also shows the strong commitment of Thailand to cooperate with Cambodia and develop the Southern economic corridor as a main economic corridor. Not only will the new road and border gate greatly facilitate the exports of agricultural products from the Banteay Meanchey province of Cambodia and surrounding provinces to Thailand, but it will also open up the potential for Poipet to transform as major manufacturing hub, linked in particular to the large automotive industry clusters based close by in Thailand. Changes have already started happening in recent years as an increasing number of special economic zones opened around Poipet.

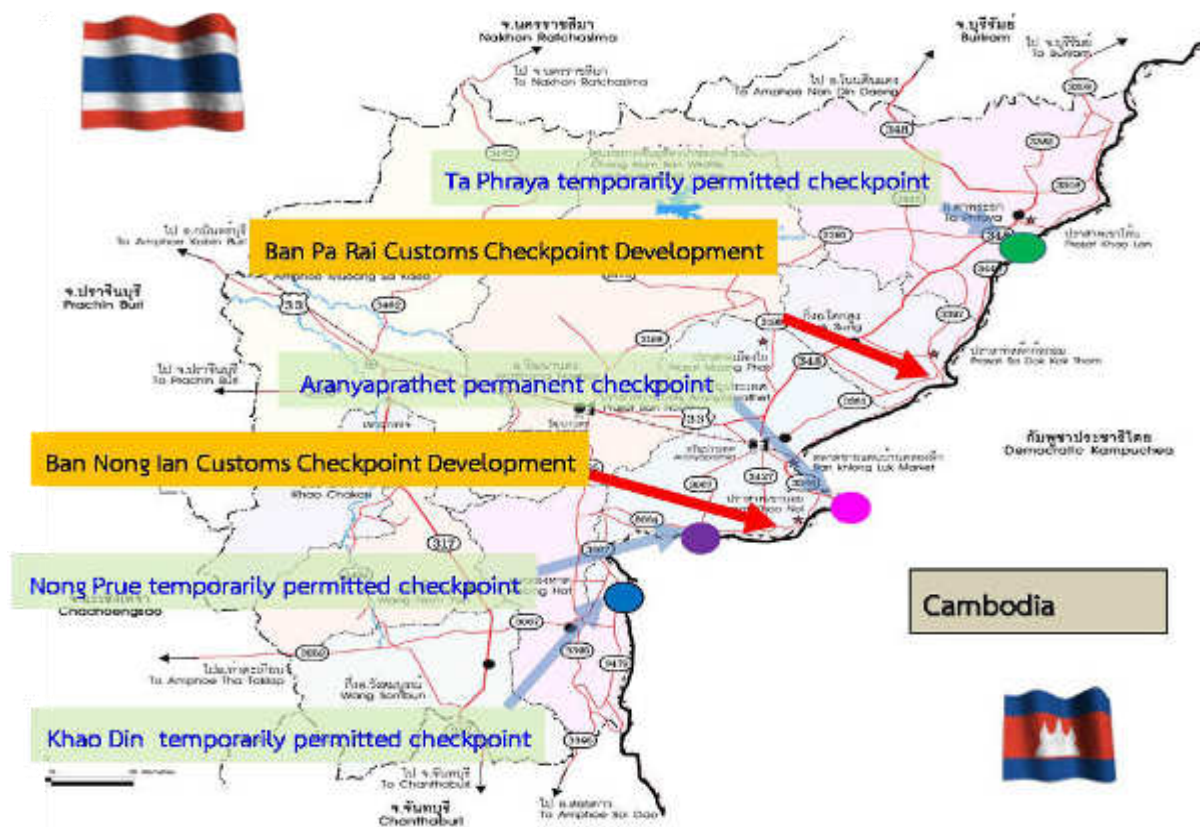
Figure 43: Location map of New International Check Point Stung Bot – Ban Nong Ian (Poipet)



380. Around Poipet, there are several other border crossing checkpoints, mostly local ones. The most promising one is the Ban Pa Rai (Thailand)-O’Neang (Cambodia) border checkpoint, some 10 kilometres northeast of Poipet (see Figure 44). Currently this is a local border facility. It is close to the Cambodian O’Neang special economic zone -5 km away-. The governments of Cambodia and Thailand are discussing the upgrading of this border point to a third international border in Poipet. Border infrastructure and paved access roads to Poipet and to AH 5 need to be built. Ample space is available on both sides of the border. On the Thai side, a large area of public land is available where the Industrial Estate Authority of Thailand is also building the Sa Kaeo

Industrial Estate –about 3 Km from the border- which is part of the larger Sa Kaeo Special Economic Zone<sup>108</sup>.

**Figure 44: Border Checkpoints between Thailand and Cambodia Close to the Southern GMS Economic Corridor**



381. The upgrading of the Ban Pa Rai-O’Neang border crossing point to international status would help decongest further the traffic in the Poipet main urban area and along Highway 5 in Cambodia. It would also directly benefit the development of the SEZs in Cambodia, in particular the large Poipet O’Neang Special Economic Zone.

**(ii) Special Economic Zones**

382. There are currently 3 special economic zones in Poipet. Like all the SEZs in Cambodia, they have been invested by the private sector. They have been approved by the Council for the Development of Cambodia (CDC) and are under the supervision of CDC. As for all zones in Cambodia, the zone developers have to provide all necessary facilities including power, water supply, waste water sewage networks, solid waste management and environmental protection measures.

383. While the availability of land and labor is not an issue in and around Poipet, the availability of a sufficient and stable power supply has been an issue. Currently most power is supplied by

<sup>108</sup> The Sakaeo Province of Thailand bordering the Banteay Meanchey Province of Cambodia is one of the provinces targeted for border economic zones by the government of Thailand.

Thailand. The SEZ operators have signed power supply agreements with Thai power companies but the average cost is \$0.18 per kilowatt, higher than the \$0.10-0.11 per kilowatt in Thailand. The possible development of a power plant to supply the SEZs is an issue currently discussed.

#### *The Poipet O Neang Special Economic Zone (POSEZ)*

384. The POSEZ, the first SEZ in Poipet, was established on 1 June 2006 under the sub decree on the formation of the Poipet “O Neang” special economic zone. It is located northeast of Poipet about 10 km from the city center. It covers an area of potentially nearly 500 ha. POSEZ would include an industrial zone, a commercial zone, a dry port and a residential zone.

385. Its development has been slow until recently partly because the road infrastructure leading to it is not paved and it lacks facilities. Its location is also somewhat remote. It has attracted 4 investors so far, 2 garment manufacturers (Thai and Chinese), a Japanese electronics producer, and a Thai jewelry producer. With the announcement of the opening of the new border gate and the plans to develop new major roads from the new border and Highway 5, the interest from Japanese investors in particular appears to be strong.

#### *SANCO Special Economic Zone*

386. The Sanco SEZ was officially established in 2014 under the Sanco Cambo Investment Group Co., Ltd., a joint-venture between Japanese and Cambodian investors, to develop and operate the “Sanco Poipet Special Economic Zone” with its Headquarters located in Phnom Penh (Cambodia).

387. The SANCO Poipet SEZ is 5 Km from the current border gate with Thailand and Thai trucks can directly move from the border point to SANCO. It is however also close to the new proposed international border gate.

388. It is a delimited zone on an area of 83Ha, which can be expanded to 500ha. It provides water –through the municipal water supply system-, electricity, waste water treatment and drainage. Typically, Thailand + 1 companies have invested in SANCO. Currently there are 10 companies invested in SANCO, including SC WADO Components producing bases plates for hard disks, NHK Spring (seat covers for vehicles and Toyota supplier), Sumitronics Manufacturing (electronics parts for automotive and consumer electronics manufacturers in Thailand), Koiwa Bond (urethane laminate) and Steel Hub Co producing steel pipes for construction. A major investor in SANCO is also Toyota Tsusho, the distribution arm of Toyota, which set up the \$3 million Techno Park which provides rental factories together with employee meal services and administrative services such as general affairs, accounting, finance, human resources –staffing services-, customs clearance and subcontracted processing. Rental units cover 1,000 square meters. The services provided by Techno Park substantially reduce investment costs. 6 of its 7 units have been rented out. More than 1,200 workers are employed in the SEZ. It offers good facilities and is well located close to the new border gate. It is likely to expand significantly and is an attractive location for labor intensive manufacturers based in Thailand. Its access road from AH 5 is narrow and will eventually need to be expanded.

**Figure 45: Location map of Length from Sanco Sez to the regional**



Source: SANCO SEZ

*Phnom Penh Special Economic Zone-Poipet (PPSEZ-Poipet)*

389. The Phnom Penh Special Economic Zone, the largest SEZs operator in Cambodia and one of the few publicly listed companies, is developing a third SEZs on 68 hectares of land it acquired in Poipet in 2015 along AH 5 close to the new border gate with Thailand. The decision to invest in Poipet financed by capital raised on the Cambodia stock exchange reflects the optimism about Poipet developing as a major industrial hub linked to the Thai transport hubs and industrial clusters, and in particular the automotive cluster. Interestingly also, part of the capital raised on the stock exchange was acquired by Thai and Singapore investors.

390. Besides Japanese investors, PPSEZ hopes to attract Thai firms which want to move their more labor-intensive manufacturing operations to neighboring countries. The PPSEZ started operations in 2017 and the first investor in the PPSEZ is the Japanese-Thai firm Sumitronics, an affiliate of the Sumitomo, producing electronics components for the automotive industry. PPSEZ also signed an agreement with the Thai B. Grimm Power Group to supply electricity to the SEZ.

*Sisophon Industrial Park*

391. About 40 Km from the Poipet SEZs and the new border gate, an industrial park is operating in the provincial capital of Sisophon. Several garment producers are located in the park. However, with the opening of the railway line and the new border gate, the Sisophon Industrial Park might become more attractive to investors and should not be overlooked in a provincial development strategy.

### **(iii) Border Zone Collaboration**

392. Meetings between the two countries' officials are held both at the provincial and district levels. On the business side, regular consultations including business matching events have been taking in place between business people from the Cambodian Chamber of Commerce and Sa Kaeo Chamber of Commerce.

393. The rapid development of SEZs on the Cambodian side of the border and the objective of developing part of the Sa Kaeo Province of Thailand as a border economic zone with the ongoing investment of the Industrial Estate Authority of Thailand in Sa Kaeo Industrial Estate would justify the creation of a “Cambodia-Thailand Southern Economy Corridor Development Authority” involving both public and private sector organizations from both countries. Such an organization could provide guidance to the coordinated development of the border SEZs and border infrastructure as well as on transport and trade facilitation issues. For instance, there is concern that the Sa Kaeo Industrial Estate will rely mainly on Cambodian workers, thus competing with rather than being complementary to the SEZs on the Cambodian side of the border. The main advantages of investing in Cambodia are a relatively large and young labor force, low wages costs and a favorable GSP regime in the major advanced markets.

## **b. Socio-Economic Profile**

### **(i) Demographic Characteristics**

**Table 28: Demographic Feature of Poipet**

<b>No.</b>	<b>Description</b>	<b>Year 2015</b>	<b>Year 2016</b>
1	Land Area (ha)	27,313.42	27,313.42
2	Number of Sangkat/Commune	3	3
3	Number of Village	38	38
4	Number of households	21,415	21,497
5	% of female household head	11.2	10.1
6	Total population	92,810	95,723
7	Number of females	46,146	48,359
8	Number of males	46,664	47,364
9	% of people under 0-17 years old	41.1	40.8
10	% of people under 18-60 years old	53.2	53.8
12	Annual population growth	5.7	5.5
14	% of people whose primary occupations are in the agriculture sector	23.1	23.7
15	% of people whose primary occupations are in the handicraft sector	0.3	0.4
16	% of people whose primary occupations are in the service sector	76.6	75.9
17	% of people looking for job in Cambodia	4.6	4.1
18	% of people looking for job outside Cambodia	16.7	16.7
19	% of household with access to electricity	98.6	93.7

Source: Royal Government of Cambodia. Municipality of Poipet. Five-Year Municipal Development Master Plan 2018-2020

394. The municipality of Poipet recorded a total population of 95,723 inhabitants in 2016. This population represents 21,497 families with an average household size of approximately 4 persons. The female population is slightly higher than the male counterpart. Based on the Municipal Master Plan, the population of Poipet is growing at rate of 5.5 percent. The population density in Poipet is 307 people per square kilometres based on the land area of 27,313 Hectares. The poverty incidence in Poipet in 2010 was reported at 29.50 percent. The population is also quite young with 40.8 percent below 17 years of age. Interestingly, in 2016, about 17 percent of the people were looking for jobs abroad.

395. The population of Poipet has been fluctuating over the past ten years, depending on the entrants of new migrants which has been influenced by security and economic stability along the Cambodia and Thailand borders, and the availability of employment mainly in the services sector. Employment in the SEZs only started to become significant over the past 3 years. The security situation with Thailand is not longer an issue as demonstrated by the large investments Thailand has committed to Poipet, both in border facilities and transport infrastructure, and in businesses. Indications are that population growth will accelerate markedly in the next years due to immigration and rapidly growing employment opportunities in the SEZs and the services sectors.

### **(ii) Economic-Trade Profile**

396. The economy of the Banteay Meanchey Province of Cambodia where Poipet is located, is mainly based on agricultural production with fertile soils and also with good potential in agro-industry.

397. Poipet used also to be an agricultural area but economic activity has diversified rapidly over the past decade. The agricultural sector still employed some 23 percent of the population in 2016 but represents less than 20 % of the economy. Tourism related services sector, including hotels, gaming establishments, restaurants, financial institutions and trading as well as logistics and transshipment services now play the dominant role in the economy absorbing the largest share of the labor force, about 76 percent of the population. There are 10 casinos resorts operating in Poipet. The services sector represents more half of the local economy, generating increasing employment for both unskilled and skilled workers.

**Table 29: Businesses Operating in Poipet, 2016**

Type of business	No. of Establishments
Rice miller	19
Brick or clay making	18
Wooden furniture manufacturing	13
Carving making from copper, stone and leather	2
Latex handicraft	9
Pure drinking water factories	19
Metal and aluminum manufacturing	3
Processing or packaging of cereal products	15
Processing or packing of fish products	3
Restaurants	34
Hotels	15
Guesthouses	43

Type of business	No. of Establishments
Health clinics	28
Electronic repairing shops	64
Barber and massage outlets	104
Repairing and selling machineries shops	31
Small business outlets (rice/soup selling)	264
Other factories, enterprises, companies, casinos, train stations and railways connected from Thailand to Sirisophoan town	

Source: The Three-Year Investment Plan of Poipet Town, Banteay Meanchey Province (2018-2020)

398. The recent establishment of several new special economic zones together with the planned opening of new border crossing facilities has led to a growing manufacturing sector which will likely experience a very significant acceleration in growth over the next few years, thus creating considerable employment opportunities in both the services and manufacturing sectors. With the improved trade and traffic flows along the southern transport corridor, the manufacturing sector is expected to gradually become an important source of income for the population and of revenues for the municipal government.

399. The city’s population can be expected to increase rapidly due to migration from other parts of Cambodia and the return of some migrant Cambodian workers from Thailand. With proper human resource development programs and technical skills training –such as those provided by Techno Park-, the working age group should be able to provide the required manpower resource. All these changes will put very significant pressure on the urban infrastructure and services over the next decade.

400. The trade data with Thailand via Poipet show the changes which have happened in recent years. Exports of Cambodia to Thailand more than quadrupled between fiscal year 2010 and fiscal year 2017, rising from US\$113.61 million to US\$486.01 million (Table 30). While exports of cassava to Thailand remain by far the largest export via the Poipet border, increasingly manufactured products such as parts and accessories for cameras, electric wire products, motor parts, Iso tank containers and DC motors moved up the list of the 10 main exported products from Cambodia to Thailand.



**Table 30: Top 10 Exports from Cambodia to Thailand through Poipet Border Crossing (2010-2018)**

No	Goods	Value (mil. USD)								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Cassava	6.10	13.75	57.52	54.01	48.15	126.21	201.08	184.36	4.40
2	Aluminium Motor Parts					13.72	16.36	23.44	38.41	11.45
3	Copper waste & scrap	6.35	11.01	10.81	10.73	10.29	6.04	7.58	22.65	8.12
4	Aluminium waste & scrap	17.72	24.70	15.75	17.15	27.28	26.61	15.53	22.88	6.59
5	Soya beans	3.38	6.00					7.01	0.00	6.59
6	Dog Food	5.24	6.31	3.58	10.77	15.98	20.80	21.71	19.21	5.48
7	Iso tank container	16.38	27.82	30.46	38.93	17.25		33.18	31.25	5.35
8	Cassava (others)								0.00	19.44
9	DC motors			3.31	8.40	17.43	6.36		13.66	3.65
10	Used Clothes						15.98	8.68	8.22	2.80
11	Girl or Female T-shirts								8.43	
12	Electric Wire						11.91	13.46	7.99	
13	Cameras, photographic (excluding cinematographic); parts and accessories				24.99	123.02	208.72	44.36		
14	Optical film frame				28.25	83.45	14.97			
15	Electric motors			3.41	8.41					
16	Printed Circuit Board (PCB)				8.24					
17	Iron waste & scrap	21.76	38.08	31.67						
18	Paper waste & scrap	5.77	6.86	7.60						
19	Lead			3.96						
20	Lead waste and scrap		3.11							
21	Charcoal		3.02							
22	Maize	6.76								
	Petroleum Surveyor	1.61								
	<b>Total</b>	<b>91.09</b>	<b>140.66</b>	<b>168.07</b>	<b>209.89</b>	<b>356.56</b>	<b>453.96</b>	<b>376.04</b>	<b>357.06</b>	<b>73.88</b>
	<b>Others</b>	<b>22.53</b>	<b>22.35</b>	<b>28.18</b>	<b>54.58</b>	<b>52.99</b>	<b>97.27</b>	<b>86.69</b>	<b>128.95</b>	<b>41.13</b>
	<b>Grand Total</b>	<b>113.61</b>	<b>163.02</b>	<b>196.26</b>	<b>264.47</b>	<b>409.55</b>	<b>551.23</b>	<b>462.72</b>	<b>486.01</b>	<b>115.01</b>

Source: Thailand Trade Data

401. Exports from Thailand to Cambodia nearly doubled between FY 2010 and FY 2017, reaching US\$1,695 million. Exports are mainly vehicles, motorcycles and machinery.

**Table 31: Top 10 Imports of Cambodia from Thailand through Poipet Border Crossing (2010-2018)**

No	Goods	Value (in million USD)								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Non-aerated waters							33.75	80.28	33.49
2	Combine harvester-threshers machinery		23.32	38.07	40.42		63.41	93.55	80.99	30.87
3	Motorcycle Engines	42.54	54.57	67.54	83.12	99.15	94.09	102.94	90.98	30.02
4	Motorcycle Parts	41.09	55.10	69.95	80.57	94.42	90.01	97.20	86.57	28.66
5	Passenger cars	29.43	25.95	32.14	55.11	67.42	70.63	97.39	102.80	28.11
6	Motorcycles								33.91	22.49
7	Tractors						57.14	62.88	47.22	20.48
8	Plastics & Articles Thereof							40.70	43.65	13.65
9	White Cement	60.94	29.30	42.42	41.94	48.98	59.26	56.82	56.80	12.02
10	Knitted Fabrics	52.03	39.12	29.78						10.05
11	Iso tank container	15.84	26.63		36.27			37.19	33.87	
12	Swine; live	30.88	47.86	44.10		38.73	58.02	38.04		
13	Wheel Hand Plow Tractor	21.32	36.04		48.06	77.55	65.76			
14	Control Boxes					56.38	58.19			
15	Cameras, photographic (excluding cinematographic); parts and accessories					45.71	56.58			
16	Animal Food	40.52	39.38	60.81	50.53	49.21				
17	Mobile Phones					47.55				
18	Palm Oil			32.31	46.93					
19	Beer			28.88	45.33					
20	Chemical Fertilizer	13.60								
	<b>Total</b>	<b>348.19</b>	<b>377.27</b>	<b>445.99</b>	<b>528.27</b>	<b>625.08</b>	<b>673.08</b>	<b>660.46</b>	<b>657.07</b>	<b>229.83</b>
	<b>Others</b>	<b>543.16</b>	<b>671.02</b>	<b>892.74</b>	<b>1,100.13</b>	<b>1,151.70</b>	<b>1,049.66</b>	<b>984.96</b>	<b>1,038.15</b>	<b>301.07</b>
	<b>Grand Total</b>	<b>891.36</b>	<b>1048.30</b>	<b>1,338.74</b>	<b>1,628.40</b>	<b>1,776.79</b>	<b>1,722.74</b>	<b>1,645.42</b>	<b>1,695.23</b>	<b>530.90</b>

Source: Thailand Trade Data

### c. Urban Infrastructure

#### ***(i) Existing Land Use and Zoning Map***

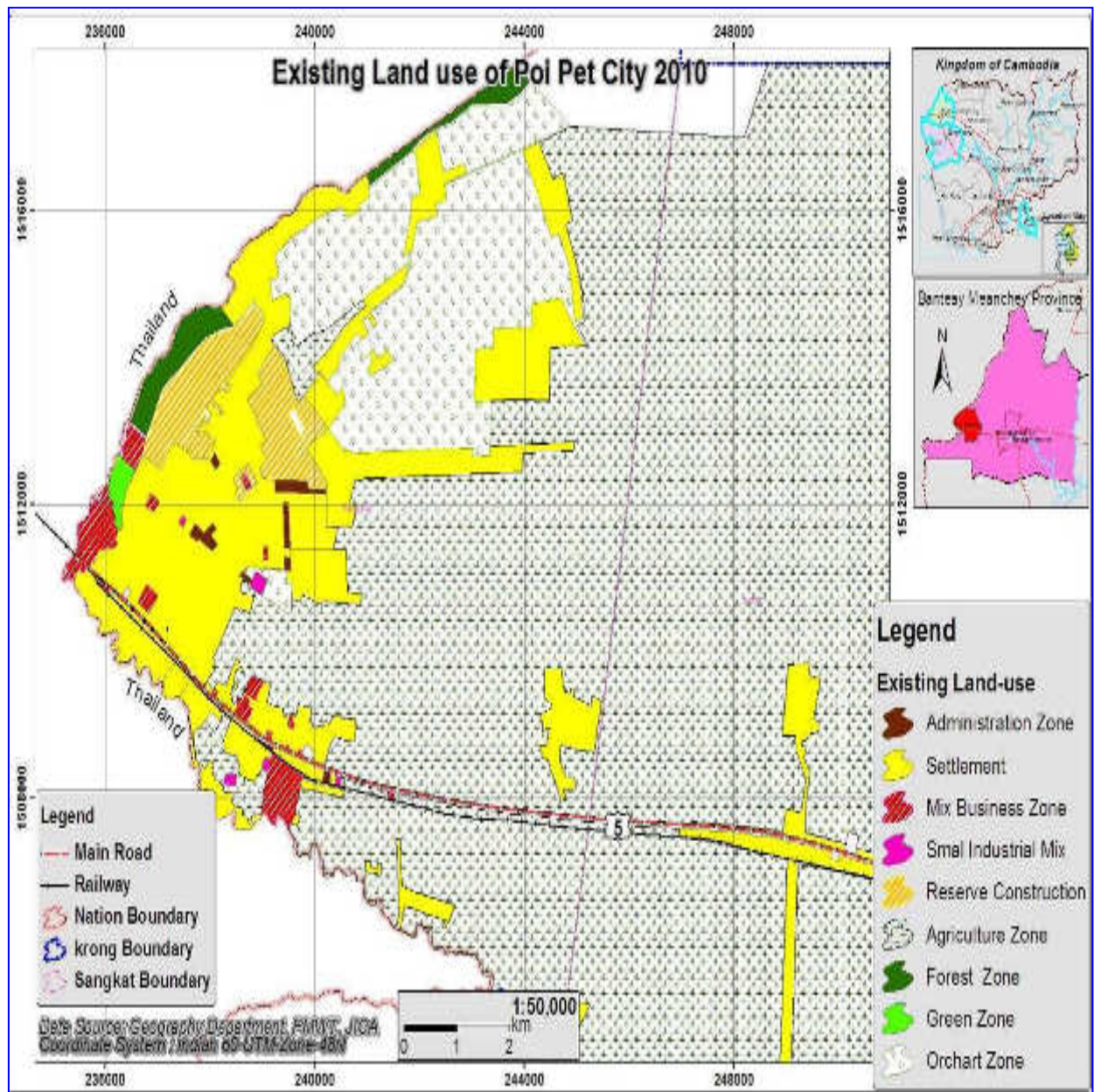
402. The municipality of Poipet has prepared its land use and zoning plan with the assistance of the Ministry of Land Management, Urban Planning and Construction (MLMUPC) and other government agencies and institutions. The plan delineates the land use categories into industrial, commercial, residential, social, open spaces and administration zones.

403. Based on the existing land use, Poipet has a total land area of 27,314 hectares, of which 18,354.05 hectares (about 60 percent) are categorized as agricultural lands, shrubs and idle lands. The residential areas occupy 4,570.47 hectares of the land area particularly in the town centre. Infrastructure space represents 1,748 ha and social facility areas 359.5 ha. Industrial and commercial space represents 900 and 540 Ha respectively. There are also 840 ha of open space.

Land availability does not appear to be a problem in Poipet. As can be seen in Figure 46, much land is available around the 3 SEZs and around the new border gate area.

404. In 2016, Poipet had 23,4 Km of BST road, 30.9 Km of concrete roads and 101.4 Km of gravel roads. Many roads apart from highway 5 are in poor conditions due to lack of maintenance, particularly during the rainy season. For instance, the road from highway 5 to the O Neang SEZ is not paved. O&M is a big issue and lacks funding.

