

9. SPECIFIED STRATEGIC ENVIRONMENTAL ASSESSMENT

9.1 Introduction

9.1.1 Rationale

1) Legal Basis for the Strategic Environmental Assessment

Law No. 32, 2009, the Protection and Management of the Environment, decrees the incorporation of an environmental considerations in the formulation of plans, programs, or policies. Specifically, the law requires the national and local governments to conduct a Strategic Environmental Assessment (SEA) in the formulation of any of the following plans:

- Regional spatial plans (RTRW), long-term plans (RPJP), and the medium-term development plans (RPJM) of national, provincial, and district/city governments; and,
- Policies, plans, and/or programs that have potential environmental risks.

The implementing guideline is provided under Law No. 27, 2009, defines strategic environmental assessment in the following terms:

- A process of integrating environmentally sustainable development in decision-making processes, especially on policies, plans and programs;
- A series of systematic analysis which are holistic and participatory to ensure that the principles of sustainable development would become a basic and integrating factor in regional development policies, plans and programs; and,
- A tool for self-assessment in order to see the extent of how policies, plans, and programs have integrated the principles of sustainability in resolving economic, social, and other environmental issues.

The initial attempt to conduct the SEA was undertaken in view of the requirement of the Government of Indonesia to incorporate environmental assessment in the process of formulating policies, plans and programs similar to that in the GKS Zone. SEA and Sustainability Principles

Under the Indonesian Law, the following sustainability principles are given emphasis in integrated environmental consideration in spatial planning:

- Interdependency: The linkage between one object or another, between one area or another, between one community or another, local and global linkages, or linkages among sectors, regions, etc.
- Equilibrium: The application of balance among aspects, interests, and interactions between organisms and living spaces, such as the balance between development and environmental protection, between conservation and utility of limited resources or

reserves, between utilization of space and the management of their impacts, etc.

- Justice: The emphasis on equity and order among policies, plans and programs, especially those that encourage access restrictions, or control over natural resources, capital and infrastructure, knowledge and information, etc., to a few, or only for particular group of people.

9.1.2 Concept of SEA

Strategic Environmental Assessment (SEA) is a tool used to assess the possible impacts in implementing a plan, policy, or program could have on existing, and future, environmental conditions. It also assesses socio-economic effects, and is designed to influence the plan, policy, or program, and improve environmental outcomes. This function make the SEA an integral part of the planning process.

It is important to emphasize the differences between SEA and an Environment Impact Assessment (EIA), A SEA is undertaken at a “strategic” level and offers the opportunity to assess policy alternatives against environmental or sustainability issues early in the decision making process, while an EIA is undertaken for individual projects and can only consider alternative within the limitations of a specific project. Table 9.1.1 illustrates this difference.

Table 9.1.1 Differences between SEA and EIA

	SEA		EIA
Decision making level	Plan Programme	within the relevant policy framework	Project
Nature of action	Strategic, visionary, conceptual		Immediate, operational
Outputs	General		Detailed
Scale of impacts	Macroscopic, cumulative, not defined		Microscopic, localised
Time scale	Long to medium term		Medium to short-term
Key data sources	Sustainable development strategies, state of the environment reports, visions		Field work, sample analysis
Type of data	More qualitative		More quantitative
Alternatives	Area wide, political, regulative, technological, fiscal, economic		Specific locations, design, construction, operation
Rigor of analysis	More uncertainty		More rigor
Assessment benchmarks	Sustainability benchmarks (criteria and objectives)		Legal restrictions and best practice
Role of practitioner	Mediator for negotiations		Advocator of values and norms Technician, using stakeholder values
Public perception	More vague, distant		More reactive (NIMBY)

Source: BECOM, The SEA Manual, A Sourcebook on Strategic Environmental Assessment of Transport Infrastructure Plans and Programmes, October 2005

SEA is undertaken systematically in a staged process, as summarized below:

- SEA Scoping

SEA Scoping is the process of identifying and agreeing to the framework that will be used to undertake the assessment. At the start of the process, the basic objectives and parameters of the plan should be laid out and understood. Having the full details of the plan however is not necessary; in fact this would limit the extent to which the SEA can influence the plan. Based on understanding of the plan's objectives, the environmental information and environmental factors that have the potential to be influenced by the plan are identified. At this stage, key environmental issues are identified and assessed, and a SEA framework is formulated.

- **SEA Consultation**

Consultation is part of the Scoping process. The purpose of this is to ensure that all relevant information on environmental baseline and key issues are obtained in order to give stakeholders an opportunity to comment or contribute to the framework.

- **Assessment of Environmental Effects**

The SEA framework, developed at the Scoping stage, forms the basis of the assessment. There is no required methodology for undertaking the assessment, but generally this is done qualitatively, at a high level, with reference to available evidence. Assessment is commonly based on expert judgment, using workshops and stakeholders' inputs to ensure a balance and sound assessment.

9.1.3 Challenges, Difficulties and Limitations

1) Policy Context

To establish the context of SEA and ensure that the plan being assessed is consistent with other policies, existing sustainability policies need to be considered when setting the scope for the assessment. Laws and policies on sustainability and spatial planning are relatively new advocacies in Indonesia, as manifested by Law No. 27 and No. 32, 2009. Thus, there is a mix-signal in interpretation compounded by the fact that some policies remain vague. For example, the Guidelines on the Implementation of Strategic Environmental Assessment does not show a detailed process and methodology in carrying out a SEA process. Assessments have mostly been dependent on the Department of Environment's understanding and interpretation. So far Indonesia has only piloted the SEA process in Pulau Jawa.

It is in this view that there might be a need to conduct a more comprehensive SEA process in the GKS Zone once the GKS Development Framework is finalized and authorized by the Spatial Planning Department. Environmental impacts cause by the proposed policies, plans and strategies will then be conducted based on the approved vision, authorized development frameworks, development structures, spatial patterns, and land use plans.

Moreover, the concept of Carrying Capacity, as stipulated in Law No. 27, 2009, although complex in its nature, is a valuable tool that can generate useful environmental indicators however, a its flaws include the difficulty in arriving at a "calculated" capacity (threshold/limit) and determining that the environment has reach its saturation level. Nevertheless, carrying capacity indicators redound down to a form of exhaustive discourse on sustainability issues.

2) Environmental Data

The environment data used in this Report were largely drawn from the following reports of the JICA Study Team:

- Progress Report I (July 2009)
- Interim Report (December 2009)
- Progress Report II (March 2010)

The reports highlight issues in relation to the availability of data. Much of the environmental and socio-economic data presented were broad and data on spatial distribution were not always clear. Throughout the life of the GKS Planning Study, the understanding of GKS Zone will be augmented through additional data collection and analysis and it may be necessary to review the SEA in the context of more detailed data obtained in the near future.

3) Governance and Capacity Issues

The question of resources and capacity for effective environmental governance is an issue that needs further deliberation to ensure compatibility between the requirement of the GKS and the capacity of the government to implement and monitor the environmental indicators contained in the SEA framework.

9.1.4 Other Identified Issues

The following is a summary of other issues that surfaced during consultations with stakeholders:

- Policy conflicts between proposed GKS-ISP land use policies and government policies on planning, and coordination with relevant agencies and each kota/kabupaten RTRW;
- Legal conflict between the GKS land use plan and other regulations;
- Impacts on economic structure and economic growth caused by the implementation of the land use plan;
- Impacts on social structures and peoples' lives caused by the implementation of land use plans; and,
- Impacts on the natural environment, including habitats, biodiversity and living environments.

Other specific issues are shown in Table 9.1.2 .

Table 9.1.2 Summary of Stakeholders' Issues and Comments

Issues raised	Influence on the SEA Report
The BLH has no guideline to conduct SEA but other areas have conducted SEA on spatial planning as pilot project.	Noted, the team shall look into the results of the pilot SEA product.
Policy to counter traffic problems and declining open and green spaces in urban areas is provided by BLH.	Noted, this will form part of the SEA baseline.
Land use plan for the areas affected by the Lapindo Mud Flow.	Noted, but this is not included in the JICA agreement.
Quantitative analysis for carrying capacity assessment.	Noted, but existing data base may not be enough and time is very limited to undertake quantitative

Issues raised	Influence on the SEA Report
	analysis. Also noted that the GKS SEA has some limitations and scope.
Policy on illegal community settlers along riversides.	Noted.
Balancing spatial planning to increase economic growth and understanding land use to provide better environment.	Incorporated as key issue.
Utilizing SWOT analysis as baseline tool.	Noted.
Economic and environmental impacts of the Suramadu Bridge.	Noted, but may require separate study in order to determine existing and future social and economic impacts of the bridge as it relates to the overall development of the GKS.
There is a need to come up with strategies for more environment-friendly transportation system.	Noted.

Source: JICA Study Team

9.2 Specified SEA Screening and Scoping

9.2.1 Rationale

The Ministry of Environment, through Law No. 32, 2009, on protection and environmental management, mandates the incorporation of a SEA in the GKS Spatial Planning process. Given the circumstances, and the status of the GKS Development Framework, the JICA Study Team and the Spatial Planning Department agreed to the following terms and conditions in the conduct of the GKS SEA:

- The strategic environmental assessment would not be a comprehensive evaluation of the GKS Development and Spatial Plan 2030 but rather focus on perceived controversial policies and proposals contained in the GKS ISP;
- The environmental assessment will mainly present qualitative assessments of impacts of the GKS Zone; and
- The results of the environmental assessment will form part of the Main Report of the GKS Spatial Plan, and serve as an appendix to the main report.

The SEA screening and scoping was conducted in this context, and they consisted the following tasks and activities:

- Establishment of the context of the GKS SEA that detailed the purposes of the GKS SEA and its desired targets;
- Clarification of the SEA methodology, processes and approaches;
- Clarification of the SEA framework; and,
- Identification of stakeholders and creation of the SEA Task Force.

9.2.2 Specified SEA Objectives and Targets

1) Objectives

The strategic environmental assessment had the following objectives:

- Contribute to the early integration of environmental issues in the preparation of the GKS spatial plan;
- Assess the targets of the GKS spatial policies and plans and their environmental impacts;
- Indicate how improvements can be incorporated into the plan to finetune their environmental performances; and,
- Provide a level of environmental protection and facilitate sustainable development outcomes in the GKS Zone.

2) Targets

The target areas of the GKS SEA are discussed in detail in Chapters 5, 6, and 7 of this report. The summary of the targets are presented below:

(1) Land Use Policy on Urban Management

i) Creation of Compact Eco-City

- Enhance controlled urban growth toward the creation of a compact city;
- Introduce “zoning system” and “policy zoning” for land use management in urbanized or urbanizing areas; and,
- Introduce “building regulations” to regulate: building height, floor-area ratios, building coverage ratios, set-backs, etc.

ii) Improvement of Existing Urban Areas

- Redevelop Central Surabaya: This includes various projects, such as waterfront development, creation of pedestrian-friendly environment (i.e. transit-mall), creation of open spaces, traffic management systems, intermodal facilities, the Suramadu Bridge Town, etc.
- Develop Subcenters: In order to vitalize the sub-regional economic activities, subcenters should be developed, providing services related to dominant local economic activities.
- Improve Living Conditions: Urban redevelopment and improvement of congested residential areas:
 - Encourage the application of proven models such as a “Land Readjustment System” and the KIPs.
 - Re-arrangement and relocation of industrial locations. Strategies include: 1) Collectivization of industries; 2) Relocation of pollutant-risky industries from congested urban area; 3) Establishment of green buffer zones; and 4) Enforcement of environmental regulations.

iii) Guided New Urban Area Development

- Facilitation of Integrated Development with Public Transport which is essential in improving people’s mobility through a better public transport system, focused on Transit-Oriented-Development (TOD) .
- Enhancement of Proper Industrial Zone Development: Clusters, or industrial estates, encourage deliberate industrial development.
- Enforcement of “Development Guidelines”, which is needed for local governments to enhance residential development with sufficient infrastructures, utilities, and other public facilities.

iv) Promotion of Urban-Rural Linkage to Assure Balanced Growth

- Vitalization of rural economies, to promote value farming through “agropolitan projects”.
- Facilitation of “One Village One Product” policy “(Satu Desa Satu Produk)
- Development of marketing channels for local producers, through the development of “Roadside Stations” (Michi-no-eki, or Jalan Stasiun”.

(2) GKS Land Use Plan

The review and analysis on existing land uses, as well as the land evaluation analysis, showed that land conversion will be facilitated in the GKS Zone to accommodate

projected land uses as envisioned in the GKS-ISP 2030. Detailed discussion is contained in Chapter 6 of this Report.

(3) GKS Spatial Development Pattern

Large scale projects are in the pipeline per the respective kota/kabupaten plans. This includes the following:

i) Surabaya

- Development of Foot Area
- Development of Tanjung Perak Port
- Lamong Bay Island Development

ii) Bangkalan

- Development of Suramadu Foot Area
- Blega Dam
- Water Front City
- Bangkalan Development of Industrial Area
- Bulupandan Port Development

iii) Gresik

- Gresik Development of Industrial Area
- Gresik Port
- Large Scale Residential Development
- Cement Factory Development
- Toll Road between Gresik-Lamongan

iv) Sidoarjo

- Toll Road Development
- GEMOPOLIS
- Marina Project
- Large Scale Residence
- SUMO Toll
- Juanda International Airport Expansion

v) Lamongan

- Lamong Port
- Lamongan Industrial Area Development

For purposes of the SEA, the above projects are clustered into the following

- Transportation Development Cluster (road, ports and airport)
- Industrial Development Cluster

- Human Settlement Development Cluster
- Natural Resource Development Cluster (water reservoir)

9.2.3 SEA Process

1) Stages in the Strategic Environmental Assessment

The strategic environmental assessment in the GKS followed three stages: 1) scoping/screening, 2) assessment of impacts, 3) feedback mechanism. Each of this stage had activities and steps which were undertaken through collaboration with members of the SEA task force. Figure 9.2.1 shows the process of the environmental assessment.

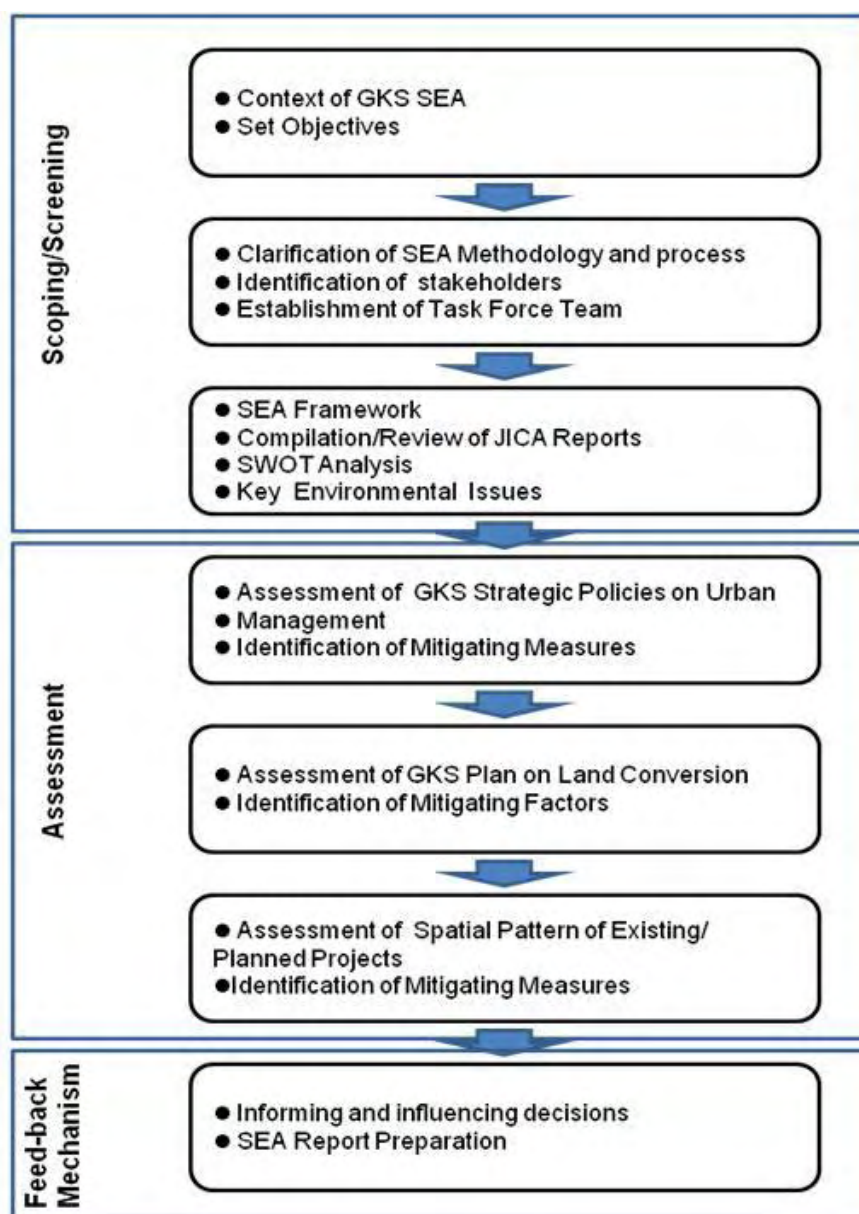


Figure 9.2.1 GKS SEA Process

2) Assessment Methodology

The purpose of assessment stage of the SEA is to use robust evidence to predict the likely effects of implementing the GKS strategies, policies and plans. Because it could not be shown that they will be necessary and proportionate to the scale of the effects being considered, the use of the numeric, or quantitative, system to determine significance was not recommended.

As an effective method of assessing effects professional judgment was used, taking into account all available evidence (including GIS data), in reviewing the likely performances of the GKS strategies, policies and plans against each of the SEA assessment criteria. This was done through workshops involving key and relevant stakeholders.

The following issues were considered in the assessment of the effects of the GKS policies and plans:

- Significance should be determined individually in each case, using the most appropriate method.
- The level of assessment should be proportionate to the likelihood, scale and complexity of the issue being assessed;
- When using professional judgment to determine significance, the appropriate stakeholders should be involved and all relevant evidence should be considered; and,
- The basis/reasoning or evidence base on each assessment should be documented in the SEA Report.

