

Japan International Cooperation Agency

Office of the National Economic and Social Development Board The Kingdom of Thailand

The Study on the Integrated Regional Development Plan for the Northeastern Border Region in the Kingdom of Thailand

Final Report Summary

September 2001

Pacific Consultants International
International Development Center of Japan
KRI International

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The exchange rate applied in the Study is: US\$ 1.00 = Thai Baht 41.4

(1998 Bank of Thailand Reference Rate)

Preface

In response to the request from the Government of the Kingdom of Thailand, the Government of

Japan decided to conduct the Study on the Integrated Regional Development Plan for

Northeastern Border Region in the Kingdom of Thailand, and entrusted the study to the Japan

International Cooperation Agency (JICA).

JICA sent a study team which was headed by Dr. Jinichiro Yabuta of International Development

Center of Japan and Dr. Katsuhide Nagayama of Pacific Consultants International to the Kingdom

of Thailand from March 2000 to August 2001.

The team held discussions with the officials of the Thai Government, and conducted field surveys.

After the team returned to Japan, further studies and analysis were made and this report was

prepared.

In parallel with this study, JICA undertook the Study on the Integrated Regional Development Plan

for the Savannakhet and Khammouan Region (SKR) in Lao PDR, which is facing with the

Northeastern Border Region (NBR) over the Mekong, in response to request from the Government

of the Lao PDR. Two studies on NBR and SKR together aimed at promoting development of not

only respective regions but cooperation between the two regions.

i hope that this report will contribute to the development of the Northeastern Border Region and

enhancement of friendly relations between Thailand and Japan.

I wish to express my sincere appreciation to the officials concerned of the Thai Government for

their close cooperation extended to the team.

September 2001

Takao Kawakami

M上隆朗

President

Japan International Cooperation Agency

Mr. Takao Kawakami

President

Japan International Cooperation Agency

Tokyo, Japan

Dear Mr. Kawakami

Letter of Transmittal

We are pleased to submit to you the final report for the Study on the Integrated Regional Development Plan for the Northeastern Border Region in the Kingdom of Thailand. The report contains our studies on the present condition of regions as well as surrounding international environment, analysis of the underlying conditions affecting the further regional development based on the regional resources, formulation of a masterplan and development programs/projects for implementation of the masterplan.

This report presents 93 projects in the masterplan. Among them, the 4 most important projects/programs are listed as priority projects for their earliest implementation.

We wish to take this opportunity to express our sincere gratitude to your Agency and the Ministry of Foreign Affairs. We also wish to express our deep gratitude to the National Economic and Social Development Board in the Kingdom of Thailand and other authorities concerned for the close cooperation and assistance extended to us during our study.

Very truly yours,

Jinichiro Yabuta

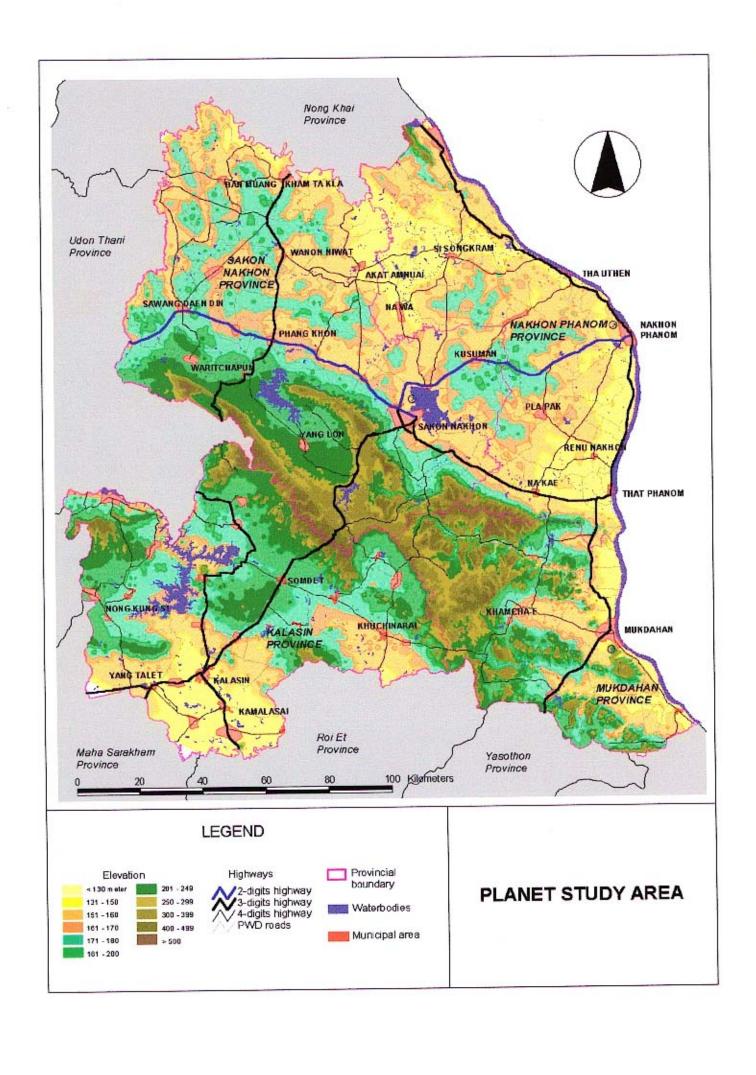
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Kastsuhide Nagayama

