

Japan International Cooperation Agency

Committee for Planning and Cooperation Lao People's Democratic Republic

# The Study on the Integrated Regional Development Plan for the Savannakhet and Khammouan Region in the Lao People's Democratic Republic

# Final Report Part 1 Main Part

September 2001

KRI International

International Development Center of Japan

Pacific Consultants International

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(Unless otherwise specified)

Preface

In response to the request from the Government of the Lao People's Democratic Republic, the

Government of Japan decided to conduct the Study on the Integrated Regional Development Plan

for the Savannakhet and Khammouan Region in the Lao PDR, 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 Mr. Hajime Koizumi of KRI International to the Lac PDR from March 2000 to

August 2001.

The team held discussions with the officials of the Lao 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 Northeastern Border Region (NBR) in the Kingdom of Thailand, which is facing with the

Savannakhet and Khammouan Region (SKR) over the Mekong, in response to request from the

Government of the Kingdom of Thailand. Two studies on SKR and NBR 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 Savannakhet and Khammouan

Region and enhancement of friendly relations between the Lao PDR and Japan.

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

their close cooperation extended to the team.

September 2001

Takao Kawakami

President

Japan International Cooperation Agency

上隆朝

Mr. Takao Kawakami

President

Japan International Cooperation Agency

Tokyo, Јарал

Dear Mr. Kawakami

#### Letter of Transmittal

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

This report presents 57 projects in the masterplan. Among them, the five most important projects 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 Committee for Planning and Cooperation of the Lao PDR and other authorities concerned for their close cooperation and assistance extended to us during our study.

Very truly yours,

Jinichiro Yabuta

Project Manager /

Cross National Development Team Leader

Hajime Koizumi

SKR Team Leader

The Study on the Integrated Regional Development Plan for the Savannakhet and Khammouan Region in the Lao PDR

## LAO PEOPLE'S DEMOCRATIC REPUBLIC



December 1996

epartment of Public Information Cartographic Section

#### THE STUDY

ON

# THE INTEGRATED REGIONAL DEVELOPMENT PLAN FOR

#### SAVANNAKHET AND KHAMMOUAN REGION

# **TABLE OF CONTENTS**

## PART 1: MAIN REPORT

l.	INTRODUCTION I-1		
	1.1	Background of The Study	l-1
	1.2	Study Objectives	
	1.3	Study Execution	l-2
	1.4	Report	l-4
II.	THE	STUDY AREA	. II-1
	2.1	Administrative Area	II-1
	2.2	Physical Conditions	II-4
	2.3	Socio-economic Characteristics	
	2.4	Macroeconomic Characteristics	II-23
	2.5	Infrastructure	II-27
	2.6	SKR Position in Wider Context	II-31
	2.7	Major Constraints and Problem Structure	II-34
III.	DEV E	ELOPMENT PERSPECTIVES	. III-1
	3.1	Policy Framew ork and On-going Development Programs	III-1
	3.2	Options for SKR Development	
	3.3	SKR Development Framework	
IV.	DEV E	ELOPMENT OBJECTIVES AND STRATEGY	IV-1
	4.1	SKR Development Objectives	IV-1
	4.2	SKR Development Strategy	
	4.3	Development Scenario	

V.	DEV ELOPMENT INITIATIV ES		
	5.1	New Village Initiative (NVI)	V-3
	5.2	Human Resource Development Initiative (HRDI)	V-6
	5.3	Resource Management Initiative (RMI)	V-10
	5.4	Market Promotion Initiative (MPI)	V-14
	5.5	Competitiveness Initiative (CI)	V-18
VI.	RUR	AL-BASED DEV ELOPMENT PLAN	VI-1
	6.1	Position of SKR Rural Area	VI-1
	6.2	Potentials and Constraints	VI-3
	6.3	Rural-Based Development Plan	VI- 11
	6.4	Community Development Plan	VI- 32
VII.	URBAN-BASED DEV ELOPMENT PLAN		VII-1
	7.1	Position of SKR Urban Area	VII-1
	7.2	Urban Potential and Constraints	VII-4
	7.3	Major Town Development Plan	VII-9
	7.4	Urban-Based Development Plan	VII-18
VIII.	REC	OMMENDED PROGRAMS AND ACTIONS	VIII-1
	8.1	Recommended Programs	VIII-1
	8.2	Actions to be Taken by Public Sector	
	8.3	Action to be Taken by the Private sector	
IX.	KEY	PRIORITY PROGRAMS	IX-1
	9-1	New Village Initiative: A Pilot Program in SKR	IX-2
	9.2	Primary Education Expansion and Improvement Program	
	9.3	Savannakhet Agricultural College Program	
	9.4	Savannakhet Technical School Renovation Program	IX-8
	9.5	Degraded NBCA Forest Area Rehabilitation Program	IX-10
X.	OVE	RALL RECOMMENDATIONS	X-1

#### PART 2: SECTOR REPORT (Separate Volume)

#### I. SOCIAL DEVELOPMENT PLAN

- I-1 Demography
- I-2 Health Sector Development Plan
- I-3 Education Sector Development Plan

#### II. ECONOMIC AND FINANCIAL PLAN

- II-1 National Economy
- Il-2 Regional Economy
- Il-3 Macroeconomic Framew ork for SKR Development

#### III. RESOURCE MANAGEMENT AND ENVIRONMENT

- III-1 Overview
- III-2 Forest Resource Management
- III-3 Environmental Management and Regional Development
- III-4 Land Use Planning