9.2.4 SEA Framework

1) Developing a SEA Framework

The review of plans, policies, baseline data and key issues were used as the basis in developing the GKS SEA framework. This comprised high-level SEA objectives and assessment criteria which were used to assess the strategies and subsequent plans of GKS 2030.

Given the state and pace of environmental and sustainability policies in Indonesia, the objectives within this framework only showed a ‘snapshot’ view of sustainability issues as they were understood at the time the SEA process was conducted. This means that the evaluation is subject to change and will further evolve in response to further environmental developments, sustainability, policies and plans in the GKS Zone.

This framework will be used as a tool to assess the effects of the policies, plans, and strategies put forward under GKS 2030.

2) SEA Framework

The SEA framework comprises two elements:

- Parameters/Indicators: parameters are used to address areas that are important for GKS’s environmental sustainability; and,
- Assessment Objectives and criteria: Objectives and criteria were used to assess the

performance of the policies, plans, and strategic .

The parameters, assessment objectives, and criteria were laid out in the framework shown below:

Table 9.2.1 GKS SEA Framework

Parameters/Indicators	Assessment Objectives and Criteria
Institutional Consideration	
1) Existing Policy	Consistency with the policies and plans in the area.
2) Legal Basis	Relationship with related and existing regulations.
Social Considerations	Minimize the negative effects in the changes of the social structure and people's well being.
Social Considerations	Minimize the negative effect in the changes of the social structure and people's well being.
Economic Considerations	Enhance economic activities across relevant sectors.
Air Quality	Reduce the negative impacts of air pollution load.
Climate Change	Reduce greenhouse gas emissions and adaption/mitigation of the adverse impacts of climate change.
Water Quality	Limit water pollution levels that do not damage natural systems.
Soil	Reduce contamination and safeguard soil quality and quantity.
Biodiversity	Conserve and enhance designated sites and legally protected habitats and species, and conserve and enhance biodiversity at all levels.
	Minimize area of habitat lost.
Coastal/Marine ecosystem	Minimize shoreline changes resulting in the implementation of policies/plans.
Landscape	Protect and enhance the attributes of the landscape, recognizing its diverse features and distinctiveness at different scales.
	Protect and enhance townscape character and the public realm.
Natural Disaster	Minimize the impact of natural disasters, like floods, landslides, and soil erosion.
Accessibility	Enhance mobility, safety, convenient lifestyles.
Natural Resources	Manner of gathering and utilization of the natural assets should consider the carrying capacity.
Solid Waste	Improve and enhance waste collection and promote 3Rs (reduce, reuse and recycle).
	Ensure appropriate waste disposal sites.
Cultural heritage (including architectural & archaeological heritage)	Minimize the adverse effects; and preserve/enhance designated cultural heritage and other valued sites, areas and features.
	Avoid loss/damage of archaeological resources and historic structures due to development.
Human health	Improve the quality of life through ensuring access to green/open space.

Source: JICA Study Team

9.2.5 Engaging Stakeholders

1) Selection of Stakeholders

The process of selecting SEA stakeholders took into account the need to limit the number of stakeholders to arrive at a number that could be managed within the time constraints. Stakeholders were selected using the following criteria:

- Stakeholders' information and knowledge about the GKS environmental baseline;
- Stakeholders' knowledge on the policy/ies or regulations about the specified SEA target areas; and,
- Stakeholders' interest and stake which will be severely affected by the implementation of the GKS-ISP Proposals.

A total of 41 representatives from seven agencies and institutions, comprised the members of the stakeholders, namely:

- Spatial Planning and Environment represented by the Planning Authority, Spatial Planning, Suramadu Development and Provincial Environment Board;
- Transportation Sector represented by the Airport Authority, Port Authority, Energy Department, and Transportation Department;
- Agriculture and Forestry;
- Industrial Department;
- Non-government agency;
- Representative from community; and
- Other Informal Sectors.

Further screenings of stakeholders were conducted to determine membership to the task force. It was decided that representatives from the seven identified stakeholders' institutions will form the SEA Task Force Team. The task force profile is attached as **Appendix**.

2) Stakeholders' Meetings

SEA Scoping process commenced with a presentation of the general updates, outcomes and processes of the GKS policies, plans, and strategies by the JICA Study Team. The SEA context was clarified during the series of meetings conducted.

3) SEA Task Force Team Workshops

A series of workshops, which were attended by the SEA task force, was conducted for a month. The workshops aimed at exchanging ideas and opinions on issues relevant to the conduct of the environmental assessment. Minutes of Meeting of this workshops is attached as a separate report. The following table shows the schedule of the series of the SEA workshops.

Table 9.2.2 Schedule of Workshop Series

Date	Activity/ies	Objectives
March 05	SEA Screening and Objective Setting	To determine the context, objectives, appropriateness and relevance of SEA in relation to the development of the GKS Spatial Plan.
June 15	SEA Scoping	To clarify the targets of the SEA, identify relevant criteria and identify stakeholders.
June 18	SWOT Analysis	To clarify and collect additional baseline data.
June 22	Assessment	To identify environmental impacts of GKS Land Use Policy 2030 and determine how to mitigate these impacts.

June 29	Assessment	To identify environmental impacts of the GKS Land Use Plan 2030 and determine how to mitigate them.
July 05	Assessment	To identify environmental impacts of the land use development patterns and determine how to mitigate these impacts.

Source: JICA Study Team

4) Public Workshops

Participation of the communities was relatively limited due to constraints in the GKS planning process. At the beginning of the GKS Study, a community survey was conducted but there were no formal mechanisms on public participation in the SEA process. Moreover, participation of the local, provincial and national level was manifested in its membership in the task force. Seminars and conferences were also facilitated for the presentation of the overall findings of the study.

9.3 Key Environmental and Socio-economic Issues

The review of relevant plans and policies and the baseline analysis provided a solid background, against which environmental and socio-economic issues relative to spatial development in the GKS zone, would be established. A SWOT analysis was also conducted to provide basic formulations on current conditions in the GKS. The identification of issues led to the creation of the objectives and criteria that made up the SEA framework.

9.3.1 SWOT Analysis

A SWOT analysis, involving the SEA task force, was conducted during the 3rd SEA Workshop on 18 June 2010. The task force conducted a SWOT analysis for each kabupaten and kota. Below is the summary of the results:

1) Analysis of Strengths

The strength of the GKS Zone is centered in Surabaya, one of the largest cities in Southeast Asia, with around three million people and, at least, seven million in its surrounding rural areas of Gresik, Lamongan, Bangkalan and Mojokerto.

Tanjung Perak, the main port is one of the busiest ports in the country and is one of the top ten busiest cargo ports in Southeast Asia. Although the port is traditionally administered, it handles modern cargo ships bound for other parts of the globe. The other port in the zone is in Gresik, a city less than an hour's drive from Surabaya's center via highway. In the future, Gresik will be the location of the new harbor, while Tanjung Perak will be torn down to make way for a recreation facility for Surabaya.

The following are the other major strengths of the GKS Zone:

- Development of Surabaya being the center of industry, commerce and education will have a positive spill-over effect to neighboring areas. Gresik, Sidoarjo and Mojokerto complement the need for additional human settlements in Surabaya. Mojokerto and Lamongan will play a major role on food security, being the region's rice producers and having the highest paddy production in the country. Bangkalan is a consistent contributor of corn and salt production in the country;
- Good road network condition compared with other areas in the country;
- Strong socio-cultural foundation of the local people; and,
- The establishment of Mojokerto as a heritage city and tourism destination.

2) Analysis of Weaknesses

The following were the identified weaknesses of the GKS Zone. If left unaddressed they will hinder the achievement of the development vision in GKS zone:

- Heavy traffic congestion (Surabaya, Gresik, Mojokerto);
- Inconsistency of land functions due to poor land use management;
- Proliferation of slums and urban poor;

- Increasing population growth;
- Poor and lack of pedestrian crossings resulting to traffic accidents;
- Lack of water supply for domestic and commercial uses;
- Increasing trend of forest damage;
- Flooding during rainy days caused by clogged sewers and inept bureaucracy;
- Poor watershed management;
- High levels of water and air pollution particularly in major urban and industrial centers;
- Increasing trend of unemployment and underemployment;
- Proliferation of unorganized and scattering street vendors;
- Lack of green areas and community spaces;
- Poor solid waste management system particularly on domestic and industrial waste; and,
- Abandoned fishponds particularly those affected by the mud flow.

3) Analysis of Threats

The following illustrates the overriding threats to the development of the GKS Zone:

- Natural disasters, particularly flooding (Surabaya and Bangkalan), landslides (prominently affecting Mojokerto), volcanic eruption (Mojokerto), earthquakes and mudflows (Sidoarjo);
- Increasing industrial pollution that affects water and air qualities and is compounded by weak law enforcement mechanisms;
- Depleting water resources and degradation of natural resources;
- Rapid increase of population especially in urban areas (Surabaya, Gresik);
- Increasing uncontrolled land conversions from agriculture to either human settlements, industrial and commercial uses; and,
- Socio-cultural decadence especially among the younger generations.

4) Analysis of Opportunities

The opportunities for the GKS Zone are outlined below. It is believed that once these opportunities are maximized they will provide a strategic tourism industry position for GKS Zone, which will help fasttrack its development and sustain its progress.

(1) Tourism industry offering various historic attractions and destinations, including, but not limited to the following:

- Suramadu Bridge, the longest suspension bridge in Indonesia;
- Grand Mosque of Surabaya, the largest mosque in East Java;
- Cheng Ho Mosque, the first mosque in Indonesia built with Chinese-style architecture;
- Jales Veva Jaya Mahe Monument, a large, historic statue commemorating the Indonesian Navy;
- Mpu Tantular Museum, a large collection of ancient Javanese artifacts;
- Monkasel, a Submarine Monument;

- A Soviet-built submarine display (named KRI Pasopati (410)), that served in Indonesian Navy since 1962;
 - Bonbin Surabaya, one of the most famous zoos in Southeast Asia;
 - Heroic Monument, a major symbol and one of the attractive tourist destinations in Surabaya and Southeast Asia;
 - House of Sampoerna, a cigarette museum, and also one of the famous factories of Sampoerna brand cigarette;
 - Taman Safari in Mojokerto;
 - Local Disneyland in Lamongan;
 - Heritage City in Mojokerto;
 - Eco-tourism in Mojokerto and Bangkalan; and,
 - Arts and Crafts Villages.
- (2) Development of the Surabaya-Mojokerto (SUMM) Ring Road to ease traffic congestion.**
- (3) Commitment of the national government to implement the Transportation Master Plan in the next 2 - 3 years, which includes a railway network connecting Jakarta and Surabaya.**
- (4) Private sector's increasing investment on human settlement and industrial development zones centering in Surabaya and Gresik.**

9.3.2 Problem Structure

The JICA Study Team formulated a structure on the major environmental problems in the GKS Zone. In summary, major environmental problems emanate from the topographic conditions and land uses in the GKS. These are distinctively characterized by the problems in hilly areas, rural areas and urban areas. In hilly areas, the problems are related to forest and soil conservation, particularly in Kabupaten Mojokerto. In urban areas, these problems are related to population growth, which are collectively caused by industrialization, urbanization and increasing population.

Development pressures in the GKS Zone mostly move from downstream to upperstream. Manifestations include: decreased agricultural lands in favor of industrial uses, settlements, and housing expansion. The forest cover in hilly areas has decreased due to illegal conversion of the forest areas into agricultural lands.

On the other hand, development pressures on the environmental impact flow move from the upper stream to downstream. For example, soil erosion caused by land conversion in hilly areas causes sedimentation in the rivers, and the use of agriculture chemicals in the rural areas and industrial wastewater adversely influences water quality in low-lying areas, while dumped garbage flow out to coastal areas. Chapter 6.6, Environmental Management System discusses in detail the problems on environmental structure.

9.3.3 Major Inter-related Issues

The following are the other major factors that contribute to the current environmental condition in the GKS:

- Population pressures in Surabaya is spilling over and causing sprawling in Sidoarjo, Gresik and Mojokerto. In the last two years, Bangkalan's population grew at the rate of 2.8% p/a, a rate which is expected to grow due to the opening of the Suramadu Bridge. If this condition will continue Surabaya and the rest of the kota and kabupaten in the GKS will exceed their carrying capacity and will have more pronounced and serious urban problems, such as an increase in the number of slum, land speculations, lack of basic social infrastructures, and other urban ;related issues.
- Increasing trends in illegal and inappropriate land conversions, particularly on agricultural lands, despite the passage of Agriculture Law;
- Urbanization phenomenon resulting to uneven distribution of people across the GKS area, leading to shortages of human settlements, lack of public transportation and roads, etc. This condition is one of the effects of rapid population growth as describe in previous chapters; and,
- Increasing industrial pollution adversely affecting quality of air and water across the GKS area.

The environmental condition in the GKS can be categorized more specifically through the following problems and issues:

- Damaged Coastal Areas. Especially along the coastlines of Kota Surabaya and Kabupaten Sidoarjo.
- Land erosion and coastal area abrasion in Gresik. Erosion continuous unabated totaling more than 3,000 hectares which spreads over 10 kecamatan areas. Erosion-prone areas are also found in Bawean Island. Erosion has also been recorded in the North Gresik and East Gresik coastlines. Buildings are also being illegally constructed in coastal borders and abrasion-prone areas.
- Solid Waste Management. This is a pressing problem for Kota Surabaya. The growing solid waste production due to population growth, as well as the economic growth on the one hand and the unavailability of landfills, has forced the government of Kota Surabaya to seek alternative ways to manage its solid waste.
- Flooding. A wide swath comprising Kabupaten Gresik (six kecamatan), Kota Mojokerto (half of city area), Kabupaten Lamongan (along Bengawan Solo), Kabupaten Sidoarjo (Kota Sidoarjo and Kecamatan Waru) are flood prone areas.
- Damage to Protect and Production Forest Areas. Unabated illegal loggings continue to damage protected and production forest areas.
- Sand and Stone Quarry Activities in Lapindo Mud ponds. The Lapindo mudflows has resulted to another inadvertent environmental concern, the massive sand and stone quarrying in Mojokerto which is being done in the effort to fill up the Lapindo mud flows. Various hills have already been chopped off or left severely damaged without proper rehabilitation measures.

9.4 Assessment of Land Use Policy on Urban Growth Management in GKS

9.4.1 Scope of Assessment

Anchored on the key environmental issues discussed above, the GKS Integrated Spatial Development plans to control and manage urban development in the GKS through the following strategies:

1) Creation of Compact Eco-City

In order to lessen the problem of urban sprawl, the GKS development strategy aims to create a compact eco-city as illustrated in the figure below:

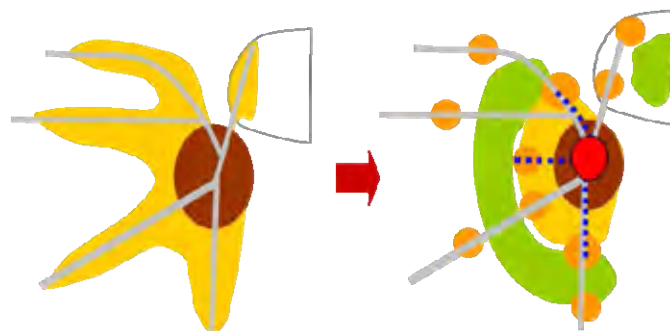


Figure 9.4.1 Urban Sprawl vs. Controlled Compact City

The GKS spatial plan forecasts that intensive urbanization will take place within a 20km radius of the metropolitan area. The area within this radius forms the SMA (Surabaya Metropolitan Area), this area encompasses Sidoarjo, Gresik and Bangkalan. The linkage with the center stretches out to areas over a 40km radius from Surabaya, reaching Lamongan, Mojokerto, and Klanpin in Bangkalan and to Pasuran.

The compact city is envisioned to have a railway driven sub-center with urban multi-functions centers, a metropolitan commuter railway system, and a public transport system. Management measures will include:

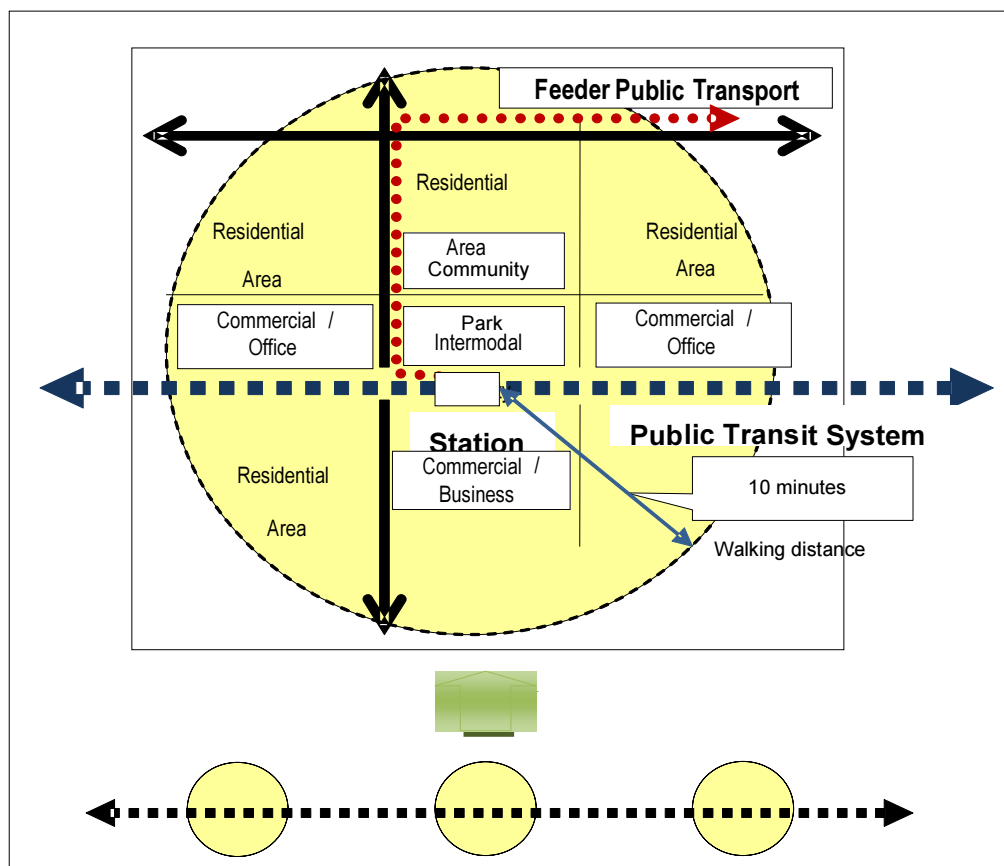
- Introduction of “zoning system” and “policy zoning” for land use management in urbanized or urbanizing areas; and,
- Introduction of a “building regulations” to regulate building heights, floor-area ratios, building coverage ratios, set-backs, etc.