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The Study on the Integrated Regional Development Plan for the Northeastern Border Region in the Kingdom of Thailand



THE STUDY ON THE INTEGRATED REGIONAL DEVELOPMENT PLAN FOR THE NORTHEASTERN BORDER REGION

FINAL REPORT: SUMMARY

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Projects and Programs List

THE NORTHEASTERN BORDER REGION

1.1 Past Socioeconomic Development

(1) Expanding Economic Disparity

Before the economic crisis in 1997, all regions enjoyed a rather high economic growth; however, economic disparities among the regions had been contrarily expanded in the past two decades. The GDP per Capita of the Northeastern Border Region (NBR) had been at the level of only 35% of the country's average in 1981. It worsened to 27% in 1997. The lives of people in the NBR have been greatly improved, but the NBR's economy has remained still relatively backward from the standpoint of national economic development.

(2) Low Income of Rural Household

NBR has developed with relatively advanced infrastructure and succeeded in providing minimum basic human needs and public services. The rural household income, however, has remained at a lower level. This problem is attributed to the following root causes:

- Unstable and lower prices of agricultural products;
- Lower bargaining power of farmers;
- Marginal agricultural production;
- Inadequate land management; and
- Less income opportunities in the non-agricultural sector.

(3) Weak Urban Economy

NBR does not have adequate urban agglomeration, which has resulted in a weak urban economy. This weak urban economy limits employment opportunities and value added products in the NBR. It strongly affects the GRDP in NBR as well by pulling it down. This problem is mainly caused by the following:

- No significant resources;
- Distance from markets and ports;
- Few entrepreneurs; and
- Less capital accumulation.

(4) Vicious Circle

These problems are inter-related as shown in Figure 1.1.

Table 1.1: Regional Economic Disparities in terms of Per Capita GDP

	1981	1985	1990	1995	1997	
Whole Country	100.0%	100.0%	100.0%	100.0%	100.0%	
Bangkok Metropolis	344.2%	322.0%	360.5%	338.9%	321.9%	
Northeastern region	38.8%	40.9%	34.6%	33.1%	33.1%	
Northern region	61.2%	62.0%	51.8%	47.5%	48.0%	
Southern region	77.6%	74.0%	70.0%	65.5%	65.4%	
Eastern region	130.5%	145.5%	135.1%	159.6%	185.0%	
Western region	91.7%	93.0%	75.8%	75.0%	72.7%	
Central region	88.0%	86.2%	79.3%	98.4%	104.0%	
BMR	311.6%	292.6%	321.8%	303.1%	286.7%	
NBR	35.0%	37.7%	30.8%	28.3%	26.8%	
Nakhon Phanom	33.0%	34.1%	29.0%	26.7%	24.2%	
Mukdahan	0.0%	46.7%	32.2%	35.3%	35.0%	
Sakon Nakhon	37.0%	37.5%	31.7%	27.8%	26.9%	
Kalasin	35.1%	37.8%	30.7%	27.9%	26.1%	

Note: GDP of the whole country is assumed to be 100%.

