

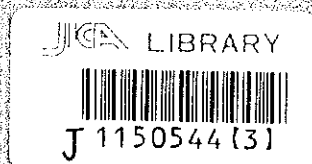
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
NATIONAL DEVELOPMENT PLANNING AGENCY (BAPPENAS)
THE GOVERNMENT OF REPUBLIC OF INDONESIA

**THE DEVELOPMENT STUDY ON COMPREHENSIVE
REGIONAL DEVELOPMENT PLAN FOR
THE WESTERN PART OF KALIMANTAN
SCRDP-KALTENGBAR**

FINAL REPORT

**VOL.2
MAIN TEXT**

MARCH 1999



**PACIFIC CONSULTANTS INTERNATIONAL
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN**

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The exchange rates applied in this study are:

| MONTH | Rupiah/US\$ |
|----------------|-------------|
| March-1997 | 2,399 |
| April-1997 | 2,412 |
| May-1997 | 2,434 |
| June-1997 | 2,428 |
| July-1997 | 2,509 |
| August-1997 | 2,735 |
| September-1997 | 2,994 |
| October-1997 | 3,566 |
| November-1997 | 3,448 |
| December-1997 | 4,798 |
| January-1998 | 9,743 |
| February-1998 | 9,045 |
| March-1998 | 9,536 |
| April-1998 | 8,057 |
| May-1998 | 10,079 |
| June-1998 | 13,532 |
| July-1998 | 13,996 |
| August-1998 | 12,127 |
| September-1998 | 11,033 |
| October-1998 | 8,567 |
| November-1998 | 7,785 |
| December-1998 | 7,630 |
| January-1999 | 7,978 |

Preface

In response to request from the Government of the Republic of Indonesia, the Government of Japan decided to conduct "The Development Study on Comprehensive Regional Development Plan for the Western Part of Kalimantan" and entrusted the study to the Japan International Cooperation Agency (JICA)

JICA sent to Indonesia a study team headed by Mr. Tadashi KUME, Pacific Consultants International, and composed of members of Pacific Consultants International and International Development Center of Japan, five times between March 1997 and December 1998.

The Study team had a series of discussions with the officials concerned of the Government of the Republic of Indonesia and the representatives of private organizations, and conducted field surveys at the study area. Through further studies in Japan, the present report was prepared.

I hope that this report will contribute to the promotion of the plan and to the enhancement of friendly relations between Indonesia and Japan.

I wish to express my sincere appreciation to all the people concerned for their close cooperation extended to the study team.

March 1999



Mr. Kimio FUJITA
President
Japan International Cooperation Agency

March 1999

Mr. Kimio FUJITA

President
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

Dear Sir,

We are pleased to formally submit herewith the final report of "The Development Study on Comprehensive Regional Development Plan for the Western Part of Kalimantan".

This report complies the results of the study which was undertaken in the Republic of Indonesia, from March 1997 to December 1998 by the Study Team, jointly organized by Pacific Consultants International and International Development Center of Japan.

We would like to express our deep appreciation and sincere gratitude to all those extended their kind assistance and cooperation to the Study Team, particularly the officials concerned of National Development Planning Agency (Bappenas), the Indonesia's counterpart agency.

We also acknowledge and appreciate greatly the excellent support given by your agency and the Embassy of Japan in Indonesia and Ministry of Foreign Affairs.

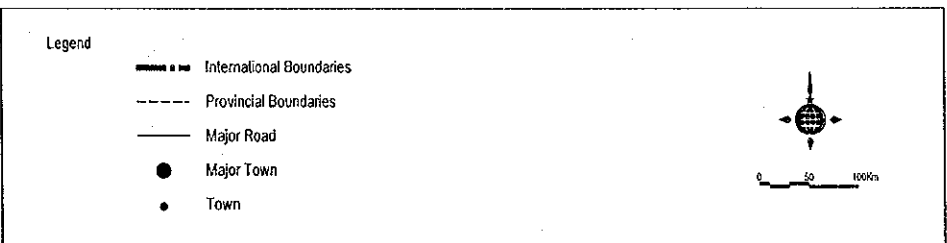
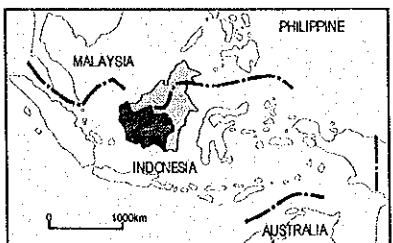
We hope that this report will contribute to regional development policy reforms and action plan making, especially for helping the country and the region to recover from the economic crisis and to prepare for the development stage after the recovery.

Very truly yours,



Tadashi KUME

Team Leader
The Study Team for the Development Study on
Comprehensive Regional Development Plan for
the Western Part of Kalimantan



Study Area Map

OUTLINE OF THE STUDY RESULTS

Background of The Study

In the last 25 years the development efforts of the Indonesian government have achieved outstanding economic growth and poverty reduction at the aggregate national level. In particular, since the late 1980s, the Indonesian economy has been rapidly growing through export-oriented industrialization and diversification. Notwithstanding such overall achievements, various inequalities, among regions, between urban and rural areas, between agriculture and industry, and among different socioeconomic groups, have become increasingly visible. One of the seven major challenges in the Second Long-Term (25-year) Development Plan is to resolve these inequalities.

Among such inequalities, the regional disparity is one of the most important issues for securing social stability and sustaining national economic development. Despite abundant land, forest and mining resources, the western part of Kalimantan has been economically left behind "the rapid growth regions," such as Java, Bali, and Sumatra, due to its geographical disadvantages, poor infrastructure and sparse population. While the region's economy still significantly depends on natural timber resources and wood processing industries, about half of the villages of the region are categorized as poor, being eligible to receive funds from the poverty village program (IDT).

In the region, however, there are two emerging factors. One is the rapid depletion of timber resources, which compels the region to restructure the forest-resource-based economy toward diversification. The other is road development into the middle and upper stream areas, which is transforming the region's spatial structure from a river-based to a road-based one along with the changes in the movement of passengers and goods, trading patterns, rural and urban function, and demands for labor and capital. Therefore, the region requires a variety of development efforts based on a master plan with long-term perspectives and medium- and short-term strategies in order to alleviate poverty, cope with forest resources and environmental degradation, and restructure its economy and space.

Identification of the Kalimantan System

We identified "the Kalimantan System" which has salient features of nature and socio-economy, which are comparatively different from Sumatra, Sulawesi or Java. Based on this understanding of the region's salient features, we recommend to set development goals, to implement policy reforms, and to formulate development frameworks and concrete measures for sustainable development and conservation.

Development Goals for Sustainable Regional Development

In the past three decades, West and Central Kalimantan have experienced unsustainable and large-scale exploitation of natural resources and land resources. Considering these experiences and the following future situations, we identify two primary goals and three secondary goals for Kalimantan's sustainable regional development:

- Prospective shortage of state revenues in providing enough development fund, due to Indonesia's transition to a net importer of oil and gas in the near future, and to Kalimantan's rapid depletion of timber resources,
- The limitation of the resource-based industries, such as logging and plantations, in creating enough employment and diffusing economic benefits
- Threat of excessive development of oil palm plantations to the environment and local communities

Primary Goals

- (1) To seek the state of a self-sustaining regional economy and society
- (2) To contribute economically and socially to sustainable national development

Secondary Goals

- (3) To promote ecologically sound natural-resource-based development
- (4) At the same time, to seek other types of development, which are not exclusively based on high-volume natural resource use or large-area land resource use
- (5) To secure social stability of the region by seeking equitable development

Recommended Scenario : Diversified Development Scenario by Sustaining the Kalimantan System

The discussion of two contrasting future visions of the region leads us to the recommendation of a scenario which aims at sustainable development with a more diversified regional economy by adjusting the scale and concentration of natural resource exploitation and plantation development to local conditions.