2) High Amenity Urban Spaces

- Redevelopment of Central Surabaya: includes waterfront development, creation of pedestrian-friendly edifices (i.e. transit-malls) creation of open spaces, traffic management systems, inter-modal facilities, the Suramadu Bridge Town, etc.
- Development of Subcenters: to vitalize the sub-regional economic activities, sub-centers will be developed, providing services related to local dominant economic activities.
- Improvement of Living Conditions: Urban redevelopment and improvement of congested residential areas:
 - Should be encouraged, applying proven models such as “Land Readjustment System” and KIPs; and
 - Re-arrangement and Relocation of Industrial centers: This include: a) clustering of industries; b) relocation of pollutant-risky industries from congested urban area; c) establishment of green buffer zones; and d) enforcement of environmental regulations.

3) High Mobility City

This can be facilitated by integrating the development of public transport to improve mobility focusing on Transit-Oriented-Development (TOD) as shown in Figure 9.4.2.



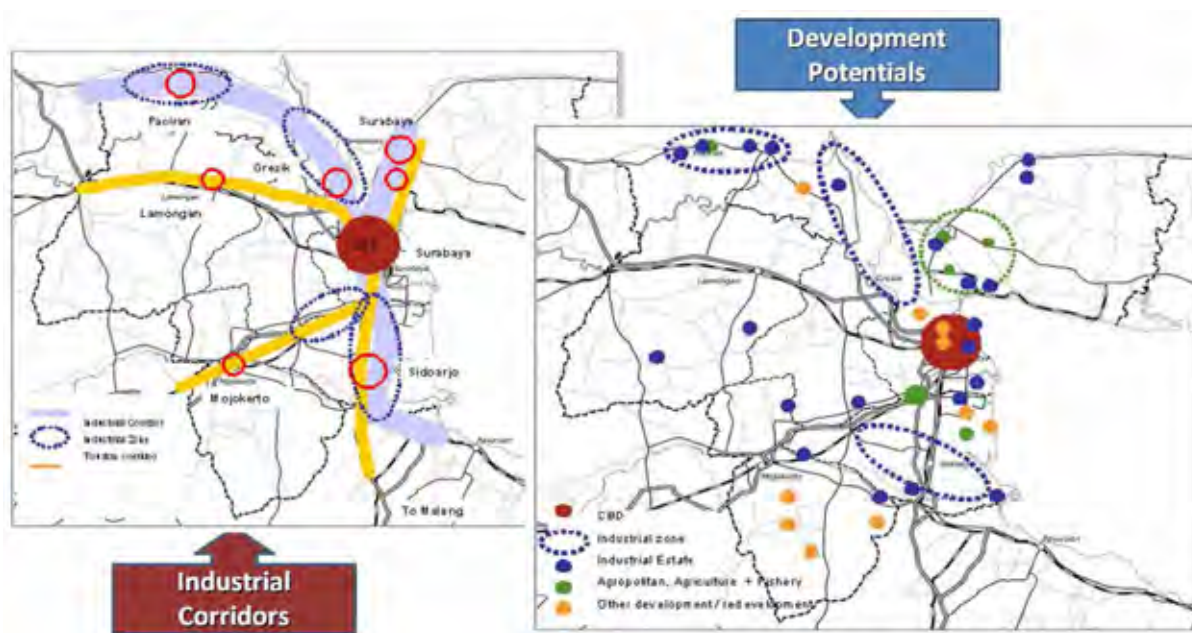
Source: JICA Study Team

Figure 9.4.2 Concept of Transit-Oriented Development (TOD)

4) Comparative Industrial City

- Enhancement of Proper Industrial Zone Development: Clusters, or industrial estates' should be encouraged for deliberate industrial development; and,
- Enforcement of "Development Guidelines": This institutional arrangement is needed for local governments to enhance residential development with sufficient infrastructures, utilities and other public facilities.

Industrial corridors are to be promoted and integrated with urban development centers as shown in the figure below. This figure illustrates that each kabupaten and kota can capitalize their potentials for industrial estate development through an agropolitan area, fishery enterprises, etc.



Source: JICA Study Team

Figure 9.4.3 Potential Industrial Corridor Locations in GKS

5) Promotion of Urban-Rural Linkages

To ensure balance growth the urban and rural areas will be promoted through the following:

- Vitalization of rural economies through value farming, agropolitanism, etc.;
- Facilitation of a "One Village One Product" policy or "Satu Desa Satu Produk;" and,
- Development of marketing channels for local producers through the creation of "Road-side Stations" or "Jalan Stasiun."

9.4.2 Assessment of Potential Significant Impacts

1) General Assessment of Impacts

Proposals on urban growth management placed emphasis on countermeasures to major environmental problems. The proper adoption and implementation of these measures will lead to various environmental, social, and economic benefits. Since it is mainly an urban

area, the proposed policy will lead to significant positive effects and efficiency on land resource utilization across the entire GKS Zone.

The following were the identified benefits resulting from the adoption of proper urban growth management:

- Reduced fossil fuel consumption and emission of CO₂ gas
- Decreased air pollutants and noise level of traffic by the reduction of traffic volume and travel distance of vehicles;
- Improved mobility and accessibility of public facilities and services;
- Enhanced social equity/fairness;
- Decreased investment costs for infrastructure development; and,
- Conserved agriculture area and natural environment with control of urbanization.

Aside from these benefits, this management policy will positively impact the location of different types of developments, such as the locations of potential industrial corridors, concentration of dense residential development, as well as promote the efficient use and supply of social infrastructure and public services. It will also promote positive practices, such as walking and biking, the growth of local tourism, etc.

However, it should be noted that while the policy notwithstanding these significant positive benefits, it should be noted that this policy also has inherent negative effects, such as the following:

- Intensified crowding and high dense population with tendency to create social problems i.e. encroachment on the privacy of people;
- Intensified concentration of pollutants in single areas;
- Decreased of open and green spaces.
- Increased land price/values.

Aside from these downsides, policy is also viewed as politically oriented and the inherently weak legal environmental framework and non-coordination among the local government units could further aggravate political disparities among the LGUs. Vague liability clauses among legal decrees could also lead to such problems as over-exploitation of natural resources, high pollution levels, and other environmental problems, in a long run.

In terms of overall environmental impact, the GKS policy on urban growth management is likely to have a neutral, or minor, adverse impact on the parameters set for assessment, i.e. air quality, water quality, biodiversity, climate change factors, among others.

Anticipated impacts related to such aspects as: institutional, social, economic, climate change, air and water quality, biodiversity, landscape, marine and coastal ecosystem, accessibility, and solid waste are discussed in subsequent sections.

2) Impacts Related to Institutional Aspects (Existing Policies and Legal Basis)

(1) Positive Impacts:

- The GKS policy on urban management, particularly the creation of compact eco-cities, is both an opportunity and a platform for policy makers to adopt an innovative approach to sustainable and integrated urban development. Recently, similar initiatives have been done around the world, particularly in Japan, Singapore, India, Brazil, US, and in Europe, which have led to the publication of good practices. These experiences are good resource materials for the GKS project to capitalize on and use for its own advantage.
- This policy also concretizes the contribution of GKS on the commitment of the Indonesian Government to the international community on climate change.

(2) Negative Impacts:

- Intensive capital investment to fulfill the initial implementation of the changes brought about the policy.
- Resource capability of the GKS, both in terms of technical and financial, to support and implement a pilot compact eco-city initiative is an important area of consideration.
- Legal and administrative legitimacy of the GKS, as a collaborative undertaking among local government units with policy directions is an issue that should be clarified and fleshed out by officials of the GKS member kota and kabupaten. Other institutional related issues include GKS institutional arrangement, i.e. Project Management Office, and organizational structures, among others.

3) Impacts Related to Social Aspects

(1) Positive Impacts:

Direct primary social benefits include the improvement of living conditions. The improvement will lead to better and cleaner urban environments through the reduction of air pollution, resulting to a decrease in medical cases and health expenses. The overall, quality of life among local communities will improve. Other positive impacts include the following:

- Allows people to live in a friendly environment where walking and the use of public transit are encouraged rather than travelling by private cars;
- Congestion and pollution in the streets will be drastically reduced and the sense of security and conviviality of the public space will increase; and
- Promote social equity.

(2) Negative Impacts:

- Resistance of people to the initial changes particularly in the diminishing use of private cars and motorbikes;
- Breakdown of traditional activities and community values. Adjustment of residents to new lifestyles, gradual loss of traditional “status” symbols, i.e. owning a car,

housing preferences, etc.;

- Implications on individual lifestyles; and,
- Tendencies of having more neighbors and neighbors with increasing diverse economic backgrounds affect cultural and local identities and the traditional sense of community.

4) Impacts Related to Economic Aspects

(1) Positive Impacts:

- Pronounced economic benefits because of the intensity of various economic activities;
- Improved savings at the local and national levels due to the reduction of resources and energy consumptions (i.e. land, travel distance, exhaust gases and wastes); and,
- Decrease in investment costs for major infrastructure development.

(2) Negative Impacts:

- Sustainability of profitable businesses and trading activities such as restaurants, entertainment facilities and other services; and,
- More cultural and entertainment facilities in town center due to concentration of retail and employment activities and to sustain urban vibrancy.

5) Impacts Related to Climate Change Factor

(1) Positive Impacts:

- Reduction of total CO₂ generation due to the decrease in travelling distance of vehicles as well as the consumption of energy; and,
- Reduction of consumption on fossil fuels and the CO₂ gas

6) Impacts Related to Air Quality

(1) Positive Impacts:

- Reduction of total generation of CO₂, NO_x and SO_x due to reduction in time to travel, distances, and number of cars on roads;
- Decrease air pollutant and noise level by traffic because of the reduction of traffic volume and travel distance of vehicles; and,
- Lesser congestion due to fewer cars and better air quality which leads to positive practice such as lessening the use of airconditioners.

(2) Negative Impacts:

- More polluted city centers due to concentration of CO₂ NO_x and SO_x.

7) Impacts Related to Water Quality

(1) Positive Impacts:

- Better management of water pollution sources, since households, offices and industries will be concentrated

(2) Negative Impacts:

- Intense concentration of water pollution loads in the center of the city. Thus, mitigation measures should be appropriately put in place to minimize its impact.

8) Impacts Related to Biodiversity

(1) Positive Impacts:

- No significant environmental impact related to biodiversity because development activities are concentrated in the center of the city; and,
- Conservation of agricultural areas and natural environment through controlled urbanization.

9) Impacts Related to Coastal and Marine Ecosystem

(1) Positive Impacts:

- No significant environmental impact related to coastal and marine ecosystem because the development activities are concentrated in the center of the city.

10) Impacts Related to Landscape

(1) Positive Impacts:

- Fewer roads will mean more landscaped public spaces such as parks, gardens and trees. Good urban landscaping reduces urban heat, minimizes aircondition use, and their vegetation dampen noise levels, filter pollution, absorb carbon dioxide, and produce oxygen.

11) Impacts Related to Accessibility

(1) Positive Impacts:

- Improve accessibility and proximity to public spaces, technologies, and services, such schools, hospitals, community centers, etc.

12) Impacts Related to Solid Waste

(1) Positive Impacts:

- Improve savings of public funds from reduction of fuel consumption from collection trips. The need to purchase garbage trucks will also decrease.

(2) Negative Impacts:

- Difficulty in waste collection from households due to urban traffic volume.

Table 9.4.1 Significant Environmental Effect of Land Use Policy

Strategic Policy Proposal	Potentially Significant Environmental Effects																
	Existing Policy	Legal Basis	Social Consideration	Economic Consideration	Climate Change Factor	Air Quality	Water Quality	Soil	Biodiversity	Coastal/Marine Ecosystem	Landscape	Natural Disaster	Accessibility	Material Assets	Solid Waste	Cultural Heritage	Human Health
Urban Development Growth																	
Enhance a Guided Urban Development towards Compact City		?	+	-	+/-	+	+/-	+	+	?	?	+	+	+	+/-	-	-
Introduce Building Physical Regulations to Regulate Building heights, floor area ratio, building coverage ratio, etc.	+	+	+	#	#	#	#	#	?	+	+	#	?	?	#	+	+
Improvement of Existing Urban Areas																	
Redevelop a Central Area of Surabaya	+	+	+	?	+	#	+	#	#	+	+	+	+	-	-	+	+
Develop Sub-centers	+	?	+	-	-	-	-	-	?	+/-	?	?	?	-	-	?	?
Improve Living Conditions by Land Re-adjustment System	+	+/-	+	?	?	?	?	#	?	+	+	+	+	+/-	-	?	+
Re-arrange/Relocate Industrial Centers		+	?	#	+	+	+	?	?	+/-	+	+/-	?	?	?	?	+
Guided New Urban Area Development																	
Introduce Integrated development with public transport		?	+	+	+	?	?	?	?	#	#	+/-	+	#	?	?	+
Enhance Proper Industrial Zone Development	+	+	?	#	+	+	+	?	?	+/-	+	#	?	?	?	?	+
Enhancement of Urban-Rural Linkage																	
Vitalize rural economy thru agropolitan projects			+	?	?	?	?	?	#	#	#	#	#	+/-	-	#	?
Introduce a One Village One Product Policy			+	?	-	?	?	?	?	?	?	?	?	?	-	?	?
Develop Marketing Channels of Local Product thru Road-side Stations			+	-	-	?	?	#	#	#	#	#	#	?	?	?	?

Source: JICA Study Team

Legend

- + : Likely to have a significant positive environmental effect
- : Likely to have a significant negative environmental effect
- # : Not considered likely to have a significant env effect
- +/- : Likely to have both positive and negative significant environmental impact
- ? : Uncertain or unpredictable significant environmental effect

9.4.3 Possible Measures to Mitigate Significant Impacts

Below are some of the identified measures that will mitigate the impacts of the proposed policy:

Table 9.4.2 Possible Mitigation Measures

Identified Impacts	Possible Measures to Mitigate Impacts	How They Could be Implemented
Promote crowding and high dense population with threats of some social problems	<ul style="list-style-type: none"> Regulate and enforce land use zoning. 	<ul style="list-style-type: none"> Establish GKS Cooperation Development Board under the Provincial Planning Department.
	<ul style="list-style-type: none"> Establish civil society groups that can assist the local police in maintaining order in identified points. 	<ul style="list-style-type: none"> Organize groups of concerned citizens and mobilize local funding to support the activities. Coordinate with National Police, village councils concerned and other security agencies in order to establish security network. Promote the establishment of local police stations in strategic areas for police visibility.
	<ul style="list-style-type: none"> Installation of CCTV cameras in strategic areas. 	<ul style="list-style-type: none"> Set up information network and police detachments. Coordinate with the National Police and Village Councils.
	<ul style="list-style-type: none"> Enhance street lightings in critical areas. 	<ul style="list-style-type: none"> Coordinate with the National Police and Village Councils.
	<ul style="list-style-type: none"> Create entertainment facilities in strategic areas (parks, museums etc.). 	<ul style="list-style-type: none"> Coordinate with Provincial Public Works. Establish and strengthen private-public partnership in improving entertainment facilities.
Intense concentration of pollutants in the city centre	<ul style="list-style-type: none"> Develop environmental monitoring system in strategic areas within the city. 	<ul style="list-style-type: none"> Coordinate with the Ministry of Environment and Department of Environment in East Java.
	<ul style="list-style-type: none"> Adopt appropriate traffic management system (traffic signals, traffic signage and treatment of traffic crossing/routes and two-level crossing). 	<ul style="list-style-type: none"> Draft new/revise traffic ordinances. Coordinate with Public Works and National Police and relevant agencies for synchronize planning.
	<ul style="list-style-type: none"> Establish/Strengthen pollution control regulations in the center of the city including tax incentives and penalties on identified polluters. 	<ul style="list-style-type: none"> Coordinate with the Ministry of Environment and Department of Environment in East Java.

Identified Impacts	Possible Measures to Mitigate Impacts	How They Could be Implemented
Increase land value and prices	<ul style="list-style-type: none"> • Establish land price control regulations. • Establish tripartite partnership with private sector and community to assist in monitoring land prices irregularities. 	<ul style="list-style-type: none"> • Coordinate with Spatial Planning and Land assessment office.
Garbage collection in households will be difficult due to traffic congestion in the city centre	<ul style="list-style-type: none"> • Improve collection system (night collection), establishment of strategic collection stations, and introduction of compaction trucks. 	<ul style="list-style-type: none"> • Coordinate with Kota Surabaya, Cleaning and Landscaping Department.

Source: JICA Study Team

9.5 Assessment of GKS Spatial Plan

9.5.1 Introduction

1) Existing Land Use

The GKS Zone and the East Java Province has yet to formulate a definitive provincial land use plan. The provincial government and the GKS currently uses an outmoded land use plan formulated by the Badan Koordinasi Survei dan Pemetaan Nasional, or BAKOSURTANAL, which is an old land use plan created by Presidential Decree No.63 in 1969. BAKOSURTANAL is an agency tasked with surveys and mapping in Indonesia.