**Figure 46: Land Use and Zoning Plan, Municipality of Poipet 2010**



### **(ii) Core Urban Area and Landscape**

405. High rise buildings of hotels, recreational and gaming establishments along Highway 5 are in the town centre, with small local restaurants, guest houses and commercial shops at the periphery. The urban roads parallel to the National road are mostly dirt roads with no drainage structures. During the rainy season, these interior urban roads are flooded and muddy causing much inconvenience to local residents and business establishments. For instance, the road from the main highway to the Sanco SEZ was a dirt road and had to be built by the SEZ investor.

406. The national railway line which stretches parallel to the National Road has been rehabilitated (until Sisophon). A new station has been built at the entrance of the town center and a rail container yard is planned close to the new border gate. There are also 3 existing transport terminals along Highway 5 close to the city center that are causing congestion in the traffic flows. Finally, several transshipment facilities –dry ports- are also located in the city area along highway 5. These facilities are too small given the rapidly increasing number of large container trucks crossing the border daily. Many of the trucks park along the highway, also contributing to traffic congestion together with noise and air pollution. As mentioned above, a new large dry port facility close to the new border gate has been built and municipal authorities are encouraging trucks to only use the new facility. The customs X-Ray facility will also relocate to the new dry port. The public market is located within the town centre and is already crowded with ambulant vendors and local market stallholders and traders from neighboring towns and provinces including those coming from border towns in Thailand.

**Figure 47: Map Delineating the Core Urban Area and Landscape**



### **(iii) Urban Economic Infrastructure**

407. The economic infrastructure in Poipet consists of the market trading centers, transport terminal and the dry port loading facility. These economic infrastructures are revenue-generating facilities managed and operated by the private sector.

408. The service facilities for trading and vending are provided by the 4 big market trading centers and 9 smaller markets sprawled in adjacent vicinities. The market facilities have 284 stalls and 130 shops to serve the buying public.

409. Presently, there are 3 separate bus terminals operating in Poipet that are managed by the private sector. One is a small terminal service for passenger buses, another terminal for cargoes of goods and commodities and the other for international cross border buses. Over 100 passenger and tourist buses ply the roads daily from Poipet to Siem Reap and Phnom Penh. The existing transport terminal for domestic passenger buses and for the international cross border buses has a combined total space area of 8,000 square meters.

410. The location of the transport terminals in 3 different sites is causing undue congestion and air and noise pollution in the town centers. Local authorities have designated a new area for the establishment of a market trading and transport terminal facilities. Relocation has however not happened yet.

411. There are several existing dry ports and loading facilities which are located along the main road leading to the town center of Poipet. However, these facilities and space area have become inadequate due to the increasing volume of traffic flows of heavy container trucks owing to the improved trade and traffic flows along the transport corridor. A new dry port has started operations closer to the new border gate area –about 7 km from the town center- and the local authorities intend to transfer all dry port operations there in order to address the perennial concerns of local authorities and residents on the disruption of traffic flows along the main road because of heavy container trucks that are parked on the sides of the road.

412. With the opening of a new border gate for goods transport –and presumably international buses to and from Thailand-, all facilities including dry ports, bus terminals and main trading markets can be transferred out of the town center, closer to the new international border. The town center can then be remodeled making Poipet an attractive and more livable city.

#### **(iv) Urban Services**

##### *Water supply and sanitation*

413. Anco Water Supply Co., Ltd is a private company providing clean water supply and electricity for all the people in the central town (Sangkat Poipet and Sangkat Phsar Kandal), as well as for all factories, enterprises and business outlets. About 54.7 percent of the households have access to tap water while 34 percent have access to water wells.

**Table 32: Selected Urban Services**

	<b>2014</b>	<b>2015</b>	<b>2016</b>
% households using garbage collection services	17.3	17.4	15.9
% Households with access to clean water	77.7	76.1	80.1
% Households with access to tap water	58.1	57.5	54.7
% Households with access to water well and water pump	36.3	39	34
% Households with access to protected man-made water well	4.42	2.30	2.3
% Households with access to protected rain water	1.2	1.2	8.3
% of Households with access to toilet	75.6	87.7	87.6

414. The municipality plans to expand the water supply capacity to service additional areas and household in the sub-urban areas of the town. The expanded water supply system will still be regulated by the municipality of Poipet and is to be contracted out to a private sector company given its capability and experience to operate and manage the system.

415. About 87.6 percent of households have access to toilets. In hotels, casinos and other larger buildings, there is a national standard design for septic tanks. The tanks are connected to the main drainage/sewerage system where wastes are discharged to the streams in the border of Cambodia and Thailand. Household waste and those from commercial centers are also disposed through collection and hauling at the north eastern part of the town.

#### *Wastewater System*

416. Wastewater and storm drainage are major problems in Poipet. The existing waste water system is limited with pipes in the areas in the center of town discharging waste water in the open canal which forms the border between Thailand and Cambodia. The canal is heavily polluted.

417. Under the CTDP 1, ADB is providing support for the construction of a wastewater treatment facility to address the needs and requirements of the expanding urban areas of Poipet. A 16 hectares plot of land in the eastern part of Poipet was identified to build a retention pond and the water treatment facility. Part of the piped wastewater drainage will also be built but due to lack of funding the sewage pipe network will not be complete. Bidding is expected to start soon. With the expansion of the city and the new SEZs, drainage and wastewater is likely to remain an issue in Poipet.

#### *Solid Waste*

418. The collection and haulage of solid waste in Poipet is managed and operated by private contractor, Poipet Cleaner since 2008. This arrangement is covered by a Contract of Service with municipality of Poipet and the province Banteay Mean Chey. Under the contract, Poipet Cleaner undertakes two main services, the waste collection from households, shops, guesthouses, hotels and restaurants, and waste sweeping and hauling along main roads and commercial areas.

419. With the increasing urban population and the expanding urban area, the collection coverage has become very limited, which is only about 16 percent of the total scope in 2016. The total waste generation in the Poipet is approximately 60 tons per day but the total daily collected solid waste is merely 10 tons. These wastes are transported and disposed into the open dump site which is located approximately 7 kilometers from the town centre. Under CTDP 1, ADB is also financing a materials recovery facility (MRF), the construction of which is about 75% complete. Solid waste management was also included as a component of the project under CTDP 1 including the establishment of a sanitary landfill, the provision of collection trucks and plastic bins, the construction of an administrative building and a weigh bridge and the installation of an hazardous waste system. This component might however be drop due to cost overrun. .

**Table 33: Poipet - Environmental Issues**

	<b>2014</b>	<b>2015</b>	<b>2016</b>
Number of households using waste service	3,824	3,717	3,412
% households collect waste at home	17.3	17.4	15.9
Number of households affected by environmental pollution	606	625	665
% of households affected by environmental pollution	2.7	2.9	3.1

Source: The Three-year Rolling Investment Plan of Poipet Town, Banteay Meanchey Province (2018-2020)

#### *Urban Road Network*

420. Poipet's road network is very poor. The main asphalted road, Highway 5, has a length of 23.5 km and runs through the middle of the city. There are about 10 km of secondary concrete roads connecting the inner urban areas to Highway 5. Most other roads are unpaved and in very poor conditions. The city is dusty during the dry season and muddy during the rainy season.

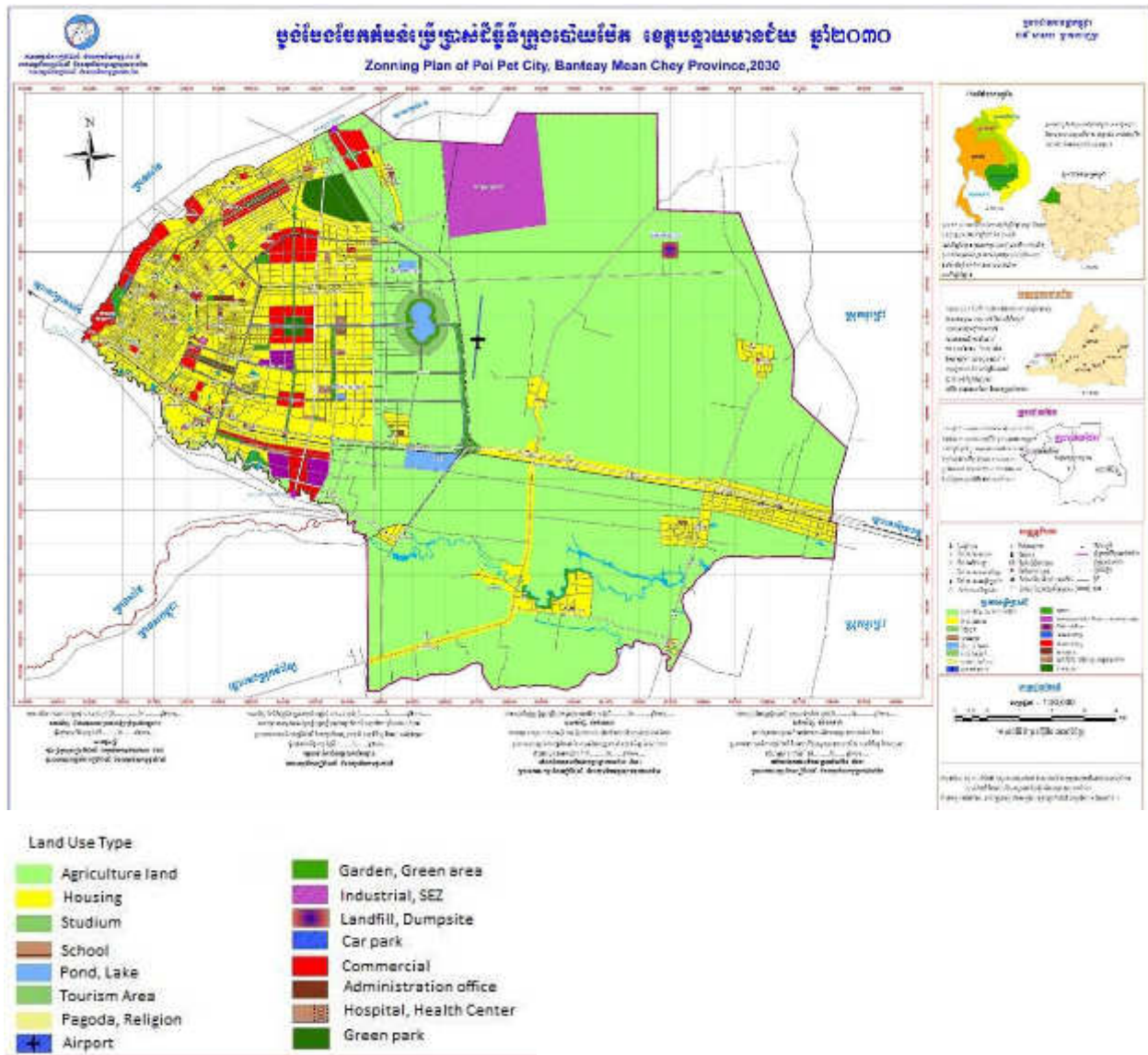
421. The opening of the new border gate at Stung Bot-Nang Ian –and possibly also at O Neang-Ban Pai Rai- and the development of several SEZs will open the opportunity to redesign the whole city area of Poipet town. A new city plan is under development. With the current border gate mainly used for tourism and visitors, and the relocation of dry ports, bus terminals and markets out to the periphery of the city, the city centre can be transformed into an attractive area for visitors, business people and executives and investors.

#### **d. Challenges for Poipet as a GMS Economic Hotspot**

422. Poipet as a strategic corridor border town on the Southern GMS economic corridor faces numerous existing urban challenges due to lack of investment in urban infrastructure and services and weak implementation of urban regulations including land use planning and regulations.

423. But if as expected after the opening of a new major border gate with Thailand at the end of 2018—and possibly a second one later- it grows into an important GMS manufacturing hub and economic hot-spot, its urban challenges are going to be severely exacerbated. As in the case of Bavet, in-migration from other parts of Cambodia and from Cambodian workers in Thailand will lead to fast population growth which will put considerable pressure on urban infrastructure and services. In addition to maintain competitiveness and to realize the vision of Cambodia's Prime Minister on the Initiative on Urbanization and Smart City, significant investments in upgrading and developing the urban environment will be needed to make it a city attractive for workers and business executives alike, from both Cambodia and other countries.

**Figure 48: Master Plan of Poipet City**



424. The municipality of Poipet has prepared a municipal development plan up to 2030 (Figure 48) including a land use and zoning plan, incorporating the developments linked to the new border gate. The new international border gate at Stung Bot-Nang Ian is located next to the purple area at the bottom left of Figure 48. From there a main new road –yet to be built– will go south to north, on the eastern side of the planned urban area. The SEZs areas are in purple color. In addition to locations –yet to be developed– close to the new international border, SANCO and the PPSEZ-Poipet are located north of AH5 along the new South-North road. POSEZ is the large purple area north next to the agricultural land. It is also close to the Thai border. Figure 48 clearly shows the very crowded urban area around the Khlong Loek-Poipet international border gate where AH5 enters Thailand. The opening of 2 new international border gates obviously offers a unique opportunity for the urban re-development of Poipet and its transformation in a GMS economic hub.



425. While the municipal development plan of Poipet up to 2030 is a step in the right direction, there appears to be a need however to establish a strong collaborative mechanism between the municipal authorities and the SEZ developers and investors, possibly coordinated by the CDC, to guide urban development issues, both in term of investments in hard and soft infrastructure. For instance, with the influx of unskilled migrant workers in Poipet, and to ensure the SEZs remain competitive over the medium and long term, institutions for vocational training, business service training and higher technical levels training are needed in Poipet –they are currently totally absent. CDC and the municipality should try to attract investments in such facilities.

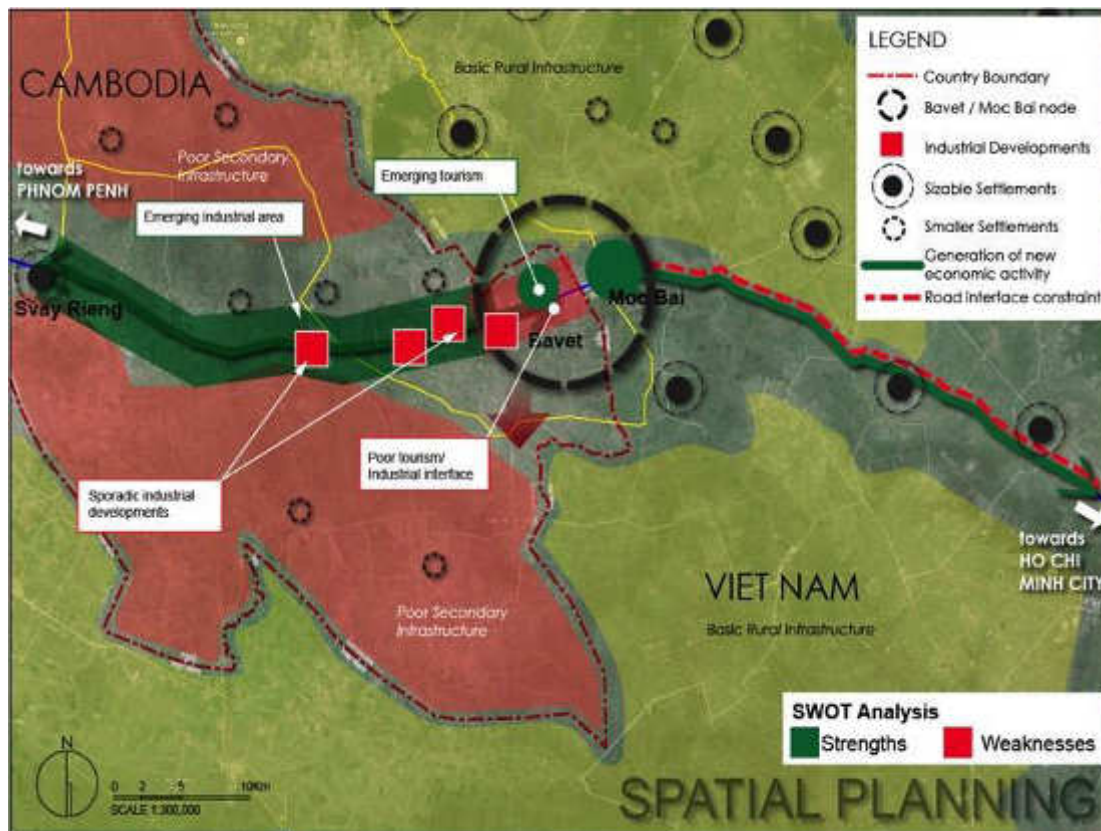
### 3. Bavet

#### a. The Border Zone

##### (i) Border Gates

426. Although border gate facilities are much larger at the Bavet (Cambodia) - Moc Bai (Viet Nam) border compared to Poipet, the border gate area is similarly highly congested on both side of the border with trucks lining up either to enter or exit Cambodia. While on the Viet Nam side the road leading to the border is wide with few constructions along it, in Cambodia, trucks and vehicles enter directly the main urban area of Bavet just beyond the border gate (see Figure 49).

**Figure 49: Bavet Town and Border Area**



427. As in Poipet, several entertainment and gaming establishments, large hotels and restaurants are located in the area beyond the border gate in Cambodia along Asian Highway 1 (AH1). Trucks pass this area on their way to either SEZs located along AH1 about 7 km from the Bavet-Moc Bai International Border Check point or on the way to the three dry ports and X-Ray facilities – for cargo going further inland into Cambodia- which are located a few kilometers inland along the main road. The customs scanning facility located along the road is too small and as result, trucks queue along the main road. The facility can only handle 100 trucks a day while 400 trucks a day need to be scanned. This results in a poor tourism and industrial interface. Although Asian Highway 1 (AH1) is currently being upgraded and widened to a 4 lanes road with a divider over 8 km under the ADB-financed CTDP 1 project, heavy trucks must pass right through the heart of the main urban center of Bavet, making the road dangerous and creating heavy noise and environmental pollution.

428. As in Poipet, the only solution over the medium term is to develop a second border gate area to reduce congestion on AH1. This has been discussed between the Cambodian and the Viet Nameese governments. In fact, an express way linking Phnom Penh to Ho Chi Minh City has been under discussion for some time. A railway connection is also considered but much more complex to realize as a railway bridge across the Mekong river would need to be built –the Mekong river road bridge at Neak Loeung was completed in 2015-. The alignment of the express way would be north of the current Bavet-Moc Bai border gate in Cambodia where land both in Viet Nam and Cambodia is available. This would allow for a by-pass to be built from the expressway to the Bavet SEZs through an area outside the town of Bavet itself.

### **(ii) Border Economic Zones**

429. The Bavet area experienced an economic transformation from a rice production area before completion of the SEC to a thriving GMS border city with casinos and hotels catering to Vietnamese customers and with several SEZs and factories producing various products -from garments to bicycles- relying on cheaper Cambodian labor. Investors in the SEZs also benefit from the favourable GSP regime of Cambodia in the EU market and the United States. Most products are exported through the air and maritime transport hubs in HCMC which is only a short distance away –about 70 km-.

430. Four SEZs, all developed by the private sector, are operating in Bavet. Two (Manhattan-Bavet SEZ and Taiseng-Bavet SEZ) are fully operational, reportedly employing more than 30,000 workers. The Dragon SEZ is still under development, while the Automobile Industry Complex SEZ is more recent and just starting operations.

431. In addition to the casinos and hotels operations, the development of the SEZs and the rapid increase in the labor force they employ have put tremendous pressure on the urban infrastructure in Bavet as well as on the environment. Although the SEZs by law are required to provide all necessary utilities such as power, water supply, waste water treatment and solid waste management, because of their size they cannot provide these facilities without close coordination with Bavet city authorities. Water supply, waste water, solid waste management, drainage and flood control appear to be the issues affecting most operations of the SEZs. The water supply in all the Bavet SEZs are extracted from ground water. There have also been many complaints of the local population on inadequate waste water treatment. The availability of power is also a critical issue affecting investors' confidence. Most of the power supply is imported from Viet Nam with no backup power facilities.

432. Another main issue is that of workers commuting time. The number of workers has increased dramatically over the past few years reaching well over 30,000. For instance, in 2011, it was found that the population of Bavet had increased by 37% due to in-migrant workers (ADB,

2012). Most workers are transported to the SEZs, and after work back to their accommodations, by a large number of small trucks, creating heavy traffic congestion along AH1 in front of the SEZs, resulting in long commuting times.

433. These issues will need to be addressed to maintain the competitiveness of the SEZs and to be able to attract and retain skilled workers if the SEZs are to move up the value chains.

#### *The Taiseng-Bavet SEZ*

434. Taiseng-Bavet SEZ was established in 2006 and is located on a land area of 130 ha. It is situated 7 km away from the Moc Bai International Border Check Point on AH1. It houses 22 factories with more under construction. It is divided into different zones: Industrial zone, Export processing zone, Service centre, Dry port logistics facility and serviced apartments, a market, and a recreation centre. From July 2013 to July 2014, exports from the Tai Seng SEZ amounted to US\$319.4 million.

#### *Manhattan-Bavet SEZ*

435. Manhattan-Bavet SEZ was established in November 2006. It is located on 180 ha area of land and employs about 30,000 workers. It is 6km from the Bavet Border Check Point. 26 factories operate in the SEZ producing a wide range of products such as garments, footwear, plastic and polypropylene bags, home accessories, bicycles, electronics, decorative lights, umbrellas, and handicraft products. A total of 36 factories have been approved. From July 2013 to July 2014, exports originating in the Manhattan SEZ amounted to US\$ 218.2 million. About 1,200 containers leave the Manhattan SEZ per month. The SEZ has its own customs and logistics facilities. They have a one stop service with ASYCUDA operational at the zone. Wastewater treatment, solid waste management and the availability of power supply appear to be issues negatively affecting operations in the SEZ.

#### *Dragon-Bavet SEZ*

436. The third SEZ, the Dragon-Bavet SEZ, was set up in 2012 but is still under construction and will cover 120 ha. 4 factories operate in Dragon-Bavet SEZ, with more under construction. Dragon-Bavet targets Japanese investors and offers factories for lease.

#### *Automobile Industry Complex SEZ*

437. This SEZ has recently been established and will focus on automobile assembly.

### **(iii) Border Cooperation**

438. There are cross-border coordination meetings between officials of Bavet (Cambodia) and Moc Bai (Viet Nam) as well as between border gate agencies such as Customs. There do not appear to be any consultations between representatives of the private sector or the management of the SEZs on each side of the border.

439. However, when an ADB team prepared a corridor concept plan in 2015 based on consultations with different stakeholders and a SWOT analysis (Gilchrist, 2015), a key principle of the plan was to bolster cross-border co-operation, and make the border area truly unique. As such the concept plan includes two bi-laterally managed project sites for consideration. These, shown as Sites 4 and 5 in Figure 51 are a key element of the plan to boost cross border

cooperation. “These sites would encourage joint planning and management for a variety of possible functions, namely:

- (i) Activities directly related to the processing of commercial traffic at the border (e.g. improving systems related to customs clearance, transport of goods and other logistical support for existing trade);
- (ii) Activities related to new activities serving existing industries on both sides of the border (such as symbiosis of industries, enhancing the value chain, upgrading of workforce skills through training programs, incentives such as bonded warehousing or special export zones, etc);
- (iii) Innovative border activities that attract visitors and entice tourists to increase their average length of stay at the border, such as developing new tourism products;
- (iv) Introducing industries that are completely new to the border area but take advantage of the strategic location, rising trade and building up of a critical mass of activity at the border.

440. Items related to trade and industry would be directed to the northern areas of the concept plan, building up a cluster of activities at the new border gate which in time can develop a collective expertise and know-how. They would respond to key issues raised during the SWOT analysis, namely cross-border congestion and administrative delays, shortage of skilled workers and the difficulties of attracting higher value investments

441. The site for cross-border co-operation will include the northwestern quadrant of the current Moc Bai SEZ which will therefore require a slight restructuring, although the existing upgrading projects carried out by ADB in this area (road improvements and introduction of water supply and wastewater treatment plants) will not be affected as shown in the concept plan. More detailed work will need to be carried out on how this zone could be incorporated as part of a wider joint border management and co-ordination” (Gilchrist, 2015).

## **b. Socio-Economic Profile**

442. The municipality of Bavet has prepared a five-year development plan which provides the medium-term development perspective covering the period 2015 -2019 (Bavet, 2015). The Development Plan Document is an integrated development plan that incorporates the socio-economic situational analysis, development framework including the vision statement and the spatial development framework, and monitoring and evaluation of the developed plan implementation.

### **(i) Demographic Characteristics**

443. In 2013, the Municipality of Bavet registered a total population of 37,795 people with 8,778 families, for an average size of 5 per household. Of the total population 19,791 are female which accounts for 51.31 per cent. The population density was reported at 446 persons per square kilometer. These figures are, however, misleading as they do not include in-migrants which form the majority of workers in the SEZs and most workers in the casinos and hotels. That population is well over 30,000 people as the Manhattan-Bavet SEZ employs already such a number of workers.

444. The following Table 34 presents a summary of the key demographic profile of Bavet.

**Table 34: Bavet Demographic Profile, 2013**

Description	Unit	Year 2013
Land Area (km square)	Km2	206.69
Number of Sangkat/Commune	Sangkat/Commune	05
Number of villages	Village	35
Total population	Pax	38,795
Total number of females	Pax	19,791
Annual population growth	%	0.2
Total number of households	Household	8,778
Rate of female household head	%	12.7
Rate of household whose primary occupations are in the agriculture sector	%	43.0
Rate of household whose primary occupations are not in the agriculture sector	%	57.0
Number of children under 6-11 years old non-enrollment	%	3.6
Number of illiterates under 15-45 years old	%	2.7
Rate of households with access to tap water	%	7.93
Rate of households with access to clean water well	%	92.07
Proportion of Households with access to toilet	%	62.26

Source: *The Five-Year Development Plan of Bavet Town, Svay Rieng Province (2015-2019)*

445. The projected annual population growth rate of Bavet is low at 0.2%, based on the Bavet Five-year Development Plan, 2015-2019. By 2020, the population is estimated at about 39,000. However, the annual growth rate of the population is only calculated for the residential population and does not include in-migration data. For both permanent residents and in-migrants, the estimated total population is close to 60,000 persons in 2013. This is based on the population census conducted by the Bavet Municipal Technical Working Group. The total population growth rate for in-migrants in Bavet from 2008 to June 2011 is approximately over 50 % of the total permanent residents. In-migration linked to the development of the SEZs remains substantial with an in-migrant population estimated at over 30,000. In-migration is expected to continue to grow rapidly over the next few years, seriously stretching urban infrastructure and services.