#### IV. AGRICULTURE DEVELOPMENT PLAN

- IV-1 Lao Agriculture Sector: Overview
- IV-2 Regional Agriculture
- IV-3 Regional Agriculture Development Plan
- IV-4 Action Program

#### V. INDUSTRIAL DEVELOPMENT PLAN

- V-1 Background
- V-2 Local Industry Development Plan
- V-3 Factory Industry Development Plan
- V-4 Tourism Industry Development Plan
- V-5 Private Sector Enterprise Promotion

#### VI. INFRASTRUCTURE DEVELOPMENT PLAN

- VI-1 Transportation Development Plan
- VI-2 Telecommunications Development Plan
- VI-3 Electric Pow er Development Plan

#### PART 3: KEY PROGRAMS STUDY REPORT (Separate Volume)

- I. NEW VILLAGE INITIATIVE(A Pilot Program in Savannakhet and Khammouan)
- II. PRIMARY EDUCATION EXPANSION AND IMPROVEMENT PROGRAM
- III. SAVANNAKHET AGRICULTURAL COLLEGE
- IV. SAVANNAKHET TECHNICAL SCHOOL RENOVATION PROGRAM
- V. DEGRADED NBCA FOREST A REA REHABILITATION PROGRAM (A Pilot Program in the Nakai-Nam Theun NBCA)

## **List of Tables**

Table 1-1	SKR Study Members
Table 2-1	Administrative Setting in SKR
Table 2-2	Current Land Use (2000)
Table 2-3	Land Use Conversion (1982, 1990 and 2000)
Table 2-4	Poverty Lines and Incidence of Poverty in SKR
Table 2-5	GPP by Sector
Table 2-6	Cropped Area and Production in 1999
Table 2-7	Livestock Population and Fish Capture
Table 2-8	Number of Industry-Handicraft Establishments by Province
Table 2-9	Revenue and Expenditure in SKR
Table 2-10	Road Length
Table 2-11	Public Switching Telephone Network Lines
Table 2-12	Major Parameters of Pow er Demand in 1999
Table 2-13	Electrification Ratio in 1999
Table 3-1	Comparison of Development Options
Table 3-2	Population Projection
Table 3-3	Rural-Urban Population Distribution in SKR
Table 3-4	Employment Projection for SKR
Table 3-5	Public Health Indicators for SKR
Table 3-6	Basic Education Targets for SKR
Table 3-7	Economic Framew ork for SKR Development
Table 3-8	Land Use Plan for 2020
Table 4-1	Proposed Development Scenario
Table 6-1	Aboveground Volume and Yield of Forests
Table 6-2	Potential Irrigation Area in SKR
Table 6-3	Potential Land Use for Agriculture in SKR
Table 6-4	Promising Local Industry Products
Table 6-5	Characteristics by Zone
Table 6-6	Population and Households by Zone
Table 6-7	Average Household Income (Low land Zone)
Table 6-8	Average Household Income (Central Zone)
Table 6-9	Average Household Income (Eastern Mountainous Zone)
Table 6-10	Promising Local Products by zone
Table 6-11	Proposed Program for District Health System Strengthening
Table 6-12	Proposed Program for Rural Reproductive Health Improvement
Table 6-13	Proposed Program for Rural Child Health Improvement
Table 6-14	Major Constraints on Community Development
Table 7-1	Projected Future Rural-Urban Population Distribution
Table 7-2	Primary Cities Urban Population

Table 8-1	Recommended Programs/Sub-Programs
Table 9-1	Number of Target NVI Villages
Table 9-2	Menus Prepared for Villagers
Table 9-3	Estimated Area and Production under Pilot NVI Program
Table 9-4	Programs/Facilities for Primary Education Expansion
Table 9-5	Estimated Cost of Primary School Expansion
Table 9-6	Courses Proposed at Agricultural College
Table 9-7	Estimated Investment in Agricultural College
Table 9-8	Estimated Cost and Income of Savannakhet Technical School
Table 9-9	Relation between Key Priority Programs and Development Objectives

# **List of Figures**

Figure 1-1	Sector-wise and Area-wise JICA Cooperation
Figure 2-1	District Composition in SKR
Figure 2-2	Administrative Structure
Figure 2-3	Topographic Elevation
Figure 2-4	Land Use and forest Type in 2000
Figure 2-5	Current Land Use
Figure 2-6	Protected Forest Area
Figure 2-7	UXO Impacted Area
Figure 2-8	Population Density in Neighboring Regions
Figure 2-9	Population Density in SKR
Figure 2-10	Population Distribution
Figure 2-11	Distribution of Lao Loum
Figure 2-12	Distribution of Lao Theung
Figure 2-13	Existing Settlement Pattern in SKR
Figure 2-14	Villages with All Year Round Road Access
Figure 2-15	Villages with No Road Access
Figure 2-16	Economic Activities Ranking by Zone
Figure 2-17	Villages Marketing at least One Crop
Figure 2-18	Villages Never Self Sufficient in Rice
Figure 2-19	Income and Expenditure Level by Zone
Figure 2-20	Percentage of Villages with a Health Center
Figure 2-21	Average Travel Time to a Pharmacy
Figure 2-22	Percentage of Villages with Complete School
Figure 2-23	Percentage of Villages with No School
Figure 2-24	Employment and Production by Province
Figure 2-25	Trade Structure in Savannakhet Province
Figure 2-26	Existing Transport Infrastructure in SKR
Figure 2-27	Current Road Traffic
Figure 2-28	Prospect of Future International Commodity Flow
Figure 2-29	Problem Structure for SKR Development
Figure 3-1	Formulation of Development Framew ork and Scenario
Figure 3-2	Economic Framew ork for SKR
Figure 3-3	Land Use in 2020
Figure 3-4	Schematic Model of Growth Pole and Regional Network Models
Figure 3-5	Schematic Model of Cruciform and Lattice Axes Models
Figure 3-6	Future Arterial Transport Network
Figure 3-7	Major Transportation Routes in SKR
Figure 3-8	Urban Cores Distribution System
Figure 3-9	Future Spatial Structure Plan
Figure 4-1	Relationship between Major Constraints, Policy Framework and Objectives
Figure 4-2	Development Zones in SKR