The central strategy for this aim is to allow the local people to combine the new opportunities of oil palm plantations with their existing livelihood means at their places. By implementing this strategy at the macro and local levels, the scale and speed of oil palm plantations cannot be excessively large. This strategy allows the conservation of the existing livelihood means (rubber groves, rattan gardens and paddy fields) for diversifying regional economy and other secondary forests for future production of high value added products.

Frameworks and Basic Strategies of Regional Development

(1) Spatial Development

In the shift in regional transport from rivers to roads, the road development connecting downstream areas with upland areas has increased the development potential of upland areas, especially for oil palm plantations. To respond to this regional spatial structural change, the major road network of the region should be reorganized. The Tayan-Pangkalanbun section of the Trans-Kalimantan Highway Southern Route and a new upland development road should be provided to serve the formulation of the upland development corridor.

The regional road network has expanded from Pontianak in West Kalimantan, and Palangkaraya in Central Kalimantan. In the course of developing the Trans-Kalimantan Highway Southern Route, Pangkalanbun and Kumai would emerge as regional urban centers with a wide service area.

(2) Economic Development

Kalimantan's economic development in the next two decades will inevitably rely on the primary sector and resource-based industries, due to lack of sufficient quality and quantity of infrastructure and human resources. It is not possible to develop infrastructure and human resources in short or medium terms (in ten years). Therefore, the operation of such natural-resource-based industries should be kept within the resource capacity to support sustainable development.

However, since the large-scale natural-resource-based industries (both exploitation and processing industries) tend to be unsustainable in their operations, it is necessary to make efforts, including promoting SMEs and urban development, to seek other types of development, which are not exclusively based on high-volume natural resource use or large-area land resource use.

(3) Social Development

Among the socio-economic characteristics, the most important is that each ethnic group has different livelihood means, as well as social/cultural traits, from others. The following three objectives and strategies are recommended for social development:

- 1) To provide all types of groups with the opportunities to participate in sustainable development efforts keeping and utilizing the features of their societies and economic systems, the strategy of promoting community-level development planning is recommended.
- 2) Not to destroy or weaken the existing social systems of different types of communities in the region, and to empower local communities to take advantage of their own characteristics of social systems and livelihood systems relying on nature, the strategy of sustaining coexistence of oil palm plantations with local communities is recommended.
- 3) For the government to provide the local communities with the basic services of school education and health as the foundation for survival and social development, and for the local communities to play roles in securing government provision of the basic services in their own communities, the strategy of reconstructing the government delivery system of basic services of school education and health is recommended.

(4) Infrastructure Development

In accordance with the conventional criteria of economic feasibility, it is difficult to justify the investment in road development in less developed regions, like the eastern part of Indonesia.

To promote development in less developed regions for the purpose of reducing regional disparity between eastern Indonesia and western Indonesia, alternative reasoning or benefits for justifying infrastructure development in less developed regions are required, such as follows:

- The benefits to satisfy the needs for social development
- The benefits to induce economic development, such as oil palm plantation development

(5) Environmental Management

The basic strategies for environmental and resource management are composed of the following two types of strategies:

Strategies for the Defense of Environment and Resources

- Formulation of an Appropriate Landuse Plan suitable and effective for Environmental and Resource Management
- Clear Designation of Managers Responsible for the Forest Management of Each Forest
- Preparing for Forest and Land Fires by Disaster Management Efforts

Strategies for Attacking Unsustainable Development Practices

- Macro and Micro Landuse Planning for Oil Palm Plantation Development
- Reduction of Polluting Burdens to Rivers originating from Middle and Upper Stream Urban Centers
- Wise Location Restrictions on Polluting Industries in Middle and Upper Stream Areas

(6) Institutional Management

The objectives in regard to institutional management for regional development should be as follows:

- To enable the local governments to fully manage their own affairs.

- To enable the local governments to be more responsive to local people's needs.

Five strategy areas are recommended to achieve the institutional changes as envisaged by the objectives:

- 1) To make the province truly autonomous.
- 2) To reconsider the way of distributing the benefit gained from natural resources.
- 3) To give the province freedom to organize its administrative structure according to its own interest and priority.
- 4) To give more substance to provincial five-year development plans by modifying the way it is prepared.
- 5) To encourage people's innovative thinking and initiative.

Policy Reforms

From regional and local perspectives, the following policy changes are recommended:

- For overall regional development planning, establishment of a new regional development planning system reflecting more regional and local initiatives and restructuring of provincial spatial structure plans,
- For the forest and land fire problems, adoption of disaster management efforts, covering those for response, recovery, development, prevention, mitigation and preparedness,
- For the oil palm subsector, improvement of the business environment, improvement of plantation development schemes, and introduction of assistance to smallholder plantations,
- For the extensive agriculture subsector, assistance to swidden-based rubber replanting, assistance to rattan cane sales promotion, assistance to small-scale irrigation in upland areas,
- For the timber trading subsector, introduction of regulations to give a high priority to supply the timber to local wood processing industries within the province,
- For the wood processing industry, structuring adjustment of abundant and inefficient wood processing factories, especially plywood factories,
- For the small and medium enterprises subsector, improvement of overall enabling environment for the SME subsector, improvement of the support service structure

Priority Projects

An evaluation was made to select 10 priority projects taking into account the criteria of (1) seeking to be self-sustaining region in development fund and food supply, (2) creation of a better business environment to seek steady economic growth, (3) empowerment of local communities, (4) support for environmental conservation. Satisfying these criteria, especially, the projects which need new ideas for taking actions, timely actions, and new emphasis on conventional ideas, are selected.

- 1) Kalimantan Forest Fire Disaster Management Project
- 2) Oil Palm Subsector Improvement Project
- 3) The Tayan-Pangkalanbun Section of the Trans-Kalimantan Highway Project
- 4) Upland Ecological Development Corridor Project in Central Kalimantan
- 5) Pangkalanbun-Kumai Urban, Industrial and Port Development Project
- 6) Kalimantan Upland Rural Infrastructure Development for Poverty Alleviation Project
- 7) Kalimantan Upland Community Rescue and Development Project
- 8) Kalimantan Small and Medium Enterprises Promotion
- 9) Development of a Research Station and Field Centers in the Upstream Kapuas for the Kalimantan System Basic and Applied Research Institute
- 10) Community-Based Environmental Management Project for Informal Gold Mining