Source: .IICA Study Team's calculation based on the NESDB data

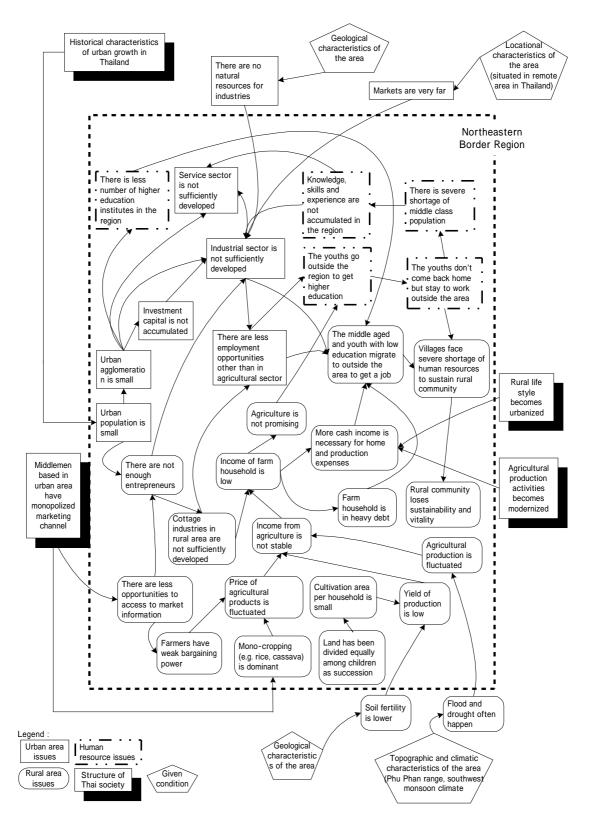


Figure 1.1: Problem Structure of NBR

1.2 Position of NBR in GMS

(1) Spatial and Socio-Economic Position

The northeastern region is surrounded by Dong Phraya Fai Mountains in the west and Dangrek Mountains in the south. The region is relatively isolated from the central activity of Thailand and from other parts of Thailand as well.

Existing urban centers of the northeastern region are Udon Thai, Khon Kaen, Nakhon Ratchasima, Ubon Ratchathani, Yasothon, which line two major economic development axes in the region along national highway route 2 and national highway route 224.

The NBR is recognized as the northeastern peripheral area facing Lao PDR across the Mekong River. It is generally regarded as one of the most remote areas in Bangkok with basically an agriculture-based economy.

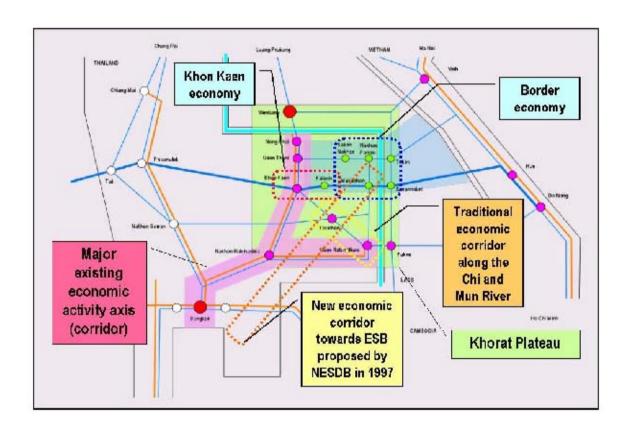


Figure 1.2: Spatial and Socioeconomic Structure of NBR in GMS

(2) Changes of Business Environment of GMS

1) GMS Program

The Greater Mekong Subregion (GMS) Program is a major existing international movement that promotes the integration of Indochina into one regional economy, which comprises Cambodia, Laos, Myanmar, Thailand, Vietnam, and Yunnan Province

(China). The major contents of the GMS program include the following:

- Better linkages among 6 sub-regional countries by developing networks of transportation, telecommunication, and energy;
- Better networks inducing more integrated sub-regional markets both in terms of trade and investment; and
- Chances for policy dialogue among the

member countries, especially for issues related to international infrastructure management, labor movement, and trade and investment rules and regulations.

A number of sub-regional initiatives along the above objectives have now entered implementation stage.