Figure 4-3	Circular Integration of Rural and Urban Areas
Figure 4-4	School and Community Integration
Figure 4-5	Relationship between Objectives and Strategies
riguic +-0	Treationship between objectives and drategies
Figure 5-1	Proposed Development Initiatives
Figure 5-2	Relation among Policy Framework, Objectives and Initiatives
Figure 5-3	Village-based Implementation
Figure 5-4	NVI and Related Initiatives/Programs
Figure 5-5	Agricultural College
Figure 5-6	HRD Initiative and Related Initiatives/Programs
Figure 5-7	Resource Management Initiative and related Initiatives
Figure 5-8	Marketing Centers
Figure 5-9	Market Promotion Initiative and Related Initiatives
Figure 5-10	Image of SKR Products
Figure 5-11	Competitiveness and Related Initiatives
Figure 6-1	Land Use of Degraded Forest
Figure 6-2	Land Suitability in SKR
Figure 6-3	Problem Structure for Rural-Based Development
Figure 6-4	Intended Means for Income Increase by Zone
Figure 6-5	Rotational Farming with Farm By-products and Residues
Figure 6-6	Integrated Farming in Low land Zone
Figure 6-7	Integrated Farming in Central Zone
Figure 6-8	Integrated Farming in Eastern Mountainous Zone
Figure 6-9	Potential for Local Industry Promotion
Figure 6-10	Public Services Expected by Village People
Figure 6-11	Map of Schools (An Example in Vilabuly)
Figure 6-12	Concept for Basic Education Improvement
Figure 6-13	Village-to-Market Road Improvement Plan
Figure 6-14	Existing and Planned Distribution System in SKR
Figure 7-1	Share of Urban Population and Land Size by Province
Figure 7-2	Potential Urban Cores
Figure 7-3	Long-term Conceptual Structure of Khantabuly Cluster
Figure 7-4	Conceptual Urban Structure of Khantabuly Area
Figure 7-5	Conceptual Urban Structure of Thakhek Area
Figure 7-6	Location of Inner land Towns
Figure 7-7	Belt Zone Proposed for SEZ in Savannakhet
Figure 8-1	Formation of Recommended Programs
Figure 8-2	Recommended Programs and Target Attainment
Figure 8-3	Institutions for NVI Promotion (an alternative)
Figure 9-1	Proposed Restructuring of Savannakhet Technical School
Figure 9-2	Proposed Sub-programs for NNT NBCA Rehabilitation

### Acronyms

ADB Asian Development Bank

ADP Agricultural Diversification Program

AFTA ASEAN Free Trade Agreement
APB Agricultural Promotion Bank

ASEAN Association of Southeast Asian Nations

CI Competitiveness Initiative

CPC Committee for Planning and Cooperation (called SPC until July 2001)

EIA Environmental Impact Assessment FCP Forestry Conservation Program

FDI Foreign Direct Investment

FSEW Farming Systems Extension Workers

GDP Gross Domestic Product
GMS Greater Mekong Sub-region
GPP Gross Provincial Product

HRDI Human Resource Development Initiative IDA International Development Association

IMT Irrigation Management Transfer
IRAP Integrated Rural Accessibility Plan

IUCN World Conservation Union

JICA Japan International Cooperation Agency

MCTPC Ministry of Communications, Transport, Post and Construction

MPI Market Promotion Initiative

NBCA National Biodiversity Conservation Areas
NBR Northeastern Border Region in Thailand
NERI National Economic Research Institute

NGO Non-governmental Organization
NIEs New ly Industrializing Economies

NLCRD National Leading Committee for Rural Development

NSC National Statistics Center NVI New Village Initiative

PAFO Provincial Agriculture and Forestry Office

PMO Prime Minister's Office

RDC Rural Development Committee

RDF Regional Development Fund

RMI Resource Management Initiative

SAC Savannakhet Agricultural College

SALT Sloping Agricultural Land Technology

SEZ Special Economic Zone

SKR Savannakhet and Khammouan Region

SME Small and Medium Enterprise

SMS Subject Matter Specialist

SPC State Planning Committee (reorganized as CPC since July 2001)

STS Savannakhet Technical School

TTC Teachers Training College

UNCDF United Nations Capital Development Fund
UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