The land use plan covered 36 categories, and after analyzing it relevance the JICA Study Team found out that the number could be paired down to 21 categories. (Please refer to Progress Reports 2 and Interim Report for the detailed result of the analysis). The following are the 21 categories:

- Agriculture
- Agriculture (non-irrigated)
- Agriculture(irrigated)
- Cemetery
- Commercial
- Dumping Site
- Fishpond
- Forest/ Grassland/ Shrub
- Housing/ Settlement
- Industry
- Mangrove
- Military
- Open Space
- Porong Mud Disaster
- Public Institution
- Recreation/ Sports
- Sea sand/ Sand dune
- Swamp
- Transportation
- Vacant Land
- Water body

9.5.2 Scope of Assessment

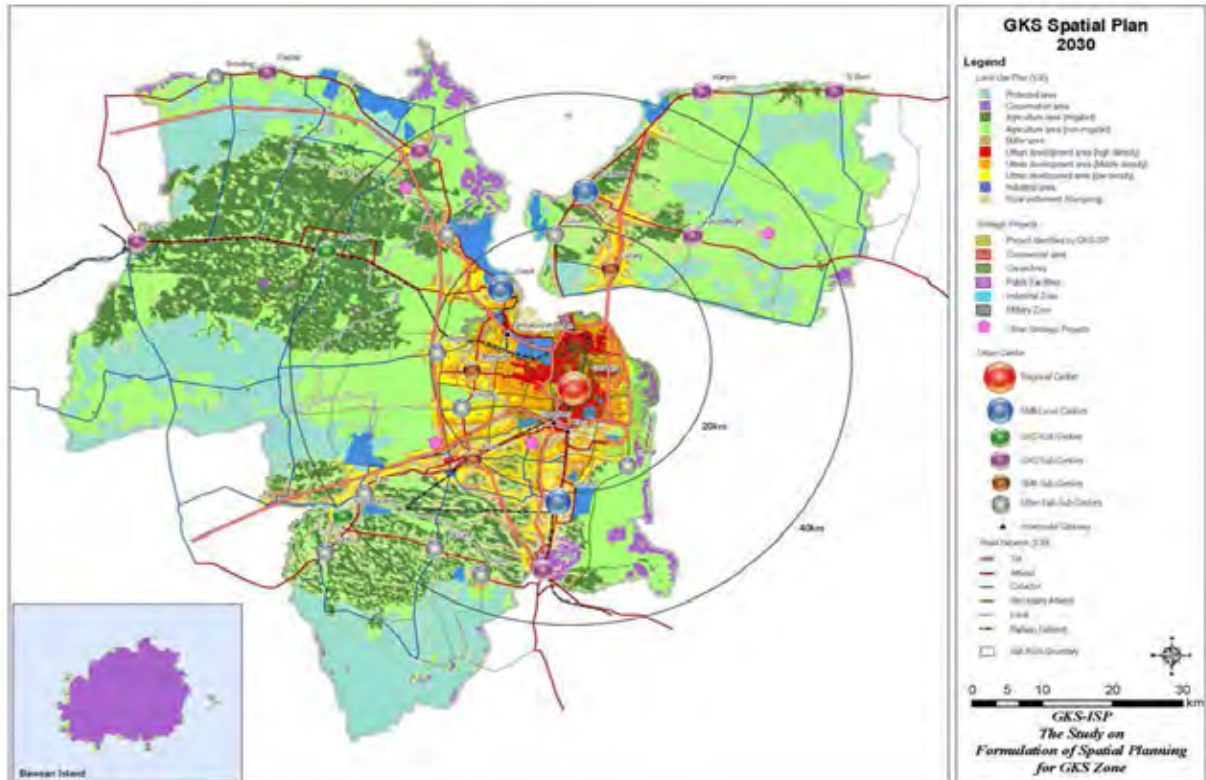
From the basic data on hand, the JICA Study Team conducted a land evaluation analysis, a basic technique that defines the capacity of an area to absorb and accept the maximum level of future developments. The analysis showed that the 21 categories could be further paired down to 14 categories. (Please refer to Progress Reports and Interim Report for detailed result of the analysis).

Below are the proposed/new categories while Figure 9.5.1 shows the GKS Future Land Use Plan.

- Protected area
- Conservation area
- Agriculture (Irrigated)
- Buffer area (possible urban development areas)
- Agriculture area
- Industrial area
- Special zone
- Protected Forest
- Production forest
- Urban development area (High density)
- Urban development area (Middle density)
- Urban development area (Low density)

- Kampung

The substantial trimming down of the initial number of categories stemmed from the fact that some of the existing land uses had redundant characteristics and functions and those similar items could be grouped into similar categories. In terms of scale, some categories were reduced and some were expanded to accommodate the maximum level of development up to 2030.



Source: JICA Study Team

Figure 9.5.1 GKS Future Land Use

Table 9.5.1 shows the comparison between the existing land uses and future land uses. The figures in this Table show the major shift and changes of the above land use categories.

Table 9.5.1 Comparison of Existing Land Use and Future Land Use

Existing Land Use Categories	ha	Land Use Plan							
		Irrigated Agriculture		Buffer		Industrial Area		Urban Development Area	
		ha	%	ha	%	ha	%	ha	%
Forest/Grassland/Shrub Area	44,460	124*	0.3	4,940*	11.1	476*	1.1	2,584	5.8
Bangkalan	3,740	16	0.4	300	8.0	88	2.4	56	1.5
Gresik	13,908	12	0.1	4,568	32.8	244	1.8	956	6.9
Lamongan	10,000	96	1.0	20	0.2	24	0.2	0	0.0
Mojokerto	14,756	0	0.0	8	0.1	0	0.0	4	0.0
Sidoarjo	624	0	0.0	28	3.4	16	1.9	484	58.7
Kota Mojokerto	28	0	0.0	8	28.6	0	0.0	4	14.3
Kota Surabaya	1,204	0	0.0	8	0.7	104	8.6	1,080	89.7
Agriculture Area	57,704	92*	0.2	1,980*	3.4	68*	0.1	3,340	5.8
Bangkalan	13,252	12	0.1	276	2.1	12	0.1	252	1.9
Gresik	11,036	0	0.0	1,468	13.3	44	0.4	2,096	19.0
Lamongan	19,048	44	0.2	0	0.0	0	0.0	0	0.0
Mojokerto	13,344	36	0.3	132	1.0	0	0.0	136	1.0
Sidoarjo	676	0	0.0	104	15.4	12	1.8	508	75.1
Kota Mojokerto	0	0	0.0	0	0.0	0	0.0	0	0.0
Kota Surabaya	348	0	0.0	0	0.0	0	0.0	348	100.0
Non-Irrigated Agriculture Area	192,296	108*	0.1	3,744*	1.9	3,016*	1.6	10,872	5.7
Bangkalan	73,204	4	0.0	1,196	1.6	672	0.9	1,092	1.5
Gresik	43,464	12	0.0	2,060	4.7	1,444	3.3	7,940	18.3
Lamongan	49,472	40	0.1	4	0.0	844	1.7	0	0.0
Mojokerto	22,776	28	0.1	240	1.1	20	0.1	228	1.0
Sidoarjo	2,276	24	1.1	192	8.4	32	1.4	660	29.0
Kota Mojokerto	144	0	0.0	36	25.0	0	0.0	40	27.8
Kota Surabaya	960	0	0.0	16	1.7	4	0.4	912	95.0
Irrigated Agriculture Area	168,104	126,536	75.3	9,224	5.5	2,516	1.5	12,768	7.6
Bangkalan	15,248	9,312	61.1	2,512	16.5	172	1.1	2,076	13.6
Gresik	16,560	13,164	79.5	840	5.1	1,472	8.9	580	3.5
Lamongan	78,684	70,076	89.1	176	0.2	0	0.0	4	0.0
Mojokerto	30,392	21,828	71.8	1,496	4.9	560	1.8	580	1.9
Sidoarjo	26,216	11,820	45.1	3,888	14.8	312	1.2	9,184	35.0
Kota Mojokerto	800	336	42.0	312	39.0	0	0.0	140	17.5
Kota Surabaya	204	0	0.0	0	0.0	0	0.0	204	100.0
Mangrove Area	3,076	8	0.3	24	0.8	168	5.5	8	0.3
Bangkalan	132	0	0.0	0	0.0	0	0.0	0	0.0
Gresik	1,632	8	0.5	16	1.0	168	10.3	8	0.5
Lamongan	88	0	0.0	0	0.0	0	0.0	0	0.0
Mojokerto	0	0	0.0	0	0.0	0	0.0	0	0.0
Sidoarjo	624	0	0.0	0	0.0	0	0.0	0	0.0
Kota Mojokerto	0	0	0.0	0	0.0	0	0.0	0	0.0
Kota Surabaya	600	0	0.0	8	1.3	0	0.0	0	0.0
Fishpond Area	50,980	0	0.0	776	1.5	2,340	4.6	1,044	2.0
Bangkalan	2,944	0	0.0	8	0.3	208	7.1	0	0.0
Gresik	22,928	0	0.0	368	1.6	1,180	5.1	344	1.5
Lamongan	2,984	0	0.0	16	0.5	0	0.0	0	0.0
Mojokerto	24	0	0.0	0	0.0	0	0.0	0	0.0
Sidoarjo	18,376	0	0.0	80	0.4	904	4.9	56	0.3
Kota Mojokerto	0	0	0.0	0	0.0	0	0.0	0	0.0
Kota Surabaya	3,724	0	0.0	304	8.2	48	1.3	644	17.3
Swamp Area	3,116	8*	0.3	56*	1.8	236*	7.6	152	4.9
Bangkalan	1,208	4	0.3	8	0.7	220	18.2	8	0.7
Gresik	116	0	0.0	12	10.3	4	3.4	24	20.7
Lamongan	772	4	0.5	0	0.0	0	0.0	0	0.0
Mojokerto	4	0	0.0	0	0.0	0	0.0	0	0.0
Sidoarjo	804	0	0.0	0	0.0	0	0.0	4	0.5
Kota Mojokerto	0	0	0.0	0	0.0	0	0.0	0	0.0
Kota Surabaya	212	0	0.0	36	17.0	12	5.7	116	54.7
Waterbodies Area	5,160	0*	0.0	244*	4.7	216*	4.2	944	18.3
Bangkalan	516	0	0.0	8	1.6	8	1.6	8	1.6
Gresik	1,244	0	0.0	56	4.5	132	10.6	88	7.1
Lamongan	1,236	0	0.0	0	0.0	0	0.0	4	0.3
Mojokerto	424	0	0.0	76	17.9	24	5.7	80	18.9
Sidoarjo	1,092	0	0.0	84	7.7	8	0.7	220	20.1
Kota Mojokerto	56	0	0.0	0	0.0	0	0.0	44	78.6
Kota Surabaya	592	0	0.0	20	3.4	44	7.4	500	84.5

Source: JICA Study Team

9.5.3 Significant Impact Related to Environment

1) Forest areas

Forest areas include protection, conservation, and production forests. The Forest/Grassland/Shrub areas category were not changed into other land use categories because the GKS-ISP has a forest protection policy which is classified priority based on the Environmentally Sensitive Zone Management as recommended by the JICA Study Team.

The local forests have one of the most important environmental values in the GKS. The land use plan divided forest areas into three: protection, conservation, and production forests. This designation is critical in the sustainable use of the forests and their resources.

2) Agriculture areas

About 47,528 ha, or 11.4%, of the agriculture areas (comprising non-irrigated and irrigated agriculture, and pasture land) will be converted either into buffer areas, industrial areas, and urban development areas. Buffer areas are defined as possible development areas meaning they could be shifted into other purposes in the future. This implies that the potential for further decreases in agriculture production will be more pronounced. The irrigated areas will diminish by about 41,568 ha, or 25%, out of the total 168,104 ha irrigated areas.

3) Buffer areas

The allocation for buffer areas, will benefit agriculture in the long run. The function of the buffer zone reduces the risks of outside development pressures and protects the areas from damages due to flooding, a recurrent problem in many kota/kabupaten in the zone. Cautious development can also be permitted in the buffer areas as long as development activities complement land uses.

4) Mangrove areas

Based on their location mangrove areas can be divided into two types: shoreline mangroves and inland mangroves, commonly found along canals. From the viewpoint of ecosystem conservation and land protection, shoreline mangrove area is comparatively important. The existing mangrove area totals 3,076 ha. And Gresik registered a total of 208 ha, or 12.7%, of the total. Sliced from the total mangrove area include the following conversions: irrigated areas 8ha; buffer areas 16ha; industrial areas, 168ha; and urban development area, 8ha; taken from the total 1,632 ha of mangrove areas. Fortunately, these conversions were categorized as inland mangrove thus ecological value was irreparably harmed.

5) Fishponds

The existing fishpond areas total 50,980 ha, of which many are concentrated in Gresik. Many fishpond conversions were located in Gresik, where 1,180 ha, or 5%, of the total, have been converted into buffer zones and urban areas. The buffer areas were defined as possible urban development areas, implying that the shift is highly possible. The coastal areas of Gresik are now more urbanized than other kabupaten and kota.

6) Swamp areas

Swamp areas function as a buffer between coastal conservation and development pressures. About 452ha, or 14.5%, of the total swamp area has been converted into other categories. Bangkalan will be mostly affected by land conversion.

Although the conversion will have a negative impact on the habitat for migrating birds and result in a decline in the number of fauna and flora, the impact has been considered as negligible.

7) Water Bodies

There are 5,160ha of water bodies in GKS Zone consisting mainly of rivers and ponds. 1,404 ha, or 27.2%, of water bodies will be developed in the urban development projects, amounting to 944 ha, or 18.4%, of the total water bodies.

9.5.4 Significant Impacts Related to Institutional Aspects

1) Positive Impacts

The following are the positive impacts relative with institutional aspects:

- The designation and expansion of buffer zones, industrial areas, and urban development areas in the future land use plan ensures the efficiency of future development plans as envisioned in the GKS Development Framework for 2030;
- Law No. 26, 2007, on spatial planning mandates national, provincial, and local governments to formulate spatial utilization and formulate policies and guidelines based on their spatial utilization plans. The proposed land use plan is an application of such requirements;
- The GKS Zone does not have an integrated land use plan yet. In 2008, several spatial plans were formulated at the national level. And the provincial level has a 2009-1029 plan, while the regency level has 2010 plans by the respective kota/kabupaten. But these plans have yet to be integrated;
- The proposed land use plan opens the opportunity for more coordination and synchronization of land use among the kota/kabupaten in the GKS Zone along with that of East Java Province
- Law No. 41, 1999, on forest protection mandates the preservation of forests and their watersheds, safeguard the area against soil erosion, flooding and other development pressures that can damage the forest ecosystem; and,
- The current problem of uncontrolled land conversion can be countered or managed appropriately through the proposed land use plan.

2) Negative Impacts

The following are the adverse impacts relative to institutional aspects:

- The proposed land use plan is covered by various laws in the country namely Land Conversion Law, Agricultural Law, Forest Protection Law, among others. As such, these laws should be carefully considered so that the proposed land use plan cannot be viewed as inconsistent with the current policies and regulations of the country.

9.6 Assessment of Spatial Development Patterns in GKS Zone

9.6.1 Scope of Strategic Environmental Assessment

The GKS Zone has four primary spatial development patterns: transportation development, industrial development, human settlements' development, and natural resources' development.

- Transportation development in the GKS concerns the development of roads, ports, and airports based on the spatial plans. The zone has allocated a 2,383ha area for the development and construction of the following:
 - Port Development in Bangkalan;
 - Airport Expansion in Sidoarjo; and,
 - Toll Road Construction in Bangkalan, Mojokerto, Lamongan, Gresik and Surabaya).
- Industrial development has gotten a lot of attention because it has been touted as the growth engine in the region. Based on the GKS Development, industrial corridors are to be promoted and integrated into urban development centers and the huge potential for industrial development are the areas of agriculture, fishery, agropolitan, etcThe land allocation for industrial development based on the existing spatial plan is approximately 12,418 ha.
- Human Settlement Development in the GKS is based on existing spatial plans which accounts for approximately 24,923 ha. The largest area will be in Mojokerto, where 75% of the total land area will be allocated for housing. Sidoarjo will allocate 1,716ha, while Gresik will allot 4,000ha.
 - Natural Resource Development is mainly focused on the development and construction of water reservoirs in Bangkalan, Gresik and Lamongan, covering an approximate area of 1,040 ha.

9.6.2 Implications of Existing Development Patterns to GKS Spatial Plan 2030

From the viewpoint of development patterns these large-scale projects was divided into four clusters, as follows:

- Transportation development projects;
- Industrial development projects;
- Human settlement development projects; and,
- Natural resource development projects.

Through spatial dimension, transportation development projects were divided into two sub-cluster, as follows:

- One-dimensional development pattern: road projects

- Two-dimensional development pattern: airport project, seaport projects

The types of impacts on land uses depend on spatial dimension (see Figure 9.6.1). For example, the impacts of a one-dimensional development projects is in a linear manner in the project site, while a two-dimensional development project affects the surrounding areas of project sites through a concentric fashion.