2) AFTA

The members of ASEAN (Association of Southeast Asian Nations) signed the Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area (AFTA) in 1992. Currently, the CEPT includes more than 96,000 items, equivalent to more than 90% of all commodities. "Free Trade" will be realized by lowering or eliminating the tariff rates on CEPT LIST products. These items are to be phased into the current CEPT scheme by the mid-2010s.

AFTA will liberalize not only commodity trade but also investment from ASEAN and other countries by AIA (ASEAN Investment Area) scheme. Especially the investment to the following seven areas will be given higher priority: (1) tourism, (2) telecommunication, (3) air transportation, (4) sea transportation, (5) business, (6) finance and (7) construction.

3) Indochina East West Corridor

In 1998, the GMS countries endorsed the concept of "Key Transportation Corridor" for the East-West Corridor. The Second Mekong International Bridge and Route 9 in Lao PDR are the main components of the East-West Corridor and they will be completed in 2004-2005. This will accelerate the trade among Thailand, Laos and Vietnam. Particularly, a certain portion of sea-borne trade among GMS countries will be diverted to land transportation for a comparative cost advantage especially in transporting goods.

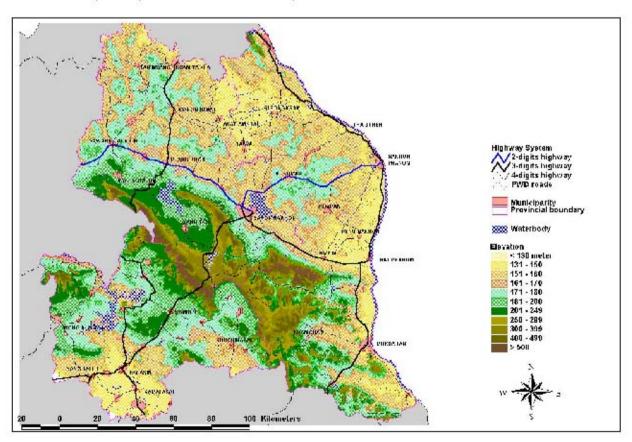


Figure 1.3: Spatial Structure of NBR

2. RESOURCE ANALYSIS

Table 2.1 summarizes views and insights into development potentials, constraints, prospects and negative concerns that are related and influential factors to development of the NBR.

A crucial factor was taken into account, that is, the on-going Second Mekong Bridge, which will connect the region from the Da Nang port in Vietnam to NBR through Lao PDR. The Bridge is expected to stimulate the economic development of the East-West Corridor, thereby largely affecting the NBR's development constraints and potentials in the future.

Table 2.1: Resource Analysis of the NBR regarding Regional Development

Aspect	Resource Evaluation					
Development Potentials	Variety of Local Products for Development					
	Adequate Level of Infrastructure Provision					
	Quality of Industrial Workers					
	Proximity to Indochina Markets					
	Experience on Border Trade Practice					
Development Constraints	Remoteness from Sea Ports and Urban Centers					
	Insufficient Agricultural Land for Expansion					
	(Poor soil fertility, Insufficient water resources)					
	Weak Agricultural Structure (Monoculture)					
	Insufficient Industrial Base (Low accumulation of industrial activities, Shortage in human resources)					
Prospects	The Second Mekong Bridge Construction					
	Agricultural Diversification					
	Advantage on International Tourism Development					
	New Business for Trade and Transportation Sector					
Negative Concerns	Market Penetration from GMS Countries					
	Labor Migration from GMS Countries					
	Weak Information and Commercial Network					

PLANNING ISSUES

Six (6) key planning issues have been identified towards a sound direction of the future development in the NBR.

Issue 1: Improvement of Rural Economy and Community

Farming Diversification: Traditional crops with traditional farming methods are marginal in terms of productivity. Therefore, in order to increase the farmers' income level, much effort for appropriate agricultural diversification needs to be made. At the same time, effort for expanding market channels and meeting with market demands in the GMS as well as the Thai domestic market is necessary.

Diversification should be deliberately guided based on the land suitability. Diversified crops need to be geared with the marketability in agro-processing industries, for which a contract-farming system should be further promoted.

Off-farm Income: Approximately 75% of the income is generated by off-farm activities in the farmers' households on average. Thus, encouragement of off-farm activities in rural areas is effective to improve the farmers' household income level. For this purpose, there exist many potential resources to be utilized for home/cottage industries in NBR. Some of them deserve to start up by either making use of the existing community development programs or developing a new financial-cum-technology support program.