446. Recent figures on poverty are not available. In 2009, the poverty rate was estimated around 20%

### **(ii) Economic-Trade Profile**

447. Until the opening of the SEC, Bavet was essentially a rice growing agricultural area in one of the poorest provinces of Cambodia. Agriculture remains an important activity and source of income. About 60% of the (local non in-migrant population) still depend on agricultural activities mainly rice production. Raising cattle and livestock is another important activity. About 6,992 households out of a total of 8,778 depend on agriculture as their primary occupation.

448. Over the past decade and a half, tourism services-related activities have grown rapidly with the opening of several entertainment venues, large hotels and restaurants. An estimate of about 13 casinos are operating in Bavet, employing about 3,830 people of which 1,907 are female. However, over the past few years, the entertainment industry appears to be somewhat in decline.

449. The most remarkable change in Bavet's economy has been the opening and expansion of 4 main SEZs, with the 2 largest employing close to 30,000-35,000 workers. The number of industries in the SEZs has grown from just four in 2006 to over 60 in 2018. The industries are quite diverse from garments and footwear manufacturing to bicycles assembly but mainly geared towards labor-intensive manufacturing for exports outside ASEAN countries via HCMC port and airport. Well over half a billion US dollars of exports are produced in the Bavet SEZ factories.

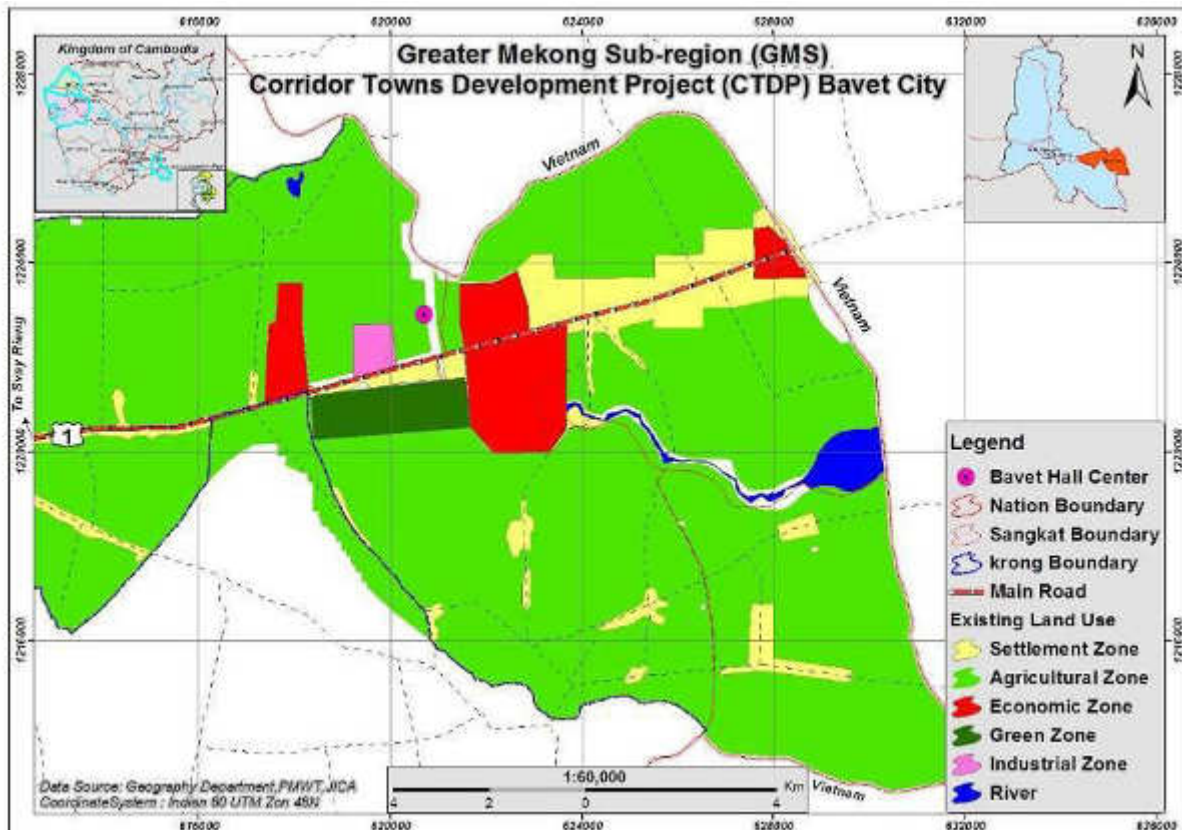
450. The future challenge will be to maintain competitiveness by raising productivity and cutting transport costs. Given its population size, Myanmar could emerge as a main competitor. Over time also better training and education would help raise the skills of the labor force and the possibility to attract higher value-added manufacturing. A major challenge also will be to improve border-crossing facilities and efficiency as well as ensuring that Bavet is an attractive and livable city for inhabitants and investors alike.

**c. Urban Infrastructure**

***(i) Existing Land Use and Zoning Map***

451. Bavet town stretches linearly along the “corridor” AH1 over a distance of 22 km, with one row of plots to either side of the highway, except for the area around the international market (2 km west of the border) and around the health centre (4km west of the border), where the built-up area widens to a grid of three streets running parallel on each side of the highway. At a further 2km distance to the west lie the two SEZs- Tai Seng Bavet and Manhattan Special Economic Zones -on each side of AH1 (about 7 km from the border gate with Viet Nam).

**Figure 50: Existing Land Use**



452. In addition to the main road AH1 which crosses the middle of the city, Bavet has 11.3 km of DBST roads, 1,250 m of concrete roads, 42,165 m of sand road, and 57,674 m of paved roads (most of them in poor condition due to damage during the rainy season and lack of O&M), and 8,200 m of gravel roads.

453. Bavet town has prepared its land use and zoning map with the assistance of the MLMUPC and other participating government agencies including MPWT. According to the land use plan, Bavet's land area is divided into agricultural, industrial, commercial, residential and administration zones. Of the total land area of 20,669 ha, the agricultural zone occupies the biggest area of 15,539 ha but is diminishing rapidly due to the expansion of the economic zones. The residential area is almost 4,310 ha that are situated mostly in the town center and those areas adjacent to the main road. Zoning enforcement is weak and as a result, there is a lot of encroaching on public land.

454. The improvement and widening of the main urban road AH1 for 8 km under the ADB-financed CTD 1 project from the border up to the SEZs' area will eventually open the agricultural lands for residential and commercial establishments as a consequence of full development of the industrial zone, which is the major economic driver for sustained development of Bavet.

### **(ii) Core Urban Area and Landscape**

455. Within the town, Sangkat Bavet is considered as the core urban area. The development along AH1 is mainly consisting of new buildings such as casinos and hotels, restaurants or eateries, beer gardens, shops/stalls and residence-cum-shops. It stretches into the middle of the town with available spaces for improvements and installation of urban amenities such as gardens or benches, and/or electricity street lamps.

456. Ditches or natural streams along some segments of the road are open and in need of dredging. Dealing with problems of sewerage and drainage systems in the town particularly during the rainy season is a task for the Town Governor since this would allow some form of relief to most households in the core town area (ADB SLEDP 2012). Due to poor or lack of drainage, about 80% of the area is flooded during the rainy season.

### **(iii) Urban Infrastructure**

457. Urban infrastructure is operated by the private sector and consists of:

- (i) Dry Ports: There are also three dry ports (So Gnourn, Tay Seng and VGT) along AH 1 close to the city area, as Viet Nameese trucks are only allowed to go 10 km into Cambodia. These dry ports do not have enough capacity and new dry port facilities of at least 10 ha are needed. The SEZs have their own dry ports.
- (ii) Bus terminal: Two existing small bus terminals in Bavet have been operating. The first terminal is located at the existing public market along AH1 and is used only for local travel between Bavet to Svay Rieng Province and other local areas. The second terminal is located near the border with Viet Nam. It is used only for tourist purposes both local and international, traveling from Phnom Penh to Viet Nam and vice versa. However, the existing two terminals do not comply with the international terminal standards just like the market complex (ADB SLEDP).
- (iii) Markets: Only two basic public markets namely the Bavet international market and the Chi Pou Market exist in the Bavet central areas. The private sector plans to invest in improving these facilities. The existing markets are used only by local people. At the moment, two investors applied for Duty Free Market investment along the border of Cambodia and Viet Nam and one has started operations (ADB SLEDP).

- (iv) SEZs: The main economic infrastructure in the urban area consists in the four SEZs mentioned earlier.

#### ***(iv) Urban Services***

458. Public investment in urban infrastructure has been very limited. In fact, power supply, water supply and solid waste management are all provided by the private sector but investment has been highly inadequate, thus leaving large parts of the town uncovered.

459. In addition, the projected growth of the total population in the future at about 10% will have a very serious impact on Bavet municipality. Bavet will be hugely challenged by the environmental impacts and inadequacy of urban infrastructure, including roads, solid waste and wastewater systems, water supply, housing and public services for a rapidly increasing population without much more infrastructure investment. This will obviously stretch the capacity of the provincial and municipal government.

#### *Water Supply and Sanitation*

460. Limited water supply is provided by two companies in Sangkat Bavet. One company – Khun AKPIWAT Co Ltd- operates in the core urban area with about 750 household connections while the other company – Chi-Phou Urban Water Supply Company- serves the Chi-Phou community with over 150 household connections. Hotels and casinos have their own water supply sources. All water supply is extracted from ground wells but coverage of the piped water system network is very limited. Water supply is a major issue in Bavet, including in the SEZs.

461. Only about 55% of households have access to toilets. The drainage system consists mainly of open drains formed from natural ditches and canals. ADB is financing construction of drainage along the 8 km stretch of AH1 being upgraded under CTDP 1. Much of the town remains without drainage and as a result, in the rainy season much of town is flooded.

#### *Wastewater System*

462. Existing wastewater canals and pipes are in very poor conditions and inadequate due to lack of funding. Even the SEZs face problems with wastewater treatment. Most of wastewater is channeled through open canals that are unsanitary. The ADB-financed CTDP 1 project includes the construction of separate sewage interceptors and piping system, upgrading the existing storm drainage canals and the installation of a new water treatment plant. The project should at least partially address the wastewater problems in Bavet.

#### *Solid Waste Management*

463. Solid waste management in Bavet is contracted out to a private company, Sok Kheng Co Ltd, since 2009. The collection coverage is very limited to a portion of the core urban area along road AH1. Only about 15% of the total households are served, together with the hotels and casinos. Solid waste management is a very serious issue. There is an open dumpsite 16 km from Bavet built with no technical consideration. Under the CTDP 1 project, ADB is financing a materials recovery facility.

#### *Flood Control and Drainage*

464. The urban land area of the municipality located in Sangkat Bavet gets about 80% flooded during the rainy season while the core area of the municipality gets about 35 % flooded. The construction of a drainage system along the 8 km stretch of road AH1 in the core urban area



under the ADB CTD 1 project will reduce flooding, in part of the municipality. Flooding will however remain a problem in much of the urban area. Flood water mixed together with wastewater flows directly into the wetland areas.

#### **d. Challenges for Bavet as a GMS Economic Hotspot**

465. Between Phnom Penh and Ho Chi Minh City, Bavet is the only location in Cambodia where there is already a critical mass of economic activities based on the still expanding special economic zones and the existence of a sizeable tourism industry based on casinos and hotels. The provincial capital, Svay Rieng, is a larger town but is far behind in terms of economic activities.

466. On the Vietnamese side of the border, there is a SEZ which is attracting investors, notably from Korea, although to a much lesser extent than Bavet. The Tay Ninh Province of Viet Nam has a sizeable population of over 1,100,000 people and a work force of 650,000. Although it has developed more slowly than Bavet, Moc Bai is an attractive location for foreign and Vietnamese investors alike partly because of its proximity to HCMC. There is great potential to create synergies between activities on both sides of the border. This will require close coordination and cooperation in border infrastructure planning and in strategic business development.

467. The large number of industries based in Bavet mainly rely on labor-intensive manufacturing as the employment figures show, together with an advantageous location close to HCMC's transport hub and further benefiting from Cambodia's favorable GSP regime and tax privileges associated with the investments in SEZs. While these are important advantages for investors, these advantages are not guaranteed over the medium and longer term. Remaining competitive and moving up the value chain are main challenges for Bavet. As has been experienced in other parts of the world and in Asia, labor-intensive industries can easily relocate if faced with labor issues or logistics costs increases.

468. As shown in Figure 51, Bavet town is basically designed along a single main road axis which has become very busy due to the passing of heavy commercial vehicles either going to the SEZs next to the town center or going to Phnom Penh. Development of the town based on expansion in a linear pattern is bound to increase road congestion on both sides of the border and threaten the existing road capacities. This will result in increasing delays and costs, and declining competitiveness.

469. The socio-economic disparities in Bavet are also bound to increase as the increasing number of workers need commuting, further contributing to road congestion and lowering productivity. This will make it more difficult to attract workers and in particular more skilled workers which are needed to move to higher value-added production.

470. Diseconomies of scale will occur as infrastructure planning plays catch-up with new developments. This will lead to an accelerated decline in the tourism sector which is already stagnating and eventually affect the attractiveness of Bavet as an investment hub. Bavet and Moc Bai could become a transit economy, limited to the passage of goods and people between Phnom Penh and HCMC (Gilchrist, 2015).

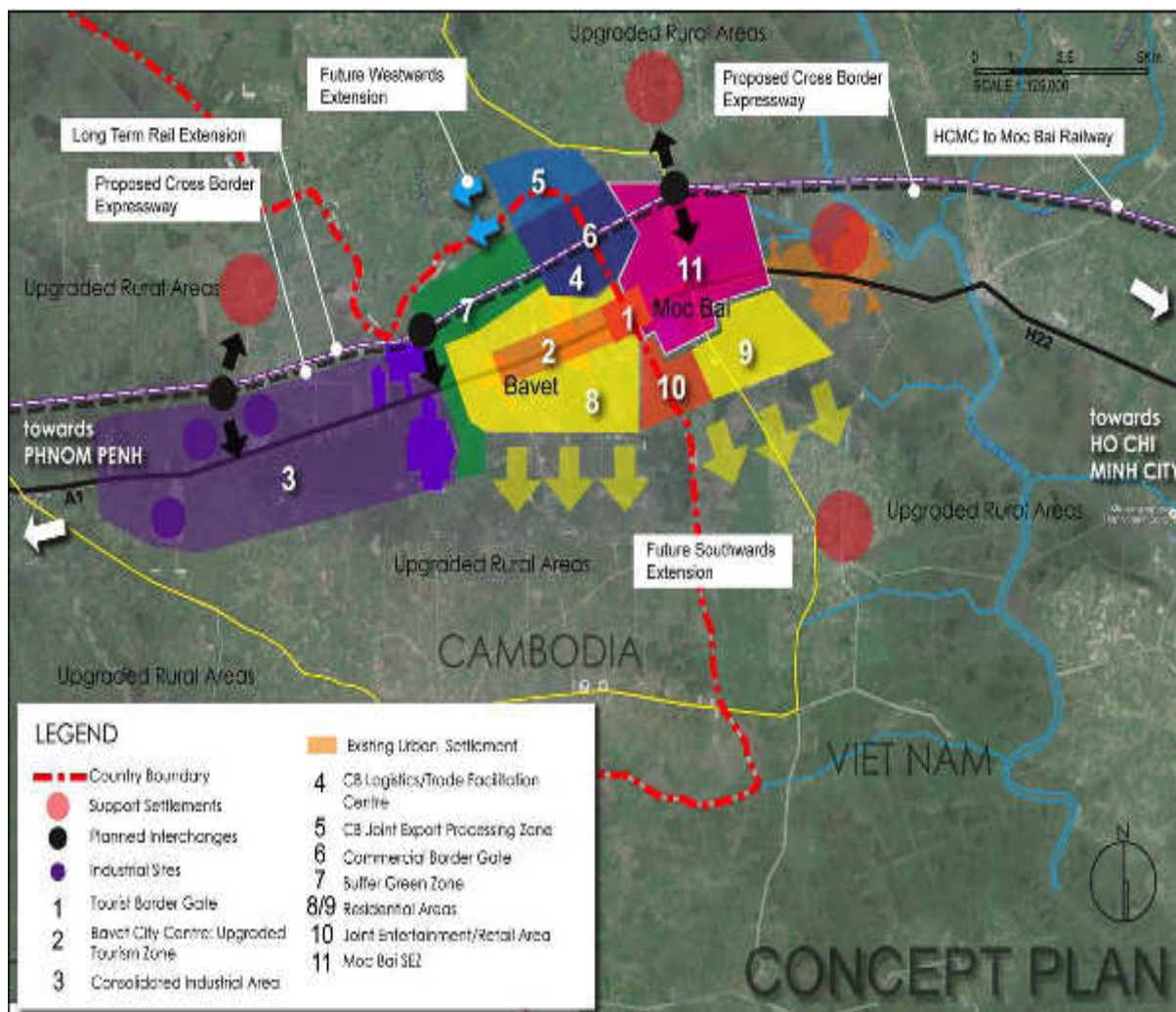
471. Instead of limited improvements in border and urban development, a more holistic approach to planning should be considered, drawing on greater cross border co-operation, better synergies between Bavet and Moc Bai, improved cross border infrastructure and more sustainable and integral forms of spatial planning.

472. In 2015, an ADB mission visited Bavet, undertook a SWOT analysis and proposed a preliminary concept plan for the development of Bavet (Gilchrist, 2015). Identified as an opportunity by the SWOT analysis, a new expressway, planned from HCMC to Phnom Penh should be seen as a catalyst to restructure the border area to achieve a more sustainable and

balanced distribution of land uses. The planning of such an expressway presents an opportunity to create an additional border post and to therefore relieve the existing border post of heavy industrial traffic (Figure 51). Part of the expressway around Bavet and Moc Bai could be developed prior to the completion of the full length between Phnom Penh and HCMC.

473. Under the concept plan, the recommended alignment for the new expressway lies to the north of the existing border post. This is commensurate with the site searches already carried out by the Svay Rieng Provincial Government for additional border facilities, where potential sites were investigated to the north of the existing border. This was confirmed also during the field visit. Moreover, the more plentiful land north of AH1 and the fewer land constraints to the east and north of H22 (the road on the Viet Nameese side from HCMC to Moc Bai) as it approaches Moc Bai make an expressway alignment in the northern part of the border area preferable. This will notably allow a clear separation of industrial and non-industrial traffic, with compatible supporting land uses related to trade being distributed in the northern part of the border area (Figure 51). The expressway would be connected to the SEZs with a by-pass to area 3 in figure 51.

**Figure 51: Concept Plan for Bavet: ADB May 2015**



Source: Gilchrist 2015

474. The existing border post to the south meanwhile, being relieved of heavy industrial traffic, would be in a position to more positively influence tourism, as tourists and business visitors would pass the border area in a relatively uncongested and less polluting environment. The old border access road corridor can be enhanced to offer a better sense of place and arrival. This would entail restructuring on both sides of the border to create a more amenable environment for tourists to shop, stay in hotels and be entertained. Both respective entrances to Viet Nam and Cambodia should be perceived as gateways for a growing pool of first-time tourists that need to be impressed once they have crossed the border.

475. It follows that uses on the southern part of the border area would therefore relate more to non-industrial uses such as residential, civic and recreational land uses (areas 2 and 8 in Bavet; area 9 in Moc Bai), while the industrial and trade related uses would be concentrated in the north (area 3). Both uses can have strong linkages, which is why a housing zone is proposed in between, to both access jobs to the north and east and recreational type uses to the south. This, which can include an element of social housing, would respond to the weaknesses identified in the SWOT analysis of current workers having to commute large distances to the newly built factories in Bavet, to the detriment of both living quality and productivity. This would also encourage the large number of migrant workers to settle down in Bavet and more skilled workers to be attracted to the town. This would also stimulate demand for local services (local shops, health care, education, urban services, training centers for workers, etc). A de facto city centre would emerge to serve the growing industrial areas

476. The housing area can expand further southwards in time, whilst in the north, the industrial uses can also expand westwards or northwards. With the consolidation of the industrial area on the Cambodian side (which may eventually form an industrial park), a clear segregation of non-compatible land uses will therefore result. Given the plentiful land available, as made apparent during the field visit (a key strength in and around Bavet) the improved distribution of land uses has the makings of a powerful border node with an array of different functions and economic activities.

477. The existing areas around the border post will need to be restructured to conform to the above land use distribution. This can be through a redevelopment of industrial related land uses that will be relocated to the north on larger and better-serviced sites, as well as through beautification of the public areas. As pointed out in the field visit, the present dry port facility in Bavet near the existing border point is too small and would benefit from a relocation to a larger site around which a cluster of compatible uses can emerge.

478. In a similar vein, the restructuring of industrial sites in Bavet can be achieved by enveloping a distinct industrial zone in which SEZs can be grouped together. This will allow enterprises opportunities through time to plan common facilities, share utility and transport infrastructure, develop symbioses between industries, and expand in an orderly and efficient manner. Such organized planning of the industrial zones is likely to attract further investment, notably in higher value uses and including foreign direct investment. It will considerably raise the profile of the SEZs in Bavet and bring economies of scale in utility infrastructure provision (notably electricity, a major weakness identified in the SWOT analysis). If jointly marketed with the Moc Bai SEZs, a wider range of investors may be attracted through possibilities of enterprises diversifying their participation in the value chains on both sides of the border.<sup>109</sup> The table below summarizes planning objectives and actions.

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<sup>109</sup> Source: Gilchriest, S. (2015) Concept Plan for Bavet, ADB, May 2015

**Table 35: Planning objectives and actions**

Key Planning Objectives	Proposed Actions
Decongest and Upgrade Border Area	<ul style="list-style-type: none"> <li>• Streamline cross border customs procedures and improve infrastructure</li> <li>• Create new border post</li> </ul>
Restructure Key Urban Industrial Area	<ul style="list-style-type: none"> <li>• Cluster industries in specific area</li> <li>• Achieve economies of scale in utility infrastructure</li> </ul>
Achieve better life-work balance	<ul style="list-style-type: none"> <li>• Introduce more housing and services</li> </ul>
Achieve better land use distribution	<ul style="list-style-type: none"> <li>• Segregate industrial-related traffic and uses</li> <li>• Upgrade tourism area</li> <li>• Introduce buffer areas</li> <li>• Introduce controlled access on new road infrastructure</li> </ul>
Reduce travel times from/to border area	<ul style="list-style-type: none"> <li>• Introduce planned expressway and possible future rail links</li> </ul>
Complement existing regulatory role of border with pro-active facilities to support cross border trade and investment	<ul style="list-style-type: none"> <li>• Build on critical mass of Government services to include trade and investment advice centres</li> <li>• Develop logistical and trade facilitation centre</li> <li>• Initiate joint export processing zone</li> </ul>

Source: Gilchrist 2015

479. A key principle of the plan should be to bolster cross-border co-operation, and make the border area unique. Two bi-laterally managed project sites are included in the concept plan. These, shown as Sites 4 and 5 in the Concept Plan, are a key element of the plan to boost cross-border cooperation. These sites would encourage joint planning and management for a variety of possible functions summarized A 3 above. A major objective is to reduce time and costs of cross-border operations, and make customs procedures transparent and predictable for the private sector. The possibility to create a cross-border export processing zone might also be explored

480. The restructuring of the Bavet border town will require significant investments by both the public and private sector over time but it is important that this is done within a clear long-term vision and strategy which will insure that the developments of Bavet are sustainable and the town develops as a major industrial center over time.

#### **4. Institutional Aspects and Challenges in Poipet and Bavet**

##### **a. General situation**

481. The present institutional framework of Cambodia is designed to serve a long-term policy: the so-called Rectangular Strategy for Growth Employment, Equity and Efficiency, of which Phase III started in 2014<sup>110</sup>. This strategy<sup>111</sup> is guided by a vision for Cambodia by 2030, provides the basic orientations to NSDP (presently 2014-2018) and justifies the de-concentration and

<sup>110</sup> RGC, 2013, "Rectangular Strategy for Growth Employment Equity and Efficiency; Of the Fifth Legislature of the National Assembly, September.

<sup>111</sup> Rectangular Strategy was followed by other important documents such as the Strategic Framework on D&D Reforms (2005) and the National Program for Sub-national Democratic Development (2010).

decentralization policy (D&D) Implemented since 2008. The four priority areas of Rectangular Strategy Phase III are fourfold<sup>112</sup>:

- Priority area 1: Development of human resources to ensure competitiveness in an increasingly open regional labor market (focused on capacity development and regulation, in particular of the productive sector)
- Priority area 2: Continued investment in transport infrastructure and improving trade facilitation to develop a vibrant logistics system (focused on connectivity within and outside the country)
- Priority area 3: Further development of and increasing value added in agriculture,
- Priority area 4: Strengthening governance and capacity of public institutions in order to improve the efficiency of public service delivery and investment climate (GMS CTDP4 directly corresponds to this priority area).

482. Despite the D&D policy implemented since the Organic Law on Administrative Management of the Municipalities (2008) and the Law on Public Finance System (2008), Cambodia remains still a centralized country. Therefore, the review of institutional arrangements at the national-level is needed to understand these arrangements and the local governance at the local level, in particular in the cases of provinces/towns such as Banteay Meanchey/Poipet and Sveng Ray/Bavet of which fast development is recent. Interestingly, Poipet and Bavet districts, both international border gates were granted the status of municipality the same year (2008) by national sub-decrees No 232 (Poipet) and No 233 (Bavet).