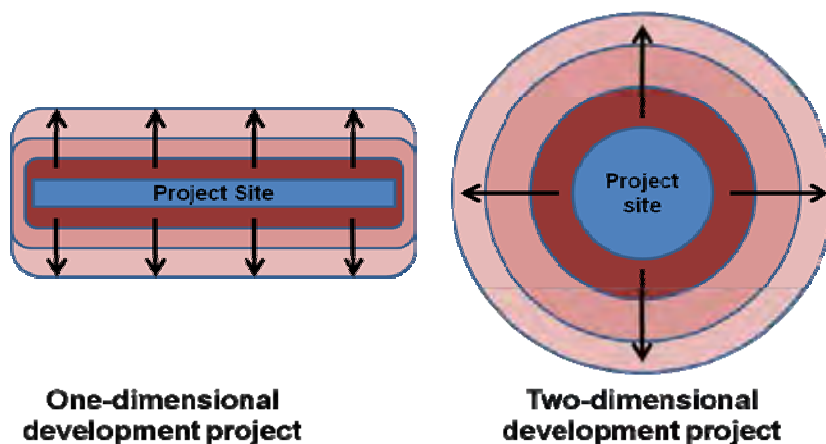


Figure 9.6.1 Impact Types by Dimensional Development Patterns

9.6.3 Assessment of Significant Impacts

The environmental impact matrix of the development patterns is shown in Table 9.6.1. The significant environmental impacts of the development patterns are summarized below:

1) Impacts Related to Transportation Development

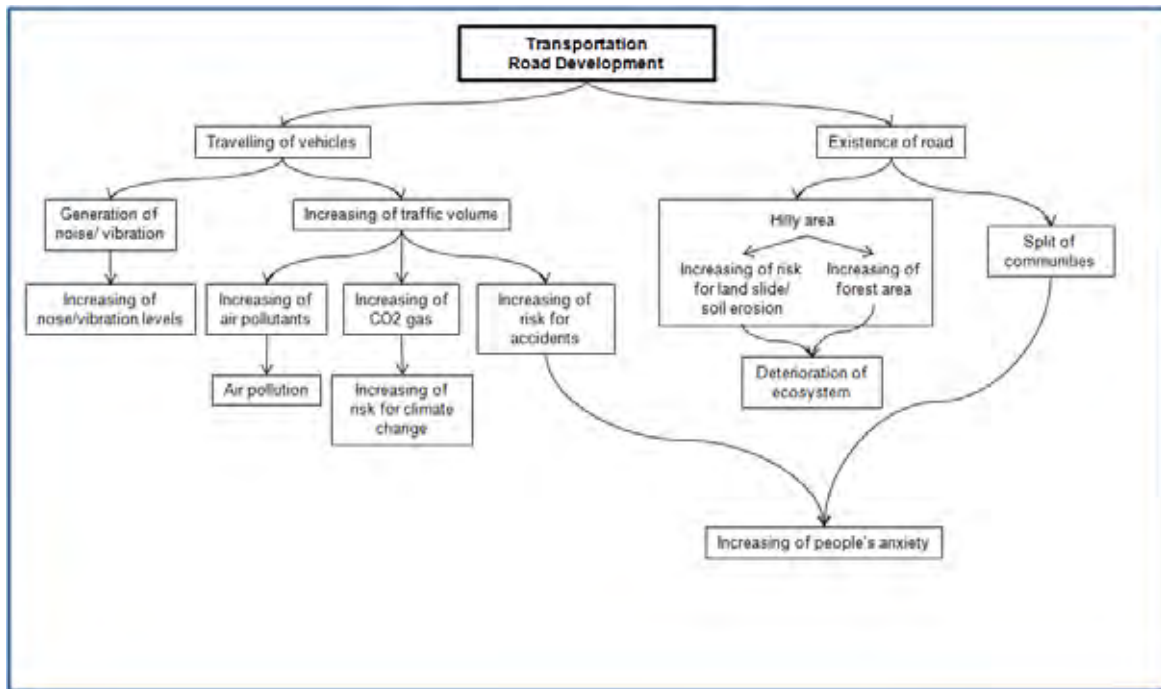
Transportation development consists of various sub-sectors, namely: road development, airport development, and sea port development.

In road development, the common environmental impacts are the generation of air pollutants, noise, vibration, traffic volume. Road improvements aimed at improving traffic (i.e. such as grade separation) reduce traffic congestions, and air pollutants and they also have different impacts.

In port development, the common environmental impact includes changes in coastal lines which can be manifested through such activities as reclamation and dredging which cause changes in tidal currents, hydrology, and shoreline formations, which in turn result in the changes in water quality, bottom sediments, and aquatic flora and fauna. An expansion in the port to the land portion will affect the balance and ecosystem of the terrestrial environments.

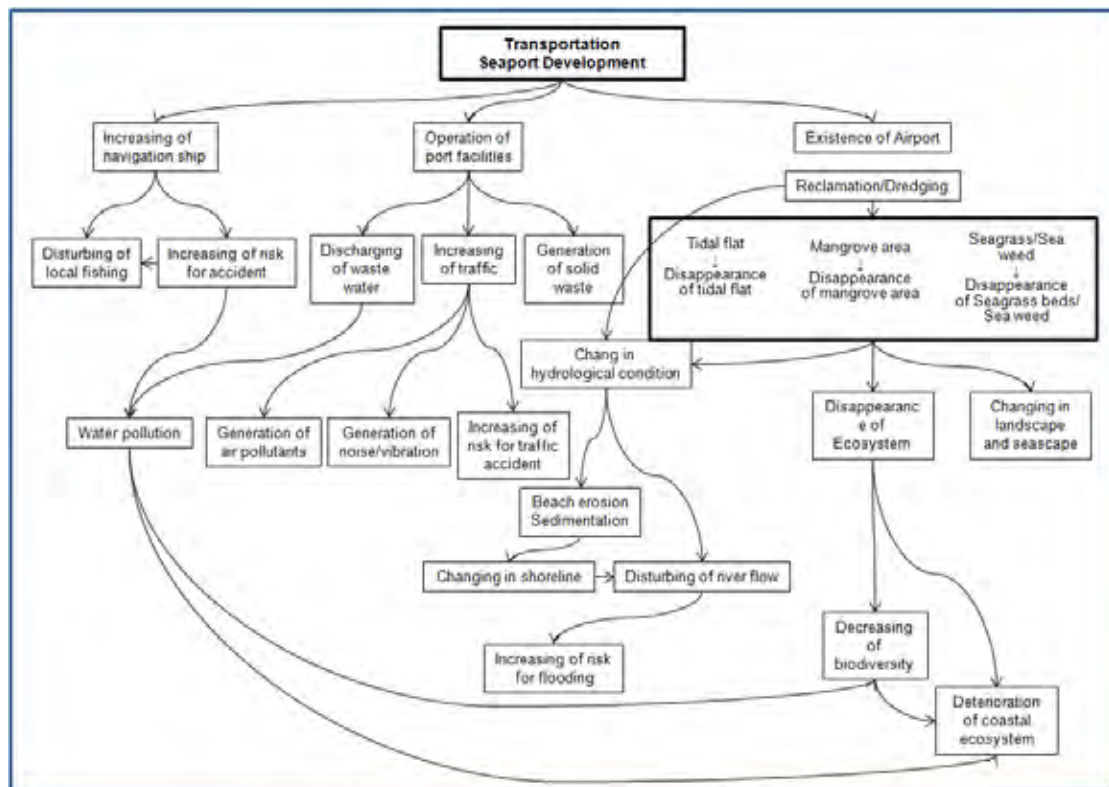
Airport developments, on the other hand, also cause environmental impacts. Construction along shorelines will include changes in tidal currents, hydrology, and shoreline formation resulting in changes in water quality, bottom sediments, and aquatic flora and fauna. Any airport development and/or expansion will results in the increase of noise levels, thus

measures should be installed to minimize these impacts. The following graphs show the environmental impact flow in the implementation of transportation development projects.



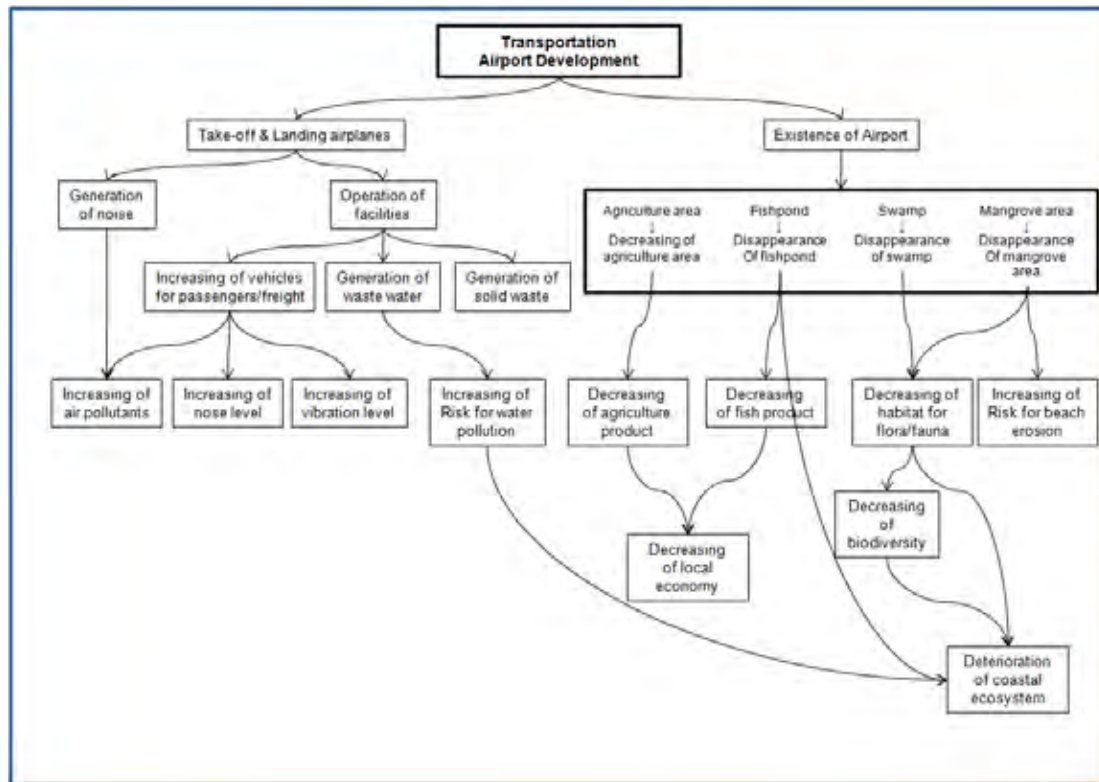
Source: JICA Study Team

Figure 9.6.2 Environmental Impact Flow by Road Development, Transportation



Source: JICA Study Team

Figure 9.6.3 Environmental Impact Flow by Seaport Development, Transportation

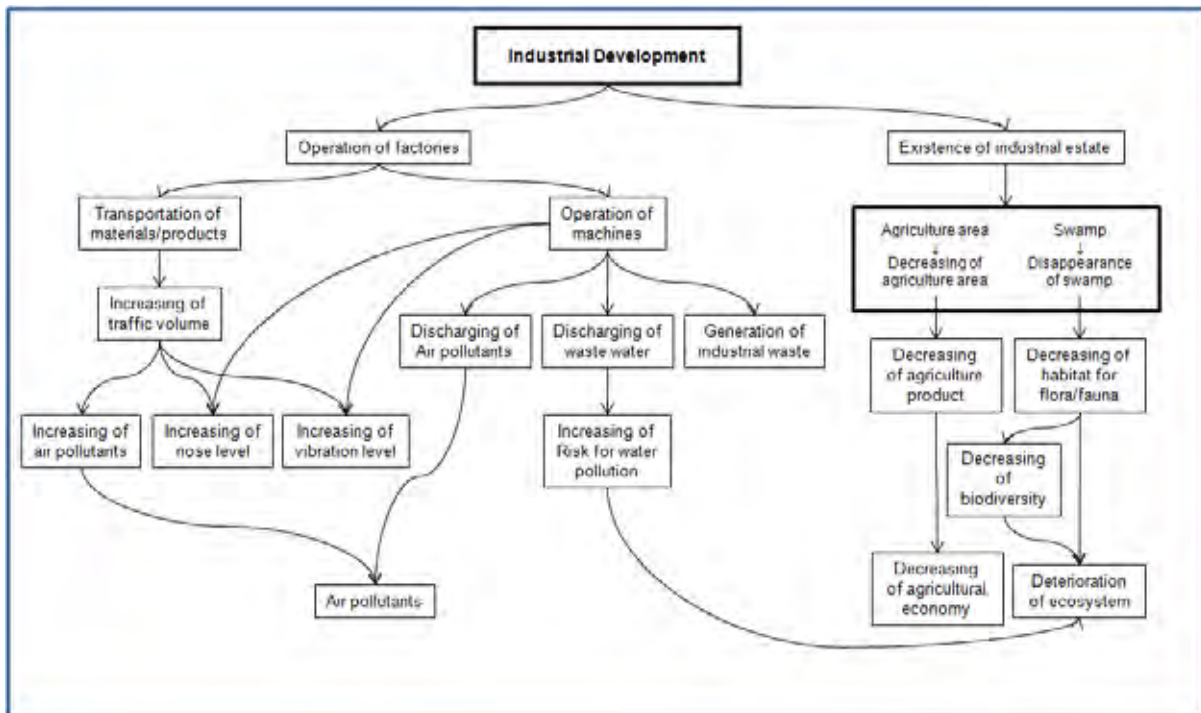


Source: JICA Study Team

Figure 9.6.4 Environmental Impact Flow by Airport Development, Transportation

2) Impacts Related to Industrial Development

Environmental impacts caused by industrial development depend on location and type of industry. Air quality and the quality of surface and groundwater are highly vulnerable to air pollutants and effluents. Industrial wastes, including hazardous wastes, will also increase. The following graph shows the environmental impact flow of an industrial development.



Source: JICA Study Team

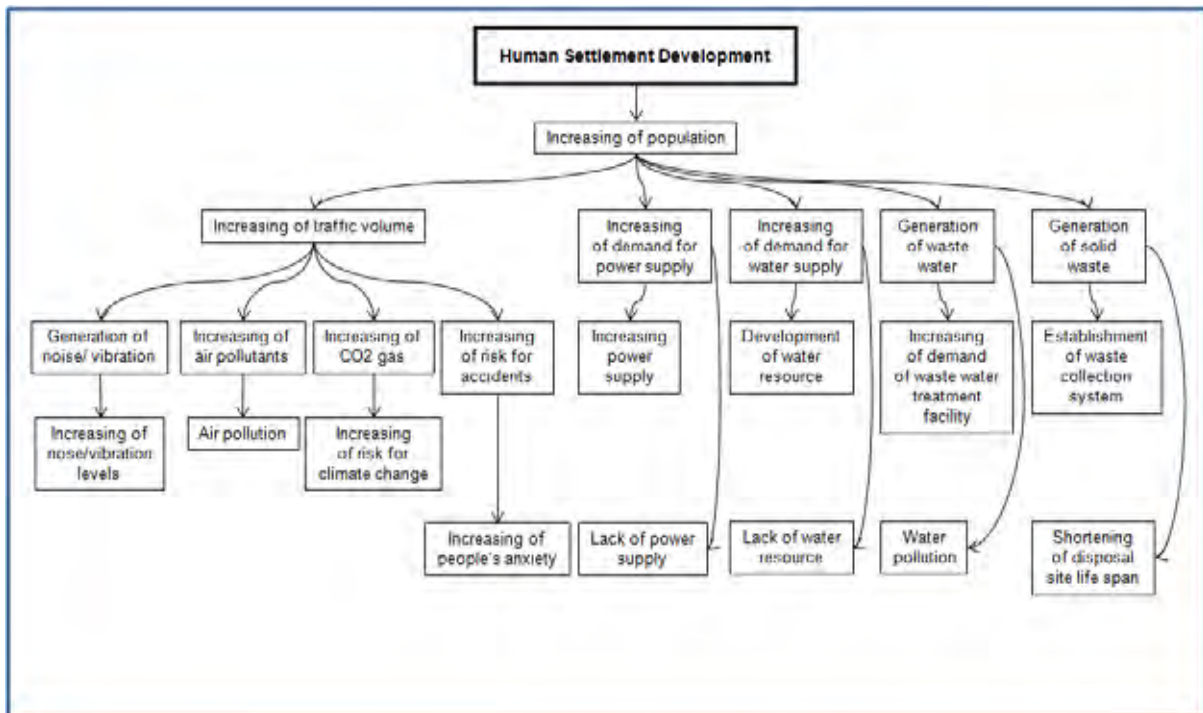
Figure 9.6.5 Environmental Impact Flow by Industrial Development

3) Impacts Related to Human Resettlement Development

Human settlement development generates environmental impacts through the location, scale, and magnitude of the development. Significant consideration should be placed on sewage and solid waste management, as well as traffic volume around the site. Other significant considerations may include the following:

- Allocate maximum amounts of housing development to existing larger urban areas where they are or can easily accessible to facilities and to a range of transport facilities;
- Promote land for housing in locations capable of being well served by rail, or other public transport means;
- Avoid housing development in the countryside, but promote appropriate development within existing communities;
- Avoid development in small new settlements, especially when they are unlikely to be served by public transport, or are not designed to be capable of being self contained, and
- Concentrate high density residential development near public transport centers, or alongside corridor well served by public transport.

This graph shows the environmental impact flows:



Source: JICA Study Team

Figure 9.6.6 Environmental Impact Flow by Human Settlement Development

4) Impacts Related to Natural Resource Development

Natural resource development in the GKS have mainly been on through the construction of reservoirs. The building of a reservoir causes changes in the topographic conditions, terrestrial, aquatic flora and fauna, the existing land and water uses, as well as the landscape. The size of the impact depends on the location and size of the development.

Figure 9.6.7 show the environmental impacts in implementing development related to natural resource development.

Appendix: List of SEA Task Force Team Members for the GKS-ISP

Task Force Team for GKS-ISP

NO	PARTICIPANT	INSTITUTION	POSITION	CONTACT NUMBER
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5	Trias Ari WICAKSONO	Dinas Pertanian <i>Agriculture Department</i>	Ka Bidang Data dan Informasi <i>Head of Data and Information</i>	081 23178709
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7	Ismail	PU Cipta Karya <i>Spatial Planning Department</i>	Ka Seksi Tata Ruang Perkotaan <i>Head of Sub Division in Urban Spatial Planning</i>	081 23134309
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12	Mr. Priyo N. CAHYO	PU Cipta Karya <i>Spatial Planning Department</i>	Staf Tata Ruang Provinsi <i>Staff of Sub Division in Provincial Spatial Planning</i>	081 334744199
13	Ms. Trimila WAHYUNINGSIH	PU Cipta Karya <i>Spatial Planning Department</i>	Staff Tata Ruang Perdesaan <i>Head of Sub Division in Rural Spatial Planning</i>	031 8280698
14				

ADMINISTRATOR

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2	Mr. Andon S. WIBOWO	JICA Study Team	Local Expert	081 134 21332
3	Mr. Rudy DEWANTO	JICA Study Team	Project Assistant	081 216 13085
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5	Mr. Kazuyoshi HIROHATA	JICA Study Team	Project Officer	
6	Mr. Dediarta BINTORO	JICA Study Team	Project Assistant	
7	Mr. Widyanto HARI	JICA Study Team	Project Assistant	

10. INSTITUTIONAL BUILDING FOR SPATIAL DEVELOPMENT

10.1 Overall Issues on Institutional Building and Reform

10.1.1 Decentralization in Indonesia

Prior to its decentralization policy in 2001, Indonesia had a highly centralized political, administrative, and fiscal system. For example, during the 1999 fiscal year, the central government collected 94% of general government revenues, and about 60% of the sub-national spending was financed through central transfers. One objective was to reduce inter-regional inequality through the reallocation of economic resources from the rich to the poor regions, a policy under the Soeharto administration. Thus, the national government centralized revenues and redistributed them across the regions.