UXO Unexploded Ordnance

VDF Village Development Fund

WGs Working Groups

WTO World Trade Organization

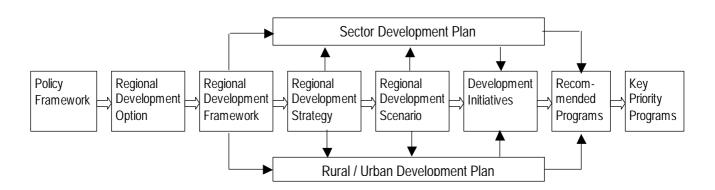
#### **EXECUTIVE SUMMARY**

#### SKR Region

- The Savannakhet and Khammouan Region (SKR), located in the central part of Lao PDR, has a total land area of 38,089 km² covered by wooded area (82%), agricultural land (11%) and other areas (7%). SKR has a total population of 1.07 million of which nearly 86% live in the rural area. The Gross Regional Product (GRP) amounted to Kip 1,900 billion (1998). Agriculture is the major economic activity, accounting for nearly 64% of GRP. The rice balance (regional demand vs. production) is surplus. GRP per capita in SKR is estimated to be about US\$320 in 2000.
- Approximately 37% of people in Savannakhet and 40% in Khammouan are reported to be below the poverty line (1997-98 survey). SKR has a variety of constraints on integrated social and economic development, as well as some environmental limitations. Major social constraints are relatively high population growth rates (2.8%), limited social services, short supply of qualified manpower, and not well advanced social integration. Major economic constraints are heavy dependence on a single crop of rice, subsistence economy prevailed in the central and eastern zones, low accumulation of capital and know-how, and a lack of entrepreneurship and motivation. Shifting cultivation still prevails in the mountainous zone, and the UXO impacted areas extends widely in the eastern zone.

#### Regional Development Planning

**03** Regional development planning for SKR has been conducted in accordance with the planning process as shown below.



**SKR Regional Development Planning** 

Outcomes of the principal planning process, as well as the rural/urban development plan, are presented in this Main Report (Part 1). Details of the sector development plans are presented in the Sector Report (Part 2), while the key priority programs are compiled in the Key Programs Study Report (Part 3).

#### Policy Framework

The regional development options have been formulated on the basis of some policy framework of the Lao government, as well as in the light of development potentials and constraints. Lao Vision 2020 is referred to as a long-term policy framework. Under the Vision 2020, the government has expressed its determination to develop an economic and social profile so that it leaves the ranks of the least developed nation by 2020. An Interim Poverty Reduction Strategy Paper (PRSP) is also referred to. The Interim PRSP focuses on fighting poverty through (i) human resource development, (ii) rural development, and (iii) people's participation. The SKR development plan is formulated generally in line with the Vision 2020 and Interim PRSP.

#### SKR Development Option

Out of three alternative development options, it is recommended that the option of "moderately open regional development" be adopted for SKR development. Under this development option, SKR envisages that the market economy will gradually penetrate the rural areas, the gap between rural and urban economies will be mitigated, resource management will be introduced, and capacity building and human resource development will be promoted. It will lead to the moderate but steady economic growth with an average GDP growth rate of 5 to 7% per annum. The alternative option of higher economic growth (8-10% per annum) has not been recommended due mainly to the negative environmental impacts and the enlarged gap between the rural and urban economies.

#### SKR Development Framework

- Socially, the SKR population will increase to 1.68 million in 2020, with a gradually lowered growth rate (2.8% down to 2.1%). The employment structure will gradually change, and the agricultural employment rate will decrease to around 80% in 2020. Some targets are set for improvement in the health status and educational level. For instance, the primary school enrollment ratio is elevated to 90% in 2020. Economically, the growth in SKR is set at a higher level than the national targets, because SKR has been and is expected to be one of the leading regions for national economic development. It is planned that GDP will grow at an average annual rate of about 7% and the per capita GDP will reach US\$830 in 2020 (at 1999 prices).
- The land use framework and spatial development framework are set on the basis of social and economic framework, as well as the potential and limitation for development. The specific criteria applied for the land use plan are to respect the conservation areas, to exceed the national target for the forest areas, and to secure the land for agricultural use as envisaged under the economic framework. The spatial development framework, on the other hand, is formulated with the inter-regional arteries and inter-regional links connecting the primary cities, inner core towns and rural center towns.

#### SKR Development Strategies

**08** SKR development has clear objectives of (i) enhancing livelihood through generation of income and the improvement of social infrastructure, (ii) attaining a balanced society through socio-economic development in the rural and urban areas, and (iii) protecting the environment to attain sustainable development. Further, through attainment of the objectives above, SKR development is elaborated to eventually attain

- (iv) promotion of partnerships within the region and with neighboring countries and (v) creation of new development initiatives which can be used as a model to disseminate to other provinces and regions in Lao PDR.
- For SKR development, some development strategies are proposed. First, SKR is divided into the lowland region, central region and east mountainous region, and the agricultural development and local industry promotion plans are elaborated for respective zones. Second, the SKR development plan places more emphasis on enhancing farmers' income, and the plan seeks to double the farm household income within 10 years. Third, the SKR plan will prioritize human resource development programs, and available resources will be strategically allocated to education and training. The fourth strategy is to prioritize the resources management and concentrate on the management of forestry resources. The fifth strategy is to change SKR from a "land-locked" region to a "land-linked" region with the improvement of transportation networks. The sixth strategy is to create an SKR image as a "ecology-friendly" region producing "eco-products". The seventh strategy is to integrate the development programs into packages and to have a synergy effect.

#### SKR Development Scenario

Pursuant to the selected development option of "moderately open regional development", a development scenario for SKR is programmed, dividing the planning period into Phase 1 (2001-2005), Phase 2 (2006-2010) and Phase 3 (2011-2020). Phase 1 is the period of the "formation of foundation for regional development" and development efforts are concentrated on dissemination of market-oriented agriculture, capacity building and human resource development (HRD). Phase 2 is the period of "dissemination of new systems and reduction of rural poverty". Human and financial resources will be directed towards dissemination of integrated farming and local industries in particular. Keeping pace with the completion of the East-West Corridor, the rural road improvement will be expanded to make utmost use of the Corridor. During the Phase 3, "consolidation of the balanced and cyclical society" will be promoted. By the year 2020, SKR will attain the social and economic targets set under the development framework, and rural poverty will be reduced to a minimum level.