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ABBREVIATION AND GLOSSARY

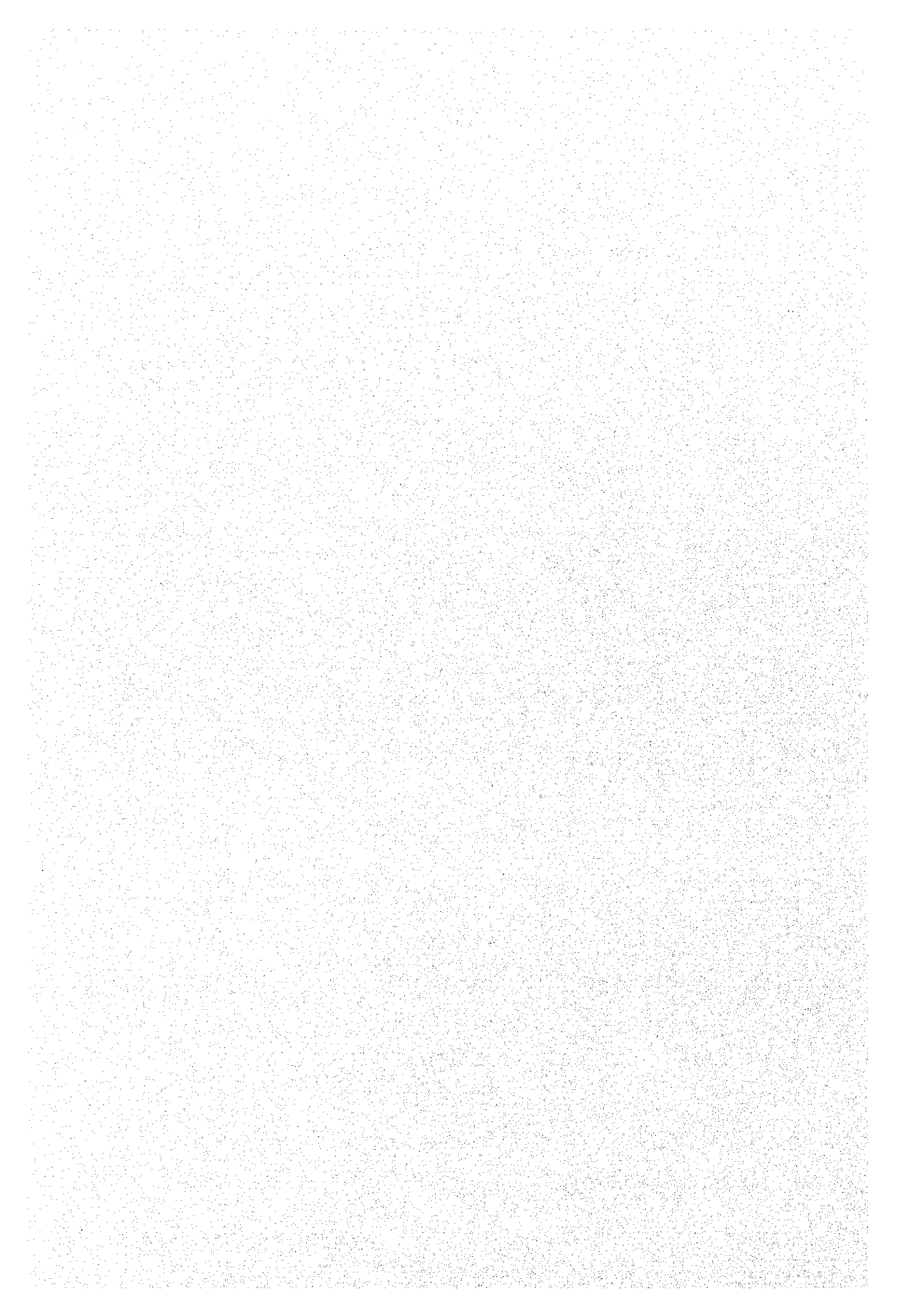
| | |
|------------------|---|
| Adat | Customary law |
| ADB | Asian Development Bank |
| AIDA | Australia Indonesia Development Area |
| Alang-alang | Imperata cylindrica grassland |
| AFTA | ASEAN Free Trade Area |
| APBD | Anggaran Pendapatan dan Belanja Daerah, Provincial or district Budget |
| APBN | Anggaran Pendapatan dan Belanja Negara, National Budget |
| APPKD | Anggaran Penerimaan dan Pengeluaran Kas desa, Village Budget |
| ASEAN | Association of South East Asia Nations |
| Bangda | Direktorat Jenderal Pembangunan Daerah (Directorate General for Regional Development, Ministry of Home Affairs) |
| Bangdes | Direktorat Jenderal Pembangunan Desa (Directorate General for Village Development, Ministry of Home Affairs) |
| Bappenas | Badan Perencanaan Pembangunan Nasional (National Development Planning Agency, Indonesia) |
| Bappeda | Badan Perencanaan Pembangunan Daerah (Regional Development Planning Agency) |
| BIMP-EAGA | Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area |
| BKKBN | Badan Koordinasi Keluarga Berencana Nasional (National Family Planning Coordinating Board) |
| BKPM | Badan Koordinasi Penanaman Modal (Capital Investment Coordinating Board) |
| BPN | Badan Pertanahan Nasional (National Board of Land Affairs) |
| BPS | Biro Pusat Statistik (Central Bureau of Statistics, Indonesia) |
| BRI | Bank Rakyat Indonesia (Indonesian People's Bank) |
| Bulog | Badan Urusan Logistik (State Logistics Board with special responsibility for food procurement) |
| Bupati | Administrative head of a district (kabupaten) |
| Camat | Administrative head of a subdistrict (kecamatan) |
| Cipta Karya | Directorate General of Human Settlements, Ministry of Public Works |
| CPO | Crude Palm Oil |
| Crude Birth Rate | The annual number of births per 1,000 persons |
| Damar | Resin |
| Desa | Administrative village |
| Dinas | Office of Provincial Government |
| DPR | Dewan Perwakilan Rakyat (House of People's Representatives) |
| DPRD | Dewan Perwakilan Rakyat Daerah (Regional House of People's Representatives) |
| Dusun | Subvillage, hamlet (part of desa) |
| EPI | Expanded Program of Immunization |

| | |
|--------------------|---|
| GBHN | Garis-garis Besar Haluan Negara (Broad Guidelines for State Policy) |
| GDP | Gross Domestic Product |
| GNP | Gross National Product |
| GRDP | Gross Regional Domestic Product |
| GTZ | Gesellschaft fur Technische Zusammenarbeit (German Agency for Technical Cooperation) |
| HPH | Hak Pengusahaan Hutan (Timber Concession) |
| HTI | Hutan Tanaman Industri (Industrial Tree Plantation) |
| IDT | Inpres Desa Tertinggal (Backward Village Program) |
| IMF | International Monetary Fund |
| Inpres | Instruksi Presiden (Presidential Instruction, a program of special grants from the central government) |
| Inpres program | Central government subsidies to regional government (province, kabupaten and villages) for various kinds of infrastructure development and for the construction of primary schools and health centers |
| IPK | Izin Pemanfaatan Kayu (Wood Utilization Permit) |
| JICA | Japan International Cooperation Agency |
| Kabupaten | District or regency, administrative unit below the province |
| KADIN | Kamar Dagan dan Industri Indonesia (Chamber of Commerce and Industry) |
| Kampung | Hamlet, traditional settlement unit in parts of Kalimantan |
| Kantor dinas | Department under provincial governor's office |
| Kanwil | Kantor Wilayah (Regional Office, a line regional agency of a ministry) |
| Kebun karet rakyat | Rubber grove established by farmers, or so-called jungle rubber grove |
| Kecamatan | Subdistrict, administrative unit below the district (kabupaten) |
| Kelurahan | Urban village |
| Kepala desa | Village head |
| KUD | Koperasi Unit Desa (Village Unit Cooperative) |
| Kukesra | Kredit Usaha Keluarga Sejahtera (small-business credit component for Family Prosperity Development Program) |
| Ladang | Dry field |
| LKMD | Lembaga Ketahanan Masyarakat Desa (Village Community Development Institution) |
| LMD | Lembaga Musyawarah Desa (Village Council) |
| LNG | Liquid Natural Gas |
| NES | Nucleus Estate and Smallholder's integration scheme |
| NGO | Non Government Organization |
| Paduserasi | Synchronization procedure of provincial landuse plans. |
| Pancasila | Five philosophical principals that constitute the official national ideology |
| Pasar | Market place |
| PBB | Pajak Bumi dan Bangunan (land and building tax which has replaced the old lan tax, Ipeda) |
| PCM | Project Cycle Management, an objectis-oriented planning method adopted by JICA, a similar method to ZOPP |
| PIR | Perkebunan Inti Rakyat (nucleus-smallholders plantation scheme) |