Issue 2: Natural and Environmental Resource Management

Currently the natural environmental system of the NBR is properly functioning. However, severe environmental burdens due to further deforestation and extensive agricultural development may harm the sustainable environmental system of the NBR. Since farming activities will remain as one of the major economic activities in the region, they are very important to maintain/rehabilitate the current environmental system.

Issue 3: Encouragement of Industrial and Service Sectors

It is necessary to strategically induce new leading industries to create more non-agricultural job-opportunities for local workers. Some selected types of small- and medium-scale industries should be introduced strategically in NBR by taking its location advantage of a "border area." Such potential industries include import- and export-related business activities based on local resources.

Issue 4: Utilization of East-West Corridor to form a Strategic Economic Region

The Indochina East-West corridor is intended to provide the NBR with new development opportunities not only for manufacturing, service and trade sectors but also for the agricultural sector by stimulating border trade and physical distribution and by expanding the variety of markets. An important insight is that the "corridor" shall not function merely as a transport linkage, but also as a "linear economic zone" integrated with economic infrastructure, such as power, energy and telecommunication systems.

Issue 5: Facilitation of Human Resources Development

Lack of middle class technical and managerial workers and their low quality are the severe constraints for future development of NBR. It is a critical issue especially for further industrialization. Further attention and policy priority should be given to human resource development (HRD). It should cover a wide variety of segments, from the young to the elderly people, and not be limited to the formal education, but also vocational training and occupational training.

Issue 6: Planning under the Current Decentralization Policy

The new constitution stipulates the new institutional framework for local governance under the decentralization policy. Under this new institution, local initiatives in planning, management and resource allocation for developments should be further strengthened.

Another issue to address is strengthening of the local financial capacity in order to create a sound basis for independent local administration. Introduction of the local government development funds for Tambon and bond issuance system for provinces and municipalities are the most practical alternatives to be examined.











4. VISIONS, OBJECTIVES AND TARGET

4.1 Vision

Local stakeholders in NBR have been sharing a common development vision crafted through a series of stakeholder meetings, that is:

"NBR will/shall be the region sustainably growing as a center of the East-West Economic Corridor with good management of natural, environmental and human resources."

4.2 Objectives

The vision can be broken down into five development objectives as follows:

(1) Sustainable Natural Resource Utilization

The excessive use of the agricultural land causes soil erosion and saltation in NBR. For sustainable utilization of natural resources over a long period of time, a proper natural resource management mechanism should be established at the local level. In addition, an appropriate land use plan should be established in association with adequate natural environmental conservation in order to clearly indicate a well-coordinated relationship between human activities and natural environment.

(2) Well-reformed Agriculture as the Basis of its Economy

Agricultural development potentials are to be fully utilized in order to improve income of farming households. The following agricultural restructuring schemes are required to realize this objective:

- Crop diversification in accordance with land suitability and marketability;
- Mixed farming system as a new farming method;
- Promotion of local products; and
- Promotion of fishery and livestock.

(3) New Leading Industries Taking Advantage of Emerging New Markets in relation to the GMS and Indochina East-West Corridor

By taking advantage of newly emerging markets in the GMS and the Indochina East-West Corridor, non-agricultural job opportunities should be increased in NBR to reduce out-migration and the number of seasonal workers. Potential industries in NBR include:

- Goods distribution-related processing Industries;
- Agro-processing industries;
- Urban Services-oriented business establishments:
- Tourism-related service industries; and
- Educational and training services for GMS.

(4) Rich Human Resources

For the next generation of industrial development of Thailand, it is imperative to increase the number of middle-class workers in technical and managerial fields. NBR will be a potential resource region to provide this type of workers. It is also important for improving wage of seasonal workers as well as for providing enough workers to promote industrialization in the NBR.

(5) Decentralized Local Administration and Public Participation

Under the decentralization policy of Thailand, local governments will play more important roles in local development and provision of public services. In the future, local governments should have capable personnel and financing capability to provide services more effectively and efficiently, and the people's participation in the development process should be further encouraged.

4.3 Development Target

As the target of economic development, farm income is taken into account as an important indicator. The target of the economic growth is to achieve the income level that will allow most of the farm households to live comfortably in the rural area. A common target for alternatives is set as shown below.