It is in this context that current decentralization laws represent a fundamental shift in Indonesian administrative and fiscal policies. Regional Government Law No.22, 1999 shifted most functions of government into the regions. The law also eliminated hierarchical relationships between the provinces and the districts. Fiscal Balance Law No.25, 1999 provided resources to finance devolved tasks by assigning revenue sources and broad expenditure functions to the regions.

In 2004, Law No.32, and Law No.33, were enacted to revise Law No.22, 1999 and Law No.25, 1999, respectively. Law No.32 strengthened the coordinative roles of the provincial governments, while Law No.33 changed various regional financing mechanisms, in particular the DAU (Block grants of general allocation funds) and the DAK (Special purpose transfers), thereby strengthening revenue sharing. They became the principal mechanisms for fiscal transfers to local governments, ending the regime of central controls over local budgets and financial decision-making. Furthermore, as part of the groundbreaking economic initiative, later dubbed as the “Big Bang”, some two million, out of 3.4 million, central civil servants were transferred to the provinces and kabupaten, a number of central government departments in the provinces were disbanded, and 16,000 facilities were transferred to the regions.

Local choice was the catch phrase in the new decentralization policy. The decentralization laws literally assigned complete responsibility for urban and rural infrastructure services to local governments. They also emphasized the importance of civic participation in making investment choices, and specified elaborate procedures designed to ensure that citizens, as well as collective groups like NGOs and civil society organizations, were represented in the priority-setting process in capital projects.

Thus, decentralization was promoted to make investment choices in the infrastructure sector more responsive to locally perceived needs, making them more efficient and turning them into vehicles wherein ordinary citizens could participate in governance.

As a result of these decentralization initiatives, the regional share in general government spending increased, thus the share of the local governments in total public expenditures increased from just over 17%, in 2000, to 30%, in the 2001 annual budget. Local governments across the country now perform many service delivery functions, including such sectors as health, education, environment and infrastructure. To a degree, and in various manifestations, grassroots democracy has become a reality at the local level.

10.1.2 Crucial Institutional Issues in the Decentralization Process

The decentralization process is still riddled with fundamental flaws. Without decisive action on certain fundamental problems the transition to better governance and improved public services at the local level cannot be guaranteed. The following are the major stumbling blocks to an effective decentralization:

1) Roles and Functions

- The distribution of responsibilities within districts, and between districts and provinces, either has become vague or they overlap. The absence of a coordinating body as resulted to redundancies and the duplication of roles and responsibilities among the local governments.
- The mandate in the national level is currently focused on policy development, technical assistance, capacity-building, promotion, and socialization of policies. This is appropriate in the context of decentralization, however evidence from a study suggests that these types of activities are merely marginal parts of the national sector budget.
- Current coordination practices are mainly dependent either on persuasion or good rapport/relationships among the local governments.
- The root problem in coordination and accountability is the lack of a sector-wide agreement among institutions on the various program areas and roles for which each local government or entity shall be responsible for.
- Sectors with large externalities and significant economies of scale, such as watershed management, have consistently underperformed. The narrow administrative boundaries of local governments, combined with the limited role of the provinces, have led to suboptimal investment decisions from the regional and national perspectives.

2) Financial Problems

- In theory, decentralization has given local government's functional autonomy, but in practice most kota and kabupaten remain heavily dependent on the central government for operating revenues.
- While many institutions have a mandate to monitor sector outcomes, few resources are available that will allow them to do so.
- While there is less mandate overlap at the local level, due to fund constraints, dissipating efforts across various institutions with declining resources is an issue among local governments.
- Concern has arisen in both countries (what countries??) as to whether Indonesian decentralization can sustain capital investment and maintenance. The World Bank has expressed concern that road maintenance at the kabupaten level suffers from underfunding, and that decentralization may exacerbate the neglect in road maintenance,

with consequences that are not immediately visible.

3) Capacity Development

- A gap exists between the responsibilities that are given to the local governments and their capacity to handle them. This gap will not be filled quickly, but capacity-building will remain an important factor to help local governments meet their new responsibilities and seize emerging opportunities.
- There is a mismatch between the required skills, especially for program planning and evaluation, and what is available at the district and provincial levels.
- District staff/personnel that previously were expected to merely follow central instructions are now expected to plan, implement and evaluate programs, tasks which they are ill-prepared to accomplish.
- There is a glaring absence of in-service training for staff/personnel at all levels, especially at the district and provincial levels.

4) Administrative Operation

- The lack of monitoring and evaluation at all levels means that the evidence base on program planning is very thin.
- Formidable barriers still prevent the public from fully participating in public policy making. Access to most governmental information is uneven and impeded. Weak capacities in fiduciary oversight are raising accountability concerns and increasing opportunities for corruption and nepotism.
- The changes in attitudes and systems required to make public services and public servants more demand driven and community responsive are still lacking. Dinas agencies prepare their individual budgets, while Renstras (policy documents), with little outside consultation, compete with each other for limited resources. Budgets are still decided at the kabupaten-level through lobbying the planning department (Bappeda), the regent's office (Sekda) and local parliament (DPRD).
- Communities have limited voices in planning processes and inputs from the kecamatan, or villages, remain minimal. Projects requiring construction, or purchase of goods, are favored, as these provide means for civil servants to supplement their low wages through kick-backs from contractors.
- In urban planning processes, case studies reveal that the planning processes play out differently in different locations. Municipal councils, technical agencies, and NGOs typically have different priorities. Negotiations leading to final project prioritization at the municipal level depend on the relative clout of these parties and the role the mayor chooses to play. Most case studies have concluded that the preferences of local elites, the municipal parliament, and technical agencies tend to drown out the preferences of community groups.

10.1.3 Directions on Institutional Improvement for Spatial Management in GKS Zone

Three basic concepts were analyzed in the pursuit of an effective spatial management in the GKS, namely inter-governmental coordination, participation, and self-reliance.

1) Inter-governmental Coordination

The implementation of a spatial planning master plan in the GKS requires an effective coordination among local governments since the implementation of many proposed projects bypass their administrative boundaries. In this respect, the role of the provincial government is very critical in implementing effective coordination among its member city/district governments. It should be noted that in Indonesia local government performance does not have a good track record in this field. The narrow administrative boundaries of local governments combined with the limited role that the provinces play has commonly led to suboptimal investment decisions from the regional and national perspectives. In this situation, there is a need to establish some form of mechanisms that will effectively coordinate different interests among local governments.

2) Participation of All Major Stakeholders in Decision-making Process

At present, the provincial government of East Java has a Coordination Board for Spatial Management. However, it has no representatives from the cities/district governments or either a representative from civil society. And even though the Government of Indonesia calls for the involvement of all major stakeholders in the democratic process from the early stages of planning, there is no sufficient participation from civil society in spatial planning processes. Although representatives of experts and the private sector are now members of the Coordination Board, their knowledge can be more utilized in the GKS spatial management. In addition, the lack of institutional mechanism for the participation of representatives of relevant cities and districts in decision making process at the provincial level may have contributed to the lack of coordination between the provincial government and city/district governments.

3) Self-reliance for Financial and Human Resources

After the completion of a final report on the GKS spatial planning, the provincial and regency governments have to implement, monitor and evaluate the plan. And every five years, local governments are supposed to revise their spatial plans based on their evaluation of its implementation framework, and in order to respond to new situations. But to this end, there is still a lack of individual skills and knowledge on spatial planning among government staff working in the GKS spatial management process. Regarding the readiness of other stakeholders to participate professionally in the implementation of development, there are indications of limitations relating to the level of the skills, expertise, and mastery of modern technology on spatial management. Conducting on-the-job trainings will not be enough to address this problem. What is needed is to promote a systematic training program for major stakeholders such as government officials, decision makers and civil society; entities which have important roles to play in the progress of GKS spatial planning.

On financial independence, GKS is still largely dependent on the central government with respect to the source of revenue for spatial management and its allocation of resources is not optimal. The GKS needs to improve allocation of resources and to develop its own sources of revenues for the implementation of its spatial plan.

10.2 Establishment of “GKS Development Cooperation Board”

At the institutional level, the provincial government should establish a mechanism to produce concrete implementation strategies, promote participation of all stakeholders in decision making processes, enhance coordination among all stakeholders, and contribute to capacity development of all stakeholders related to the development of the GKS Zone. For more effective implementation of GKS projects, a GKS Development Cooperation Board is expected to be established as an inter-governmental coordination mechanism.

10.2.1 Current Local Government Structure in East Java Province

Figure 10.2.1 shows the organizational structures of the East Java Provincial Government. Like other local governments, the organization of the provincial and city governments consist of the head of local government (governor and mayor), the deputy head, regional secretariat, the secretariat for the local house of representative, inspectorate, planning agency, departments and technical institutes. In the case of city/district like Surabaya, sub-districts and Kelrahan are included in their organizations.

With respect to the East Java Provincial Government, Provincial Regional Secretariat is an element of provincial government staff led by a regional secretary under and accountable to the governor. The Secretariat has the duty and obligation to help the governor in preparing policies and coordinate regional services and regional technical agencies. In order to conduct those duties, the functions of the secretariat include:

- Coordinates the formulation of provincial government policy;
- Coordinates regional services and regional technical agencies;
- Monitors and evaluates local government policies.
- Manages the provincial regional government’s apparatus as well as financial, infrastructure and facility resources; and
- Implements other duties assigned by the governor.

Regional Development Planning Agency is the planning element of the local government. The agency has the task of drafting and implementing regional policy in the field of regional development planning. In order to carry out this task, the agency functions as: 1) technical policy planning; 2) coordination of development planning; 3) development and implementation of tasks in the field of planning regional development; and 4) implementation of other tasks given by the Governor. Beside the head of agency and secretariat, the development planning agency has the division of: a) Economy in charge of agriculture and marine resources, industry, trade and PDU, cooperatives and SMEs; b) Infrastructure composed of transportation, public works and water resources; c) Regional Development in charge of spatial planning, natural resources and environment; d) Governance and Community; e) Finance; and f) Statistics and Reporting.

Provincial Department is a provincial government implementing element led by a chairman, who is under and accountable to the governor through the regional secretary. The department has a task of carrying out local government affairs regarding decentralized duties. Within the scope of the mandates, functions of the department include: 1) Formulation of the technical policy; 2) Implementation of government affairs and public services; 3) Development and implementation of appropriate tasks; and 4) Implementation of other tasks

given by the governor. In the East Java Provincial Government, there are following 20 departments.

- Public Health
- Social Service
- Education
- Transportation and Highway Transportation
- Communications and Information
- Manpower, Transmigration and Population
- Culture and Tourism
- Cooperative and Micro, Small, Medium Enterprises
- Youth and Sports
- Public Works, Roads (Bina Marga)
- Public Works, Drainage and Irrigation
- Public Works, Human Settlement and Spatial Planning
- Agriculture
- Plantation
- Animal Husbandry
- Fishery and Marine Resources
- Forestry
- Industry and Trade
- Energy and Mineral Resources
- Revenue

Department of Public Works, Human Settlement and Spatial Planning is led by a head officer who is under and responsible to the governor through the regional secretary. The department has the duties of conducting local government affairs based on the principle of local autonomy, and of carrying out the task of assistance in the field of public works and urban planning. The department shall play a role to support and coordinate the planning process of GKS Zone Spatial Plan.

Provincial Regional Technical Institute is a regional government supporting element led by a chairman under and accountable to the governor through the regional secretary. The technical agency has the duty to assist the governor in preparation and implementation of policy-specific areas. In order to conduct the above duties, the provincial regional technical department functions as: 1) Formulation of technical policy; 2) Provision of support for the implementation of local governance; 3) Development and implementation of appropriate tasks; and 4) Implementation of other tasks given by the governor. In the East Java provincial government, agencies in the Technical Institutes include the following:

- Agency of National Unity and Politics
- Agency of Research and Development
- Agency of Education and Training
- Agency of Community Empowerment
- Agency of Environmental Protection
- Investment Agency

- Food Security Agency
- Agency of Library and archive
- Agency for Empowerment of Women and Family Planning
- Regional Employment Agency
- Representative Office
- Regional Disaster Management Agency
- Agency of Provincial Narcotics
- Agency of Regional Coordination Board
- Agency of Electronic Data Management
- Agency of Regional Treasury
- Agency of Police Civil Service

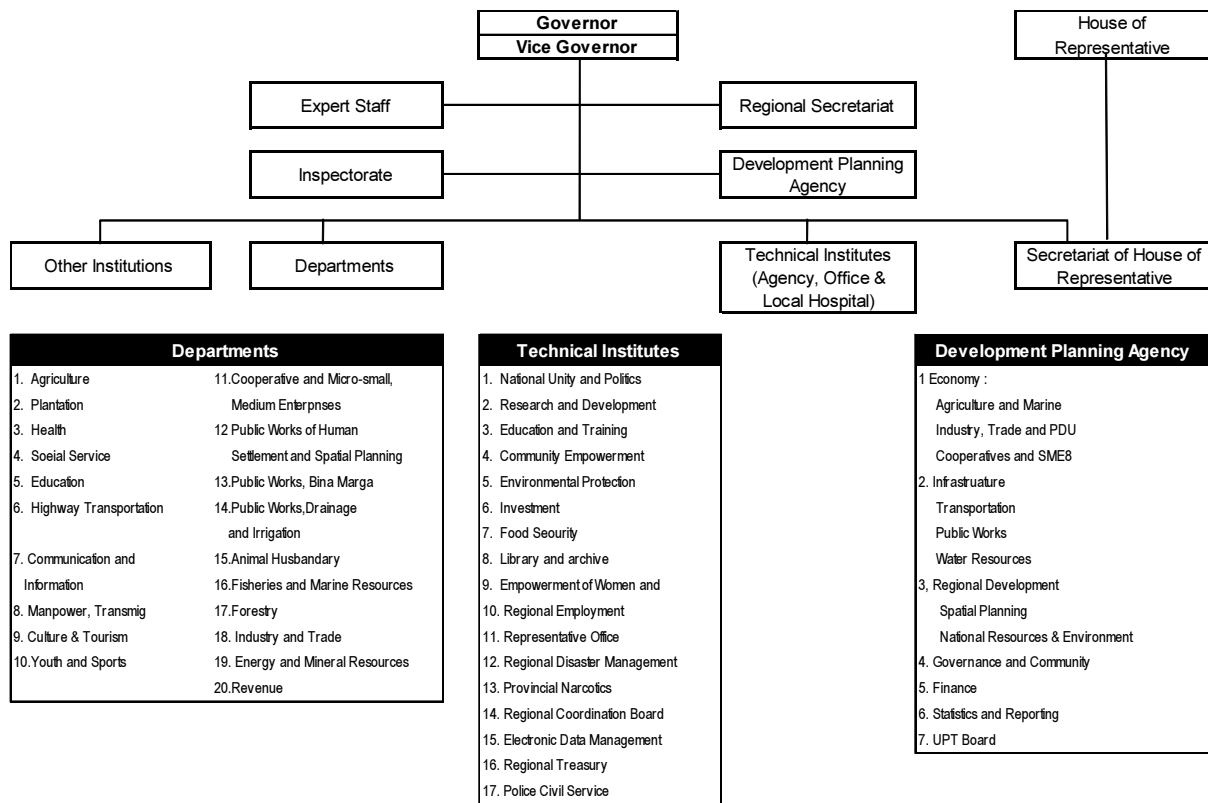


Figure 10.2.1 Organizational Structure of East Java Provincial Government

10.2.2 Rationale and Functions of GKS Development Cooperation Board

Having the recognition that the provincial government's function is extremely important to facilitate the implementation of the spatial plan, it is proposed that a **GKS Development Cooperation Board** (GKS-DCB) should be organized in the provincial government. GKS-DCB is an intersection of both vertical and horizontal cooperation towards a balanced development in the GKS Zone, as shown in Figure 10.2.2. GKS-DCB is an institutional organization to be placed under current legal frameworks, or under a Governor's Decree, not beyond the existing laws/regulations. The existing coordination board shall be replaced and revitalized by the GKS-DCB, with more enhanced functions.