| | |
|------------------------|--|
| PJP II | Pembangunan Jangka Panjang II (Second Long-Term Development, 1994-2019) |
| PKK | Pembinaan Kesejahteraan Keluarga (Family Welfare Education Movement) |
| Posyandu/Pelayanan | Pos Terpadu (Integrated Health Service Delivery Post), a once a month health care center which provides maternal and child health, as well as family planning services |
| PMD | Pembangunan Masyarakat Desa (former Bangdes), Directorate for Community Development, Ministry of Home Affairs |
| Prokasih | Program Kali Bersih (Clean river program for urban rivers) |
| PT | Perseroan Terbatas (limited liability company) |
| PTP | Perseroan Terbatas Perkebunan (limited liability estate company) |
| Puskesmas | Pusat Kesehatan Masyarakat (subdistrict Health Center) |
| P5D | Pedoman Penyusunan Perencanaan dan Pengendalian Pembangunan Daerah, 1982 regulation on bottom-up planning |
| Rakorbang | Rapat Koordinasi Pembangunan (development planning coordination meeting) |
| Repelita | Rencana Pembangunan Lima Tahun (National Five-year Development Plan) |
| Repelitada | Rencana Pembangunan Lima Tahun Daerah (Regional Five-year Development Plan) |
| RePPPProT | Regional Physical Planning Project for Transmigration |
| SALCRA | Sarawak Land Consolidation and Rehabilitation Authority |
| Sawah | Irrigated rice field |
| Sakernas | Survei angkatan Kerja Nasional (National Labor force Survey) |
| SCRDP-Kaltengbar | JICA Study Project, Development Study on Comprehensive Regional Development Plan for the Western Part of Kalimantan covering West Kalimantan (Kalbar) and Central Kalimantan (Kalteng) |
| SIJORI growth triangle | Singapore-Johor-Riau growth triangle |
| SME | Small and Medium Enterprise |
| SSE | Small Scale Enterprise |
| Susenas | Survei Sosial Ekonomi Nasional (National Socioeconomic Survey) |
| Swidden agriculture | Indigenous people's cyclic agriculture, shifting cultivation or slash and burn agriculture |
| Takesra | Tabungan Keluarga Sejahtera (saving mobilization component of Family Prosperity Development Program) |
| TGHK | Tata Guna Hutan Kesepakatan (Consensus Forest Landuse) |
| TPTI | Tebang Pilih dan Tanam Indonesia (Indonesian Selective Logging and Planting System) |
| UNDP | United Nations Development Program |
| USAID | United States Agency for International Development |
| ZOPP | Ziel-Orientierte Projekt-Plaunung (Objective-Oriented Project Planning), ZOPP planning technique, the GTZ's official project planning system |

CHAPTER 1

INTRODUCTION



CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

In the last 25 years the development efforts of the Indonesian government have achieved outstanding economic growth and poverty reduction at the aggregate national level. In particular, since the late 1980s, the Indonesian economy has been rapidly growing through export-oriented industrialization and diversification. Notwithstanding such overall achievements, various inequalities, among regions, between urban and rural areas, between agriculture and industry, and among different socioeconomic groups, have become increasingly visible. One of the seven major challenges in the Second Long-Term (25-year) Development Plan is to resolve these inequalities.

Among such inequalities, regional disparity is one of the most important issues for securing social stability and sustaining national economic development. Despite abundant land, forest and mining resources, the western part of Kalimantan has been economically left behind the "rapid growth regions," such as Java, Bali and Sumatra, due to its geographical disadvantages, poor infrastructure and sparse population. The region's economy still significantly depends on natural timber resources and wood processing industries. About half of the villages of the region are categorized as poor, being eligible to receive funds from the poverty village program (IDT).

In the region, however, there are two emerging factors. One is the rapid depletion of timber resources, which compels the region to restructure the forest-resource-based economy toward diversification. The other is road development into the middle and upper stream areas, which is transforming the region's spatial structure from a river-based to a road-based one along with the changes in the movement of passengers and goods, trading patterns, rural and urban functions, and demand for labor and capital. Therefore, the region requires a variety of development efforts based on a masterplan with long-term perspectives and medium- and short-term strategies in order to alleviate poverty, cope with forest resources and environmental degradation, and restructure its economy and space.

Under these circumstances the Indonesian government requested the Japanese government to conduct "the Development Study on Comprehensive Regional Development Plan for the Western Part of Kalimantan", which consists of the Provinces of West Kalimantan and Central Kalimantan. In March 1997, the Japan International Cooperation Agency (JICA) launched the

development study in cooperation with the National Development Planning Agency (Bappenas), commissioning it to a study team organized by Pacific Consultants International (PCI) and the International Development Center of Japan (IDCJ).

1.2 STUDY OBJECTIVES

The objectives of the study are:

1. To analyze and assess the development potential and constraints of the Region,
2. To prepare an overall regional development master plan with long-term perspectives and strategies in line with the Second Long-Term (25-year) Development Plan,
3. To identify priority sectors and areas for the Seventh Five-Year Development Plan (Repelita VII),
4. To formulate priority development projects/programs and to facilitate their implementation in harmony with the existing plans, and
5. To support institutional capacity building for regional planning.

1.3 STUDY AREA

The study area is the Western Part of Kalimantan, which consists of two provinces: West Kalimantan and Central Kalimantan (Figure 1.3.1). Although the study area is administratively divided into two provinces, the study will pay attention to the whole of Kalimantan in conducting a regional planning study for the Western Part of Kalimantan.

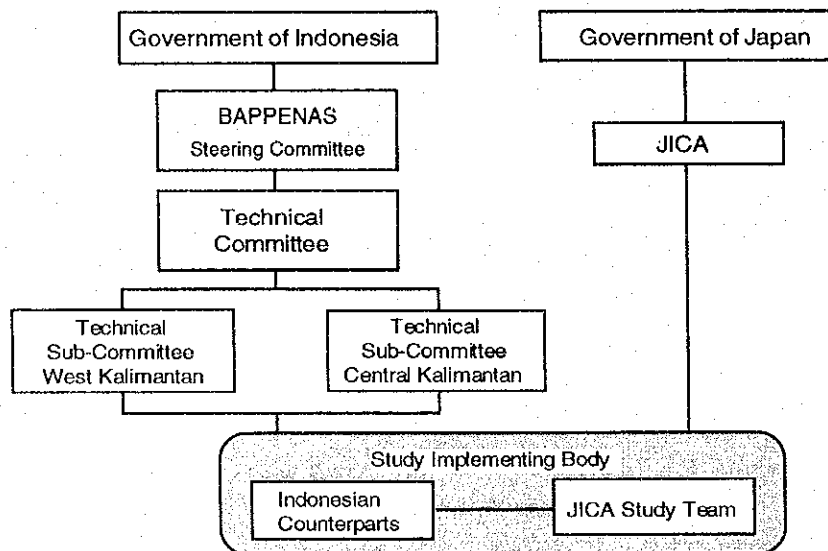
1.4 STUDY ORGANIZATION

The study has been carried out as a joint effort of the JICA study team and Indonesian counterpart personnel, both of which form a study implementing body. The members of the JICA study team and their assignments are listed in Table 1.4.1.

The Indonesian counterparts were delegated from four Indonesian government agencies, namely Bappenas, Cipta Karya under the Ministry of Public Works, Bangda under the Ministry of Home Affairs, Bappeda of West Kalimantan, and Bappeda of Central Kalimantan. The members of the Indonesian counterpart team are listed in Table 1.4.2.

The study is guided and coordinated by committees at three levels, namely the Steering Committee, the Technical Committee and the Technical Sub-Committees. Figure 1.4.1 shows the relationship among these committees, JICA and the study implementing body (the JICA study team and Indonesian counterparts).