The average rural household income shall be 100,000 Baht (USD 2,415) per year or 23,800 Baht (USD 575) per capita GRP in the rural areas in 2020 (at 1998 constant prices).

Table 4.1: Socio-Economic Framework

	Socioeconomic Indicators				Growth Rates						
	1985	1990	1995	1998p	2010*	2020*	85-90	90-95	95-98	98-2010	2010-'20
NBR											
GRP (million bahts)	37,402	50,106	71,225	66,625	99,933	130,371	6.0%	7.3%	-2.2%	3.4%	2.7%
Agriculture	12,020	15,810	18,795	17,634	20,664	22,943	5.6%	3.5%	-2.1%	1.3%	1.1%
Industry	5,139	5,790	11,968	7,279	14,032	20,328	2.4%	15.6%	-15.3%	5.6%	3.8%
Service	20,243	28,506	40,462	41,712	65,237	87,100	7.1%	7.3%	1.0%	3.8%	2.9%
Compostion of GRP											
Agriculture	32%	32%	26%	26%	21%	18%	-	-	-	-	-
Industry	14%	12%	17%	11%	14%	16%	-	-	-	-	-
Service	54%	57%	57%	63%	65%	67%	-	-	-	-	-
Population (000)	2,559	2,792	3,026	3,115	3,459	3,754	1.8%	1.6%	1.0%	0.9%	0.8%
Urban		2,.02	0,020	498	813	1,107		-	-	4.2%	3.1%
Rural	_	_	_	2.617	2.646	2.646	_	_	_	0.1%	0.0%
Outmigrating pop/ year				-5.6	-5.9	-5.6	-	-	-	-	-
Per Capita GDP (000baht)	14.6	17.9	23.5	21.4	28.9	34.7	4.2%	5.6%	-3.1%	2.5%	1.9%
Urban		_		46.2	55.6	60.6	_	_	_	1.5%	0.9%
Rural		_		16.7	20.7	23.9	_	_	_	1.8%	1.5%
Agriculture]]]	6.7	7.8	8.7	_	_	_	1.2%	1.1%
Non-agriculture				9.9	12.9	15.3	_	_		2.2%	1.7%
14011-agriculture				5.5	12.5	15.5	_	_	_	2.270	1.7 70
Rural household income	-	-	-	70	87	100	-	-	-	1.8%	1.5%
Disparity Index	0.38	0.31	0.28	0.28	0.29	0.29					
(National Ave. = 1)	0.36	0.31	0.20	0.20	0.29	0.29	-	-	-	-	-
Whole Country											
GDP (million bahts)	2,011,033	3,284,106	4,955,352	4,635,926	6,884,339	9,207,162	10.3%	8.6%	-2.2%	3.4%	3.0%
Population (000)	51,796	56,303	59,460	61,466	69,674	76,584	1.7%	1.1%	1.1%	1.1%	1.0%
Per Capita GDP (000)	38.8	58.3	83.3	75.4	98.8	120.2	8.5%	7.4%	-3.3%	2.3%	2.0%

OVERALL DEVELOPMENT STRATEGY

In order to achieve the long-term vision and materialize the development target as discussed above, five (5) strategies are recommended. Each strategy is mutually linked with and related to the others to be fully functional (see Figure 5.1).

Strategy 1: Natural Resource and Land Use Management

Strategy 2: Diversification of Local Economy

Strategy 3: Promotion of New Leading Industries

Strategy 4: Increase of Middle-class Technical and Managerial Workers

Strategy 5: Urban Centers and Infrastructure Development

Strategy 1: Natural Resource and Land Use Management

A strategic focus should be placed on maintaining existing local resources, the environment and the eco-system of the NBR. For this purpose, an appropriate land use pattern needs to be designated to guide towards appropriate agricultural activities.

Strategy 2: Diversification of Local Economy

The regional economy in the NBR is based on agriculture and rural community by fully utilizing facilitating local resources, agricultural restructuring in accordance with crop suitability and marketability. The rural economy needs to be further facilitated, creating new income generating opportunities. This can be materialized through proper agricultural diversification and promotion of activities such as cottage off-farming industries and agro-processing industries. Such integrated efforts at the local level should be reinforced by a number of strategic financial and technical support programs.