#### **Development Initiatives**

- 11 For SKR development, several development plans and programs are integrated into "development initiatives", since it is more effective to integrate the plans into the objective-oriented packages or initiatives. The first initiative is the New Village Initiative (NVI). The proposed NVI is an integration of (i) enhancement of integrated farming through promotion of intensive farm management and organic farming, (ii) promotion of local industries at the village level, and (iii) improvement in such village infrastructure as water supply and village roads. At the initial stage, a dozen model villages will be implemented for demonstration and the institutional/financial system will be consolidated. Thereafter, NVI is expanded to about 570 villages in 10 years. NVI could be a national movement for rural development.
- 12 The second initiative is the Human Resource Development Initiative (HRDI). Three sub-programs are integrated into HRDI; i.e., (i) construction of 100 primary schools with

satellite schools, (ii) establishment of an agricultural college in Savannakhet, and (iii) renovation of the Savannakhet Technical School. These sub-programs are combined with income generation schemes, respectively. Priority of public investment and foreign financial cooperation should be directed towards the proposed HRDI sub-programs. When primary schools combined with the income generation scheme turns out to be effective in SKR, this sub-program may be disseminated to other provinces and regions as an SKR model.

- 13 The third initiative is the Resource Management Initiative (RMI). Several sub-programs are incorporated into RMI, i.e., (i) delineation of conservation, protection and production areas on the ground, (ii) appraisal of long-term concession systems, (iii) further utilization of commercial and non-commercial species, (iv) market expansion of small-size wood and non-wood products, (v) agro-forestry demonstration, (vi) rehabilitation of the degraded forest areas, (vii) tree planting for production and commercial nurseries, and (viii) environmental education at schools and other public institutes. More attention should be drawn to RMI, since the forest resources are gradually degraded in SKR. At the initial stage, efforts should be concentrated on capacity building and strengthening of forest officers.
- 14 The fourth initiative is the Market Promotion Initiative (MPI). Out of five sub-programs proposed for MPI, priority is given to the establishment of an "export marketing center" and "local product market promotion center", because the SKR products are currently exported to neighboring countries in the form of raw materials. These centers may be set up in the special economic zone (SEZ) proposed in Savannakhet. Another sub-program is to set up a log auction market in Thakhek to modernize the marketing system and to make the system transparent.
- The fifth initiative is the Competitiveness Initiative (CI). With the dissemination of the market economy and the free trade regime (e.g., AFTA), the SKR products will face severe international competition. Basically, a mass-production system is not recommended for SKR. The region should produce "niche products" for "niche markets". In this context, the paramount importance for CI is to create an image or brand name of the SKR products. It is proposed that the SKR products are all "ecology-friendly products" or "eco-products" and this image is disseminated worldwide. CI should be promoted both in the private sector and public sector.

#### Rural-based Development

SKR is endowed with abundant land and water resources, and it offers large potentials for rural development. Agriculture is the principal activity in the rural area. For agricultural development in SKR, sizable expansion of paddy fields and irrigation system is not envisaged. In the lowland zone, "integrated farming with rice + small animal + fishculture" will be promoted in view of the relatively limited forest area for pasture expansion. In the central zone, "integrated farming with large animal (cattle) + rice" will be promoted in gentle rolling hills. In the eastern mountainous zone, the agricultural pattern of "integrated farming with rice + large animal (cattle) + fruit tree" will be adopted. Villagers in this zone have strong desires to promote livestock, and cattle raising will be vigorously promoted. In every zone, farmers-driven development should be adopted to enhance the village capacity.

- Local industries should be promoted vigorously for SKR rural development. About 100 products have been identified as potential local products utilizing unused or under-used materials in SKR. Judging from their marketability, a dozen products have been selected as promising local products; e.g., bio-compost, non-wood products, natural dye, medical herbs, bee culture, sericulture, cotton and natural fibers, charcoal, and wood handicraft. Marketing of these products will be supported by the Local Product Market Promotion Center which has been programmed under MPI. With these local industries, villagers will earn additional income to elevate their standard of living.
- 18 Social development programs are integrated into rural development. For the improvement of health services, the district health system should be strengthened, the reproductive health system should be improved, and the child health system should also be improved in the rural areas. About 200 primary schools will be required for construction by 2010. Special attention is needed for school feeding in the eastern mountainous zone where Lao Theung are predominant and educational motivation is low. Primary schools will be designed to have a water well for the improvement of sanitary conditions in the rural areas.
- 19 Economic infrastructure is proposed for further improvement in the SKR rural areas. Village-to-market road improvement is planned to improve provincial and district roads to be all-weather links between villages and a market center in the districts. Rural accessibility improvement will be programmed to start after completion of the East-West Corridor and other on-going improvements. Likewise, rural electrification should be further promoted as the electrification ratio is still low in SKR. In medium term, 115 KV transmission line should be extended from Pakxan to Savannakhet via Thakhek.

#### **Urban-based Development**

- The urban areas have not been developed yet in SKR, except for the capitals of Savannakhet and Khammouan provinces. Several district centers, however, are categorized as urban areas, and these centers should be integrated into the SKR development plan for balanced development in the rural and urban areas. Savannakhet and Thakhek are expected to strengthen their urban functions as consumption centers, high value added production centers, higher education and training centers, and information centers. Savannakhet city would develop in combination with Seno, Xaibuly and Lak 35, forming a cluster in the long run. District centers are expected to function as marketing and information centers. Development of the district centers should be promoted to mitigate migration to the capitals and to attain balanced regional development.
- Inner-land town development should be promoted in line with the improvement of road networks and promotion of market-oriented agriculture and local industries. Inner core towns are developed as distribution centers or gateways to the rural areas. Rural center towns are developed to serve for tourism and mining development, and rural towns are developed for promotion of marketing and administrative strengthening. Inter-city and inter-cluster infrastructure should also be planned, including a Sunset Corridor between Savannakhet and Thakhek, public transportation improvement and telecommunications improvement.