Figure 1.4.1 Study Organization



The Steering Committee guides and advises the JICA study team on overall study directions and policy-related matters. The Steering Committee is chaired by Bappenas and comprised of key agencies, such as Cipta Karya under the Ministry of Public Works and Bangda under the Ministry of the Interior. The Technical Committee gives technical guidance to the JICA study team. The Technical Committee is comprised of members from relevant technical ministries at the national level. The Technical Sub-Committees are responsible for the coordination and management of the study in the study area. The Technical Sub-Committee is chaired by

Bappeda of each province in the study area, and it consists of relevant government agencies at the provincial level.

Table 1.4.1 Members of the JICA Study Team and Assignments Covered

| No | Name | Assignment |
|----|-----------------------------|--|
| 1 | Mr. Tadashi KUME | Team Leader and Regional Planning |
| 2 | Mr. Hideyuki SASAKI | Deputy Team Leader and Social Development Planning |
| 3 | Dr. Michiaki HOSONO | Forestry Resources Management |
| 4 | Mr. Yoshinobu NOMURA | Human Settlements and Rural Development Planning |
| 5 | Mr. Yasunori NAGASE | Water Supply, Sanitation, Power, and Social Infrastructure |
| 6 | Dr. Norimichi TOYOMANE | Local Public Administration and Local Financial Systems |
| 7 | Ms. Michiko HATAKEYAMA | Regional Economy and Investment Promotion |
| 8 | Mr. Osamu ISODA | Landuse Planning and Watershed Management |
| 9 | Ms. Satoko EMOTO | Agriculture and Agro-Industry |
| 10 | Mr. Ichiro KOBAYASHI | Transportation and Communications |
| 11 | Dr. Nahoko NAKAZAWA | Social Systems and Local Institutions |
| 12 | Mr. Roger O. ROWE | Water Resources Management |
| 13 | Mr. Izumi SAKAYA | Mining and Industry |
| 14 | Ms. Megumi HIRAYAMA | Health Sector |
| 15 | Ms. Naomi IMASE | Education and Vocational Training |
| 16 | Ms. Hisako KOBAYASHI | Urban Sector |
| 17 | Mr. Tsuyoshi ITOH | Fisheries and Environmental Consideration |
| 18 | Mr. Wataru YAMAMOTO | Forest Conservation and Social Forestry |
| 19 | Mr. Klaus D. SCHNEIDER | Industrial Economy and Investment Promotion |
| 20 | Mr. Yoji SAKAKIBARA | Coordination and Regional Economy |
| 21 | Ms. Mihoko OGASAWARA | Coordination and Planning |
| | Names of Additional Members | Assignment |
| 22 | Mr. Osamu NARASAKI | Fisheries and Marine Products Processing Industry |
| 23 | Mr. Kazunori INOUE | Hydrology |
| 24 | Ms. Linawati NASRIF | Health Sector |
| 25 | Mr. Yoshinori TAKAHASHI | Geographic Information System |

Table 1.4.2 Members of the Indonesian Counterpart Team

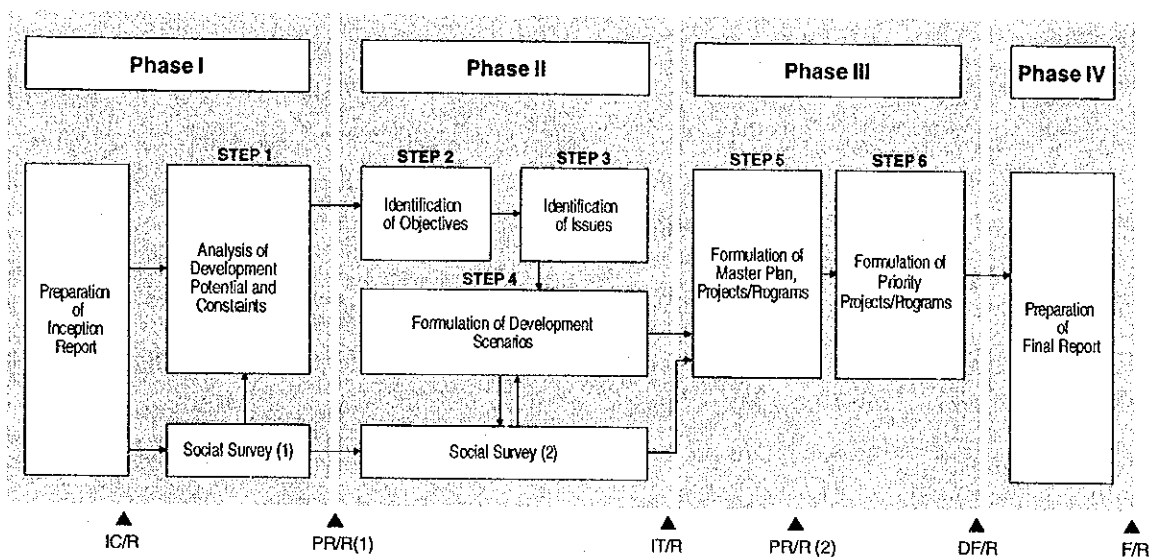
| Organization | Name |
|---------------------------------------|---|
| Bappenas | Dr. Ir. Ikhwanuddin Mawardi Ir. Deddy Koespramoedyo, MSc. Ir. Endang Indriati, MCRP Erman A. Rachman, MSP |
| Cipta Karya, Ministry of Public Works | Ir. Amwazi Idrus, Msc. Ir. Budi Situmorang Ir. A. H. Buchary, Dipl. HE Ir. Eko B.K. Ir. Herdian H. Purwanto, BE Mahdi, BSc |
| Bangda, Ministry of Home Affairs | Drs. Herman Siregar, MA Drs. Fasli Siregar, MPIA Drs. H. Sudgari Drs. Herry Yuherman |
| Bappeda, West Kalimantan | Ir. Syamsul Usman, M.T. Ir. Rusnawir Hamid, MTP Ir. Anna Laviana Ir. Momon Rivai, Msc. Ir. Karsono Rumawadi |
| Bappeda, Central Kalimantan | Drs. Kampily K. Lamey Drs. Philip Embang, SE. MRP. Ir. Humala Pangaribuan, Msc. Ir. Herson, MSc. Dr. Cornelis Rintun Drs. Roberth Upeng, M.Pd. Dr. Ahim Rusan |

1.5 IMPLEMENTATION SCHEDULE AND MAJOR WORK PHASE

The study is divided into four phases as shown in Figure 1.5.1. The study was composed of the following steps, in order to achieve the study objectives:

- Step 1 Analysis of Development Potentials and Constraints
- Step 2 Identification of Regional Development Objectives
- Step 3 Identification of Regional Development Issues
- Step 4 Formulation of Development Frameworks, Strategies, and Scenarios
- Step 5 Formulation of a Master Plan and Projects / Programs
- Step 6 Selection of Priority Projects / Programs

Figure 1.5.1 Basic Flow of Study



Study implementation commenced in Indonesia in March, 1997, and Phase I lasted from March to July, 1997. The progress of Phase I was compiled and presented in Progress Report (1). Implementation of Phase II lasted from September, 1997, to March, 1998. The results of Phases I and II were compiled in the Interim Report, which was presented and discussed during start-up of Phase III. Implementation of Phase III, which comprised, based on the results of Phases I and II, formulation of the master plan, projects and programs (Step 5) and formulation of the priority projects and programs (Step 6) was implemented over the period July to September, 1998. The major elements of the master plan and the priority programs and projects were compiled in Progress Report (2), which was presented and discussed in August, 1998.

The Draft Final Report was submitted in October, 1998, and, after having received the comments of the GOI and incorporated them into the report, it was finalized as the Final Report.