Strategy 3: Promotion of New Leading Industries

New business opportunities shall be created by GMS economic integration.

Agro-processing industry should be promoted to make use of the local products, while exploiting the new GMS market. Tourism development should be encouraged under the Thai-Lao cooperation. In addition, the export-oriented industry, and trade and transport-related industries should be promoted to utilize the location advantages.

Strategy 4: Increase of Technical and Managerial Workers in Middle-class

One of the major constraints on the development of the NBR is a lack of adequate middle-class workers in the NBR. Increase of the middle-class workers is vital to entice new investments in the NBR. This is required to shift the Thai industrial structure to a technology-oriented one.

Strategy 5: Urban Centers and Infrastructure Development

A sizable urban agglomeration is needed to support the manufacturing and service sector development, as well as to create new agricultural markets in the NBR. The urban development should be further encouraged to attract a variety of urban services such as trading, financing and information functions in major urban centers. Infrastructures should also be properly provided to support urban center development and their effective linkage.

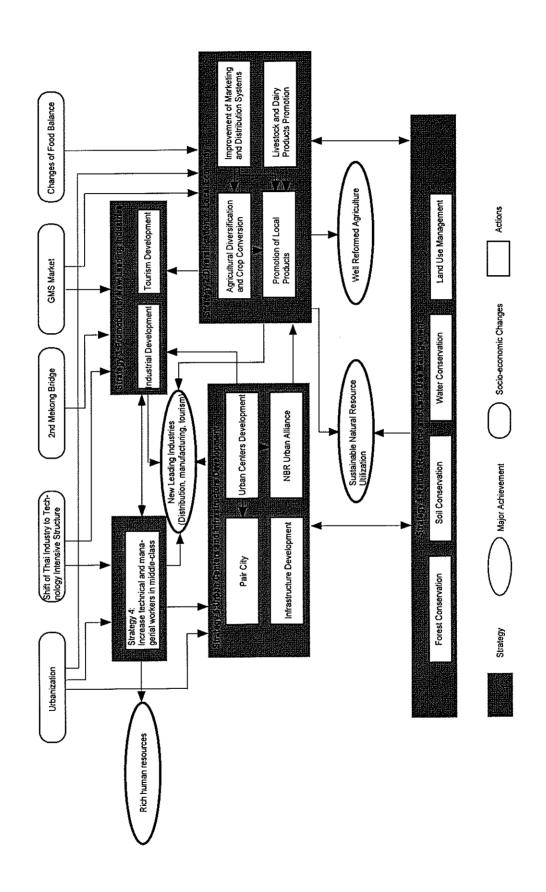


Figure 5.1: Structure and Relation of Five Strategies

Future Spatial Structure is delineated for physical development planning of the NBR, based on the urban centers and their hierarchy, urban linkages and transport and communications networking.

Primary urban centers: Sakon Nakhon, Mukdahan, Nakhon Phanom, Kalasin.

Principal urban linkage/network: the triangle network to support urban alliance, the East-West corridor

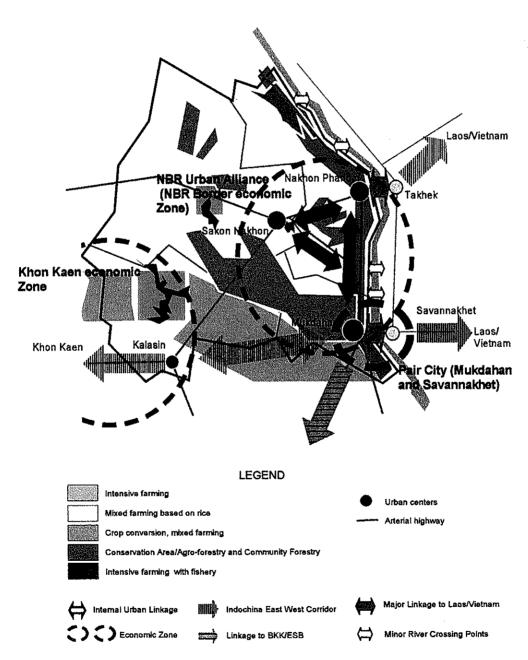


Figure 5.2: Future Spatial System in the NBR