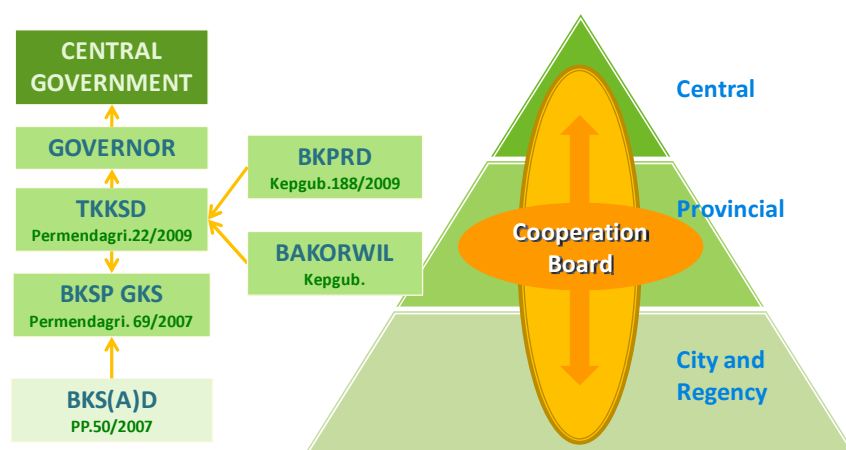


Figure 10.2.2 GKS-Cooperation Board's Function for Inter-governmental Cooperation

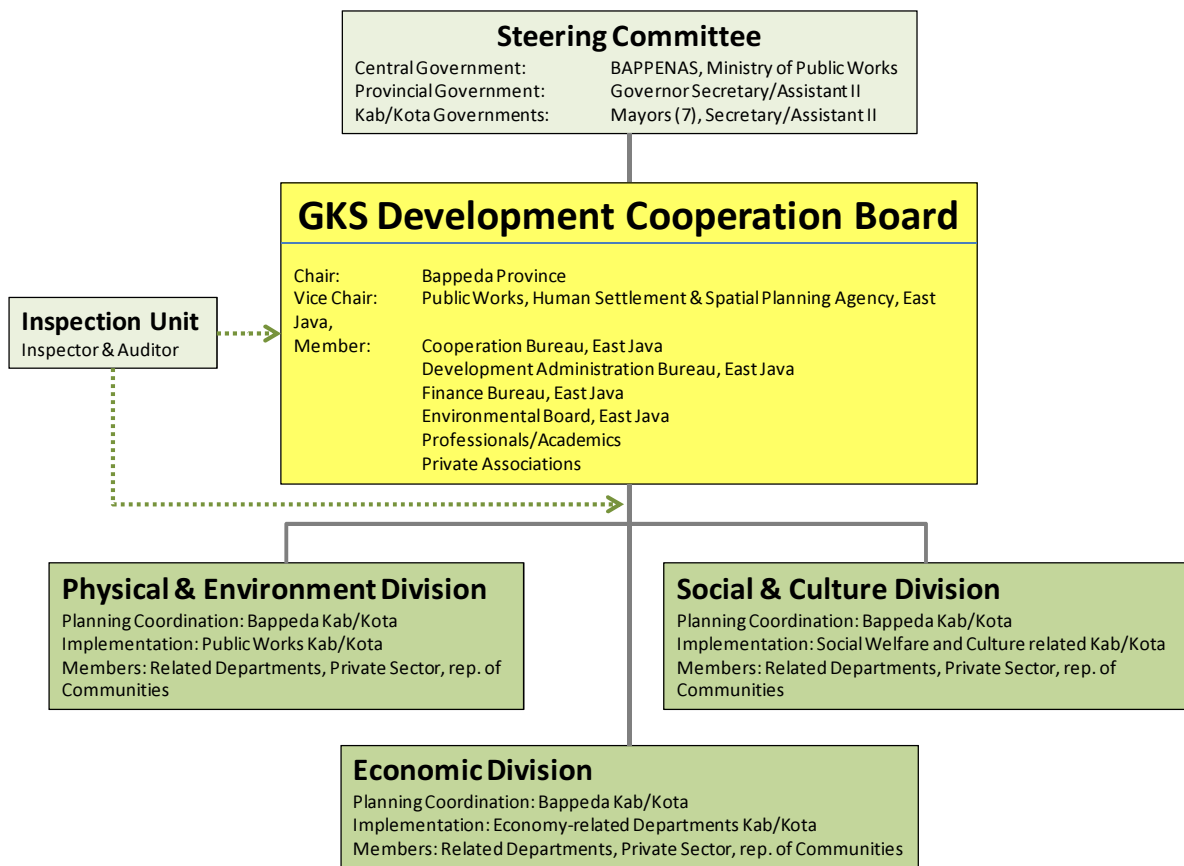
GKS-DCB is expected to have the following functions:

- As a development agency for National Strategic Zone, GKS-DCB conducts strategic development programs as required by the Central Government to speed-up national economic growth;
- GKS-DCB will be an assembly of officials comprising local governments' representatives in charge of planning and budgeting for development to share inter-government policies, project budgeting priorities, executing capacity building and so on;
- GKS-DCB shall have an important role in the cooperation between kabupaten and kota within the GKS Zone, to realize cross-boundary development programs, and undertake countermeasure against unresolved regional infrastructure problems, such as:
 - Inter-city road development
 - River management and environment
 - Water-supply system development:
 - Drainage and sewerage system development;
 - Solid waste management system improvement (for treatment of hazardous/hospital waste and final disposal sites management in particular)
 - Fire-fighting system development
 - Environmental monitoring system

- New housing and industrial projects to be located in cross-boundary area
- Training program for capacity development of planning officials.

10.2.3 Organizational Structure

In the organizational structure, the Board will be comprises of the following: 1) Steering Committee; 2) Cross-Functional Coordination Board; 3) Sectoral Taskforce Divisions. An organizational structure of the GKS-DCB, with its corresponding characteristics, is shown in Figure 10.2.3,



Source: Outcomes of Workshop on Institutional Reform conducted by JICA Study Team and PU Counterpart Team

Figure 10.2.3 Proposed Organizational Structure of GKS Development Cooperation Board

- A Steering Committee will be established outside GKS-DCB to steer and/or direct the decision-making process of the GKS-DCB. The Steering Committee shall be organized with representatives of BAPPENAS and Ministry of Public Works, at the central level, and East Java Provincial Government and Mayors of Kota/Kabupaten in GKS Zone, at the local level.
- GKS-DCB is to be chaired by Director of BAPPEDA Province, and co-chaired by the head of East Java Public Works, Human Settlement and Spatial Planning Agency. The secretariat members will comprise the Cooperation Bureau, Economic Bureau, Development Administration Bureau, Environmental Board at the provincial level, and representatives of private associations and academic areas.
- GKS-DCB's functions will be supported by three working divisions, namely, Physical and Environment Division; Social Culture Division and Economic Division. These divisions will take responsibility for the sector projects and programs. Moreover, an Inspection Unit shall be set forth with an independent monitoring power.

10.2.4 Establishment of a Steering Committee

The present spatial management system of the province of East Java consists of a Coordination Board and two working groups (in charge of plan, and utilization & control) under the Coordination Board. What the Coordination Board lacks is the mechanism of direct communication between the Coordination Board and representatives of cities and districts in the province. For the system to be effective, a Steering Committee should be established for the management of GKS. This Steering Committee will consist of the Governor (as chairman) and the mayors and camats of cities and districts in the GKS. Although the representative of the civil society (Musrenbang) should be a member of the Coordination Board, as in the case of representatives of university, real estate of Indonesia and of planning expert association, in the meantime, the society's representative could be a member of the Steering Committee???. A representative from the media should also be a member of the Committee. The main function of this Steering Committee is to promote communication and share information on important issues between these actors, and to reflect the opinions of the mayors and camats as well as of the civil society in the decision making process in the Coordination Board.

10.2.5 Task Force on Cross-functional Working Divisions

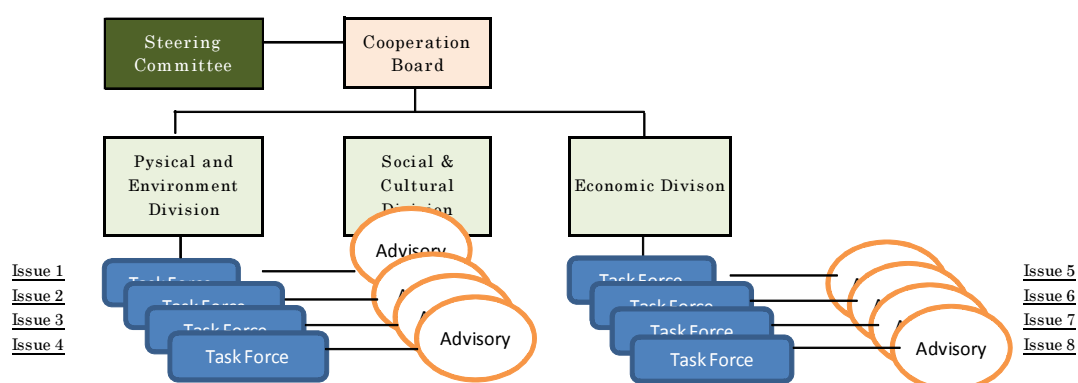
One of the major objectives of the establishment of a cross-functional task force under the Working Divisions of the Board is to develop an effective and concrete strategy for the GKS spatial planning. Other objectives include the promotion of active participation from key stakeholders in the decision making process, enhancement of coordination among all major stakeholders, and the development of human resource in the related departments.

Task forces are formed at least for each vital issue area, such as the financial plan for GKS projects, human resource development plans, formulation of training programs, and plans for the establishment of a local government association for cross-jurisdiction projects. A task force can also be formed in order to formulate concrete strategies on various important issues. Their members could come from competent middle ranked officers from relevant departments, researchers and university professors, representatives of private sectors and

mass media, as well as representatives of Musrenbang when necessary. The task force will also perform functions on strategy formulation for each important issue as well as the functions of coordination among departments and major stakeholders, as well as in the monitoring of the implementation of the projects in order to gain lessons from the past and replicate best practices.

10.2.6 Expected Functions of Advisory Group

Because it might be difficult to enlist into the task force researchers and university professors, representatives of private sector, mass media, Musrenbang, and since competent middle-ranked officers are commonly preoccupied to formulate strategic plans by themselves, the task force can set up an advisory group which will comprise these non-governmental representatives, as well as other representatives, in the affected cities and districts. In this case, the major role of middle-ranked officers is to formulate a framework of the plan, and ask the advisory group to study the current conditions and problems and to make proposals that would address them. Based on the proposal, the Task Force can formulate concrete plans to solve the problems. This system can enhance the participation of stakeholders in the decision making process and help the introduction of various ideas and insights from various citizens in the GKS development.



- ☆ GKS Coordination Board
 - Relevant Provincial Government Institutions
 - Representative of University/ planning experts
 - Representative of the private sector
- ☆ Steering Committee
 - Governor: Chairperson
 - Mayors / Camats
 - Representatives of Civil Society
 - Representatives of Media

- ☆ Working Group
 - Related Departments adjusted for spatial planning needs and local capabilities
- ☆ Cross Functional Task Forces
 - Middle-level Officials from each relevant government Institutions
- ☆ Advisory Group
 - Researchers/Consultants
 - Representatives of Private Sector
 - Representatives of Civil Society
 - Representatives of Affected cities/districts

Figure 10.2.4 Proposed Management System in GKS

10.2.7 Roles and Responsibilities of GKS Development Cooperation Board

The need for good coordination and cooperation among the relevant local governments and agencies in the spatial planning activities in the GKS will be addressed by the establishment of a Regional Coordinating Agency for Spatial Planning (BKPRD) which will exclusively have the following characteristics:

1) Person in charge: Governor of East Java Province

- Chairman: Vice-Governor of East Java Province and/or Head of BAPPEDA East Java Province
- Chief Executive: Secretary of the Governor of East Java Province
- Secretary: BAPPEDA East Java Province
- Deputy Secretary: Head of Department of Public Works, Cipta Karya, and Spatial East Java Province

2) Members:

- Head of Department of Agriculture Province of East Java;
- Head of the Estates Office, East Java Province;
- Forest Service Chief, East Java Province;
- Head of Department of Public Works Water Resources, East Java Province;
- Head of Highways Department of Public Works, East Java Province;
- Head of Department of Energy and Mineral Resources, East Java Province;
- Environment Agency Head, East Java Province;
- Head of Department of Transportation and Highway Transportation, East Java Province;
- Head of Culture and Tourism, Province, East Java;
- Head of the Secretariat of the Development Section, East Java Province;
- Head of the Legal Secretariat, East Java Province; and,
- Heads of other concerned Units/Agencies.

3) Functions

The Board will convene at least every three months to discuss matters such as the formation of alternative principles and policies and in how to solve the problems which will eventually be decided on by the governor. Its functions will include the following:

- Formulate the implementation of spatial planning policy in East Java Province by paying attention to spatial planning policies in the national and local scope (i.e. regencies/municipalities) within East Java;
- Coordinate the formulation of the Spatial Planning of East Java Province;

- Coordinate the formulation of Detailed Zone Spatial Plan in accordance with the authority of the Province of East Java;
- Integrate and harmonize the various spatial plans, such as Spatial Plan of the East Java Provincial Spatial Planning, Regency/Municipality Spatial Planning, National Spatial Plan, Specific Spatial Plan, and the Spatial Plan of the neighbor Province;
- Harmonize the Medium Term Development Plan and Annual Development Plan of the provincial, regency/municipality governments, with that of the public and the private business, through a sustainable spatial planning;
- Carry out supervision activities, including reporting, evaluation, and monitoring of the implementation of spatial utilization;
- Recommend enforcement against inappropriate utilization of the spatial planning;
- Provide recommendations for provincial spatial planning permissions;
- Optimize public participation in spatial planning, spatial utilization and its control;
- Develop Provincial spatial planning information for the benefit of the government sector, society, and private users;
- Promote and disseminate information on East Java provincial spatial planning;
- Coordinate the handling and resolution of arising issues or conflicts in the implementation of spatial planning both in East Java province and in the regencies/municipality in East Java, and provide guidance and advice to solve them;
- Provide recommendations to solve problems or conflicts, and spatial utilization of East Java Province and those that cannot be reconciled with regencies/cities;
- Implement facilitation, supervision and coordination among provincial agencies, the regency/municipality governments, as well as the community and business, relating to the operation of spatial planning;
- Integrate spatial planning, spatial utilization, and the control of provincial spatial utilization with those with the regency/municipality and neighboring provinces;
- Conduct an annual evaluation of the East Java Province spatial planning performance;
- Spell out the governor's instructions regarding the implementation of the functions and obligations of East Java Province Spatial Planning Coordination;
- Report the results of the execution of their duties regularly to the Governor of East Java.

Table 10.2.1 indicates a summary of attributes of the organizations that are attached with the GKS-DCB, in terms of the following aspects: 1) Expected functions, 2) Persons-in-charge, and 3) Participating members.

10.2.8 Implementation Stage of GKS Zone Management Institution

There are two stages in the GKS Zone Management Institution. The first stage is the establishment of the GKS Development Cooperation Board, two Working Groups for planning as well as utilization and control, and the creation of a Steering Committee. In this stage these groups should identify the critical issues that should be addressed for the effective

management of the GKS spatial planning and implementation. In the second stage, the Board and Working Groups should establish the relevant Task Forces in order to formulate plans to address the above issues. This stage also includes the implementation of the plan, as well as the monitoring and evaluation of the implementation.

The subsequent stages involves the identification of new and arising issues, formulation of plans to solve problems, implementation of the plans, and their monitoring and evaluation. These stages could be cyclical.

Table 10.2.1 Organizational Attributes Attached to GKS Development Cooperation Board

Organization	(1) Functions	(2) Persons-in- Charge	(3) Participating Members
Steering Committee	<ul style="list-style-type: none"> ● Formulate strategy for each important issue; ● Promote coordination among departments and major stakeholders; ● Monitor the implementation of the strategy; ● Take lessons for the successive year and replicate the best practice; ● Promote active participation of key stakeholders in the decision making process; and, ● Develop human resources in related departments. 	<ul style="list-style-type: none"> ● Chairman: Governor of East Java Province ● Chief Executive: Secretary of the Governor of East Java Province ● Secretary: Head of Planning Board of East Java Province ● Deputy Secretary: Head of Department of Public Works, Cipta Karya, and Spatial East Java Province 	<ul style="list-style-type: none"> ● Competent middle ranked officers from relevant departments; ● Researchers/university professors and consultants; ● Representatives of private sector and mass media as well as representatives of Musrenbang wherever necessary; and ● Central Government officials concerned.
Working Division for the Spatial Planning,	<ul style="list-style-type: none"> ● Prepare policy formulation for the Governor of East Java province and the regional planning of East Java Province, and strategy development; ● Investigate and summarize the problems that arise in the spatial structuring of East Java Province, and to formulate alternative solutions; ● Prepare and implement community activities, regulatory policies and spatial planning and regional planning strategies for East Java Province to all agencies and communities in a coordinated manner; and ● Draft BKPRD activity report to the East Java Province, and propose solutions to issues discussed in the plenary BKPRD. 	<ul style="list-style-type: none"> ● Chairman: Head of Regional Infrastructure in the Planning Board of East Java Province. ● Vice Chairman: Head of Sub Section Laws and Regulations on the Administration Section of East Java Province Regional Secretariat. ● Secretary: Head of Sub Division of Transportation Infrastructure on the Planning Board of East Java Province. 	<ul style="list-style-type: none"> ● Head of Research and Development and Economic Development Agency of Research and Development in East Java Province; ● Head of Forest and Land Rehabilitation in the East Java Provincial Forestry Service; ● Head of Community Benefit at the Public Works Department of Highways of East Java Province; ● Head of Program Development at the Public Works Department of Highways of East Java Province; ● Head of Development and Human Resources Program at the Department of Agriculture and Plantation East Java Province; ● Head of the Department of Fisheries and Livestock, Fisheries and Maritime Province of East Java; ● Division Head of the Environment in East Java Province, Planning Board; ● Section Head of Spatial Planning and Mapping at the Department of Public Works, Cipta Karya, and Spatial Planning, Cleaning and Landscaping of East Java Province; and ● Head Sub Division of Development Administration Secretariat Development Section of East Java Province.

Organization	(1) Functions	(2) Persons-in- Charge	(3) Participating Members
<p>Cross-functional Working Division and Task Force</p>	<ul style="list-style-type: none"> Provide inputs to BKPRD in order to formulate policies and control of East Java Province spatial utilization; Coordinate supervision (monitoring, evaluation, and reporting) of the spatial plan; Coordinate the enforcement and licensing of East Java Province spatial utilization; Inventory and assess the problems that arise in the spatial utilization and control and provide alternative solutions; and Report execution results of the working group duty to BKPRD and present a proposal of problem solving/policy to be discussed in the BKPRD plenary meeting of East Java Province. 	<ul style="list-style-type: none"> Chairman: Head of Spatial Planning in the Office of Housing, Cleaning and Landscaping of East Java Province. Vice Chairman: Head of the Secretariat of Governance of East Java Province. Secretary: Head of Section Spatial Planning and Mapping at the Department of Public Works, Cipta Karya, and Spatial East Java Province. 	<ul style="list-style-type: none"> Head of Environmental Impact Analysis on the Environment Agency of East Java Province; Head of Development and Preservation of Cultural Tourism on Culture and Tourism Office Province of East Java; Sub Head for Infrastructure Development in the Planning Board of East Java Province; Section Head of Spatial Exploitation and Control at the Public Works Department, Cipta Karya, and Spatial East Java Province; Guidance Section Head Rural and Irrigation Water Management Fee (IPAIR) at the Department of Water Resources of East Java Province; Head of Section on Peace and Public Order Police Unit Civil Service of East Java Province; Head Sub Division of Law on the Legal Documentation Regional Secretariat of the East Java Province; Head Sub Division of Public Governance at the Regional Secretariat of Governance Section of East Java Province, as well as; Head Unit / Agency concerned.
<p>Advisory Group</p>	<ul style="list-style-type: none"> Study present situation and problems Make a proposal to address the issue based on which the Task Force formulates concrete plans to solve the problems; Enhance the participation of stakeholders in decision making process; and Introduce various ideas and insights from variety of citizens for GKS development. 	<ul style="list-style-type: none"> Chairman: Chairman of related Working Group 	<ul style="list-style-type: none"> Members of the task force concerned; Researchers/university professors and consultants; Representatives of private sector; Representatives of Musrenbang; and Representatives of affected cities and districts.