483. In Cambodia, provinces, municipalities, sangkat/communes<sup>113</sup> and villages are commonly qualified in the regulation and policy documents as sub-national authorities (SNAs). According to the D&D policy, municipalities and sangkat/communes should benefit from a greater autonomy of decision-making. Although provincial government and administrations remain keys in the public decisions related to SNAs, the balance of power between provincial and municipal institutions varies. In provinces where the municipal areas generate most of the provincial revenues, the influence of the municipal governor is likely higher compared with more agriculture-oriented provinces (e.g. Rattanakiri or Mondulakiri). However, no comprehensive comparative study is yet available on this matter.

484. A large number of national agencies are concerned by the scope of TA 8989. The main ones are listed in the Table 36 below. The main tasks of ministries comprise policy preparation, preparation and enforcement of regulations, registration, strategic planning, inspections, standards and guidance. The ministries are traditionally compartmented and therefore implementing cross-sectoral initiatives is challenging in Cambodia, despite the establishment of a large number of inter-ministerial committees (see below). MOEF, MOI and MOC are key-institutions to prepare and approve the main national regulations related to SNAs, in particular guidance related to local regulations, planning methods, public staffing and budget. In addition, the CDC, under the direct authority of the Prime Minister, is a primary institutional stakeholder of economic development, in particular to define and stimulate local priority investments determined as strategic to the economy (e.g. land concessions for mining, SEZ, etc.). Technical ministries, such as MPWT, MOE, MIH, or MLMUPC remain at the frontline regarding development of economic infrastructure and the MOP for the preparation of the three-year rolling Public Investment Program-PIP (prepared also at provincial level). Other ministries must deal with critical challenges at the local level but their own resources remain limited in this regard: MPT, MOT,

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<sup>112</sup> This list is extracted from GMS CDTP-4, TA 9192.

<sup>113</sup> "Sangkat" designates municipal sub-divisions, "communes" designates sub-divisions of districts. The system differs in Phnom Penh (where sub-divisions are known as *khan*).

MLVT, MOWA, etc. The Table 36 below lists RGC ministries in two categories related to responsibilities in development of BEZs: “Key Ministries”, which would key interlocutors for BEZ development in Poipet and Bavet, and “Other Ministries”<sup>114</sup>.

**Table 36: Ministries Related to Development of BEZs and Responsibilities**

Council, Ministries and General Departments/Departments	Provincial level	Responsibilities related to GMS BEZs
<b>Key ministries and national institutions</b>		
<p>Cambodia Development Council (CDC)  <i>Main boards concerned:</i> i) Cambodian Special Economic Zone Board ii) Cambodian Investment Board iii) Rehabilitation and Development Board</p> <p>National Secretariat of the Greater Mekong Sub-region (NSGMS)</p>	None	<p>SEZ, Management of Foreign Investment, PPP, Investments promotion guarantees and incentives (over 50 million USD), ODA coordination and aid efficiency (Paris Declaration, Busan Agreement etc.), Cambodia’s Secretariat of GMS.</p> <p><i>Missions of the CDC are defined by Sub Decree No. 60 ANK BK, dated 05th April 2016. See also Sub Decrees No 147 ANK BK and No 148 ANK BK, both dated December 29th 2005<sup>115</sup>, and also Sub-Decree No. 149 ANK BK, and dated 03rd October 2008</i></p>
<p>Ministry of Foreign Affairs and International Cooperation (MOFAIC)  <i>Main General Departments concerned:</i> i) ASEAN Affairs, ii) Legal, Consular and Border Affairs [Dept. of Border Affairs] iii) International Cooperation [Mekong Depart.]</p>	None	<p>International cooperation, twinning, consular affairs in Viet Nam and Thailand, GMS agreement (with CDC)</p>
<p>Ministry of Public Works and Transport (MPWT)  <i>Main General Departments concerned:</i> i) Public Works ii) Transport</p>	<p>DPWT</p> <p>Municipal: Office of Public Works and Transport</p>	<p>Wastewater and drainage, roads, bridges and river banks, ports and airports, railways, logistics, dry ports and sea ports, vehicles registration, traffic safety. MPWT Executing Agency for many ADB GMS projects (CDTP)  <i>Missions of the MPWT are defined by sub-decree on the organization and functioning of the Ministry of Public Works and Transport No. 14 dated March 3, 1997.</i></p>
<p>Ministry of Economy and Finance (MEF)  <i>Main General Departments concerned:</i> i) National Treasury ii) Budget (incl. Depart. of Investments /Office for Private Sector Development), iii) State Property and non-Tax Revenues iii) Taxes iv) International Cooperation and Debt Management (incl. Dept. of Economic Integration and ASEAN Department), v) Customs and Excise</p>	DEF	<p>State budget, national and sub-national budgets, debt management and ODA, Customs, tariffs for public services, public debt, tax collection, investment promotion, public private partnership, economic integration and ASEAN<sup>116</sup>.</p> <p><i>Missions of the MEF are defined by the Sub-Decree on The Organization and Functioning of the Ministry of Economy and Finance (04/ANK/BK) dated 20 Jan. 2000.</i></p>

<sup>114</sup> This estimate is based in particular on the experience of consultant team of ADB projects Cambodia, In particular PPTA of GMS 2-CDTP, GMS 4-CDTP and current Urban Environment Improvement Project Implementation.

<sup>115</sup> 147: on the Organization and Functioning of the Council for the Development of Cambodia. 148: on the establishment and management of Special Economic Zones,

<sup>116</sup> The Undersecretary of the MEF is National GMS coordinator for Cambodia.

Council, Ministries and General Departments/Departments	Provincial level	Responsibilities related to GMS BEZs
Ministry of Interior (MOI) <i>Main General Departments concerned:</i> i) Local Affairs ii) Immigration	None. But Governors are former MOI officers (Organic Law).	Regulation of local administrations, Local governance, registration of NGOs, support to D&D process (through NCDD-S), immigration and visas, international checkpoint facilities <i>Missions of the MOI are defined by Sub-Decree concerning the Organization and Functioning of Ministry of Interior<sup>117</sup> (No. 16 SD/LV), dated 20 December 1993.</i>
National Council for Sub-national Democratic Development (NCDD) <i>Advisory body: Composed of a tenth of ministries plus the CDC, the State Secretariat for Civil Service, and the Office of the Council of Ministers</i> <i>NCDD-Secretariat composed of MOI officers and external appointed specialists</i>	None but <i>sala khet</i> is possibly the main operational interlocutor locally	Identifies conditions of transferability of competences to sub-national level: redeployment of personnel, change of administrative boundaries and financial mechanisms. <i>Missions of the MOI are defined by sub-decree NS/RKT/1208/1429 dated 2009</i>
Ministry of Environment (MOE) <i>Main General Departments concerned:</i> Environment Protection (incl. Dept. of Solid Waste, Dept. of Pollution Control, Dept. of Nature Protection and Conservation, Dept. of EIA, Dept. of Water Quality Management)	DOE	Pollution control and public laboratories, garbage and solid waste, toxic waste, quality of environmental impacts, natural river courses and lakes, sources protection, adaptation to climate change, nature conservation and protection and management of protected areas. <i>Missions of the MOE are defined by Sub-decree on the Organization and Functioning of Ministry of Environment (55 ANKr.BK) dated 04 May, 2015</i>
Ministry of Commerce (MOC) <i>Main General Department concerned:</i> Technical General Directorate (incl. Domestic Trade Dept. and Foreign Trade Dept. Imported and Exported Goods and Fraud Repression Dept., ASEAN and International Agencies Depart. Export Promotion Dept.)	DOC	ASEAN, trade foreign trade and domestic trade, business licensing. <i>Missions of the MOC are defined by Sub-decree on the on the organization and functioning of the Ministry of Commerce (No. 54/ANK/BK) dated September 22, 1997</i>
Ministry of Water Resources and Meteorology (MOWRAM) <i>Main General Department concerned:</i> i) Technical Affairs (incl. Department of Hydrology and River Works, Department of Irrigation and Agriculture, Department of Water Resource Management and Conservation, Department of Meteorology).	DOWRAM	Hydrology, hydrology, meteorology, floods prevention, irrigation, river banks. <i>Missions of the MOWRAM are defined by Sub-decree on the Organization and Functioning of Ministry of Water Resources and Meteorology (58 ANKr.BK) dated 30 June, 1999</i>
Ministry of Land Management Urban Planning and Construction (MLMUPC) <i>Main General Department concerned:</i> i) Land Management and Urban Planning, ii) Housing, iii) Construction	DLMUPC	Land use planning and cadasters, urban planning, housing, building safety and codes, architecture, construction permitting <i>Missions of the MLMUPC are defined by sub-degree on the organization and functioning of the</i>

<sup>117</sup> See also Royal Kram No. NS/RKT/0196/08, dated 24 January 1996, promulgating the Law on the Establishment of Ministry of Interior

Council, Ministries and General Departments/Departments	Provincial level	Responsibilities related to GMS BEZs
Ministry of Mines and Energy (MME) <i>Main General Department concerned:</i> i) Energy, ii) Mineral Resources Electricity Authority of Cambodia Electricite du Cambodge	DME	<i>Ministry of Land Management Urbanization and Construction (62ANKR.BK) dated July 20, 1999<sup>118</sup>.</i> Electricity sector, mining industry petroleum and gas, incl. licensing and concession granting, regulation of the electricity sector by the Electricity Authority of Cambodia.  <i>Missions of the MME are basically defined by Royal sub-degree on the organization and functioning of the Ministry of Industry, Mines and Energy (35ANK/BK) dated April 26, 1999. MME was established by Royal-Decree No..NS/RKM/1213/017 dated 09 December 2013 on the Establishment of Ministry of Mine and Energy.</i>
Ministry of Industry and Handicraft (MIH) <i>Main General Department concerned:</i> Industry (Departments: i) Potable Water ii) Techniques, Science and Technology <i>Institute of Standards</i>	DIH	Urban water supply, industrial standards, SMEs and handicraft development, industrial innovation, industrial patents and ASEAN Patent Examination Cooperation (ASPEC). MIH is Executing Agency for ADB urban water supply projects <i>Missions of the MIH are basically defined by Royal sub-degree on the organization and functioning of the Ministry of Industry, Mines and Energy (35ANK/BK) dated April 26, 1999. MIH was established by Royal-Decree No..NS/RKM/1213/018 dated 09 December 2013 on the Establishment of Ministry of Industry and Handicraft.</i>
Ministry of Planning (MOP) <i>Main General Department concerned:</i> i) Planning ii) Statistics	DOP	National Socio-economic Development Plan, three years PIP, census, economic statistics, evaluation of local development policies <i>Missions of the MOP are defined by Sub-decree on the Organization and Functioning of Ministry of Planning (70 ANKr.BK) dated 20 February, 2014</i>
<b>Other Ministries</b>		
Ministry of Agriculture, Forestry and Fisheries (MAFF) <i>Main General Department concerned:</i> i) General Directorate (incl. Dept. of Agriculture, Dept. of Animal Health and Production, Dept. of Fisheries, Dept. of Agro-industry, Dept. of Forestry and Wildlife, Dept. of Agronomy and Land Extension) The MAFF controls a large number of rubber plantation companies	DAFF	Agriculture and bio-agriculture, land concessions, fisheries management, forestry management, plantations, line ministry for Economic Land Concessions as defined by the last Land Law (2001) <i>Missions of the MAFF are defined by Sub-decree on the on the organization and functioning of the Ministry of Agriculture, Forestry and Fisheries (No. 17/ANK/BK) dated April 7, 2000. The role and functions of MAFF were increased by sub-decree 105/ANK/BK dated August 22, 2005</i>
Ministry of Rural Development (MRD)	DRD	Rural infrastructure and livelihood in rural areas, in particular rural roads, water supply and sanitation, rural poverty alleviation.

<sup>118</sup> See also Law on the Establishment of the Ministry of Land Management, Urbanization and Construction (Royal Kram No NS/RKM/0699/09 of June 23, 1999).



Council, Ministries and General Departments/Departments	Provincial level	Responsibilities related to GMS BEZs
		Preparation of the National Strategy for Water Supply and Hygiene 2011-20125. <i>Missions of the MRD are defined by the Law establishing the Ministry of Rural Development (NS/RKM/0196/20) dated 24 January 1996</i>
Ministry of Women Affairs (MWA)	DWA	Gender equality, promotion of women-supported economic activities, fight against human trafficking
Ministry of Posts and Telecommunications (MPT) <i>Main General Department concerned: ITC (incl. i) Depart. of e-government, ii) ICT Policy Depart., iii) Depart. of National Infrastructure Management and Video Content, and iv) Depart. of Computer Application and Content).</i>	DPT	Posts, telecommunications, Implementation of ICT Masterplan by 2020, e-governance, regulation (regulation authority for telecommunication). <i>Missions of the MPT are defined by the Law establishing the Ministry of Posts and Telecommunications (NS/RKM/0196/20) dated 24 January 1996</i>
Ministry of Health (MOH)	DOH	Food safety, drinking water safety
Ministry of Tourism (MOT)	DOT Municipal: Tourism Authority	Promotion of tourism and statistics, issue business licenses for hotels, casinos and tourism agencies, tourisms standards and labeling, transport and logistics for tourism, management of tourism services at border crossing points
Ministry of Culture and Fine Arts (MCFA)	DCFA	Cultural heritage (tangible or intangible), museums
Ministry of Labor and Vocational Training (MLVT)	DLVT	Labor regulation, vocational training

485. National ministries are often represented in national committees established to facilitate the inter-ministerial coordination for issues of a national interest and to advise the RGC. They are established by official decisions (e.g. the Climate Change National Committee, the National Economic and Financial Policy committee, the National Committee for Sub-national Democratic Development (NCDD), the Public Administrative Reform Committee, the National Committee for Disaster management, the Mekong Committee, etc.). Few committees have substantial budgets to operate except some, such as the NCDD which has its own secretariat (50 staff, most from MOI) and budget to provide advisory and capacity development and training tasks in the provinces. Another interesting case is the Special Economic Zones Trouble Shooting Committee under the CDC, of which 8 ministers are members, whose function is to facilitate solving problems arising related to the development of SEZ projects.

486. Following 2008 and the two major laws mentioned above, the RGC has issued a large number of regulations, for instance recently in the fields of solid waste (sub-decree 113; 2015), wastewater and drainage (sub-decree 235; 2018), and urban planning (sub-decree 77<sup>119</sup>; 2012 sub-decree 42; 2015)<sup>120</sup>. But provinces and towns often lack the necessary guidance required to apply the regulations locally (*deika*, or provincial/municipal circulars). Important efforts have also

<sup>119</sup> Sub-decree No. 77 on the establishment of the Capital, Provincial, Municipal, District and Khan Committee for Land Management and Urban Planning (2012)

<sup>120</sup> RGC, 2015, Sub-decree n°42 ANKR/BK on Urbanization of Capital City, Towns and Urban Areas, April

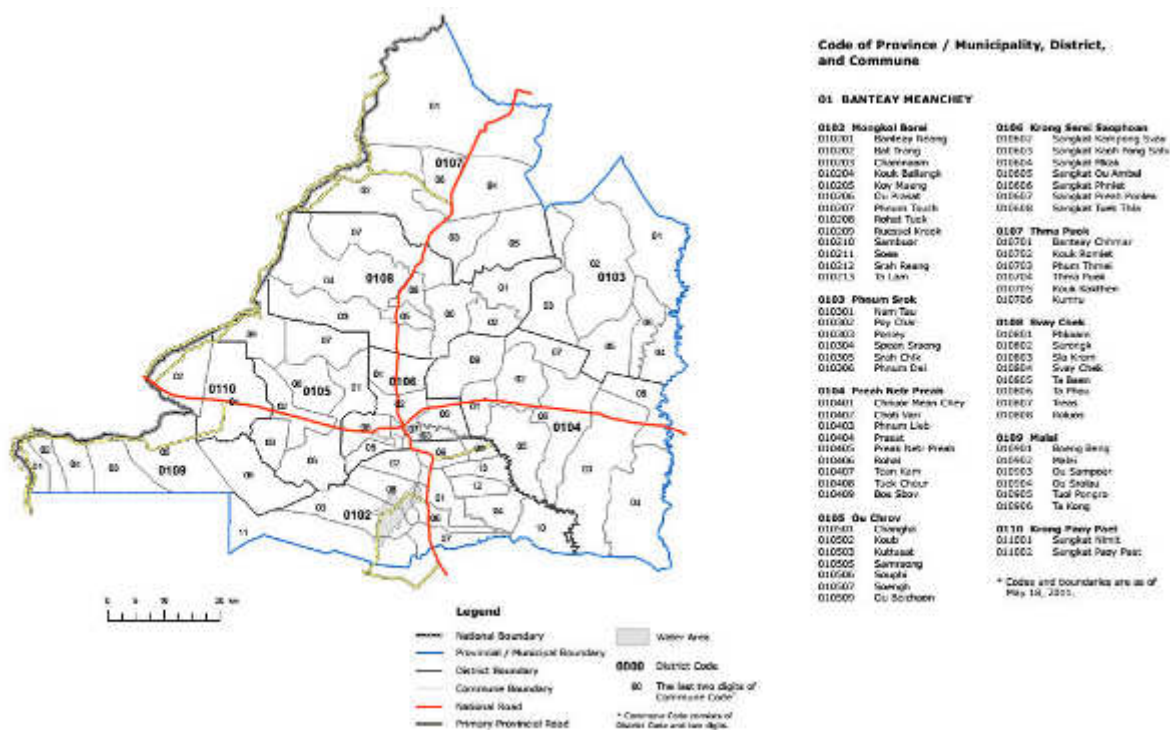
been provided to reform the public financial management (PFM) system<sup>121</sup>. But the situation of SNAs remains generally the same; a lack of budget and difficulties to recruit new staff.

## b. Local Institutional Framework

### (i) Poipet

487. Banteay Meanchey (“Fortress of Victory” in Khmer)<sup>122</sup> is composed of 2 municipalities (*krong*), Sisophon<sup>123</sup> and Poipet, 7 Districts and 64 Sangkat (or communes). Poipet achieved the rank of municipality following sub-Decree 232 dated 2008 and comprises three Sangkat including Poipet (alternative transcription: Paoy Paet), Phsar Kandal, and Nimit (and a total of 38 villages today against 26 in 2008)<sup>124</sup>. In 2010, The Municipality comprised only two Sangkat but Phsar Kandal, where Sanco SEZ is located, was added in the early 2010s by re-arranging administrative boundaries and village numbers when this SEZ was established. Poipet Municipality is separated from Sisophon Municipality by Ou Chrov District. The urbanization process in Poipet District has partially concerned Ou Chrov Sangkat.

**Figure 52: Municipalities, Districts and Sangkat in the Banteay Meanchey Province**



Source: National Institute of Statistics / Ministry of Planning<sup>125</sup>

<sup>121</sup> National Program for Administrative Reform 2015-2018 and Public Financial Management Reform Program

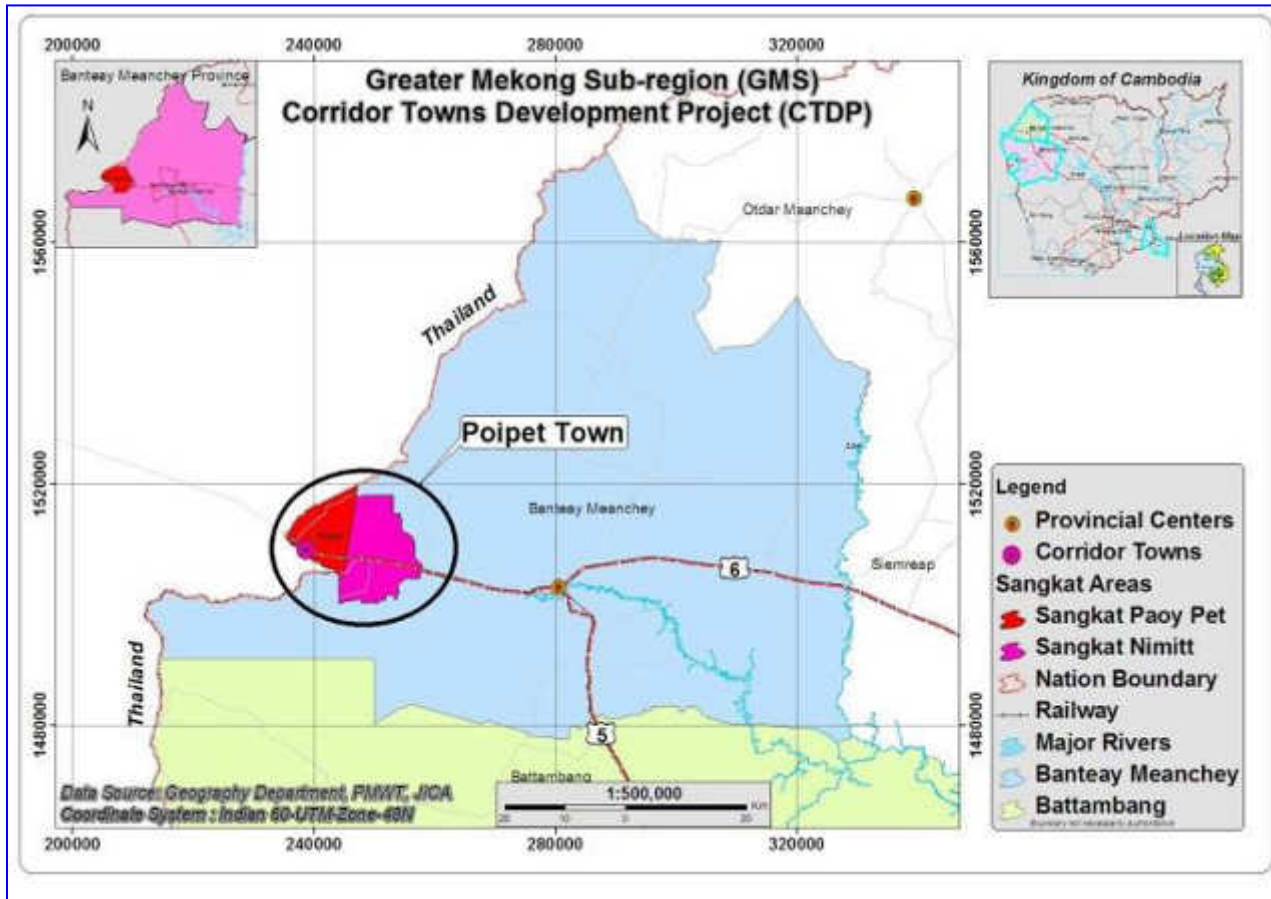
<sup>122</sup> Banteay Meanchey province was split off from Battambang province in 1988

<sup>123</sup> Or transcribed Serei Saophon or Serei Sophorn

<sup>124</sup> In 2008, Poipet Sangkat comprised 11 villages and Nimit Sangkat 15 villages

<sup>125</sup> National Institute of Statistics, Ministry of Planning, 2013, Economic Census of Cambodia 2011, Provincial Report 01 Banteay Meanchay Province, March.

Figure 53: The two Sangkat of Poipet Municipality



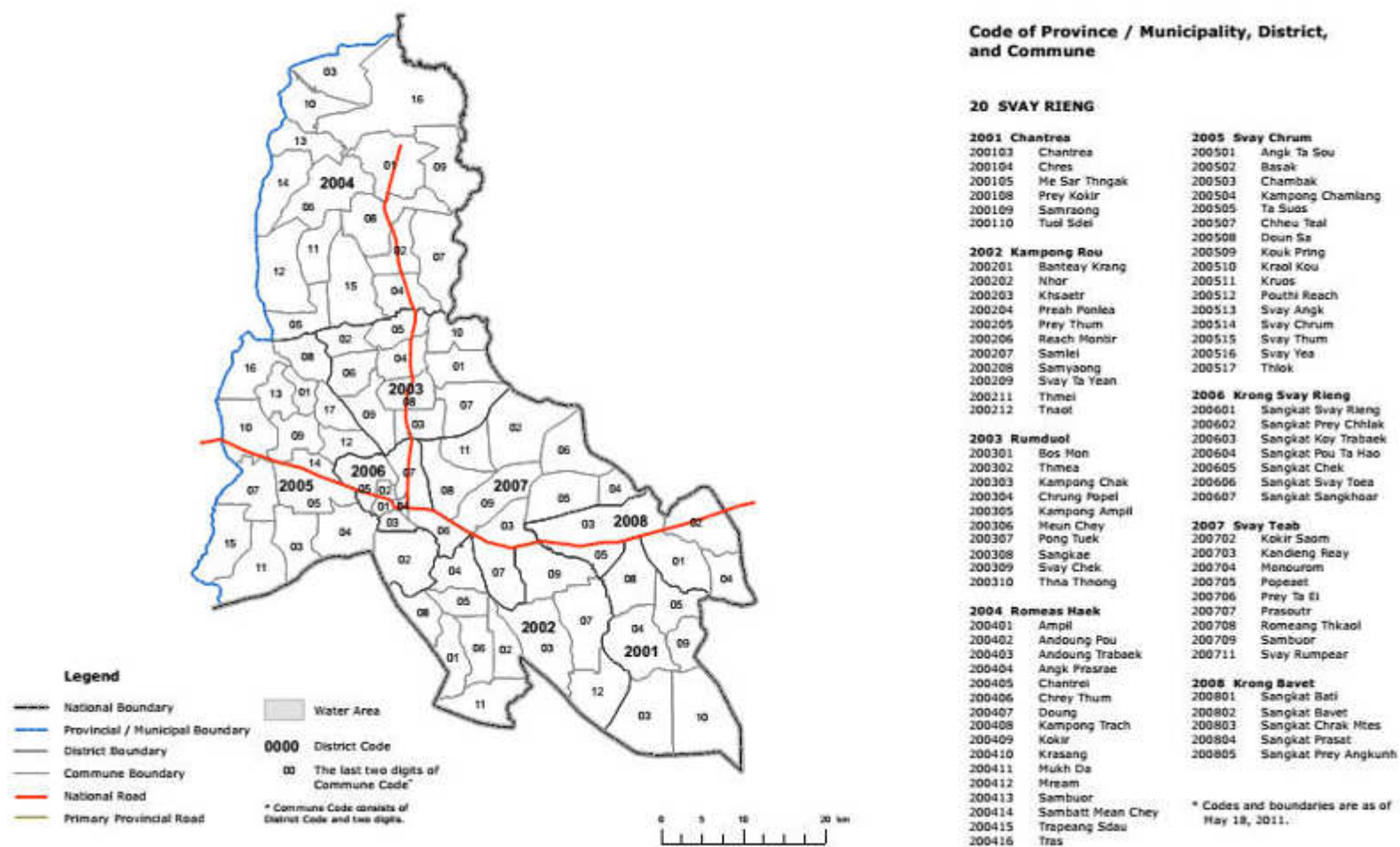
Source: SELDP, TA 7644-REG<sup>126</sup>

**(ii) Bavet**

488. Svay Rieng province is composed of 2 municipalities (*krong*), Svay Rieng and Bavet, 6 Districts and 80 Sangkat. Bavet achieved the rank of municipality following sub-decree 233 (2008) and comprises five Sangkat (Bavet, Bati, Prasat, Prey Angkunh and Chrak Mtes), and a total of 35 villages in 2012.