#### Recommended Programs

Based on the rural and urban development plans and the sector-wise development plans, a total of 57 programs/sub-programs are recommended for implementation under the SKR master plan. They include sub-programs for the five development initiatives, sub-programs proposed for rural and urban development, and programs elaborated through the sector studies. These programs are listed in Chapter VIII of this Main Report. In the event that the programs/sub-programs are executed as recommended, the framework and objectives set for SKR development will be attained, socially and economically.

#### **Key Priority Programs**

- Out of 57 recommended programs/sub-programs, five programs are selected as key priority programs for the earliest implementation. The first key priority program is a pilot program of the New Village Initiative (NVI). Out of 2,347 villages in SKR, 567 villages are targeted for stage-wise implementation of NVI in 10 years. Technically, it is planned that five menus are prepared for promotion of integrated farming and seven menus for promotion of local industries. Villagers are suggested to select one or two menus of their interest. Financially, a new scheme is proposed to extend credits for respective menu (US\$200 to 1,280 depending on menus) which should be repaid within three years. A preliminary estimate indicates that a fund of about US\$5.8 million will be required to complete this program.
- The second key priority program is the primary education expansion program. Under this program, 100 primary schools and 97 satellite schools will be newly constructed in SKR. At the core primary schools, some facilities for school gardens (fruit tree, fishponds and livestock) will be provided to generate some incomes for procurement of teaching materials. The primary schools will also have some facilities (a water well and first aid kits) to serve as a village community center. Total investment in these facilities will amount to US\$6.1 million in Savannakhet and 6.7 million in Khammouan. It is estimated that a total of about 13,000 pupils will be newly enrolled.
- 25 The third priority program is the establishment of an Agricultural College in Savannakhet. The proposed Savannakhet Agricultural College (SAC) will educate and train village leaders and extension workers in market-oriented agriculture and practical knowledge in integrated farming. The existing agricultural training center will be gradually shifted to the new campus to be located in Xaybourly (about 800 ha). A learning-by-doing approach is adopted, and the products at the college farm will be marketed. Although the initial investment in SAC, estimated to be about US\$11.4 million, should be granted by a donor agency, SAC can be operated as a financially self-supporting college.
- The fourth priority program is the renovation of the Savannakhet Technical School (STS) which is currently obsolete in facilities, courses, curricula and teaching staff. Under the proposed plan, STS will be expanded to have a 1,500 student-capacity, with the renewed courses and curricula to meet the requirements of the industrial and service sectors (e.g., Savannakhet SEZ). A plan to construct a training center for road/bridge maintenance should be merged into this STS. The initial investment cost is estimated to be around US\$10.9 million. A part of the operation costs may be covered by the income generation activities at STS.

The fifth priority program is the rehabilitation of the degraded NBCA forest area (Nakai-Nam Theun NBCA). As it has been disclosed that about 19% of NBCAs in SKR have been degraded by shifting cultivation and illegal logging, a pilot program is proposed to rehabilitate the degraded forest area. The Nakai-Nam Theun NBCA is selected as a typical NBCA, having about 38,000 ha of degraded forests (25 enclave villages with the estimated population of 5,000). The social settings in this area have been studied by IUCN (1997-1999), and the proposed pilot program puts emphasis on reforestation in addition to the IUCN social action plan that would cost about US\$5 million for implementation. It is proposed to carry out a feasibility level study to define detailed programs for implementation.

#### **Overall Recommendations**

- 28 Through the formulation of the SKR master plan, a dozen suggestions have been worked out as overall recommendations (see Chapter X of this Main Report). It is recommended:
- (i) that the PRSP be prepared with more attention to the elevation of household income,
- (ii) that limited resources be strategically allocated to rural development to attain balanced development in the region,
- (iii) that focuses of the PRSP and any other plans be strategically put on education, training and capacity building,
- (iv) that a provincial level master plan be formulated referring to this SKR master plan,
- (v) that the ideas and approaches proposed in this master plan be duly reviewed and adopted in the sector development plans to be formulated by respective ministries,
- (vi) that appropriate actions be taken for the earliest realization of the proposed key programs,
- (vii) that the programs proposed under the Cross National Development Study be also reviewed and its recommended actions be taken,
- (viii) that some additional programs be incorporated through review of the sector-wise master plan studies at the national level (e.g., agriculture, health, and power transmission),
- (ix) that the pioneer implementation of the development initiatives in SKR be duly monitored and evaluated,
- (x) that the development strategies for local industries be formulated at the national level based on the SKR plan,
- (xi) that census and periodic survey be carried out to have reliable data on GDP, agriculture, industry, and social indicators, and
- (xii) that the SKR master plan be updated in 2010, reflecting economic and social changes in the coming decade.

## **CHAPTER I**

### INTRODUCTION

#### 1.1 Background of The Study

Since 1986 when the New Economic Mechanism was adopted, the government of Lao PDR has been promoting social and economic development under the policy of a market-oriented economy. Various economic reforms have been adopted thereafter, but the market economy is still in a transitional period. Such reforms and development have been executed by the government, as well as assisted by the international organizations, sector-wise.