1.6 STRUCTURE OF THE FINAL REPORT

The Final Report (F/R) is comprised of six volumes, namely:

- Volume 1 : Executive Summary
- Volume 2 : Main Text
- Volume 3 : Priority Project Profiles, and
- Volume 4 : Sector Plans (1)
- Volume 5 : Sector Plans (2)
- Planning Atlas : Kalimantan in GIS

The Executive Summary in Volume 1 presents the compressed recommendations of the masterplan study. The Main Text in Volume 2 summarizes the study's approach, the results of the analysis of the region's characteristics and key development activities and policies, it presents the goals of sustainable regional development for Kalimantan and key issues for sustainable regional development. Based on such fundamental analytical considerations, the main text then elaborates on scenarios for sustainable regional development and the frameworks and basic strategies of the master plan for sustainable regional development. The main text is concluded with a sort of long list of programs and projects, the implementation of which is recommended in support of implementing the masterplan.

Such programs and projects refer to a regional policy reform program for PJP II, a restructuring program for the provincial spatial structure plan, a development program for the Kalimantan system basic and applied research institute, an oil palm subsector improvement program, an extensive agriculture improvement program and a lowland agricultural development program, a Kalimantan community forestry development program, a Trans-Kalimantan Highway program, the Pontianak metropolitan area development program, the KAPET Sanggau development program, the Pangkalanbun-Kumai port and industrial zone development program, the Kalimantan upland ecological development corridor program, an inland Kalimantan health services improvement program and an inland Kalimantan education services improvement program, a regional water resources development and supply program, a pollution monitoring program, a fisheries promotion program, a SME promotion program, and a forest fire disaster management program.

This long list has been screened resulting in priority projects, the profiles of which are summarized and presented in Volume 3 of the F/R. The following priority projects have been identified in line with the results of the screening and appraisal process :

- Master planning study project on forest fire disaster management in West Kalimantan
- Planning study for oil palm subsector improvement in Kalimantan

- Upgrading of Tayan-Pangkalanbun section of Trans-Kalimantan highway project
- Planning study for Upland Ecological Development Corridor in Central Kalimantan
- Master planning study project for Pangkalanbun-Kumai urban, industrial and port development
- Upland rural infrastructure development for poverty alleviation in Kalimantan
- Kalimantan upland community rescue and development project
- Development of research station and field centers in the upstream Kapuas for the Kalimantan System basic and applied research institute

Volume 4 and Volume 5 finally present the sector development plans in line with the masterplan for sustainable regional development. The sector plans are presented in a sector-wise form, but they are strongly guided by a regional approach which shaped the masterplan. Each sector plan's chapter identifies the main development issues, development and operational objectives, and outlines of action plans, which need to be implemented in order to achieve the identified sector development objectives.

The Planning Atlas: Kalimantan in GIS presents not only basic geographic information but also GIS-based analyses for regional development planning. The Planning Atlas of Kalimantan is presented in print as well as in the form of CD Rom.

Besides the F/R, two volumes of Technical Reports have been prepared for compiling discussion papers which summarize the results of key technical aspects and the results of the social surveys and distribution surveys implemented under the project.

The following discussion papers have been compiled by Technical Report (1) and Technical Report (2):

- Discussion Paper No.1: Potential and Constraints of Oil Palm Plantation Development Land Suitability in the Western Part of Kalimantan
- Discussion Paper No.2: The PIR Scheme in Oil Palm Plantation Development: Why Do Plasma Farmers Have Economic Difficulties in the Initial Stage?
- Discussion Paper No.3: A New Community-Based Oil Palm Plantation Development Scheme
- Discussion Paper No.4: The Place of Swidden Farmers (Shifting Cultivators) in Regional Development of Kalimantan
- Discussion Paper No.5, No.6, No.7: Transportation System in Kalimantan
- Discussion Paper No.8: Environmental Impact of Large-Scale Oil Palm Plantation Development A Case Study of West and Central Kalimantan
- Discussion Paper No.9: The Direction of Industrialization in West Kalimantan Province - Alternative Approaches to Industries Development
- Discussion Paper No.11: Population in West and Central Kalimantan: Is the present population large enough or not?
- Discussion Paper No.12: Goals of Regional Development for Kalimantan: Back to the Basics, the Sustainability of the 'Kalimantan System'
- Discussion Paper No.14: Hydrological Significance of the Upper Kapuas Basin
- Discussion Paper No.15: The Importance of the Smallholder Rubber Sector in the Region's Economy: Proposal for a Low-Input Rubber Replanting Scheme

CHAPTER 2

STUDY APPROACH

CHAPTER 2 STUDY APPROACH

2.1 PLANNING APPROACH: REGIONAL AND COMPREHENSIVE

2.1.1 Regional Approach

Rather than focusing on individual sectors, the regional approach identifies development goals and problems at the regional and local levels. Then, it proceeds to find alternative solutions in order to facilitate more effective regional development through the development efforts of various sectors.

Indeed, there are a variety of regional planning styles. Even for regional development planning, some planners do not adopt such a regional approach. However, the JICA study team and our Indonesian counterparts advocate this regional approach.

2.1.2 Comprehensive Planning Approach

Due to the persistence of poverty among the rural population and the increasing degradation of forest resources and the environment in the western part of Kalimantan, social development and environmental sustainability should be incorporated into the major issues for regional planning, together with economic development, investment promotion and infrastructure provision.

Indeed, both the development projects/programs with social or environmental consideration and the projects/programs specially designed for social development or for environmental conservation are important. However, these efforts do not seem to be effective enough to reduce rural poverty and to promote environmental sustainability in the western part of Kalimantan because small and medium-scale entrepreneurs and industries have not developed sufficiently in the region, and because a substantial amount of trickle-down effect to vast inland areas cannot be expected from economic development efforts in the modern sectors, such as large-scale industry and agriculture. The study will, therefore, incorporate the objectives of social development and environmental sustainability into the formulation of the sectoral development plans and spatial structure plans, by modifying the existing policies and plans of sectoral development and infrastructure provision. (See Figures 2.1.1 and 2.1.2.)

Figure 2.1.1 Comprehensive Planning Approach Incorporating Social Development and Environmental Sustainability (1)

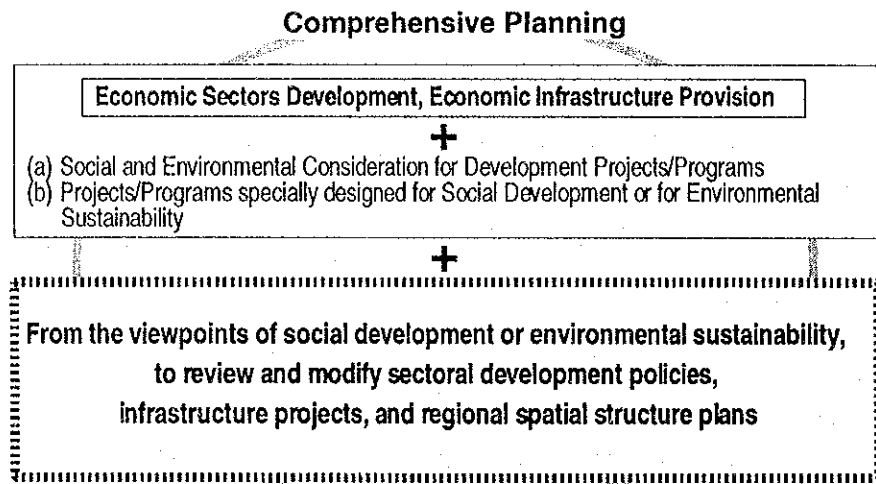
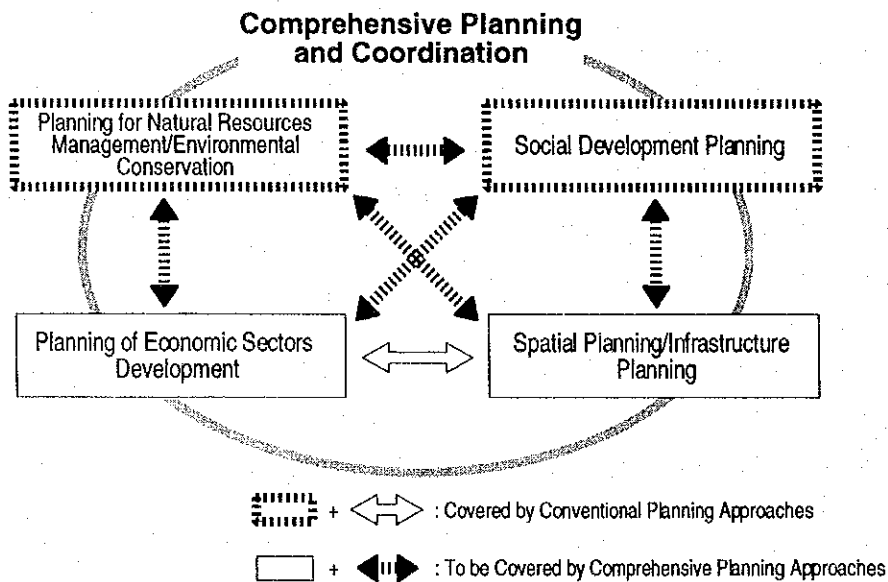