<sup>126</sup> CTDPI

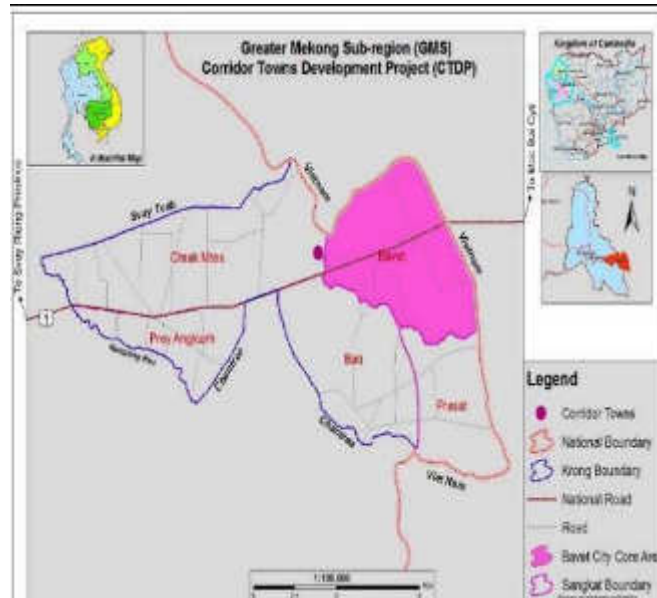
Figure 54: Municipalities, Districts and Sangkat in the Svay Rieng Province



Source: National Institute of Statistics, Ministry of Planning<sup>127</sup>

<sup>127</sup> National Institute of Statistics, Ministry of Planning, 2013, Economic Census of Cambodia 2011, Provincial Report 20 Svay Rieng Province, March.

**Figure 55: Map of the five Sangkat in Bavet<sup>128</sup>**



489. **Institutional arrangements at provincial level<sup>129</sup>**. Each province is headed by a Governor assisted by three Vice Governors, appointed by the Prime Minister. Together they form the Provincial Board of Governors. They are assisted in their management tasks by a provincial office (*sala khet*) headed by a director. In parallel are provincial departments (DEF, DPWT, DOE, etc.) which report both to their line ministry and to the provincial government. In accordance with the Organic Law (2008), committees have been established ((i) Procurement, (ii) Technical, (iii) Women and Children), commonly composed of representatives of the government and qualified managers of provincial departments to propose decisions to the PBG and to coordinate the action of provincial administrations. Each province has also an elected council to which major subjects are submitted for approval. In a D&D perspective, the role of the provincial Council<sup>130</sup> is potentially important but the recent establishment of this institution in a context where the executive power of the provincial level remains strong, makes an assessment difficult at this stage, within the framework of TA 8989. Each provincial DPWT is the PIU for components of CTD1 in Poipet and Bavet. In spite of the delays implementation of CTD1, DPWT staff is nonetheless learning about ADB procedures and project management practice, under the guidance of the PMU in Phnom Penh (MPWT; GDPW).

490. Provincial Departments concentrate the main technical experience at the SNA level, compared with Districts and sub-district institutions. In the present context, district and sub-district institutions' main tasks are to contribute to the preparation of the provincial planning documents, to implement ODA projects and to provide technical assistance to the provincial government – and in the case of DPWT, DOWRAM and DRD in particular, to assume responsibilities of construction and O&M of infrastructure in most of the districts. Commonly, and there is no reason

<sup>128</sup> Source: ADB TA 7644-REG, taken from SLEDP 2012

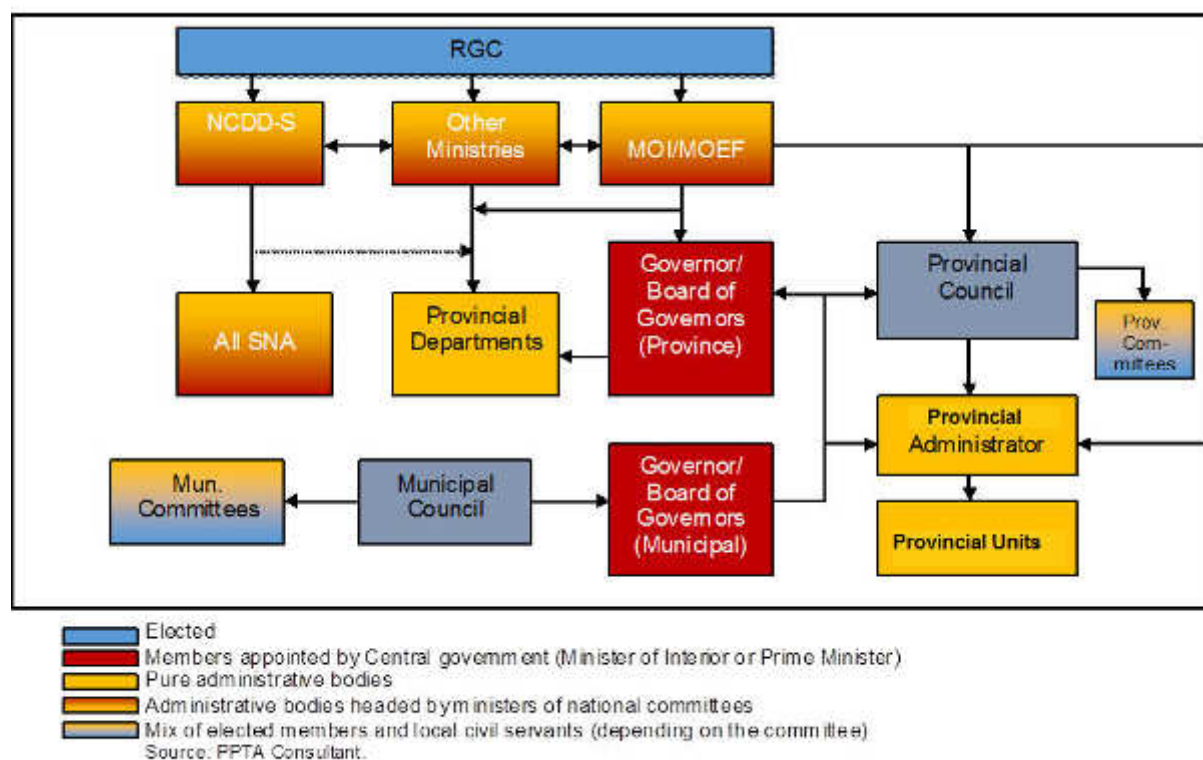
<sup>129</sup> See also Sub-decree 216 on Roles, Duties and Working Relationship of the Provincial Council and Board of Governors, Municipal Council and Board of Governors and District Council and Board of Governors (2009).

<sup>130</sup> Provincial councilors are elected by Municipal Councilors

that Banteay Meanchey and Svay Rieng provinces represent different cases, these departments have challenging tasks compared with their capacities: they lack budgets and qualified staff.

491. Poipet and Bavet municipalities are each headed by a governor assisted by three vice governors (Municipal Board of Governors). The Municipal Board of Governors is assisted for its management tasks by an office (*sala krong*) headed by a director, composed of units (e.g. Administration and Procurement, Finances and Properties, Investments, One Window Service Office, Poverty Alleviation Office, etc.). In parallel are municipal-level offices of the provincial departments (Office of Public Works, Office of Environment, Office of Economy and Finance, Office of Land Management and Construction, etc.) which each report to their line department and to the municipal government. Aside from the three committees required by the Organic Law, other committees were set-up at the municipal level (e.g. Planning and Investment Committee). By law, the municipal governor is accountable to the elected municipal council<sup>131</sup> to which major subjects are submitted for approval. Each Sangkat is headed by a Chief, assisted by one clerk and one assistant; Sangkat have their own elected Committee and budget<sup>132</sup>. Each village, 26 in Poipet and 35 in Bavet, is headed by a chief, elected by the Sangkat's Council. The general organization chart of the municipal government is inserted below.

**Figure 56: The institutional arrangement in provinces and municipalities in Cambodia**



<sup>131</sup> Municipal councilors are elected by Commune/Sangkat councilors

<sup>132</sup> These budgets are limited however. In the case of Kampong Cham for instance, each Sangkat manages a budget of USD 21,000 per year (source: ADB TA 9291 Draft Final Report). This amount is likely similar in Poipet. A (limited) part of the national budget is dedicated to Sangkats (Sangkat Fund), largely used to improve rural roads.

492. A Municipal Urban Service Unit (MUSU), an autonomous unit<sup>133</sup> under Poipet Municipality, will be established once the facilities financed by CDTP1 are completed. Targeted sectors are solid waste management, wastewater and drainage. It is expected that the establishment of MUSUs will become a standard loan covenant for ADB urban projects in Cambodia<sup>134</sup>. Yet, its creation requires the upgrading technical capacities of municipal staff and the approval of a suitable regulatory framework by relevant ministries. The capacities of MUSU to collect sufficient revenues to finance O&M expenses, and to establish reasonable public services tariffs should also be clarified.

493. The decision-making process in Banteay Meanchey province and in Poipet Municipality is, as common in Cambodia, based on the work of committees (at provincial and municipal levels) composed of public officers or Council members and headed by the Governor or vice Governor. Three committees are defined by the Organic Law<sup>135</sup> but other ad hoc committees can be established. These committees have no executive power, which remain in the hands of the government, with or without submission to the Council.

494. The cases of Poipet and Bavet are however specific. Due to the rapid growth of towns where a large number of their respective provincial economic activities are expected to concentrate in the future, Poipet and Bavet are of critical importance to the national economy. At the same time, both municipalities (and provinces) remain weak, in terms of skills and financial resources. For the time being, nearly 10 years since 2008 (when Poipet and Bavet were upgraded to municipalities), the D&D policy has not yet significantly solved the basic problems encountered by the SNAs: shortage of funds and lack of capacity/experience. This explains why the CDC, for instance mentioned several times during interviews in Poipet and Sisophon<sup>136</sup>, that it should be considered a key institutional stakeholder of the municipalities' development. The CDC has substantial power and influence in Cambodia, whereas the two municipalities and provinces still lack the necessary resources to self-govern their development. More than any other ministry taken separately, the involvement of CDC can eventually better stimulate inter-ministerial dialogue and problem solving, with the direct support of the Prime Minister of Cambodia. The CDC, at least in border economic zone projects in Cambodia should not be neglected (as was often the case in previous urban development projects).

### **c. Public Private Partnership for Public Service Provision**

495. PPP in the economic infrastructure sector is regarded by the RCG as an important aspect of the Rectangular Strategy, first established in 2003 and updated in 2013 and this support was reaffirmed again recently<sup>137</sup>. In fact, collection of solid waste is delegated to the private sector in nearly all provinces and the number of small water service providers is high, particularly in small towns and rural growth centers<sup>138</sup>. The main regulatory framework for PPP is the Law on Concession (2007), or LOC, expected to be revised soon, complemented by other legal documents<sup>139</sup>. The LOC authorizes concessions in sectors such as water supply and treatment,

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<sup>133</sup> Similar to the UDAA system in Lao PDR (also supported by the ADB a decade ago). UDAA's are presently under provincial authority but should be placed under municipal authority in the future.

<sup>134</sup> e.g. Kampong Chhnah and Pursat, Tonle Sap Urban Environment Improvement Project.

<sup>135</sup> Namely; Procurement Committee, Technical Committee and Women and Children Committee

<sup>136</sup> TA8989, Interview, May 2018

<sup>137</sup> RGC, 2016, Policy Paper on Public-Private Partnerships for Public Investments Project Management, document prepared by the MEF.

<sup>138</sup> The private small-scale service operators were estimated 300 (only 147 licensed) in the mid-2010. See World Bank and Water and Sanitation Program, 2015, Water Supply Services in Cambodia, Turning Finance into Services into the Future.

<sup>139</sup> Laws on Investments and amendments (1994, 2001, 2003), draft PPP Procurement Manual (2016) new Civil Code (2011), etc. A National Private Sector Development Steering Committee was also established, including a Sub-

wastewater and sanitation, solid waste management, railways, roads, and telecommunications<sup>140</sup>. It designates the public parties as Government Contracting Authorities (GCA). For large investments, the key institutions involved are the technical ministry in charge (e.g. the MPWT for dry port in Poipet), the MEF and the CDC. A sub-decree was expected to be issued following the LOC but still remains at a draft stage, waiting for the revision of the LOC<sup>141</sup>. PPP projects have increased sharply in Cambodia since the mid-2000s<sup>142</sup>. The national railway (Royal Railways) for instance, including the Sisophon-Poipet line recently re-opened, are presently operated by the Royal Group of Companies, a major national conglomerate, under a 30-year concession contract. The major airports in the country are also typically concessions (Vinci Group) and the RGC expect to arrange a BOT for the future Phnom Penh-Bavet expressway (3.8 billion USD).

### ***(i) Poipet***

496. The SLEDP prepared with the support of the ADB in 2012<sup>143</sup> is particularly rich in information related to PPP in Poipet. It highlights the predominant role of the private sector in areas such as public services, education and of course business-oriented economic activities. Public services in Poipet are not assumed by the operators in charge in the neighboring municipality of Sisophon. PPP has developed intensively<sup>144</sup> and was the only solution available to Poipet municipality to face the rapid economic and demographic development considering their limited budget. Yet, and as in many other Cambodian cities, PPP projects do face problems. According to the final report of TA7644-REG, PPP opportunities grew fast in Poipet in the early 2010s.

497. In Poipet Sangkat and Phsar Kandal Sangkat, water is supplied by a private operator, the Anco Water Supply Company (Anco)<sup>145</sup>, which also supplies water in Sihanoukville and controls the use of the Ou Kai Don reservoir, the only storage facility for the city. The company built and owns both the water treatment plant and the reservoir. The service covers the core urban area (1,300 households) and only an estimated 54.7% of households are accessing the tap water<sup>146</sup>. Anco is owned by an important member of the CPP political party. Due to the difficulties for the company to provide water during drought periods (in 2015, 2016 and early 2017<sup>147</sup>), the private operator has been targeted by critics in the media<sup>148</sup> and the central government was obliged to publicly express its concern. Details of the contract between Anco and the municipality (duration, agreement on tariffs, service area, etc.) are not available at this stage. But Anco has invested in water facilities and has been a concessionaire for a number of years. This might raise concerns regarding the technical and institutional feasibility of this expansion (the municipality wants to

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Committee on PPP. These instances prepare policy documents, prepare technical documents useful to PPP arrangements etc.

<sup>140</sup> Electricity sector is regulated by the Electricity Law (2001), which also established the Electricity Authority of Cambodia.

<sup>141</sup> For comments and critics of the LOC, see for instance Pen Thirong, Ministry of Economy and Finance, 2015, Financing Sources for Public Private Partnerships (PPPs) Sub-regional Expert Group Meeting for South-East Asian Countries, Cambodia's Experiences in PPP, Kuala Lumpur, 24th Nov.

<sup>142</sup> See ADB-AFD, 2012, Assessment of Public-Private Partnerships in Cambodia, Constraints and Opportunities, July.

<sup>143</sup> Cambodia Corridor Towns Development Project, 2012, Strategic Local Economic Development Plan, Poipet Cambodia, TA7644-REG, November.

<sup>144</sup> Norconsult A/S and CADTIS Consultants, 2012, GMS Southern Economic Corridor Towns Development Project, Sub-project Pre-feasibility Study, Poipet Dry Port Logistics Facility, ADB TA 7644-REG report, January.

<sup>145</sup> Subsidiary of Anco Brothers Company, owned by Mr. Kok An, an influent Cambodian business man.

<sup>146</sup> Development Plan of Poipet Municipality 2018

<sup>147</sup> At the initial stage there were also floods due to the reservoir, but Thailand and not the contractor, were blamed by the provincial government. See Poipet Villagers Blame Water Treatment Plant for Flood, The Cambodian Daily, 14th September 2010.

<sup>148</sup> Phnom Penh Post, Families Protest Water Restrictions in Poipet, 7 June 2018. The article reminds also that "In 2014, however, the company was found to only be meeting half of Poipet's demand for clean water".



keep the service private). The oversight of water service in Poipet is assumed in principle by the provincial office of potable water (under MIH), together with the municipal government.

498. Domestic solid waste is also managed under a PPP agreement. The present operator is Poipet Cleaner, which provides trucks and drivers to assume the collection of urban solid waste. Yet, only 3,412 households (15.9%) benefited from the service in 2016<sup>149</sup>. An engineered landfill is under construction, financed by CDTP1, and is presently expected to be managed by the municipality (one issue is the impact of this landfill on the existing PPP arrangement). The collection service presently is considered poor since waste is collected once per week instead of four times as stated in the service agreement. The drainage system is often clogged with solid waste and the collection not always synchronized with the peak of market activities. It may be that this poor service results from difficulties commonly encountered by solid waste operators in Cambodia: low tariffs and low rate of bill recovery from residents (limited willingness to pay for the service as delivered presently), distance to the dumpsite which impacts operating costs, etc. In spite of these unsatisfactory PPP experiences in water supply and solid waste management sectors, the municipality is also considering a PPP arrangement for the cleaning of the drainage system. There are also 4 major trading centers and 9 small marketplaces in Poipet. As in other Cambodian cities, the collection of market waste is presumably assumed by private collectors (under one-year contracts), also in charge of cleaning marketplaces.

499. Electricity, purchased from Thailand<sup>150</sup>, is also distributed by the private sector (again, Anco its power subsidiary Anco Power Ltd. under Anco Electronic) in Phsar Kandal and Poipet Sangkats, but outside the SEZ, the details of this Anco-Poipet arrangement for electricity distribution are not documented at this stage. Lastly, public transport is assumed by small private service providers. In 2017, there were 3 bus terminals managed by the private sector in the city<sup>151</sup>.

## **(ii) Bavet**

500. The SLEDP prepared with the support of the ADB in 2012<sup>152</sup> provides information related to PPP in Bavet. This document highlights the predominant role of the private sector in areas such as public services, and business-oriented economic activities such as market management and bus terminals. Public services in Bavet are not assumed by the operators in charge in the neighboring municipality of Svay Rieng. PPP has developed intensively<sup>153</sup> for the same reasons as Poipet.

501. Water supply in the urban area was provided in 2012 by two private operators, Khun Akpiwat Co. Ltd and Chi-Phou Urban Water Supply Company. This information is now six years old. Unlike in Svay Rieng municipality where the provincial waterworks operates, water supply service in Bavet is 100% assumed by the private sector. Since groundwater is traditionally the main source of water, it is likely that very small service providers also operate outside the city center. Khun Akpiwat Co. Ltd. and Chi-Phou Urban Water Supply Company are of a small size (in 2012, barely 8% of households had access to tap water) with presumed limited financial resources: the water supply system is still rudimentary with regard to increasing demand and Bavet's urban expansion requires significant investments. It is likely time to structure the water supply service, possibly based on PPP-type contractual terms and public external regulation,

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<sup>149</sup> Development Plan of Poipet Municipality 2018

<sup>150</sup> PPA signed in 2002 and amended in 2007 with Trat province. The electricity is transported via a substation in Aranyaprathet (source: CDC website)

<sup>151</sup> Norconsult A/S and CADTIS Consultants, 2012, op. cit.

<sup>152</sup> Cambodia Corridor Towns Development Project, 2012, Strategic Local Economic Development Plan, Poipet, Cambodia, TA 7644-REG, November 2012.

<sup>153</sup> Norconsult A/S and CADTIS Consultants, 2012, GMS Southern Economic Corridor Towns Development Project, Sub-project Pre-feasibility Study, Bavet Dry Port Logistics Facility, ADB TA 7644-REG report, November 2012.

unless Svay Rieng provincial water works agree to assume the services (provided that existing service agreements with the two main operators are not obstacles). The context in Bavet (existing PPP arrangements for water supply and critical needs for investments locally<sup>154</sup>, needs of the SEZ) should make possible in the future a more comprehensive institutional framework combining water supply and wastewater/ drainage management under a single organizational arrangement<sup>155</sup>. Several options are possible:

- To establish a joint venture company with mixed capital, public in majority and private. This option might ease borrowing of ODA funds for water supply and wastewater;<sup>156</sup>
- To transfer water supply under the responsibility of the MUSU, under municipal responsibility (see below);
- To structure water supply/wastewater management services in town together with SEZ operators;
- Or others.

502. Solid waste collection is undertaken by a small local private company, the Sok Kheng Co. Ltd, with 4 trucks (in 2012) of which the owner is Viet Nameese. The company also collects solid waste in parts of the SEZ. Part of the recyclable waste was sold to Viet Nam. According to the SELDP, only 14% of residents of the Sangkat Bavet had access to it in 2012, essentially in the core urban center around national highway 1 and near the border gate. It means that the 5 other Sangkat get no service, or deal with smaller operators. The former 4 ha dumpsite (about 15km from the city center) will be abandoned once the new 6.5 ha material recovery facility being built under CDTP1 is commissioned<sup>157</sup>. In 2012, according to the SELDP, the quality of services remained poor. Nonetheless, it was expected that Sok Kheng Co. Ltd will continue to be contracted for solid waste collection.

503. There is no public transport in Bavet and short distance transport is assumed by informal modes or taxi companies. All bus terminals are privately managed, as well as the three existing dry ports (So Gnourn since 2007, Tai Seng since 2011, and VGT since 2008). The pre-feasibility study undertaken by the ADB under the CTDP 1 in 2012 considered the option for PPP for additional dry ports.

504. Electricity in Bavet is provided to residents by Electricite du Cambodge, the state-owned power company under MME's control. 50% of the electricity distributed today in Bavet is generated in Viet Nam by PC2 (the regional corporatized company of Electricity of Viet Nam)<sup>158</sup>. However, the power supply does not meet the demand, as illustrated by problems encountered in some SEZs. A PPP was arranged in 2017 to enable the Singaporean group Sunseap, financially supported by the ADB (Private Sector Operations investment of USD 9.2 million), to implement a solar energy farm. According to the EDC/Sunseap 20-year power purchase agreement, the solar farm should provide 10 MW and enable supplying electricity to 25% of Bavet municipality<sup>159</sup>.

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<sup>154</sup> Water pipe network extension, WTP to treat groundwater (of which quality is possibly altered by high rates of arsenic...), WWTP, effluents collection system with mandatory and subsidized connections, DEWATS systems, etc.

<sup>155</sup> This combining is made more complicated in most cities of Cambodia since water supply is under the responsibility of MIH whereas waste water and drainage is under the MPWT.

<sup>156</sup> This would mean to adapt the Vietnamese model of equitized water supply companies at a municipal scale by including in their mandatory function to assume at least waste water service

<sup>157</sup> The land belonged to the Red Cross and was donated to Sangkat Municipality (source: MPWT, 2012, Initial Environment Examination, CAM Greater Mekong Subregion Southern Corridor Towns Development Project, Sub-projects of Battambang, Bavet Neak Loeung and Poipet, June).

<sup>158</sup> PPA signed in 2002 and renewed every five years.

<sup>159</sup> Khmer Times, Solar Power Set to Shine in Bavet, 22th August 2017.

#### **d. Institutional Aspects of SEZs**

505. The legal framework for SEZs in Cambodia is essentially provided by the Law on Amendment of the Law on Investment<sup>160</sup> (2003) and by sub-decree 148 (2005) mentioned in Table 1 above, but there are at present more than 35 relevant regulations in total (laws, sub-decrees, prakas, letters from ministerial general departments, etc.).<sup>161</sup> Presently, after several years, a draft revised Law of Investment and a draft Law on Special Economic Zones are still awaiting enactment. SEZ projects have developed in Cambodia but success still remains to be confirmed, since only a small number of the industries are located in SEZs today<sup>162</sup>. In Cambodia, SEZs are rarely a matter of PPP contract, as the case in Thailand or the People's Republic of China-PRC (e.g. SPIC near Shanghai). The procedure to register SEZs is under the responsibility of the CDC which approves SEZ (and also Export Processing Zones) proposals. CDC also chairs the inter-ministerial Special Economic Zones Trouble Shooting Committee mentioned above. SEZs are established by national sub-decrees. Their management is assumed by the State Administration Management Unit under the Cambodian Special Economic Zone Board under CDC (and therefore not under the local government's responsibility). This unit has the task to coordinate with relevant ministerial administrations and makes available to enterprises a One Window Service Office. For public services, SEZ developers arrange separate contracts with the operator they choose or assume the service themselves and charge the tenants.