Lao PDR has been actively promoting development programs planned for the Greater Mekong Sub-region (GMS). The development concept of GMS is to apply an area-wise or regional development approach to GMS, promoting networks among the six Mekong riparian countries. As one of the spearhead GMS programs, the East-West Corridor has been designed and some of its component projects are being implemented. This Corridor runs through Route 9 in Savannakhet province. The improvement of Route 9 is underway, and the New Mekong Bridge is about to be constructed across the Mekong river between Savannakhet and Mukdahan. The Corridor will be more effective when an area development approach is applied to development planning in Savannakhet and Khammouan Region (SKR).

With this background, the government of Lao PDR requested the government of Japan to undertake a Study on the Integrated Regional Development Plan for Savannakhet and Khammouan Region (the SKR Study). In response to this request, the government of Japan decided to conduct the SKR Study and JICA was commissioned to undertake the Study. JICA, in turn, retained a team of consultants (the Study Team) to carry out the SKR Study. On the side of Lao PDR, the State Planning Committee (SPC) agreed to act as the counterpart agency to the JICA Study Team.

The SKR Study is the first project for which the area development approach has been adopted for planning in Lao PDR. JICA arranged to execute another study on integrated regional development in four provinces in Northeastern Thailand (the NBR Study), in parallel. Consequently, the SKR development plan is formulated within this wider context, and a cross-national development concept is incorporated into the SKR Study.

#### 1.2 Study Objectives

The SKR Study covers two provinces round the East-West Corridor, i.e., Savannakhet province and Khammouan province. The total area is 38,089 km². It is bounded to the east by Vietnam and to the west by Thailand.

The Study objectives have been defined in the Scope of Work agreed between SPC and JICA, as follows:

- (1) To draw up a regional development master plan inclusive of its component projects of the study area toward the year 2020, in view of the region's relationship with GMS and its linkage with the cross border region of Thailand across the Mekong river,
- (2) To propose a phased plan of action to implement the regional development master plan coupled with a package of programs which are critical for implementing the master plan and ensuring its sustainability for the future,
- (3) To carry out a preliminary feasibility study on a couple of key projects of the master plan, and
- (4) To pursue technology transfer and/or information dissemination to counterpart personnel, regional planners, stakeholders and others through on-the-job training and workshops/seminars.

This Final Report presents a regional development master plan proposed for SKR, together with a few key programs recommended for immediate implementation.

#### 1.3 Study Execution

The Study Team started the study in Lao PDR in late March 2000. The Inception Report was submitted by the Study Team and discussed with SPC in May 2000, and the Progress Report was submitted and discussed in August 2000 (Phase I Study). A draft master plan for Integrated Regional Development of SKR was

formulated and presented in the Interim Report submitted in February 2001 (Phase II Study), and it was discussed in the field in March 2001. The Phase III Study on the key priority programs was executed in March-May 2001, and the Draft Final Report was submitted in June 2001 presenting all the results of Phase I to III Studies.

The SKR Study has been carried out in coordination with the other JICA sponsored studies, e.g., (i) the Macroeconomic Policy Studies (study period from April 2000 to March 2002), (ii) the Study on Special Economic Zone Development in Border Area (Savannakhet Province) (July 2000 - March 2001), and (iii) the Master Plan Study on Integrated Agricultural Development (November 2000 - September 2001). The relation of the SKR Study with other JICA cooperation programs is illustrated below.

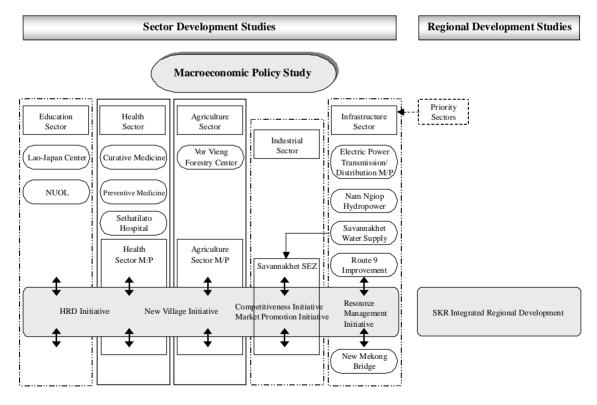


Figure 1-1 Sector-wise and Area-wise JICA Cooperation

The JICA Study Team for SKR has worked closely with the counterpart experts assigned by SPC. To pursue information dissemination to counterparts and other

Lao experts, six Working Groups (WGs) have been organized and they exchanged opinions in the respective field of specialties. These WGs are:

- (1) Social development WG,
- (2) Economic and financial WG,
- (3) Resource management and environment WG,
- (4) Agricultural development WG
- (5) Industrial development WG, and
- (6) Infrastructure development WG.

The results of discussions at these WG meetings have been reflected in formulating the master plan for SKR.

Members of WGs, as well as members of the steering Committee formed for this study, are listed on the following pages.

#### 1.4 Report

The Final Report of the SKR Study is composed of three parts. Part I is the Main Report and summarizes the settings and issues for development, the development perspectives, and the development directions and programs. It also summarizes the proposed key programs recommended for implementation.

Part 2 presents the results of the sector studies. The settings and issues are discussed sector-wise and the development programs are formulated and proposed for each sector. The sector development plans are proposed as follows:

- (1) Social development plan,
- (2) Economic and financial development plan,
- (3) Resource management and environment plan,
- (4) Agriculture development plan,
- (5) Industrial development plan, and
- (6) Infrastructure development plan.

Part 3 presents the results of pre-feasibility level studies on the key priority programs, with recommendations for their earliest implementation.