Figure 2.1.2 Comprehensive Planning Approach Incorporating Social Development and Environmental Sustainability (2)



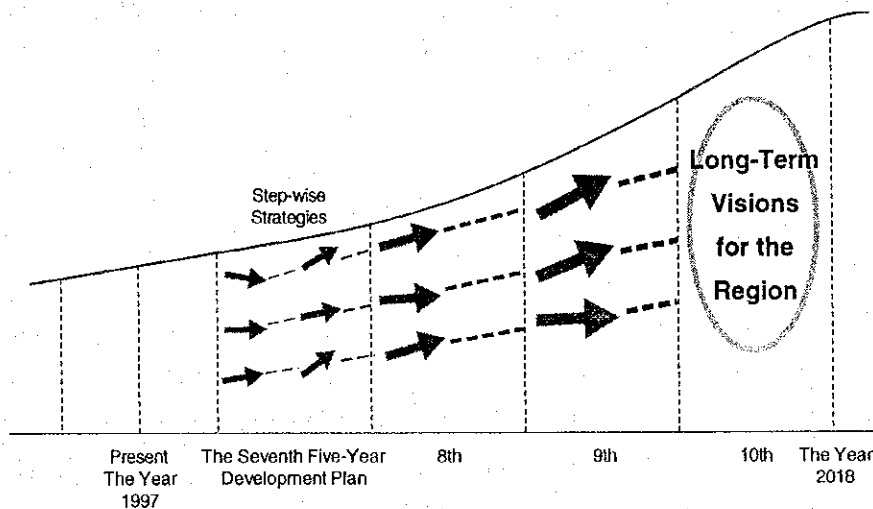
2.1.3 Long-Term Perspectives and the Formulation of Medium And Short-Term Strategies

The study’s planning horizon will cover more than 20 years until the year 2018, which is the end of the second 25-year development period. Since the Western Part of Kalimantan has been in the process of transition in terms of regional economy and spatial structure, and since the region will be in a more liberalized international environment through APEC and AEGA in future, the study envisions alternative future situations of the region and alternative directions of regional transformation by considering what the desirable future situations of the region are, and what should be avoided in the transformation process.

The future visions of the region are composed of various elements, which are not only economic sectors (industry, agriculture and services) and infrastructure, but also social groups (business people, urban employees, small entrepreneurs, wetland rice farmers, upland farmers, rural wage workers, and so on) and environmentally differentiated areas (highland forests, upland undisturbed forests, upland logged-over forests, upland secondary forests, wetland forests, and so on), in order to incorporate social development and environmental sustainability.

It will be possible to formulate short-term and medium-term strategies for breaking through the existing constraints and for utilizing development potential, once the visions for the region are clarified. (See Figure 2.1.3.) The study designs such step-wise strategies in order to achieve the desirable goals for the region.

Figure 2.1.3 Long-Term Visions and Step-Wise Strategies in Regional Development Planning



2.1.4 Formulation of Regional Development Scenarios and Projects/Programs Reflecting Macro Perspectives and Local-Level Needs

It is necessary to incorporate a variety of development needs ranging from those of the economic sectors to local people's needs, in order to formulate effective and well-balanced regional development plans.

Recognizing that there are several levels of regional development efforts, the study is based on the understanding that effective and well-balanced regional development plans entail development efforts at different administrative levels, and that local levels of development efforts should be supported or at least not hindered by development efforts at higher levels of authority. That is, in the effective regional development plans, the local people's development needs and initiatives should be encouraged not only at the village level, but they should also be supported directly or indirectly by the subdistrict and higher levels of government development efforts.

In this sense, regional and provincial levels of the development efforts should be planned not only based on macro analyses at the national and regional levels, but also reflect local-level needs and motives. For this purpose, the study conducted two types of social surveys at the village level. The first was to generally understand the village situation as well as the villagers' perception of development problems. The second was to understand the villagers' livelihood strategies, including production and consumption, and to analyze their problems and potentials using a participatory approach. At the same time, the findings from village-level analyses were presented to subdistrict government offices.

By conducting and participating in these social surveys at the village level, both the JICA study team and Indonesian counterparts gained useful insights to formulate regional development scenarios and projects/programs, which are more supportive to local initiatives, as well as more acceptable to the local people.

2.1.5 Enhancement of Regional and Local Initiatives

The roles of various actors in making development efforts should be clarified by regional development plans, in order to pursue regional development in an effective and well-balanced manner. Moreover, for achieving the objectives of social and economic development with environmental sustainability, it is significant to involve local governments (provincial, district and subdistrict levels of local governments), as well as local people's organizations.

The most important roles of these local governments for social and economic development and environmental sustainability are to encourage and facilitate local people's initiatives as well as the regional initiatives and to persuade the central government agencies of the importance of regional and local initiatives and the provision of necessary budget allocations.

In a gradual process of decentralization from the central government to local governments, the study needs to formulate regional development plans with explicit attention to the roles of various parties, including local governments. At the same time, the JICA study team helped local government counterparts in conducting presentations to the central government during workshop sessions.

2.2 SCRDP-KALTENGBAR'S CONTRIBUTION TO THE IMPROVEMENT OF THE EXISTING DEVELOPMENT PLANNING SYSTEMS OF INDONESIA

Since the beginning of the study, we have been frequently faced with the following questions and comments from Indonesian government agencies, especially in the provinces:

“Will you make a totally new regional development plan for us, although we already have one?”

“Because there are existing plans on those matters, please follow our plans.”

Our quick responses to these questions were as follows:

“Our study will provide input to Repelita VII and PJP II. We are not going to write a new plan instead of you. Based on the input from us, you will write a plan.” On other occasions, “Through this study, you will make a regional development plan, not the JICA study team.”

“Since the region is in great transition, you need to review the existing plans and on-going regional transformation. And you need to change the existing policies and plans for guiding various development activities into desirable directions.”

Another type of question posed to the JICA study team, is mostly by our counterparts from the central government agencies.

“What and how are you going to contribute to the existing regional development planning system?”

“You need not only just review the existing planning systems of Indonesia, but you also need to give your own views on them.”

This is more encouraging. Indeed, the technical assistance of the JICA study team is not a conventional type, which teaches how to make a regional development plan simply because the Indonesian counterparts already know how to do it, and they are experienced. However, there are more difficult challenges for us in the technical assistance project of the JICA planning study.