##### **(i) Poipet**

506. The three SEZs in Poipet are managed as follows:

- The Sanco Poipet Special Economic Zone was established in 2014 (presently 83 ha), developed by the Sanco Cambo Investment Group Co., Ltd., a joint-venture between Japanese and Cambodian nationals.
- The Phnom Penh SEZ Poipet (68 ha) started operating in 2017. On the Cambodian side, the capital was provided by the private Phnom Penh Special Economic Zone (listed on the stock market). The first tenant lease contract was signed in 2018 (with Sumitronics, a Japanese electronics company based in Thailand)<sup>163</sup>.
- The Poipet O'Neang Special Economic Zone or POSEZ (500 ha), established in 2006, is developed by Cambodian group, Chhay Chhay Investment (CCI) originally a real estate developer (it introduces itself as a property development company). The SEZ will include an industrial zone, a commercial zone, a dry port and a residential zone.

507. For the time being, however, there is no clear framework for the arrangement for public services, as compared to economic zones in Thailand, for instance. Each SEZ is expected to arrange its own public service management system (missing opportunities to achieve economies of scale for operators). Also, there is no evidence that residents of SEZs can benefit from services provided to SEZs (as made possible in Viet Nam for instance<sup>164</sup>). Even worse, it seems that

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<sup>160</sup> The Law on Investments was enacted in 1994.

<sup>161</sup> For a comprehensive presentation, see Kingdom of Cambodia, 2013, Laws and Regulations related to the Establishment and Management of the Special Economic Zone, First Edition, Ministry of Economy and Finance, General Department of Customs and Excise, JICA.

<sup>162</sup> For an overview of SEZs in Cambodia, see Peter Warr and Jayant Menon, 2015, Cambodia's Special Economic Zone, ADB Economics Working Paper Series, No 459, October. Interestingly, Sumitronics Manufacturing (Cambodia) is also based in SANCO SEZ.

<sup>163</sup> Phnom Penh Post, 12 April 2018.

<sup>164</sup> The concept of SEZ in Vietnam relates to areas much wider than in Cambodia since it includes urbanized or rural areas,

residents of Pshar Kandal Sangkat for instance, where SANCO SEZ is located, have serious problems to access public services compared with the central urban Sangkat of Poipet<sup>165</sup>.

508. The business community in Poipet is recent. The local chapter of the Chamber of Commerce comprised 85 companies in 2012. Four main types of enterprises are present in Poipet: (i) foreign investors, in particular from Japan and Thailand; (ii) Large Cambodian firms (Anco, Phnom Penh SEZ, Chhay Chhay Investment, Key Real Estate), including financial institutions (Aba, Canadia and Aceda Banks); (iii) Cambodian SMEs, originally local ones or from other provinces (services related to tourism); and (iv) very small enterprises and traders. According to the Poipet SLEDP (p. 27), the Municipality has engaged in a dialogue with the business community (via the Chamber of Commerce) regarding town planning and preparation of development plans (see the case of the dry port extension and loading facility mentioned in Section above). This Chamber of Commerce is therefore an important stakeholder, but the business community looks mixed: some of its members have obviously a much higher capacity to weigh on the public decisions due to their connections with the central government, in particular in a context where there is high competition between economic activities for access to land<sup>166</sup>.

### **(ii) Bavet**

509. The three SEZs in Bavet are managed as follows:

- Manhattan Bavet (500 ha, established in 2006 by sub-decree 135 for 157 ha and extended in 2015). The zone is developed by Manhattan International Co. Ltd, (Taiwanese investors).
- Tai Seng SEZ (130 ha, established by sub-decree 29 in 2007 for 99 ha) is developed by the Tai Seng Bavet SEZ Co., Ltd.
- Dragon-Bavet SEZ (120 ha, established by sub-decree 190 in 2012 for 106 ha, Prey Angkunh Sangkat) is developed by Dragon King Ltd., an Australian-Cambodian joint venture established in 1995 for the purpose to facilitate Japanese investments in Cambodia. Based on a 50-year land lease agreement, the developer proposes to provide industrial tenants (in its brochure) access to electricity and water, and wastewater services.

### **e. Official Development Assistance (ODA)**

510. The preliminary review of ODA projects in the two sites proposed in this report is not comprehensive (e.g. many grants or small initiatives, details about co-financings, etc. are not available). The exact amounts and dates indicated are rough estimates and obtained from various sources (donors reports, interviews, media, etc.). Though further investigation would be needed to make this review more comprehensive, it provides at this stage an adequate overall picture. Last but not least, limiting this review to “ODA” is partially relevant to understand the dynamics of bilateral cooperation, in particular in the case of Korea or PRC where private enterprises (Korea) or corporatized public enterprises (PRC) play a key role to complement the projects financed by official development assistance or banks (e.g. concessional loans).

### **(i) Poipet and Banteay Meanchaey**

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<sup>165</sup> Khmer Times, New Poipet Area Chief Promises Changes, June 7th

<sup>166</sup> Khmer Times, Poipet; From Gambling Hub to an Industrial Boomtown, 25<sup>th</sup> October 2017.

511. The list of identified projects is inserted in Appendix II. Its review highlights the following points:

- Around 15 ODA loan projects were identified, many among them benefiting several provinces simultaneously (several are aimed at supporting the Northwest/Tonle Sap region's development as a whole).
- Most financing relates to the 2010s; volumes tend to increase in more recent years with more initiatives focusing at the municipality or province level. Several important projects are planned in the coming years.
- Many of these projects address rural development and agriculture, roads, basic urban infrastructure, response to floods or electric power. Several respond to reconstruction needs following periods of political turmoil and to improve transport connectivity. Road and transport infrastructure improvements are extremely important to the provinces, of which much is provided by bilateral ODA from Asian countries.
- ADB, the World Bank and PRC (Export Import Bank) are the largest donors. ADB has successfully raised additional funding (through bilateral grants or loans, the Organization of Petroleum Exporting Countries (OPEC), and other dedicated funds) to finance several projects. ADB is the main donor supporting the urban sector (Poipet under CDTP1 and Sisophon under the Tonle Sap Urban Environment Development Project II soon to be implemented).
- ODA from Thailand (which so far has provided most of its financing to Lao PDR) now considers Cambodia as a priority country. NEDA provides a USD 28.5 million<sup>167</sup> loan to finance the access road from Stung Bot to Highway 5 plus the construction of administrative buildings for border crossing formalities. Thailand has financed in 2014 the feasibility study for the reconstruction of the Poipet–Klong Loeuk Railways Bridge. The principle of a USD 5.2 million grant<sup>168</sup> was also agreed (MOU 2016)<sup>169</sup> for Thailand to support the construction of the Cambodian section of the Ban Nong Ian-Stung Bot Bridge. In total, USD 45 million in loans could be provided to Cambodia by Thailand for the Poipet area only<sup>170</sup>. Moreover, Thailand (in particular the Transport Ministry) has also invested massively in transport infrastructure for the Aranyaprathet-Poipet bypass road and for the Sakaeo Industrial Estate on the Thai side; this has indirectly benefited economic development in the Poipet area.
- ADB and the Japan International Cooperation Agency (JICA) financed upgrading of Highway 5 from Phnom Penh to Poipet (only one section is indicated in the review) and the national railway network's rehabilitation (ADB and Australia). Poipet also benefitted from these investments. One can expect ODA support to the railways sector to increase in Cambodia (from Japan, Republic of Korea (Korea)<sup>171</sup>, and PRC).
- Bilateral ODA from Asian nations (PRC, Thailand, Japan, and possibly Korea in the future) appears heavily committed to transport infrastructure in the province, because all these countries likely have strong economic rationale (industrial, logistics and trade).

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<sup>167</sup> Source: NEDA, Project Management and Operation Bureau, July 2016.

<sup>168</sup> Thailand Government Cabinet Meeting December 29, 2015.

<sup>169</sup> Fifth Joint Committee Meeting for the Greater Mekong Subregion Cross-Border Transport Facilitation Agreement in Chiang Mai, December 16.

<sup>170</sup> Phnom Penh Post, 2015, New Border Crossing Set to Make Trade Easier, March 3<sup>rd</sup>.

<sup>171</sup> Korea (KOICA) has recently financed a master plan for railways in Cambodia (2013). A loan from the EXIM Bank of Korea is now being considered by authorities.

## **(ii) Bavet and Svay Rieng**

512. The list of identified projects is inserted in the Appendix II. Its review highlights the following points:

- Unlike in Poipet/Banteay Meanchey ODA from Thailand is absent in Bavet/Svay Rieng. Viet Nam does not yet have capacity to provide significant ODA support.
- ADB and the World Bank have provided significant support to the improvement of livelihoods of urban and rural residents. ADB is the only development partner having so far provided financing to urban development in Svay Rieng province and Bavet municipality.
- The World Bank remains a major development partner in education and social development (including health).
- PRC provides financing to the road sector only, possibly to facilitate exports from its Cambodia-based factories to Viet Nam and Viet Nameese ports, and regional exports from those based in southern Viet Nam.
- Japan provides significant levels of ODA, complementing its important support to the development of both Phnom Penh and Ho Chi Minh City, and fitting with the role expected from the HCMC-Bangkok corridor in the regional strategy.
- One can expect Korea to provide significant assistance to Cambodia which should inevitably benefit Bavet and Svay Rieng, in particular in the transportation (railways/road) and possibly the ICT sector. A large number of Korean companies are located in Viet Nam in the Mekong delta (Long An province) and in Ho Chi Minh City and Dong Nai province.
- However, this picture is not complete: there is possibly much small grant support not identified in the review which benefits rural development and agriculture in the provinces.

### **f. Environment, Natural Resources, Heritage and Climate Change**

#### **(i) Poipet and Banteay Meanchey**

513. Poipet and Banteay Meanchey province are located in the Stung Mongkol Borey sub-basin. Sisophon River (total catchment area 5,593 km<sup>2</sup>) and Mongkol Borey (total catchment area 5,264km<sup>2</sup>), flowing from Thailand are the two main rivers of the province and both are tributaries of Tonle Sap Lake. The province is close to the Tonle Sap Lake and partially encompasses (in eastern areas) its ecological system. One landscape protected area, the Banteay Chhmar (81,200 ha) is part of the Tonle Sap Biosphere Reserve (established in 2001)<sup>172</sup>, under the oversight of the same name Secretariat and MOE. Sisophon and Poipet are located westward and outside this biosphere reserve. However, the province is less famous as an environmentally attractive area compared with coastal or northeastern provinces in Cambodia.

514. Banteay Meanchey, and particularly Poipet are known to be prone to floods. Rural areas are also affected and, in 2013, 30 ha of rice fields were nearly completely destroyed by floods (and 17,000 ha were affected), some of the flood waters coming from neighboring Thailand according to local authorities<sup>173</sup>. The urban area of Poipet is not spared since 3,460 households were affected by floods in 2013 (a catastrophic year)<sup>174</sup> and another 141 households in 2016.

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<sup>172</sup> The province also counts 2 lots (11 ha in total) of fish habitat conservation areas in Cambodia

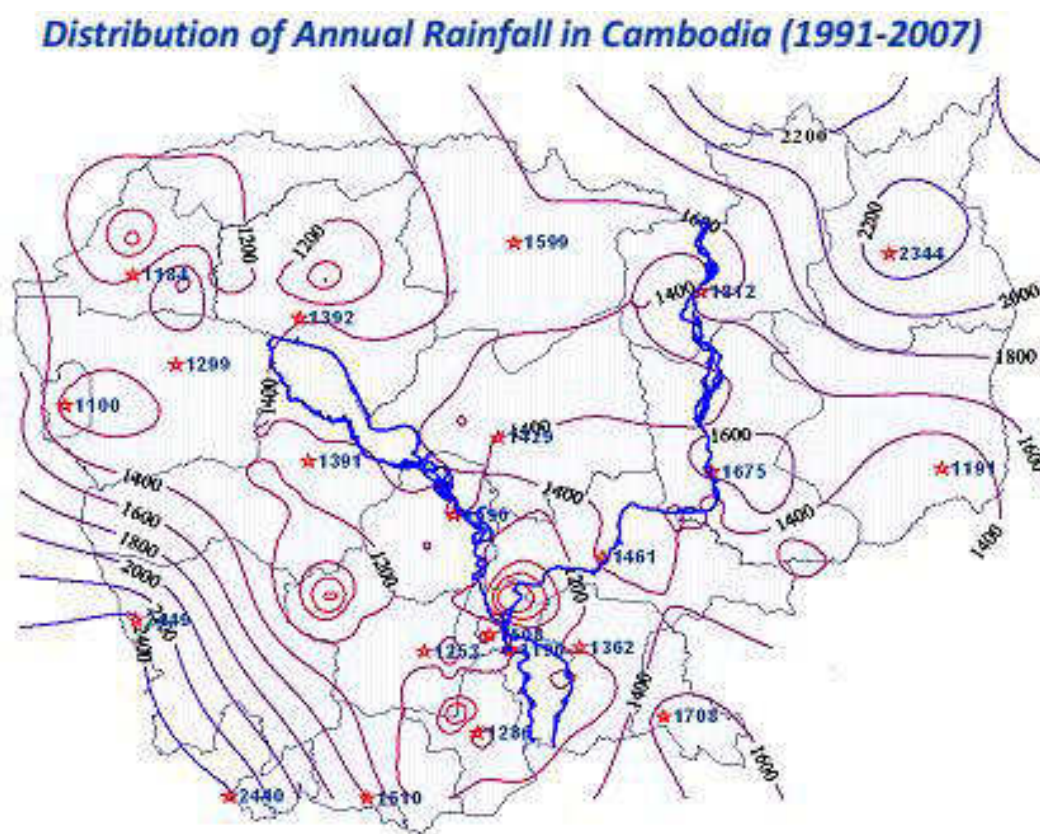
<sup>173</sup> Cambodian Daily, Banteay Meanchey Dam at Risk of Breaking, Inundating Villages, October 2013

<sup>174</sup> Development Plan of Poipet Municipality 2018.

Such vulnerability to floods will worsen with increased urbanization and will require mitigation measures including through infrastructure investment. Banteay Meanchey province is also prone to droughts and located in a region of Cambodia where rainfall is among the lowest ones in the country (Figure 57). A severe shortage of water in Poipet in 2015 was partially due to a major climactic event (the El Nino). In addition, the quality of ground water is poor and suspected to contain a significant level of arsenic<sup>175</sup> which seriously affects the population not connected to the piped water supply network.

515. Water appears as the major environmental concern in Banteay Meanchey, whether it is in excess or shortage. The increasing agriculture production of cassava, maize and paddy rice aggravates the situation and, aside from the primary problem of water resources sharing, the impact of human consumption on water flows to Tonle Sap Lake (and the development of fisheries including in Banteay Meanchey) may have severe adverse impacts on already vulnerable ecosystems of the great lake. In Poipet municipality, the sanitation and wastewater situation should improve with the investments enabled by CDP1 but the access to safe drinking water remains a challenge, since half of the population uses ground wells with pumps to access water whereas the quality of this water is questionable with suspected ambient (arsenic) pollution and the pollution of aquifers linked to poor or inadequate sanitation systems.

**Figure 57: Poipet area: low rainfalls**



Source: Ponh Sachak<sup>176</sup>

<sup>175</sup> NJS Consultants, Kokusai Kogyo Co. Ltd, 2010, Survey on the Water Supply Sector in the Kingdom of Cambodia, final report to JICA, June.

<sup>176</sup> Ponh Sachak, 2014, Expanding Irrigated Agriculture in the Floodplains in Cambodia, prepared for the 4<sup>th</sup> Stakeholder Forum, 20-22 November.

516. The environment situation in Banteay Meanchey is not documented much compared with other Cambodian provinces. Actually, its late economic development has spared Banteay Meanchey from the severe impacts of urbanization, intensive agriculture, industrialization or tourism observed elsewhere<sup>177</sup>. This period is possibly over, due to the economic development in Poipet since the late 2000s. The urban demographic growth and increasing trade and industrial activities will inevitably negatively impact the environment in the coming years (wastewater discharge, solid waste, air and noise pollution due to traffic on RN 5).

517. The Nam Sai River<sup>178</sup> which flows along the Cambodia-Thailand border is indeed not a border river. A close look at the border map reveals that the Nam Sai has most of its left bank located in Thailand, but is increasingly polluted by the consequences of Poipet's urban development. As a consequence, the environment management of the Nam Sai in the Poipet area is a complicated institutional problem. Moreover, the Nam Sai River flows southward to the neighboring Cambodian province of Battambang (its banks sometimes in Thailand sometimes in Cambodia). The Nam Sai River flows also along the western limits of the former Roneam Daun San Wildlife Sanctuary (178,750 ha mostly forests in Battambang province and partly in Banteay Meanchey)<sup>179</sup>. Therefore, future impacts of Poipet development on the quality of the Nam Sai River's waters and ecosystems may (i) be a growing common concern of Thailand and Cambodia and (ii) affect the ecosystems of the sanctuary located in another Cambodian province.

518. The Banteay Chhmar temple (constructed by King Jayavarman VII in the 12<sup>TH</sup> Century is located at the extreme north of the province, in Thma Puoc District. Although much closer from Sisophon than from Poipet, this has major potential as a tourism site (which covers 81,200 ha compared to 10,800 ha for the Angkor Wat complex in Siem Reap) and must be included in the overall picture of economic development of Poipet as a tourism destination, and could be a matter of cooperation between Poipet and Sisophon (for development of hotels and guesthouses, tours, etc.). Banteay Chhmar is on the "waiting list" to obtain a UNESCO World Heritage Site status. Unlike archaeological studies, there is so far no assessment of the relation between (i) the protection of the site, (ii) development of tourism and accessibility, and (iii) indirect impact of the economic development BEZ on these two aspects (tourism and the heritage site's protection).

### **(ii) Bavet and Svay Rieng**

519. Bavet and Svay Rieng are mostly flat regions where rice culture dominates. Every year during the rainy season, large areas of the rice fields are flooded. Forest land is limited to the northern part of the province (20% of total land area). In Bavet, forests represent only 2% of the land according to the MLMUPC in 2011. The province has no national preservation area (only provincial protected community forests in the northern part of the province). The wildlife is not plentiful and there is no nature sanctuary established. Species living in the water bodies are common. Also, there are no cultural heritage sites in the province and around Bavet.

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<sup>177</sup> Not to mention environmental impacts of phosphate mines (Banteay Meanchey is one of the few provinces having phosphate reserves) and possibly limestone.

<sup>178</sup> Nam means river in Thai (as in Lao)

<sup>179</sup> Interestingly, this sanctuary was closed by Royal decree on 22 February 2018 to give place to plantations (Phnom Penh Post, "Wildlife sanctuaries in Kratie, Battambang and Banteay Meanchey closed" 19 March 2018. Whatever, not only the wildlife is still there – for the time being – but it may be that the ecosystems of eastern Sakaeo and Chanthaburi provinces in Thailand can be affected by this decision. No information is available to TA 8989 at this stage about the reactions of Thai authorities.



520. Svay Rieng is spared from natural disasters such as earthquakes or typhoons, but vulnerability to floods and droughts (rain is found more erratic than before)<sup>180</sup> has increased, affecting the local population where poverty levels are already high; droughts lead to important economic losses and increase vulnerability to disease and insect pest outbreaks. Exposure to urban floods can also increase due to increasing pavement area and land occupation.

521. Surface water quality is considered poor due to increasing human pollution, lack of dispersion effects (low or lack of water flows) and lack of treatment of urban and industrial effluents. Occasionally, the surface water situation may encourage growth of mosquitoes and increasing risks of dengue fever. Groundwater is abundant and represents the source of water for the population who widely use hand-pump wells. Yet this water resource is affected by the presence of arsenic and manganese. There is no structural problem of access to the water resources presently, but rapid industrial development combined with repeated droughts (as in 2002) may change this situation in the long-term. River basin management in Cambodia is not well-developed (as in Viet Nam). In the long-term, access to water resources may become a matter of cooperation between Mekong delta provinces in Viet Nam and Cambodian provinces of the eastern plain.

522. The most serious environmental threats are linked to the impacts of industrial/urban and trade activities on the air, water and soil. In 2016, a company located in Manhattan SEZ was accused of polluting the Tapov canal in Bavet, but, aside from such publicized accidents, daily pollution may have more long-lasting negative impacts on the water and biosphere. Cross-border traffic in Bavet generates increasing emissions of CO<sub>2</sub> and heavy metals (second-hand trucks are commonly used for transport), and the lack of solid waste management represents a danger to soil quality. In this respect, future industrial pollution impacts will largely depend on the industrial processes which develop in the SEZ and the volumes of pollutants produced. Last but not least, the scarcity of land in Bavet is a result of land encroachment by new settlers, which may impact the flows of water and the aquatic regime of waterbodies.

523. Agricultural development represents also a threat due to the use of fertilizers and pesticides and the resulting increase in soil pollution. Infiltration of chemical pollutants in ground water will have serious consequences on the accessibility to the resource.

524. The institutional context relating to environment protection in Bavet is similar to the context in other municipalities. The regulatory and technical tasks are in fact assumed at the provincial level of DOE, which lacks resources. There is an office of Environment at the municipal level but major environmental problems, including those related to solid waste, are managed by the DOE or the ministry.

525. The ADB provided support to Bavet to improve its environment (GMS CDTP-1), but further support could focus on increased capacity to monitor the quality of the milieu, and to enforce regulations and support to urban planning implementation (limit land encroachments).

#### **g. Institutional Challenges**

526. Since the mid-2000s and the D7D process, the Cambodian legislators and ministries have been prolific in the production of regulatory documents (laws, sub-decrees and ministerial prakas). Yet the efficiency of the regulations at provincial and municipal levels is all but effective. National regulations remain sometimes long under draft form before being approved. Moreover, guidance to apply national regulations comes often late (e.g. the case of sub-decree 113). Last, some regulations are not always consistent with each other (see below). This makes SNAs lacking

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<sup>180</sup> Oxfam Cambodia, Graduate School of Global Environmental Studies of the University of Kyoto, Droughts Management Considerations for Climate Change Adaptation: Focus on the Mekong, Cambodia Report.

visibility and capacity to enforce the national regulations locally (e.g. by issuing their own *deika*). This affects the decision-making process in active provinces such as Banteay Meanchey and Svay Rieng, where the local administration do not always like to take regulatory initiatives without clear assurances that they fit with central government's will, and where the private sector needs visibility of the regulation to invest in good conditions.

527. The development of Poipet and Bavet is under the control of three levels of public institutions simultaneously: national, provincial and municipal. Two points need further investigations.

- The challenge for the country represented by the development of Poipet and Bavet's areas puts on the frontline the CDC and other ministries, but the inter-ministerial dialogue is rarely easy<sup>181</sup>. Moreover, the "shadow" of the national-level institutions (in a traditionally centralized country) possibly inhibits or slows down initiatives of local institutions and the decision-making process in general.
- The relation between the municipality and the province needs also to be clarified. So far, although available studies have supported decentralized administrations, the sharing of tasks between provincial and municipal levels remains unclear. In principle, the economic development of the municipalities should benefit their provinces, but more evidence is needed to confirm that provincial and municipalities operate in tandem in practice<sup>182</sup>. A competition between BEZ municipalities and provincial capital cities to attract investors would possibly lead to a slowdown in the decision-making processes at the SNA-level. In the same vein, it is important to measure, in the case of the two provinces and municipalities, progress in the reform of the national public finance system regarding for instance the transfer of larger allocation of tax and fees revenues from locally generated economic activities to municipal or provincial budget.

528. Compared with other cities targeted by other urban projects in Cambodia, the support to Bavet and Poipet's growing economic role and importance for the whole country's development requires probably a specific institutional approach. Commonly, ADB projects' steering committees do not seem playing the role expected from them, in particular to represent real instances of monitoring inter-ministerial coordination and decision, in particular by meeting more regularly.

529. PPPs take an important place in the delivery of public services in both Poipet and Bavet. Any further projects in both locations would require a good understanding of existing PPP contracts including their implications on future investments to expand the services (e.g. in the case of water supply and electricity in Poipet, Nimit Sangkat and part of Phsar Kandal Sangkat are not presently areas serviced by private operators). Under the pressure of the need for public infrastructure and services, local governments have possibly not achieved the most suitable arrangements for PPPs. As a result, PPPs are unsatisfactory in both municipalities, but particularly in Poipet (water supply, solid waste). Ministries and provincial administrations have limited capacity to support municipalities to arrange PPPs. For instance, in spite of the recent increase in PPP arrangements for urban solid waste in Cambodia, the MOE does not provide any indicative model contract (adapted to the local characteristics). Bidding – possibly because of the lack of attractiveness of the projects to the private sector - is often bypassed to select an operator. Also, the private sector is nation-wide and fragmented. Operators are different, even in the same

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<sup>181</sup> At the end of the PPTA GMS CDTP-4 (Cambodia), the option to have two Executing Agencies was eventually raised because of the regional ambition of one component of the project. Finally, due to the wish to sign the loan agreement before the national elections (2018), the project was arranged following the classical scheme with MPWT as the single Executing Agency.

<sup>182</sup> In a context such as Poipet and Bavet, one cannot exclude that the central government in some cases by-pass the authority of the province to implement its choice.

province, and are often financially weak individual enterprise. Professional experience of operators is not the primary criteria in the selection process, and urban public services are disconnected from those delivered in SEZ. Consequently, there is a strong need to familiarize the two provinces and municipalities with PPPs: bidding process, contracts arrangements, technical oversight and economic regulation of contracts implementations. Actually, PPP for urban services in Cambodia is still in infancy, and contractual arrangements do not reflect international standards<sup>183</sup>: Unsatisfactory PPP arrangements in the urban sector represent a national challenge from the livelihood improvement and economic attractiveness viewpoint, in particular in fast growing areas such as BEZ municipalities.