Table 1-1 SKR Study Members

Tak	ole 1-1 SKR Study Members
Name	Position
Steering Committee Members	
Dr. Souphanh Keomisay	Director General, NERI, SPC
Dr. Khamliene Pholsena	Dty General Director, Department of Planning, SPC
Dr. Soulasith Ouphavanh	Dty Director, Department of Foreign Cooperation
Mr. Chaleam Inthavong	Dty Director of Cabinet, Ministry of Industry and Handicraft
Mr. Thongsai Sayyavongkeomaly	Dty Chief, Division of Investment Promotion and Information
Mr. Norkhame Lattanavong	Dty Director, Research Institute, Min. of Commerce and Tourism
Mr. Onida Souksavat	Dty Director, Department of Planning, MCTPC
Mr. Bounkouang Souvannaphanh	Dty Director, Dept. of Planning, Ministry of Agriculture and Forestry
Mr. Sithon Nanhthalath	Dty Director, Dept. of Planning and Cooperation, Savannakhet Province
Mr. Khamkeo Oudomsouk	Director, Dept. of Planning and Cooperation, Khammouan Province
SPC Management	
Dr. Souphanh Keomisay	Director General, NERI, SPC
Mr. Phoukong Bannavong	Chief, Macroeconomic Research Division, NERI
Mr. Thanta Kongphaly	Chief, International Economic Research Division, NERI
Mr. Sitthiroth Rasphone	Economist, NERI
Social Development WG	
Mr. Somkhanh Didaravong	Chief, Division of Planning and International Cooperation, Ministry of Education
Mr. Khamvieng Vilaphanh	Cabinet Office, Ministry of Health
Ms. Sirikith Boupha	Rural Women Development Project, Lao Women Union
Mr. Saysana Khaykhamphithone	Social and Environment Research Division, NERI
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Mr. Khampoon Inpangladxabooth	Dty Director, Department of Custom, Ministry of Finance
Ms. Thonmy Keokinnaly	Bank of Lao PDR
Mr. Bounsy Thanousing	Chief, Project and International Coop., Agricultural Promotion Bank
Ms. Chongpraseuth Vilaylack	Macroeconomic Division, NERI
Resource Management and Enviro	onment WG
Dr. Somsy Gnophansay	Director, Forestry Division., Agricultural Faculty, Lao National University
Mr. Chanthaneth Boualapha	Chief, Environment Research Center, STEA
Mr. Thipamphone Sailath	Planning Division, MOAF
Mr. Tengmeng Yangleusay	Social and Environment Research Division, NERI
Agriculture Development WG	
Mr. Thongly Sayyachack	Vice Dean, Faculty of Agriculture, Lao National University
Mr. Souksavanh Inthalhack	Planning Department, MOAF
Mr. Youngthong Sihanath	Livestock and Fishery Department, MOAF
Mr. Sisavong Vonghachack	Agriculture and Forestry Institute, MOAF
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Name	Position
Industrial Development WG	
Ms. Somsanouk Khennavong	Chief, Research Division, DIMC, PMO
Mr. Phoulattana Phommahasay	Planning Division, FIMC, PMO
Ms. Viengkham Vongduan	Chief, Statistic Planning Division, MOIH
Mr. Thanomvong Khamvongsa	President, Enterprise Development Co.
Ms. Thiphaphone Phetmant	M.D., Enterprise Development Co.
Infrastructure Development WG	
Mr. Sangath Chounlamany	Department of Transportation, MCTPC
Mr. Bounnao Fongkhamdeng	Urban Research Institute
Mr. Daovong Phonekeo	Manager, System Planning, EdL
Mr. Sounthone Chanthavisith	Macroeconomic Research Division, NERI
JICA Advisory Committee	
Mr. Nobuhiro Koyama	Chief of Advisory Committee, JICA Senior Advisor
Prof. Michimasa Numata	Shumei University
Mr. Tsunenobu Miki	JICA Senior Advisor
JICA Headquarters	
Mr. Fumio Kikuchi	Director, Planning Division, Social Development Study
	Department (-Feb. 2001), Preparatory Team Leader Director, First Development Study Division, SDSD (-Oct. 2000)
Mr. Takao Kaibara	
Mr. Toshio Hirai	Director, First Development Study Divi., SDSD (Nov. 2000-)
Ms. Eri Honda	Dty Director, First Development Study Div., SDSD (-Mar. 2001)
Mr. Satoshi Umenaga	Dty Director, First Development Study Divi., SDSD (Apr. 2001-)
Mr. Tomohiro Ono	Staff, First Development Study Division, SDSD
JICA Study Team	
Dr. Jinichiro Yabuta	Project Manager/CND Team Leader
Mr. Hajime Koizumi	Lao-Team Leader
Mr. Shigeki Kawahara	Macroeconomist
Mr. Yoshitaka Tanaka	Education Development Expert
Ms. Kimiko Abe	Public Health Expert
Ms. Kumi Saito	Land Use Planner
Mr. Keith Openshaw	Resource Management Expert
Mr. Kazuyuki Shimazaki	Agricultural Development Expert
Ms. Mariko Shiohata	Rural Development Expert
Mr. Takeshi Izumi	Industrial Development Expert
Mr. Masato Kuroda	Local Industry Expert
Mr. Isamu Asakura	Tourism Development Expert
Mr. Noriyoshi Nagamatsu	Transportation Expert
Dr. George Terahara	Telecommunications Expert
Mr. Sumio Tsukahara	Electric Power Expert
Mr. Takashi Koyama	Urban and Spatial Planner
Dr. Masafumi Tanifuji	Private Sector Development