Although we are bound by the officially agreed objectives shown in Chapter 1, in the course of the study, we came to understand what we can contribute, and how we can assist our counterparts.

The JICA study team recognizes the great efforts which have been made by the Indonesian government agencies to build up development planning systems including both technical and institutional systems. The JICA study team acknowledges the great achievement in economic and social development which have been made in the last 25 years. However, at the same time, it seems to us that the government of Indonesia has been faced with many difficulties in further improvement in the performance of their development administration due to Indonesia's strong tradition of development planning, which is based on the top-down structure and on the single policy system throughout the country.

Through the interviews we conducted with central government officials in various ministries, we heard many opinions on the need to change the existing policies and systems. Their major points are very similar to each other and summarized as follows:

- It is necessary to make policies and programs more suitable to each region's conditions, potential and constraints in order to make further progress.
- It is necessary to pursue bottom-up planning or participatory planning more and more in order to make further improvement.
- It is necessary to pay more attention to the social aspects and social development.
- It is necessary to promote decentralization of government administration in order to enable local governments to be more responsive to local needs.

We agree with these points. However, it is very difficult to achieve such situation in the existing development planning and administrative framework. Since regional development planning is very much related to how to attain these situations, our study could provide some answers to what to change and how to change the existing framework. Our study could substantiate what Indonesia's policy makers and bureaucrats are supposed to seek by providing basic concepts and concrete measures to tackle these problems. Although the study deals with only two provinces, it has the potential to generate useful recommendations which are applicable to most areas of Eastern Indonesia.

2.3 JICA STUDY TEAM ASSESSMENT OF THE EXISTING DEVELOPMENT PLANNING SYSTEMS OF INDONESIA

2.3.1 Sectoral Approach vs. Regional Approach in Long-Term Development Planning and Short-Term Development Planning

The government of Indonesia has developed a complex, broad system of development administration and development planning. At the national level, there is a long-term (twenty five-year) development planning system and a short-term (five-year) development planning system. The second long-term development plan (PJP II) was formulated as the long-term "grand design" of the nation. Every five year short-term development plan is formulated for the nation as a whole by Bappenas, while each ministry also makes its own sectoral development plan for a five-year period.

The sectoral approach is dominant in the formulation of development plans, as well as in the implementation of actual projects. In this five-year national development plan, regional development is one of the 53 subsectors, and it has its own development budget. The category of regional development in the development plan is that of development activities by local governments, such as those of the province and district. Although the budget allocated to the regional development category has gradually increased,¹ the amount is still so limited that the local governments cannot take their own strong initiatives for formulating development efforts, which are more suitable for each locality. As a result, at present, the local governments have to rely on sectoral budgets for substantial development efforts through collaboration with sectoral regional offices (kantor wilayah).

2.3.2 Spatial Structure Planning

Indonesia is one of the few countries which has developed a strong tradition of spatial structure planning.² Cipta Karya under the Ministry of Public Works, first started urban spatial planning, and then expanded its application to region-wide spatial structure, from the province level, to the island, the district and the nation as a whole. Indonesia has imported the concept of the structure plan from the UK. The original model of the British structure plan has both an indicative nature in development direction and power in landuse regulations. However, Indonesia's spatial structure planning system has inherited only the indicative nature from the British model, but failed to introduce powerful landuse regulations.

¹ In Repelita VI, the percentage of the regional development budget is 16% of the total of the national development budget.

² It is easier to list the countries which have not developed strong spatial planning tradition in the Southeast Asian Countries. Among the examples of weak spatial planning tradition are Thailand and Philippines.

This is partly because there had been strong vested interests in forest resources, especially timber in the outer islands, when the provincial spatial structure planning system was introduced. The utilization of the forest resources was delineated by provincial forest landuse plans established in the early 1980s. It has continued to be effective in regulating major landuses, especially development projects accompanying large-scale landuse changes. However, it is recognized that the malfunction of the provincial spatial structure plan is an obstacle to the desirable guidance of development activities in provinces, as well as smooth implementation of development projects. Now at the provincial level, related government agencies are making efforts to synchronize the provincial spatial structure plan and the forest landuse plan into one modified landuse plan, creating a new provincial spatial structure plan.

Recently, however, the formulation of district-level spatial structure plans was started and many of them are still being made. Without the power of landuse regulation, such efforts at formulating district spatial structure plans are still lacking in powerful landuse regulations.

Among the typical examples of the malfunctioning of the provincial spatial structure plan is the case of oil palm plantation development. In the early 1990s, in West Kalimantan the oil palm plantation development was booming. Many private investors rushed to get licenses for land development for oil palm plantations. The provincial authorities were not ready to utilize provincial spatial structure plans to issue land development permits. As a result, overtly high concentrations of oil palm plantations took place in the Sanggau district. This reduces the diversity of the regional economy and increases the chemical impact on local communities and the environment from the plantations. Moreover, a huge amount of unsuitable land is still offered for oil palm plantation development by the provincial authorities. This is a case, in which sectoral interests override regional and local interests.

Spatial structure plans at any level (provincial, district and local) should work for protecting their own levels' interests against one-sided winning by sectoral or other interests. Such spatial structure plans empower the regional or local authorities to guide development and conservation efforts. Spatial structure planning is a starting point for regional development planning for regional initiatives because conflicts of various interests become visible over the space.

2.3.3 Bottom-Up Planning

In 1982, the Department of Home Affairs established a development planning and budgeting system for local governments, called P5D. It is based on a chain of consultation processes between the levels of villages, subdistricts, districts, and provinces and the nation, with the aim of incorporating development initiatives from the lower levels of government. However, this bottom-up approach has resulted in providing a sphere in which the central government has

control over the development efforts at every level. For final funding decisions, village proposals should reach Bappenas through the long chain of the consultative processes. This is unrealistic even in theory, and actually has been totally ineffective in achieving planned objectives.

In this context, the real decentralization is to allow the lower level of government, for example, at the district level, to have power to decide funding for village proposals and subdistrict proposals. The idea of a "kecamatan fund" aims at breaking the long chain of administrative process in the middle, and empowering the district office to decide funding. Even though the PSD planning and budgeting procedure is properly done, the budget of local governments to fund the proposed projects in the procedure is not nearly enough. More fundamental measures for decentralization are really needed for the local government to control their territory, resources and future.

2.3.4 Integrated Economic Development Zone (KAPET)

The idea of integrated development is quite popular in the field of regional development. In many cases, urban and industrial development are the major components of planned development efforts because the concentration of investment in infrastructure and production facilities is justifiable according to investment rationality. In the case of Sanggau KAPET, however, the development of oil palm plantation together with palm oil processing is one of the components of integrated development efforts. The concentration of such plantations in one district is not good with respect to the negative impact derived from a monocultural economy and the environmental impact of chemical inputs used in plantations.

KAPET is a conventional development method, by which private investment in infrastructure are planned and institutional measures are prepared to attract private investment. Based on these incentives, KAPET aims at promoting rapid and relatively large-scale development. However, in such a development method, more is taken out of the region and less remains in the region. Moreover, in many backward regions like in Eastern Indonesia, such a method does not always provide the key to removing the obstacles to development in the region as a whole. The growth pole strategies have been criticized in that the trickle-down effect tends to be small and confined to the urban areas and their vicinities.

Therefore, we have to realize both the potential and limit of the KAPET approach. However, in the impasse of Eastern Indonesia's development, KAPET initiatives should be fully but carefully utilized because they promise some government support.

Other basic strategies in seeking sustainable, more rewarding regional development patterns, which are based on the unique potential of the region, are to be seriously considered. That is,

we need to get back to the basics and pay more attention to the local conditions and make a serious commitment to sustainable development. We hope that our SCRDP-Kaltengbar could provide some concepts and concrete measures to reach this goal.