530. The MPWT and ADB now expect municipalities to establish MUSU once facilities financed by ADB are completed, in order to manage the facilities -this is even a loan covenant in the case of Tonle Sap Urban Environment Development Project-. Poipet and Bavet have similar plans. These plans are institutionally challenging. There is no evidence today: (i) that other concerned ministries (particularly the MEF, the MOE and the MOI) will fully support the establishment of MUSU; (ii) that future revenues generated by drainage or solid waste will enable greater autonomy of the municipal units. Moreover, recent sub-decrees 113 and 232 (application guidance are not issued so far) do not consider combined management of waste water and solid waste. A further institutional/legal analysis is recommended to make sure the “MUSU principle” is compatible with these sub-decrees. For instance, the sub-decree 113 does not mention the MPWT as a key ministry, whereas the ministry seems to be the main supporter of this institutional concept. Last but not least, no assessment exists about the potential consequences of establishing MUSUs for existing or potential PPP arrangements in the solid waste sector<sup>184</sup>.

531. Most residents of Poipet and Bavet municipalities are in-migrants and a partially floating population. If supporting local governance enhancement were to be one key objective of a further project in Poipet and Bavet, the institutional status (and therefore not only socio-economic) of this population should be considered further: registration regime, right to use land, tax obligations, right to elect Sangkat councilors, etc. Eventually, increasing awareness of each town’s residents to assume their role/duty as citizens needs to be encouraged: active role of women in the local social life, acceptability to pay for local public service, awareness by enterprises (in particular the small ones) of their environmental and social responsibility locally, etc. Also, local populations’ resilience to possible adverse effects of economic development such as criminal behaviors (human trafficking, drug trafficking, etc.) or health problems (HIV, etc.), must be strengthened. In this respect, the role of villages and sangkat is important to facilitate the integration of newcomers into the existing communities of residents, to support education to conduct awareness campaigns, to identify needs/expectations of the population and of small enterprises relating to public spaces and services, to facilitate relations between higher level administrations and residents, etc. Sub-municipal organizations are key not only in the D&D process, but also to permit increased ownership of development projects by residents. In particular, and where relevant, projects should support closer interactions between sangkats/villages and SEZ developers and international companies to extend public services such as solid waste collection in the vicinity of SEZ.

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<sup>183</sup> The solid waste concession contract (CINTRI) was 50 years in Phnom Penh and initially the private parties expected about 90 years in Siem Reap (GAEA) and Sihanoukville (CINTRI). Sub-decree 113 has established the maximum duration of contracts at 10 years. The ADB tried to push forward the Design Build & Operate mechanism in the case of GMS CDTP-4 (2018) but DBOs is unknown in Cambodia; finally a Design & Build arrangement was preferred by the Cambodian part.

<sup>184</sup> Actually, these aspects are partially considered by the project implementation consultants of the Tonle Sap Urban Environmental Development Project (Pursat, Kampong Chnanh). The ADB had prepared RO for an institutional study of the feasibility of MUSU, but so far, no consultant was selected to assume this task.

532. As a corollary of the previous points, there is a greater need to enhance institutional, financial and technical capacities of institutions. Since budgets allocated initially to capacity development are often reduced to enable financing of capital investment, one priority should be to convince the borrowers that the value for money is possibly higher for investments in human capital and organizational arrangements compared with physical investments. In the cases of Poipet and Bavet, a lack of organizational/regulatory/individual skills (procurement, PPP contracts<sup>185</sup>, participatory planning, project management, management of urban-rural connectivity, regulation of the management of SEZ, etc.) may discourage private initiatives and affect the cities' competitiveness. In both cases, capacity development programs, not limited to training and workshops but extended to pilot projects, learning by doing, study works etc., should target municipality and Sangkat officers, provincial and ministry officers and also business stakeholders.

533. The Cambodia-Thai dialogue is active but, apparently, the official relations involve the central administration and the RGC itself (Cambodian-Thailand Joint Cabinet retreats mechanism) as illustrated by the decision to develop the Stung Bot – Ban Nang Ian international border checkpoint. At the local level, regular meetings take place between Poipet/Aranyaprathet cities and Benteay Meanchey (Cambodia)/Sa Kaeo (Thailand) provinces. Yet, there are potentially many points for tighter cooperation relating to urban development and environment, such as the protection of the Nam Sai river, the securing of access to water resources, regulation of floods, or even solid waste management. Determining the effective and relevant matters for discussions would require further investigations. One challenge however is that the recently established municipality of Poipet and even the province has likely limited resources and institutional power to engage in an operational dialogue with the neighboring cities and province. In a previous section, this report suggests establishing a specific Cambodia-Thailand Southern Economy Corridor Development Authority. This option is worth to be considered further, with possibly a softer concept than “authority” which may raise institutional difficulties on both sides for institutional/financial reasons. Possibly, mandating a specific institution with executive power and own budget (like the CDC), to establish a joint authority or agency can be an initial stage. Also, and given the link between Thai and Japanese industrial cooperation, such an institutional mechanism could include a dialogue with Japanese authorities, for instance through JETRO.

534. Concerning Bavet, joint meetings are also regular between Svay Rieng authorities and Tay Ninh province. The dialogue at provincial level is regular and joint initiatives have concerned safety issues on the border, fight against criminality and also implantation of signboards. Tay Ninh provincial authorities are eager to develop province to province cooperation on trade, education, transport, or crime prevention. Viet Nam is however not organized to develop a city-to-city cooperation at the scale of secondary towns as Moc Bai (with Bavet). Border cooperation should first be the affair of the provincial government. Compared with Thailand, Viet Nam has very limited resources to support economic development in Bavet or Svay Rieng and the prospect to establish in the future a joint authority does not appear feasible before a long time, in particular due to the very centralized system of regional cooperation in Viet Nam. The historical relations between Viet Nam and Cambodia make any substantial cooperation in Bavet-Moc Bai area largely dependent on central governments initiatives at the highest levels. For the time being, priorities focus on defense and security aspects<sup>186</sup>. Any future project in Bavet should strengthen cooperation between Bavet and Moc Bai focusing on very operational objectives such as solid waste management improvement (why not the same operator on both sides), traffic counting or

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<sup>185</sup> The ADB provided assistance to the MEF.

<sup>186</sup> See activities of the Joint Committee on Land Border Demarcation and Border Planting or initiatives of the Ministry of Public Security of Vietnam

exchange of information regarding land occupation and local planning following the opening of the second border gate planned.

## **h. Main Institutional Conclusions and Recommendations in a Perspective of Further ADB Support**

### **(i) Long-term vision**

535. In both cases of Poipet and Bavet, municipal institutions are weak (finance and human capacities). This report strongly recommends tightening the link between each municipality and their respective provinces, and where relevant promoting inter-provincial initiatives (economic or environmental)<sup>187</sup>. This should enable a more harmonized spatial development between border cities and provincial capitals and stimulate urban-rural connectivity. Cross border cooperation and operational dialogue with neighboring provinces and cities in Thailand and Viet Nam are also essential.

536. The idea (supported by the ADB and MPWT) to combine the management of several urban services under the same institutional umbrella, the MUSU, is very relevant. However, and considering (i) the present institutional and public finance system framework in Cambodia, and (ii) the Lao experience of UDAAAs, the creation of the MUSU may not achieve its expected results. Establishing MUSU in Poipet and Bavet without a clear vision regarding generation of revenues from services delivered by units lacking skilled human resources and management knowledge might be premature, and result only in disillusion regarding urban services improvement. The risk is high that this institutional innovation leads to a no-change in this regard. At the same time, the present institutional arrangement in each town is likely also inadequate to provide urban services. Over time, the capacity of the two municipalities to manage urban services has to be substantially enhance to enable them attract investors and required manpower, and finally to assume their function of national economic growth pole.

537. As an alternative, the RGC could establish a BEZ autonomous entity (BEZEA) for each site (Poipet and Bavet) with planning, investments, services management and economic regulation (PPPs and concessionary schemes included) functions. BEZEA should have authorities for infrastructure services in both urban, peri-urban and SEZ areas, in other words over the whole administrative jurisdiction of the present municipalities. It should have the adequate legitimacy power and resources to undertake a real cross sector approach. Project preparation, implementation and O&M of facilities should be part of a local strategy and a spatial planning bridging economic and trade issues, social issues, governance and environmental policies of the country. Sectors under these BEZEAs' mandate would encompass water supply, waste water, solid waste, urban public space beautification, possibly energy and telecommunications and basic social services. The decision board of BEZEA could mix representatives from central, provincial and municipal governments and from the private sector (e.g. SEZ developers). BEZEA would be able borrow ODA funds, manage fees collection and contracts with private operators (PPPs), as the economic development zones are in Viet Nam.

538. Establishment of BEZEAs based on a robust business plan will take several years. Urban services managed with the satisfaction of customers (from the poor up to multinational firms based locally) will make these services economically and financially viable in the long-term.

### **(ii) GMS Project approach in a shorter term**

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<sup>187</sup> For instance, in the case of Poipet, with Siem Reap and Battambang provinces/municipalities

539. In both cases of Poipet and Bavet, this report recommends to study further an alternative to the common arrangement schemes for urban projects in Cambodia, insofar as both municipalities<sup>188</sup> assume economic functions of national interest. Due to the similarity of the challenges (and of the responses to these challenges) both in Poipet and Bavet, projects targeting these two municipalities simultaneously (excluding other ones), should be encouraged.

540. In this respect, several points relating to future projects are worth mentioning:

- Whatever the regulatory measures adopted by the RGC, SNAs will likely remain financially and technically weak to implement complex projects, and for a long time.
- The MPWT, the traditional executing agency for ADB urban projects, is now busy with a large number of ongoing projects which are affected by important delays. Expected massive ODA projects in the road and transportation sector will certainly not improve the situation.
- The traditional approach of development partners and borrowers regarding local development is characterized by the priority given to a project-based approach. To improve the relevance of projects, a greater attention should be granted (i) to the links between these projects; and (ii) O&M of public services. GMS CDTP 3 (Myanmar only) and GMS CDTP 4 (Cambodia, Laos) have tried to do at the PPTA stage but there is no evidence that final design of these projects will be fully successful to these two aspects.
- The strong international dimension of GMS (not only border crossing but also environmental issues, industrial economics and production processes) requires a strong knowledge of economic/industrial mechanisms, ODA mechanisms, international diplomacy of Cambodia (bilateral relations, ACMECS, GMS, ASEAN, etc.) and capacity of advising the RGC in these fields. Ministries in charge of construction or infrastructure are not the best prepared ones to deal with these challenges.
- The CDC which is a powerful institution in Cambodia, chaired by the Prime Minister Hun Sen himself, has comparatively greater capacities to deal with economic challenges and to mandate a rapid, operational and effective collaboration between ministries.
- Therefore, the CDC appears as the possible appropriate institution to take the responsibility of further GMS project focusing on BEZ in Cambodia, namely Poipet and Bavet.
- Such a role expected from CDC should better fit with result-based approach (authority of the CDC to mandate the necessary monitoring of outcomes) and more generally with the compliance of supported initiatives in Poipet and Bavet with the criteria of aid efficiency as agreed by the international community.

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<sup>188</sup> Possibly as experimental sites for other Cambodian municipalities where SEZ are developed.

## ANNEXES

### A. Annex I: Information Tables

**Table AI-1: Registered Lao and Thai businesses under the MoU in 2016**

Lao Companies (13)	Thai companies (31)	
1. Paksong Development Import-Export	1. Aekaxay Trade Shop	17. Adam Enterprise
2. Agricultural Trade Promotion	2. Sana Import -Export	18. Bhor Boon Farm
3. Advance Agriculture	3. Phetploy Trade Shop	19. Bio Y
4. Mrs. Khambay Handicraft	4. Chaleun Crops Shop	20. Douangchanta Trade
5. Asian Economic	5. Hitkhanthong Trade	21. Vilasack Crop Shop
6. Sanaxay Maize Dryer (Salavan province)	6. Hengphayixay	22. Chaleunsab Homsok
7. Paksong Farmers' Group	7. Thai World Farm	23. Aphilak Rungrot
8. Adam International	8. Meuang Thai Agricultural Trade	24. SPC Bridge Channel
9. LaoNgam Agricultural Production	9. Sokchinda Agricultural Trade	25. Hala Production
10. Bating Agricultural production	10. Vichitra Trade	26. Sirithone Agricultural Trade
11. Boualapha Agriculture Import-Export	11. Soneway Shop	27. Suannay Agricultural Trade
12. Savannakhet Provincial Trade	12. Leu Agricultural Trade	28. Thai Commodity
13. Hung Sayasingchaleun Agricultural Development	13. Ting Heng Phut	29. Chanvanoheng SOE
	14. Somedi 2011	30. Khorat Sod Agricultural Trade
	15. Lonesok Agricultural Trade	31. Thani Siam
	16. Thima Shop	

Source: Trade Promotion Center Champasack

**Table AI-2: Registered agricultural Cooperatives, Champasack Province under the MoU in 2016**

No.	Cooperative name	Production area	Type of products	No of Production Groups
1.	Coffee Producer Cooperative (CPC)	Paksong district	Coffee	32
2.	Coffee Farmer of Bolovan Cooperative (CFBC)	Thongkatay village	Coffee	10
3.	Jai Coffee Farmer Cooperative (JCFC)	Paksong district	Coffee	64
4.	Paksong Coffee Cooperative Km 40 (PCC)	Paksong district	Coffee	13
5.	Sanasomboun Development Cooperative (SDC)	Kili Village	Rice	6
6.	Collection and Promotion of Agricultural Products Cooperative (ACBPC)	Paksong district	Vegetable	11
7.	EABAPC	Kenchai, B Chiangchaleunsouk district		2
	<b>Total</b>			<b>138</b>

Source : Extension Unit, PAFO, Champasack Province, 2016



## Tables AI-3 to AI-11: Socio-Economic Profiling of Lang Son Province

(Source: Lang Son Statistical Yearbook 2016)

**Table AI-3: Population Distribution by Gender between 2010 and 2016**

Year	Total population (#)	Male (# / %)	Female (# / %)
2010	736,294	366,873 (49.83%)	369,421 (50.17%)
2011	740,812	369,625 (49.89%)	371,187 (50.11%)
2012	745,280	372,359 (49.96%)	372,921 (50.04%)
2013	749,743	374,136 (49.90%)	375,607 (50.10%)
2014	753,697	376,931 (50.01%)	376,766 (49.99%)
2015	760,640	380,799 (50.06%)	379,841 (49.94%)
2016	768,671	385,219 (50.11%)	383,452 (49.889%)

**Table AI-4: Population Distribution by Urban/Rural population between 2010 and 2016**

Year	Total population (#)	Urban (# / %)	Rural (# / %)
2010	736,294	140,784 (19.12%)	595,510 (80.88%)
2011	740,812	142,073 (19.18%)	598,739 (80.82%)
2012	745,280	143,358 (19.24%)	601,922 (80.76%)
2013	749,743	145,269 (19.38%)	604,474 (80.62%)
2014	753,697	147,094 (19.52%)	606,603 (80.84%)
2015	760,640	149,380 (19.64%)	611,260 (80.36%)
2016	768,671	151,905 (19.76%)	616,766 (80.24%)

**Table AI-5: Natural Population Forecast by Gender from 2010 to 2030**

Year	Total population (#)	Male (# / %)	Female (# / %)
2010	736,294	366,873 (49.83%)	369,421 (50.17%)
2015	760,640	380,799 (50.06%)	379,841 (49.94%)
2020	785,791	395,254 (50.30%)	390,537 (49.70%)
2025	811,774	410,257 (50.54%)	401,517 (49.46%)
2030	838,615	425,830 (50.78%)	412,785 (49.22%)

**Table AI-6: Natural Population Forecast by Urban/Rural population from 2010 to 2030**

Year	Total population (#)	Urban (# / %)	Rural (# / %)
2010	736,294	140,784 (19.12%)	595,510 (80.88%)
2015	760,640	149,380 (19.64%)	611,260 (80.36%)
2020	785,791	158,501 (20.17%)	627,290 (79.83%)
2025	811,774	168,179 (20.72%)	643,595 (79.28%)
2030	838,615	178,447 (21.28%)	660,168 (78.72%)

**Table AI-7: Unemployment Rate by Gender and Urban/Rural Population between 2013 and 2016**

Year	Overall (%)	By gender (%)		Urban/Rural (%)	
		Male	Female	Urban	Rural
2013	0.82	0.82	0.81	3.22	0.29
2014	0.65	0.57	0.75	3.57	0.03
2015	1.92	2.41	1.36	4.29	1.42
2016	1.89	2.62	1.04	4.48	1.37

**Table AI-8: Industrial Production Index by Industries**

Year	2013 (%)	2014 (%)	2015 (%)	2016 (%)
Total	100.81	106.11	111.93	107.81
Mining	100.68	95.79	114.60	102.21
Processing	102.54	113.62	113.63	110.87
Production and distribution of electricity, gas, and water	97.96	107.68	106.90	111.22
Water supply; wastewater and solid waste treatment and management	103.80	102.84	104.38	99.74

**Table AI-9: General education in SY 2016 – 2017**

	Total	Primary (# / %)	Lower secondary (# / %)	Upper secondary (# / %)
1. Number of schools in SY 2016 – 2017 (Unit: School)				
Lang Son City	22	10 (45.45%)	8 (36.36%)	4 (18.18%)
Cao Loc district (including Dong Dang Town)	42	20 (47.62%)	19 (45.24%)	3 (7.14%)
2. Number of teachers in SY 2016 – 2017 (Unit: person)				
Lang Son City	924	335 (36.26%)	303 (32.79%)	286 (30.95%)
Cao Loc district (including Dong Dang Town)	1,161	520 (44.79%)	446 (38.42%)	195 (16.80%)
3. Number of students in SY 2016 – 2017 (Unit: person)				
Lang Son City	16,156	6,952 (43.03%)	5,562 (34.43%)	3,642 (22.54%)
Cao Loc district (including Dong Dang Town)	13,927	6,261 (44.96%)	4,917 (35.31%)	2,749 (19.74%)

**Table AI-10: Number of health care facilities in 2016**

	Total	Hospital (# / %)	Medical consulting- room (# / %)	Commune clinics (# / %)
1. Number of health care facilities in 2016 (Unit: facility)				
Lang Son City	11	4 (36.36%)	1 (9.09%)	6 (54.54%)
Cao Loc district (including Dong Dang Town)	27	1 (3.70%)	3 (11.11%)	23 (85.19%)
2. Number of beds in 2016 (Unit: bed)				
Lang Son City	1,079	1,050 (97.31%)	5 (0.46%)	24 (2.22%)
Cao Loc district (including Dong Dang Town)	169	70 (41.42%)	30 (17.75%)	69 (40.83%)

**Table AI-11: Number of health care staff in 2016**

	Total	Doctor (# / %)	Physician (# / %)	Technician (# / %)	Nurse (# / %)
Lang Son City	834	299 (35.85%)	105 (12.59%)	372 (44.60%)	58 (6.95%)
Cao Loc district (including Dong Dang Town)	177	38 (21.47%)	58 (32.77%)	54 (30.51%)	27 (15.25%)

**Table AI-12: Comparison of the Economic growth rates and Economic Structure between Observed and Target by industries from 2016 to 2017**

	Economic Growth Rate		Economic Structure	
	Observed (%)	Target (%)	Observed (%)	Target (%)
Gross regional domestic product (GRDP)	8.02	8.00 – 19.00		
Agriculture and forestry	2.26	3.50 – 4.00	22.85	
Construction	25.56	9.00 – 10.00	18.28	
Service	8.31	9.00 – 10.00	49.00	

## Tables AI-13 to AI-25: Socio-Economic Profiling of Mong Cai - Hai Ha BEZ

**Table AI-13: Population Distribution of Mong Cai City by Gender in 2010 – 2014**  
(Mong Cai City Statistical Yearbook, 2012-2014)

Year	Total population (#)	Male (# / %)	Female (# / %)
2010	91,077	47,121 (51.7%)	43,956 (48.3%)
2011	92,771	47,945 (51.7%)	44,826 (48.3%)
2012	94,495	48,776 (51.6%)	45,716 (48.4%)
2013	96,372	49,582 (51.4%)	46,790 (48.6%)
2014	100,737	51,721 (51.3%)	49,016 (48.7%)

**Table AI-14: Population Distribution of Mong Cai City by Urban/Rural population in 2010 – 2014**  
(Mong Cai City Statistical Yearbook, 2012-2014)

Year	Total population (#)	Urban (# / %)	Rural (# / %)
2010	91,077	53,751 (59.0%)	37,326 (41.0%)
2011	92,771	54,708 (59.0%)	38,063 (41.0%)
2012	94,495	55,637 (58.9%)	38,858 (41.1%)
2013	96,372	56,805 (58.9%)	39,567 (41.1%)
2014	100,737	60,480 (60.0%)	40,257 (40.0%)

**Table AI-15: Projected Population Forecast of Mong Cai City by Urban/ Rural population in Mong Cai BEZ**

Year	Total (#)	Urban (#)	Rural (#)
2013	126,000		
2020	177,000 – 200,000	124,000	53,000
2030	344,000 – 350,000	293,000	47,000

**Table AI-16: Poverty rate of Quang Ninh Province by Urban/ Rural Population between 2013 and 2016**  
(Source: Quang Ninh Statistical Yearbook 2016)

Year	Poverty rate (%)	Urban (%)	Rural (%)
2013	4.60	1.20	10.00
2014	4.10	0.80	9.32
2015	3.70	1.10	8.50
2016	3.20	0.90	7.40

**Table AI-17: Unemployment rate of Quang Ninh Province by Gender and Urban/Rural population in 2010, 2014 – 2016**  
(Source: Quang Ninh Statistical Yearbook 2016)

Year	Overall	By gender (%)		Urban/Rural (%)	
		Male	Female	Urban	Rural
2010	2.84	2.48	3.28	4.19	1.53
2014	1.18	1.01	1.60	1.77	0.34
2015	4.61	4.50	4.70	4.68	4.53
2016	3.22	2.80	3.74	3.96	2.30

**Table AI-18: Industrial production index by industries**  
(Source: Quang Ninh Statistical Yearbook 2016)

Year	2013 (%)	2014 (%)	2015 (%)	2016 (%)
Total	100.27	104.58	105.61	100.68
Mining	98.19	101.49	103.84	97.13
Processing	121.73	114.88	108.5	119.33
Production and distribution of electricity, gas, hot water, steam and air conditioners	128.21	140.41	137.21	122.58
Water supply; wastewater and solid waste treatment and management	103.71	104.52	105.32	103.59

**Table AI-19: Kindergarten education in SY 2016-2017**

	Total	Public (# / %)	Non-public (# / %)
1. Number of kindergarten schools in SY 2016 – 2017 (Unit: school)			
Ha Long City	29	20 (68.96%)	9 (31.03%)
Mong Cai city	19	16 (84.21%)	3 (15.79%)
Hai Ha district	16	15 (93.75%)	1 (6.25%)
2. Number of kindergarten teachers in SY 2016 – 2017 (Unit: person)			
Ha Long City	1,183	528 (44.63%)	655 (55.37%)
Mong Cai city	430	322 (74.88%)	108 (25.12%)
Hai Ha district	302	263 (87.09%)	39 (12.91%)
3. Number of kindergarten students in SY 2016 – 2017 (Unit: person)			
Ha Long City	15,460	7,490 (48.45%)	7,970 (51.55%)
Mong Cai city	6,354	4,824 (75.92%)	1,530 (24.08%)
Hai Ha district	3,907	3,379 (86.9%)	528 (13.51%)

**Table AI-20: General education in SY 2016 – 2017**

	Total	Primary (# / %)	Lower secondary (# / %)	Upper secondary (# / %)
1. Number of schools in SY 2016 – 2017 (Unit: School)				
Ha Long City	39	17 (43.59%)	15 (38.46%)	7 (17.95%)
Mong Cai city	31	14 (45.16%)	14 (45.16%)	3 (9.68%)
Hai Ha district	28	14 (50.00%)	12 (42.86%)	2 (7.14%)
2. Number of teachers in SY 2016 – 2017 (Unit: person)				
Ha Long City	2,013	883 (43.86%)	628 (31.20%)	502 (24.94%)
Mong Cai city	894	433 (48.43%)	306 (34.23%)	155 (17.34%)
Hai Ha district	763	401 (52.56%)	269 (35.26%)	93 (12.19%)
3. Number of students in SY 2016 – 2017 (Unit: person)				
Ha Long City	46,302	24,426 (52.75%)	13,523 (29.21%)	8,353 (18.04%)
Mong Cai city	18,181	9,033 (39.68%)	5,922 (32.57%)	3,226 (17.74%)
Hai Ha district	10,684	5,259 (49.20%)	3,712 (34.74%)	1,713 (16.03%)

**Table AI-21: Number of health care facilities in 2016**

	Total	Hospital (# / %)	Medical consulting- room (# / %)	Commune clinics (# / %)
1. Number of health care facilities in 2016 (Unit: facility)				
Ha Long City	28	5 (17.86%)	3 (10.71%)	20 (71.43%)
Mong Cai city	18	1 (5.56%)	0	17 (94.44%)
Hai Ha district	17	1 (5.88%)	0	16 (94.12%)
2. Number of beds in 2016 (Unit: bed)				
Ha Long City	2,044	1,990 (97.36%)	25 (1.22%)	29 (1.42%)
Mong Cai city	240	200 (83.33%)	0	40 (16.67%)
Hai Ha district	122	80 (65.57%)	0	42 (34.43%)

**Table AI-22: Number of health care staff in 2016**

	Total	Doctor (# / %)	Physician (# / %)	Technician (# / %)	Nurse (# / %)	Midwife (# / %)
Ha Long City	1831	640 (34.95%)	149 (8.14%)	131 (7.15%)	831 (45.39%)	80 (4.37%)
Mong Cai city	209	55 (26.32%)	58 (27.75%)	12 (5.74%)	65 (31.10%)	19 (9.10%)
Hai Ha district	183	36 (19.67%)	61 (33.33%)	7 (3.83%)	61 (33.33%)	18 (9.84%)

***Economic development in Mong Cai City:***

The average annual GRDP growth rate of Mong Cai city in the period 2011-2015 is 8.65%, in which:

**Table AI-23: Production value of each industry and Comparison of their Economic growth rates the same period in 2013 and against the Target**

	Value	Economic growth rate comparing to the same period in 2013 (%)	Economic growth rate comparing against the Target (%)
Total production value	VND 6,548.862 billion	55.3%	
Agriculture, forestry and fishery	VND 418.15 billion	7.8%	
Construction	VND 4,131.081 billion		104.1%
Service	VND 1,999.631 billion	10.8%	

**Table AI-24: Value of Export and import goods and their increase comparing to the same period in 2014 and against the Target**

	Value	Increase comparing to the same period in 2014	Increase comparing against Target
Total value of export-import goods	USD 5,097.778 million	127.58%	= 106.2%
Export	USD 2,010.467 million	145%	
Import	USD 3,087.311 million	118.32%	

**Table AI-25: Value of Export and import goods and their increase comparing to the same period in 2014 and against the Target**

	<b>Value</b>	<b>Increase comparing to the same period in 2014</b>	<b>Increase comparing against Target</b>
Total state budget revenues	VND 210.6 billion		
Cumulative revenue	VND 1.835 billion (Estimated at VND 1,825.3 billion)		
Total value of export-import goods	USD 4,650 million	46.7%	46.6%
Export	VND 1,820 billion	42.7%	42.2%
Import	USD 2,830 million	49.7%	49.9%
Import-export tax	VND 435 billion	72.8%	

**B. Annex II: Official Development Assistance**

**Table All-1: Official Development Assistance for the Southern Lao region**

Area 1	Area 2	Amount 1	Grant/Loan	Status	Year/Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack Province (Boloven Plateau)	Saravane and Sekong Provinces on the Bolovens Plateau in the south, and Vientiane Municipality and Province in the north.	20,200,000.00 USD	Loan	Completed	1989-1998	MOA/MOT				
Champasack Province	Saravane, Sekong, Savannakhet, Khammouane, and Bolikhamxay	36,000,000.00 USD	Loan	Completed	1992-1999	Electricité du Laos	Electricité du Laos			
Very partially: Champasack Province (Sepian area, 240,000ha)	Khammouane, Savannakhet, Attapeu provinces	8,700,000.00 USD	Loan/Grant	Completed	1994-2000	MAF/DFE	DFE			
Champasack Province	Bolikhamxay, Khammouane, Savannakhet, Saravane, Attapeu, and Sekong.	34,700,000.00 USD	Loan	Completed	1998-2004	Electricité du Laos	Electricité du Laos			
Champasack Province	Other Lao provinces, and Cambodia	534,000 USD	Grant	Completed	2012-2014	Mekong River Commission	Mekong River Commission			
Champasack Province	Sekong and Attapeu provinces	26,000,000.00 USD	Grant	Ongoing	2012-2018	MAF	Department of Livestock and Fisheries (Champasack)			



Area 1	Area 2	Amount 1	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack province	Oudomxai, Phongsaly, Luang Namtha, Bokeo, Xieng Khouang, Luang Prabang, Houaphan, Sayaboury, Savannakhet, Saravan, Sekong, Attapue, Xaysomboun	10,000,000.00 USD	Grant?	Ongoing	2017-N/A	MOH	N/A			
Champasack Province	Savannakhet, Khamouane, Attapue, Vientiane	25,000,000.00 USD	Loan	Ongoing	2017-N/A	MONRE	N/A			N/A
Pakse District	Luang Prabang, Savannakhet, Thakhek	33,500,000.00 USD	Loan	Completed	1997-2005	MPWT	DPWT			
Champasack Province		12,590,000.00 USD	Loan	Completed	2003-2008					
Pakse District	None	700,000.00 USD	Grant	Completed	2010-2011	MPWT	DPWT		None	
Pakse District	None	3,250,000.00 USD	Grant	Ongoing	2012-2021	MPWT	DPWT			
Pakse District	None	24,250,000.00 USD	Loan (OCR)	Ongoing	2012-2022	MPWT	DHUP	DPWT	N/A	Egis (France)
Khong District (Siphandone Ban Hang Khone, Don Khong Island)	Salavanh, Savannakhet, Vientiane Province, Houaphanh, Oudomxay, Sayabouli, Bokeo and Luang Namtha	10,000,000.00 USD	Grant	Completed	2009-2013	MICT				

Area 1	Area 2	Amount 1	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack province	Attapu, Bolikhamxai, Houaphan, Khammouan, Khoueng Bokeo, Khoueng Oudomxai, Khoueng Phongsali, Khoueng Savannakhet, Khoueng Xekong, Louangnamtha, Luang Prabang Province, Salavan, Vientiane, Vientiane Prefecture, Vientiane Province, Xaignabouli, Xiangkhouang	10,000,000.00 USD	Grant	Completed	2009-2012	MOH				
Khong and Paksong District	Attapeu, Salavane, Savannakhet, and Sekong provinces	700,000.00 USD	Grant	Completed	2009-2014	Ministry of Agriculture and Forestry	Department of Planning and Cooperation			
Champasack Province	Salavan, Attapeu and Sekong Provinces	3,900,000 USD	Grant	Completed	2014-2015	MONRE	DWR (Department of Water Resources), NERI (National Environmental Research Institute), DPC (Department of Pollution Control), DEP (Department of Environmental Promotion).	MONRE, DONRE, Offices of NRE	None	AECOM Asia Ltd
Khong and Paksong District	Attapeu, Salavane, Savannakhet, and Sekong provinces	35,000,000.00 USD	Grant	Completed	2009-2016	Ministry of Agriculture and Forestry	Department of Planning and Cooperation			
Pakse District (Champasack University)	Luang Prabang, Vientiane	24,800,000.00 USD	Grant	Completed	2009-2016		Department of Higher Education			

Area 1	Area 2	Amount 1	Grant/Loan	Status	Year/Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack Province	Khoueng Savannakhet, Luang Prabang Province, Vientiane, Vientiane Province	23,000,000.00 USD	Grant	Completed	2010-2017	MOET				
Khong, Champasack and Paksong Districts (Greater Vat Phu, Four Thousand Islands, Bolaven Plateau)	Khammouane, Luangprabang, and Oudomxay provinces	40,000,000.00 USD	Loan	Ongoing	2014-2019	MICT	DICT			Swisscontact
Champasack Province	Houaphanh, Xieng Khouang, Khammouane, Savanakheth, Attapeu	N/A	Grant	Completed	1992-2006					
Champasack Province	None	N/A	Grant	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	Saravan, Sekong	N/A	Loan	Completed?	N/A	N/A				
Champasack Province	Vientiane, Luang Prabang, Khammouane, Xieng Khouang	1,238,069.18 EUR	Grant	Ongoing	2014-2018					
Champasack Town and Vat Phu World Heritage Site, Champasack District	Luang Prabang (3.5 million €)	500,000.00 EUR	Grant	Ongoing	2013-2019	MICT	Champasack District	World Heritage Office	None	French experts
Vat Phu World Heritage Site, Champasack District	None	1,000,000.00 €	Grant	Completed	2007-2012	MICT	Champasack District	World Heritage Office	None	French experts

Area 1	Area 2	Amount 1	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Vat Phu World Heritage Site, Champasack District	None	370,000.00 USD	Grant	Completed	2013-2016	MICT	Champasack District	World Heritage Office	None	French experts
Boloven Plateau	Cambodia, Myanmar, Thailand, Viet Nam	1,500,000.00 EUR	Grant	Completed	2012-2017	MAF				
Boloven Plateau?	Cambodia, Myanmar	N/A	Grant	Grant agreement to be signed	2019?	MST				
Boloven Plateau	North Laos	1,500,000.00 EUR	Grant	Completed	2010-2015	MAF				
Paksong District	Boloven Plateau		Grant	Completed	2015			Coopérative des Producteurs de Café du Plateau des Bolovens		Synergia Consulting and Training (France)
Kong and Mounlapamoke districts, Champasack province.	None	506,809.00 USD	Grant	Ongoing	2017-2019	MAF/MOFA	Department of Livestock and Fisheries (Champasack)			
Champasack Province	National level and Luang Prabang	6,400,000 EUR	Grant	Completed	2014-2017	MPI, MIC, and Lao National Chamber of Commerce and Industry				
Champasack Province	None	33,000,000.00 USD	Loan	Ongoing?	2009-	Electricité du Laos	Electricité du Laos			

Area 1	Area 2	Amount 1	Grant/Loan	Status	Year/Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack Province	Vientiane Capital, Savannakhet,		Grant	Completed	2010	MOIC				Nippon Koei Ltd., ICDJ, Mintech Consultants Inc
Champasack Province	Saravan Province		Grant	Completed	1995					Kokusai Kogyo Ltd.
Champasack Province	Oudomxay, Luang Prabang, Khammouan, Savannakhet,	546 Million Yen	Grant	Completed	2004					
Champasack Province	Vientiane Capital, Phongsaly, Luang Namtha, Oudomxay, Sayaboury, Savannakhet, Salavan,	1,221 Billion JPY	Grant	Completed	2006-2007					
Champasack Province	Savannakhet, Salavan	7,649 billion JPY	Grant	Completed	1997					
Champasack Province	Savannakhet	1,108 billion JPY	Grant	Completed	2010					
Pakse District	None	5,446 billion JPY	Grant	Completed	1997-2000					
Champasack District	Vientiane, Luang Prabang, Xiang Khouang, Savannakhet	533 million JPY	Grant	Completed	2013					
Champasack District	Vientiane, Salavan, Sekong	N/A	Grant - (Technical Cooperation)	Ongoing	2015-2018					
Sanasomboun District	None	N/A	Grant	Completed	2008	MEM	Electricité du Laos (EDL)			The Kansai Electric Power
Champasack District	None	N/A	Grant	Completed	2001-2003	MIC				Kokusai Kogyo Co.Ltd

Area 1	Area 2	Amount 1	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack Province	Vientiane, Luang Prabang, Luang Namtha, Xieang Khuoang, Savannakhet, Salavan, Khammouane	N/A	Grant	Completed	2004-2013	MOES				Plan International
Pakse District Phonthong District	None	48,000,000.00 USD	N/A	Completed	1997-2000				Shimizu Corp.	
Champasack Province	Vientiane, Champasack, Salavan, Sekong, Attapeu	N/A	Grant - Technical Cooperation	Ongoing	2016-2021					
Champasack Province	Vientiane, Savannakhet, Saravan	81,160.00 USD	Grant	N/A	2006					
Champasack Province	Vientiane, Luang Prabang	346,244 JPY	Grant	Completed	2009					
Champasack Province	Khamouan, Savannakhet, Sekong	N/A	Grant	N/A						
Paksong district, Champasack	None	88,364.00 USD	Grant	Completed	2012-2014					
Champasack province	Attapeu province	1,402,947.00 USD	Grant	Completed	2012-2014					
Champasack province	None	N/A	Grant	N/A						

Area 1	Area 2	Amount 1	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
Champasack province	None	102,358.00 USD	Grant	N/A	2015					
Sanasomboun District	None	102,616.00 USD	Grant	N/A	2014			Department of Education and Sports of Champasack Province		
Champasack province	None	60,929.00 USD	Grant	N/A	2013			Department of Education and Sports of Champasack Province		
Sanasomboun District	None	81,750.00 USD	Grant	Completed	2010-2011			Sanasomboun District		
Sanasomboun District	None	48,450.00 USD	Grant	Completed	2010-2011			Sanasomboun District		
Sanasomboun District	None	93,153.00 USD	Grant	Completed	2010-2011			Sanasomboun District		
Champasack Province	None	78,354.00 USD	Grant	Completed	2005-2007			Health Department, Champasack Province		
Pakse District	Vientiane Capital	5,000,000.00 USD	Grant	Grant agreement to be signed	2019?	MPWT	UDAA? DPWT?	N/A	N/A	N/A
Mekong river bank, Pakse and Phonthon Districts	Xedon River Bank, Phonthon District	53,000,000.00 USD	Loan	Completed	June 2017- June 2021	MPWT	DPWT	DPWT	Hanshin & C Corp.	Isan Corp. (Korea) and DOWAH Eng.(Korea)
Pakse District	None	69,000,000.00 USD	Loan	Loan agreement to be signed	2020-2023?	MPWT	DPWT	N/A	N/A	N/A

Area 1	Area 2	Amount 1	Grant/Loan	Status	Year/Stage	Ministry	Implementing Agency	Beneficiary	Contractor	Consultant
7 Districts incl. Pakson and Pakse	1 District in Silavanh Province	40,000,000.00 USD	Loan	Loan agreement to be signed	2018?	MPWT	Champasack Water Works (Nam Papa)	N/A	N/A	N/A
Pakse District	None	75,000,000.00 USD	Loan	Loan agreement to be signed	2020?	MoH	N/A	N/A	N/A	N/A
Pakse District	None	30,000,000.00 EUR	Mixed (45% grant, 55% loan)	Loan/grant agreements to be signed	2019?-?	MPWT	DPWT	N/A	N/A	N/A
Champasack province	None		Grant	Completed	2013-2016					Swiss Contact
Champasack province	Cambodia	500,000.00 USD	Grant	Completed	2018-	MICT	DICT			Swiss Contact
Khong District	Oudomxay, Xayabuly, Bokeo, Savannakhet Provinces	35,140,000.00 THB	Loan (+ minor grant)	Ongoing	2013-?	MPWT	Department of Water Supply	Khong District	Hydro Engineering Co., Ltd. (Thailand)	Panya Consultant Co., Ltd. (Thailand)
Paksong District	Bokeo Province	N/A	Grant	Completed	2015-2018?	MPH	Provincial Department of Public Health	Paksong District	Ubon Ratchathani Provincial Public Health Office	N/A
Paksong District	None	N/A	Grant	Completed	2016	MPWT	DPWT	Paksong District		



**Table All-2: Official Development Assistance for Poipet**

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency
Multilateral	UNDP, CIDA, AusAID, DFID, Austria, SDC	Clearing for Results Phase II	Demining	Banteay Meanchey	Battambang, Pailin	25.72 million USD	Loan	Completed	2011-2016	N/A	(CMAA) Cambodia n Mine Action and Victim Assistance Authority
Multilateral	World Bank	Education For All Fast Track Initiative Catalytic Trust Fund	Education	Banteay Meanchey	N/A	57.4 million USD	Loan	Completed	2008-2012	MEYS	
Multilateral	World Bank	Ketsana Emergency Reconstruction and Rehabilitation Project	Rural development, emergency response, roads, water and sanitation	Banteay Meanchey	Kampong Cham, Siem Reap, Kampong Thom, Kampong Chhnanh	40 million USD	Loan	Completed	2010-2014	MEF	
Multilateral	World Bank	Provincial and Peri-Urban Water and Sanitation Project	Water and Sanitation (peri - urban)	Banteay Meanchey	Phnom Penh, other provinces	19.9 million USD	Loan	Completed	2003-2011	MIME	
Multilateral	SPCR PPCR	Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang, and Kampong Speu (part of the Provincial Roads Improvement Project)	Roads	Poipet	Battambang, Bavet, Neak Leung	10 million USD	Loan	Ongoing	2012-	MPWT	

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implement ing Agency
Multilateral	ADB	Power transmission Project	Energy- Electricity transmission and distribution	Banteay Meanchey	Siem Reap, Battambang, Pursat	8 million USD	Loan	Completed	2007- ?	MIME	Electricite du Cambodge (EdC)
Multilateral	ADB	The Tonle Sap Poverty Reduction and Smallholder Development Project-Additional Financing	Agriculture, natural resources and rural development	Banteay Meanchey	Kampong Cham, Kampong Thom, Siem Reap, and Tboung Khmum	27.30 million USD	Loan	Ongoing	2009-2018	MAFF	
Multilateral	ADB, OFID (The Opec Fund for International Development),	Medium Voltage Sub-Transmission Expansion Project (former name: Rural Electrification Project)	Energy- Electricity transmission and distribution	Banteay Meanchey	Kampong Thom, Kampong Cham, Siem Reap, Kandal	66.29 million USD	Loan	Ongoing	2013-2018	MIME	EDC
Multilateral	ADB,Nordic Development Fund, Government of Australia, Export-Import Bank of Korea, Strategic Climate Fund, AFD,	Cambodia: Rural Roads Improvement Project II	Transport / Roads (rural)	Banteay Meanchey	Thbom Khmom, Kampong Cham, Kampong Thom, Kampong Chhnang, Pursat, Battambang, Kampong Speu, Siem Reap and Takeo	142 million USD (loans)/39.92 million USD (grants)	Loan/G rant	Ongoing	2013-	MRD	Ministry of Rural Developme nt

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implement ing Agency
Multilateral	ADB	Upper Secondary Education Sector Development Program	Education	Banteay Meanchey	Kampong Cham, Kratie, Kampong Thom, Battambang, Otdor Meanchey, Kampong Speu, Kandal, Sihanoukville, Koh Kong, Kampong Chhnann , Pursat	45 million USD	Loan	Ongoing	2016-	MEYS	
Multilateral	ADB, AFD	Northwest Irrigation Sector Project	Irrigation	Banteay Meanchey	Pursat, Battambang, Siem Reap	30.9 million USD	Loan/G rant	Completed	2003-2010	MOWRAM	MOWRAM
Multilateral	ADB	Northwestern Rural Development (Rural Development)	Rural development	Banteay Meanchey	Battambang, Oddar Meanchey, Siem Reap	27.2 million USD	Loan	Completed	2002-2005	Ministry of Rural Development	
China	Eximbank	Construction of National Road No 59	Transport / Road transport (non-urban)	Banteay Meanchey	None	87.6 million USD	Conces sional loan	Completed	N/A	MPWT	
China	Yunnan province	China provides agricultural engines for post-flood rehabilitation	Eergency response	Banteay Meanchey	None	N/A	Grant	Completed	2013	N/A	

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implementing Agency
China	Eximbank	Rehabilitation Project of the National Road No 57B	Roads	Banteay Meanchey (Ou Chrov District)	N/A	60.17 million USD	Concessional loan	Ongoing	2012-	MPWT	
China	Eximbank	Rehabilitation Project of the National Road No 57B	Transport / Road transport (non-urban)	Banteay Meanchey		125 million USD	Concessional loan	Completion	N/A	MPWT	
China	Eximbank	Cambodian National Road No. 58 Project	Roads	Banteay Meanchey	Uddor Meanchey	119.75 million USD	Concessional loan	Ongoing	2014-?	MPWT	
China	N/A	Cambodian National Road No. 58 Project	Transport / Road transport (non-urban)	Banteay Meanchey	– Banteay Meanrith-Thmor Daun	100 million USD	Concessional loan	Ongoing	2013	MPWT	
Korea	KEXIM	Irrigation Development and Flood Mitigation Project in Banteay Meanchey Province	Irrigation	Banteay Meanchey	None	85 million USD	N/A	Ongoing	2015-N/A	MOWRAM	MOWRAM
Japan	JICA	National Road No. 5 Improvement Project (Thlea Ma'am-Battambang and Sri Sophorn-Poipet Sections)	Transport - Road	Poipet-Sisophon	Thlea Ma'am, Battambang	19,208 million JPY	Grant	Ongoing	2016-	MPWT	

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implement ing Agency
Multilateral	ADB	Community-based Livelihood Enhancement for the Rural Poor	Rural development	Banteay Meanchey	Battambang, Oddar Meanchey, Siem Reap	1.8 million USD	Grant (JFPR)	Completed	2002-2005	MRD	
Multilateral	ADB	Second Urban Environmental Management in the Tonle Sap Basin Project	Water and other urban infrastructure and services	Sisophon	Battambang (Battambang), Kampong Thom (Stung Saen)	86.77 million USD (loan), 1.27 million USD (grant)	Loan /Grant	Starting	2018-	MPWT	
Multilateral	ADB	Medium-Voltage Sub-Transmission Expansion Sector Project (former name: Rural Electrification Project) - Loan 2979-CAM	Electricity/Power	Banteay Meanchey	Kampong Thom, Kampong Cham, Siem Reap, Kandal	55 million USD (incl. 10 million USD and 1 million USD Grant)	Loan /Grant	Ongoing	2017-	MME	
Multilateral	ADB	Study on Dry Port Development Plan along International Railway Lines Connecting Thailand with Cambodia, the Lao PDR, and Myanmar. REG-TR/TA/10	Transport/logistics	Poipet	Thailand, Lao PDR, and Myanmar	N/A	Grant	Planned	2018 ?	MPWT?	
Multilateral	ADB	GMS Corridor Town Development Project 1	Urban environment	Poipet	Battambang (Battambang), Svay Rieng (Bavet), Neak Loeung	42 million USD (loan), 5.9 million USD (grant)	Loan /Grant	Ongoing	2012-	MPWT?	

Country	Donor institution	Project Name	Sectors in Banteay Meanchey	Area 1	Area 2	Amount	Grant/ Loan	Status	Year/ Stage	Ministry	Implement ing Agency
Thailand	State Railways of Thailand	Construction of Poipet (CAM)– Klong Loeuk (THA) Railway Bridge	Transport - Railways	Poipet	None	0.5 million USD	Grant	Completed	2015	MPWT	
Thailand	NEDA	Access road from Stung Bot to Highway 5	Road and administrative buildings	Poipet	None	28.5 million USD	Loan	Ongoing	2018-2020 ?	MPWT	
Thailand	Ministry of Transport	Ban Nong Ean Stung Bot Bridge Construction	Bridge	Poipet	None	5.2 million USD	Grant	Ongoing	2016-	MPWT	

**Table All-3: Official Development Assistance for Bavet**

Country	Donor institution	Project Name	Sectors in Svay Rieng	Area 1	Area 2	Amount	Grant/Loan	Status	Year/ Stage	Ministry
Multilateral	World Bank	Provincial and Peri-Urban Water Supply and Sanitation Project	Water and Sanitation	Bavet	Kratie, Prey Veng, Kandal, Takeo, Kampong Cham, Stung Treng...	19.9 million USD	Loan	Completed	2003-2011	MIME
Multilateral	World Bank	Higher Education Institutions Capacity Improvement Project	Education and Agriculture	Svay Rieng	Battambang and other provinces (school construction)	90 million USD	Loan	Starting	2018	MEYS
Multilateral	World Bank	Second Health Sector Support Program	Health	Public Sector Management, human development	Large number of towns in other provinces	30 million USD	Loan	Completed	2008-2016	MOH
Multilateral	World Bank	National road 1 : Neak Loeung - Bavet (Road Maintenance, upgrading)	Transport infrastructure	Bavet	Neak Loeung	3 million USD	Loan	Completed	2009-2013	MPWT
Multilateral	ADB	National Road 1 : Neak Loeung - Bavet (DBST)	Transport infrastructure	Bavet	Neak Loeung	50 million USD	Loan	Completed	1999-2004	MPWT
Multilateral	ADB	Rural Energy project	Energy	Svay Rieng	Kampong Cham	4.81 million USD	Grant	Ongoing	2014-2018	MIME

Country	Donor institution	Project Name	Sectors in Svay Rieng	Area 1	Area 2	Amount	Grant/Loan	Status	Year/ Stage	Ministry
Multilateral	ADB, Canadian Climate Fund for the Private Sector	Cambodia Solar Power Project	Energy/ Renewable energy generation - solar	Bavet	Bavet	3.6 million USD (from ADB) 3.25 million USD (from CCFPS)	Loan	Ongoing	2016-?	MIME
Multilateral	SPCR PPCR	Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang, and Kampong Speu (part of the Provincial Roads Improvement Project)	Roads	Svay Rieng	Prey Veng, , Kampong Chhnang, and Kampong Speu	17 million USD	Loan	Ongoing	2012-	MPWT
Multilateral	ADB	Road Network Improvement Project	Road, Infrastructure	Svay Rieng	Prey Vieng, Siem Reap	70 million USD	Loan	Planned	2018	MPWT
Multilateral	ADB	Urban Water Supply Project	Urban Water Supply	Svay Rieng	Stung Treng, Siem Reap, Kampong Cham	37.4 million USD	Loan	Ongoing	2015-2020	MIH
Canada	CIDA, CIGAR	Small Holder Market Development	Fruits, Vegetables	Svay Rieng	N/A	N/A	Grant	N/A	N/A	MAFF



Country	Donor institution	Project Name	Sectors in Svay Rieng	Area 1	Area 2	Amount	Grant/Loan	Status	Year/ Stage	Ministry
Multilateral	ADB	GMS Corridor Town Development Project 1	Urban environment	Bavet	Battambang (Battambang), Banteay Meanchey (Poipet), Neak Loeung	42 million USD (loan), 5.9 million USD (grant)	Loan /Grant	Ongoing	2012-	MPWT
Australia	AUSaid	Cambodia - Australia Agricultural Extension Project Phase II	Agriculture	Svay Rieng	N/A	N/A	Grant	N/A	N/A	MAFF
Australia	AUSaid	Agriculture Quality Improvement Project	Rice, Fruit, Vegetables	Svay Rieng	N/A	N/A	Grant	N/A	N/A	MAFF
USAID	Usaid	Cambodia - Micro, Small and Medium Enterprise Program	Livestock, Aquaculture, Agro-processing and claytile	Svay Rieng	N/A	N/A	Grant	N/A	N/A	MAFF
Japan	JICA	Feasibility Study of Phnom Penh – Bavet Expressway Development Project	Road, Infrastructure	Svay Rieng-Bavet	Phnom Penh, Kandal and Prey Veng provinces	N/A	Grant	Completed	N/A	MPWT
Japan	JICA	Phnom Penh – Bavet Expressway Development Project	Road, Infrastructure	Bavet	Phnom Penh, Kandal and Prey Veng provinces	2 billion USD	Loan	Planned	N/A	MPWT
China	Chinese Eximbank	Construction of 115kV Transmission Line and Substation from Phnom Penh to Bavet	Energy	Bavet	Phnom Penh	80 million USD	Loan	Completed	2010-2015	MIME

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