Source: JICA Study Team

10.3 Capacity Building for GKS Spatial Planning

10.3.1 National Framework for Capacity Building

In 2002, the Government of Indonesia announced its “National Framework for Capacity Building to support Decentralization Program of the Government of Indonesia”. The framework defines the meaning of capacity building, points out three levels of capacity building to be addressed, and stipulates government’s principle of capacity building in the future.

The National Framework for Capacity Building, defines capacity building as follows:

Capacity building --- refers to the need for adjusting policies and regulations, institutional reforms, modification of work procedures and mechanism of coordination, improvement of human resources, skills and qualifications, change of the value system and attitudes, so that the needs of regional autonomy as a new approach towards governance, administration, and participatory mechanisms of development can be fulfilled in order to meet the demands for a more democratic system. (National Framework for Capacity Building to Support Decentralisation, Nov. 2002, p13)

1) Three Levels of Capacity Development

In order to be effective and sustainable, capacity building according to the framework includes three levels of intervention:

- (1) **Individual level**, i.e. individual skills, qualifications, knowledge, attitudes, work ethics and motivations of the people working in organizations.
- (2) **Institutional level**, i.e. the structure of organizations, the decision making processes within organizations, procedures and working mechanisms, management instruments, the relationships and networks between organizations, etc.
- (3) **System’s level**, i.e. the regulatory framework and policies that could support, or hamper, the achievement of certain policy objectives.

2) Principles of Capacity Building

The National Framework maintains the needs for building capacities at these three levels based on the following principles:

- (1) Capacity building is **multi-dimensional**. It should embrace several timeframes, i.e. long-term, medium-term, and short-term.
- (2) Capacity building covers **multiple stakeholders**, like the central government, the provinces, local and village governments, the private sector and communities.
- (3) Capacity building must be **demand-driven**, where the capacity building needs are not defined “top down” but come from the stakeholders. Relevant to this is the need for

transparency and accountability in formulating such needs.

- (4) Capacity building refers to **national policies**, like the Broad Guidelines of State Policy (GBHN 1999-2004), which underlines the necessity for developing regional autonomy in a wide and realistic scope by empowering people, economic and political institutions, legal and religious institutions, cultural institutions, and civil society organizations. Capacity building is also embodied in the National Development Program. (PROPENAS – Law No. 25, 2000).

In order to realize the objectives of regional autonomy, the national framework adds that capacity building requires a wide variety of stakeholders. Capacity building that support decentralization aims to encompass various forms of institutions, such as government institutions at the central level (their organization and work mechanisms), institutions at the provincial level, as well as other local institutions that provide public services. This is emphasized in the framework, in order to ensure good governance which includes democratic values, transparency, accountability, efficiency and wide, active and significant community participation for each development program related to their needs, both from the central and regional levels. This national framework also identifies capacity building needs among nongovernmental organizations (LSM) and local communities.

3) Task Demarcations

In these capacity building efforts, the main tasks of the central government is to ensure the following:

- Prepare information on capacity building programs and providing access to the service providers which will help the stakeholders in building capacity in the fields required.
- Prepare standard material on capacity building as far as the are related with training activities and the training of trainers.
- Coordinate and facilitate with the regions in analyzing the capacity building needs and accessing service providers and alternative funds.
- Coordinate and facilitate with donor institutions so that capacity building activities are well-organized and coordinative in order to achieve optimum results.
- Monitor, evaluate, supervise, and facilitate so that the regions can develop their capacities in implementing their autonomy effectively, efficiently, and with accountability.

On the other hand, the provincial and local governments must define their own specific capacity building needs. In this context they are allowed to allocate funds from their regional budgets in order to purchase capacity building services (like training programs, consultancy services, information) from a wide variety of providers such as from central and provincial government agencies, universities, private sector agencies, professional associations, etc.

10.3.2 Problems in Capacity Building in GKS Spatial Management

The national framework identifies eight items as the scope of capacity building, namely:

- General regulatory framework for decentralization.
- Organizational development of regional and village governments.
- Human resources management of the regional apparatus.
- Regional financial management.
- Support and strengthening of regional and village councils and civil society organizations.
- Development of the planning system.
- Local economic development.
- Managing the transition period.

This scope is summarized and shown in Table 10.3.1.

Table 10.3.1 Scope of Capacity Building

No	Scope	Content
1	General regulatory framework for decentralization	<ul style="list-style-type: none"> • Activities focused on formulating and completing the regulatory framework, so that a strong legal basis can be created in accelerating the overall implementation of autonomy. • Activities regarding the regulatory framework are arranged to cover regulation which are no longer valid in the context of implementing Law No.22, 1999 and Law 25, 1999 and their implementing regulations. • Priority should be given to regulations which are urgently needed and can potentially achieve legal consistency and legal certainty.
2	Organizational development of regional and village governments	<ul style="list-style-type: none"> • This cluster of activities is intended to strengthen the institutions of regional and village governments to achieve optimal institutional, networking, and clean work procedures and mechanisms.
3	Human resources management of the regional apparatus	<ul style="list-style-type: none"> • This cluster of activities is intended to improve the capability of the human resources in the regional apparatus to allow the regions to manage their human resources effectively and efficiently.
4	Regional financial management	<ul style="list-style-type: none"> • This cluster of capacity building activities is intended to improve the capability of the regional governments in managing their funds by using an effective, transparent, and accountable budget and accounting system in line with the principles of good regional governance.

No	Scope	Content
5	Support and strengthening of regional and village councils and civil society organizations	<ul style="list-style-type: none"> This cluster of activities is intended to enable the regional and village councils to play their roles and functions effectively in order to create checks and balances; Capacity Building in the Regions (Version 2.0) – Module C (February 2005) 21 executive and legislative bodies. This cluster of activities is also intended to improve the accountability of regional councils towards the community and to create access of the community and civil society organizations in expressing their aspirations to the regional council. This cluster of capacity building activities includes capacity building needs of the communities and civil society organizations to understand and get involved in the process of local governance.
6	Development of the planning system	<ul style="list-style-type: none"> This cluster of activities is intended to create a regulatory framework for a clear and consistent planning system, and to improve the capability of the regions in using the planning system in a democratic participatory, transparent, and accountable manner.
7	Local economic development	<ul style="list-style-type: none"> These activities are intended to develop the capacity of the regions to plan, together with the related stakeholders, in how to utilize the potentials of the local economy by focusing on a community-based economy.
8	Managing the transition period	<ul style="list-style-type: none"> These activities are meant to improve the capacity of central government institutions and coordination teams, which have been formed to coordinate the implementation of the regional autonomy policy, and develop the capacity of the newly formed associations of regional governments and the regional councils, as well as improve the capability of the regions to manage conflicts in implementing regional autonomy.

Source: Indonesian Government, "National Framework for Capacity Building to support Decentralization of the Government of Indonesia", 2002

Based on the national capacity building framework in tandem with identified capacity building scope, this section evaluates the capacity of GKS spatial management at three levels, namely the individual, institutional, and system's levels.

1) Individual Level

After the completion of the final report on the GKS spatial planning, the provincial and city/district governments have to implement, monitor and evaluate the plan. In order to respond to new situations, every five years the local governments are supposed to revise their spatial plans based on their evaluation of the implementation of the plan. However, there is a lack of individual skills and knowledge on spatial planning among government staff working with the GKS spatial management process. As to the readiness of other individuals there are indications of limitations relative to the level of skills, expertise, and mastery of modern technology for spatial management. Conducting on-the-job training is not enough to rectify this capacity shortcoming, what is required is the promotion of a systematic training program for major stakeholders such as government officials, decision makers, members of civil society, and others who have important roles to play in the GKS spatial planning process.

2) Institutional Level

The institutional level has two issues which should urgently be resolved in relation to the GKS Spatial Planning:

Lack of Effective Coordination among Local Governments: The implementation of the spatial planning master plan in the GKS requires the proper coordination among the relevant local governments since the implementation of many proposed projects pass through their administrative boundaries. This highlights the critical role of the provincial government in ensuring effective coordination among its relevant member cities/districts/municipalities and instrumentalities. It should be noted that the history of coordinative work among the local governments and agencies in Indonesia is not encouraging. Historically, the narrow administrative boundaries of the local governments and the limited role of the provinces have led to suboptimal investment decisions from regional and national perspectives. This dilemma underscores the need to establish a mechanism that will ensure effective coordination among the concerned local governments and agencies.

Lack of Participation of Major Stakeholders in the Decision-Making Process: At present, the provincial government of East Java has a Coordination Board on Spatial Management comprised of members from the heads of all relevant bureaus and departments, as follows:

- Head of Marine and Fishery Department, East Java Province;
- Head of Energy & Mining Resources Department, East Java Province;
- Head of Transportation and Freight Department, East Java Province;
- Head of Animal Husbandry Department, East Java Province;
- Head of Communication and Information, East Java Province;
- Chairman of Inspectorate, East Java Province;
- Head of Environment Board, East Java Province;
- Head of Development Administration Bureau, East Java Secretary;
- Head of Cooperation Administration Bureau, East Java Secretary;
- Head of Economic Administration Bureau, East Java Secretary;
- Head of Natural Resource Administration Bureau, East Java Secretary;
- Head of Police Civil Service Unit, East Java;
- Universities;
- Real Estate of Indonesia; and,
- Planning Expert Association.

The above list does not include representatives from the city/district governments and the civil society even though the national framework calls for the involvement of all major stakeholders in a democratic manner from the early stages of planning onwards. The framework lists at least seven groups of stakeholders, namely:

- Central level departments/non-departmental organizations relevant to regional autonomy (e.g. those whose tasks are related to the mandatory authorities to be implemented by the regions according to Article 11 of Law 22, 1999, Ministry of Home Affairs, Ministry of Finance, LAN, BKN, etc.)
- Provincial governments
- Local governments
- Provincial councils
- Local councils

- Communities/civil society and non-governmental organizations
- Service providers or institutions, which are competent to provide services to develop and improve capacity, such as universities, education and training centers, research institutions, etc., both from the public sector and the private sector.

These major stakeholders are expected to be involved in the decision making process of any national and regional development management, which is what is glaringly lacking in the GKS spatial planning process. Although experts and representatives from the private sector are now members of the Coordination Board, their knowledge can be more utilized in for the GKS spatial management. In addition, the lack of institutional mechanisms for the participation of representatives from the relevant cities and districts in the decision making process at the provincial level may have contributed to the lack of coordination between the provincial government and city/district governments.

3) System's Level

The system's level also have two issues that should be urgently resolved in relation to the GKS Spatial Planning.

Lack of guidelines for the participation of all stakeholders: Law of No.26, 2007, concerning Spatial Management stipulates the right, liability, and role of the society. The law, in spatial management, addresses every person's right to participation in spatial planning, spatial utilization, and spatial management. (Please refer to Section 10.5 for more detailed discussions).

This implies that spatial management administration is expected to be executed with robust societal involvement. However, the current spatial planning lacks an effective participation from civil society in such processes as the preparation of a spatial plan, the spatial utilization, and in the control over spatial utilization. Up to now, the participation of the civil society in decision-making process has not been effectively institutionalized in spatial management. So far the participation of civil society in the entire process has been through seminars and socialization programs.

Likewise, direct communications with stakeholders in Kota and Kabupaten have not been effectively institutionalized at the provincial level. The mayors have not been enlisted to be members of provincial coordination board on spatial management, which means that an effective coordination regime cannot be expected between the provincial government and kota/kabupaten governments in the project. This calls for the provision of opportunities that would allow the direct exchange of opinions from key stakeholders for the smooth management of spatial planning in the GKS.

Lack of a comprehensive training program on spatial management: Inadequacies in training policies is also a barrier to effective spatial management in the GKS. The Indonesian government does not have comprehensive training policies that offer guidelines on training needs, design and planning of training programs, as well as for the monitoring and evaluation of training in the field of spatial management.

The proper integration of training policies with broader personnel policies is vital for training to be effective. In this regard, the commitment of both political and bureaucratic leadership is also essential. However, the adoption of a training policy is no guarantee that it will be implemented. Without policy capabilities and skills within government institutions and agencies, tasks such as needs' assessment, evaluation, and monitoring will not be accomplished even if policy commitments exists.

10.3.3 Measures for Enhancing Capacity Development

Four key-programs are proposed to enhance the capacity development activities. Out of them, two programs are related to the improvement of the individual level, and the others are for the institutional and system levels.

1) Provision of an Integrated Training Program on Spatial Management

The effective management of the GKS spatial planning requires the acquisition of knowledge on spatial management especially among government officials and other key stakeholders. Table 10.3.2 indicates the technical knowledge required for spatial management.

Table 10.3.2 An Example of a Capacity Development Program on Spatial Planning

Module		Sub-Module	Course
1	Overview of Spatial Planning	Introduction of GKS Spatial Planning	Introduction of GKS Spatial Planning
2	Spatial Structure Planning	Urban System Planning & Human Settlement System	<ul style="list-style-type: none"> • Urban System Planning • Human Settlement System
		Urban-Rural Linkage System & Economic Activities Based Linkage	<ul style="list-style-type: none"> • Urban-Rural Linkage System • Economic Activities Based Linkage
		Regional Infrastructure Network System Planning	<ul style="list-style-type: none"> • Overview of GKS Infrastructure System • Integrated Transportation Network System • Energy Network System • Telecommunication Network System • Water resource Network System • Regional Solid Waste Network System
		Reservation and Conservation Zone	<ul style="list-style-type: none"> • Natural Conservation • Cultural and Science Conservation • Mangrove Coastal Zone • Forest Park
		Agriculture and Cultivation Zone	<ul style="list-style-type: none"> • Agricultural Land Zone • Plantation land Zone • Animal Husbandry Zone • Fishery Zone • Production Forest • Community Forest

Module		Sub-Module	Course
			<ul style="list-style-type: none"> Gas, Oil and Mineral Mining Zone
		Urban Land Use Development Zone	<ul style="list-style-type: none"> Industrial and Agroindustry Zone Housing and Settlement Zone Tourism Zone Mainstay Zone
3	Determination for Strategic Zone	Strategic Zone Determination	Strategic Zone Determination
		Urban Center Area and New Town Development	Urban Center Area and New Town Development
		Industry and Agrobusiness Center	Industry and Agrobusiness Center
		Tourism Center	Tourism Center
		Defense and Security Zone	Defense and Security Zone
4	Spatial Utilization Direction	Program Indication of Structure Plan	Program Indication of Structure Plan
		Program Indication of Pattern Plan	Program Indication of Pattern Plan
		Program Indication of Strategic Zone	Program Indication of Strategic Zone
5	Institution Establishment and Development	Institution Establishment and Development	Institution Establishment and Development

Source: JICA Study Team

2) Formulation of a Comprehensive Training Policy on Spatial Management

The performance of an individual is jointly influenced by his ability and motivation. An individual's motivation, on the other hand, is dependent on other factors such as compensation, working conditions, and personality characteristics. Thus, training influences performance through the ability factor and plays only a partial role in determining the overall level of an individual's performance.

Thus, training is unlikely to be effective as long as personnel policies and systems of the government do not support such activity. If training is not integrated with the *career development plans* of public servants and systems for performance evaluation, it is unlikely that "affective demand" for training will be created. In addition, the administrative culture of governments also affects training. For training to be effective, it will require an administrative system that is performance oriented in its patterns of authority and communication, attitude to work, and values. Furthermore, a national policy on training on design and management is a prerequisite for effective training. When training is haphazardly organized and training concepts, contents, and methodologies are not properly adapted to the local environment, both training and training institutions usually fail to make the proper impact expected of them.

Thus, ingredients of a training policy should include: 1) objectives and scope of training, 2) assessment of training needs, 3) training plans, strategies, and priorities, 4) monitoring and

evaluation of training, and 5) career development linkages. Those are summarized in Table 10.3.3. Based on the training policies, examples of training modules for government officials are shown in Tables 10.3.4 and 10.3.5.

Table 10.3.3 Comprehensive Training Policies on Spatial Management

No	Themes	Descriptions
1	Objectives and Scope of Training	<ul style="list-style-type: none"> • One of the responsibilities of a government is to publicly declare the objectives and scope of public service training and the importance it attaches to this function. As a result, government's expectations become clear to both the employees to be trained as well as those who perform training tasks. • It is for the government to relate its objectives for training to the national goals and environment of the country.
2	Assessment of Training Needs	<ul style="list-style-type: none"> • An important function of policy is to offer guidelines on the systematic assessment of training needs and assignment of responsibility for this task among relevant agencies so that orderly planning of training activities is facilitated. Training needs can be identified at national, institutional and individual levels. • At the national level, the sources of inputs include 1) the strategies and priorities of development programs; 2) training needs perceived by the different government agencies; and, 3) diagnosis of prevailing administrative inadequacies. • At the institutional level, the need assessment must be undertaken within the framework of priorities generated by the national exercise. A variety of methodologies and techniques of analysis of needs are available from which institutions must choose an appropriate mix.
3	Training Plans, Strategies, and Priorities	<ul style="list-style-type: none"> • In light of the results of the exercise on assessing needs, a policy decision must be taken on the overall training plan for the government, its underlying strategy, and priorities in terms of the tasks to be accomplished. • Training needs generally exceed the resources available so that it becomes imperative to decide what will and will not go into a plan. This decision implies the choice of a mix of training programs that best meets the national needs. This is a strategic decision which must be influenced by what resources – human, financial, and organizational – are available in the short run and the long run. Policy guidelines indicating government's priorities and resources are essential to assist institutions in making their choices. • Policy decisions on annual-term and long-term training plans must be based on an iterative process of interaction among individual institutions, and the central policy and coordinating agencies. • While no policy can lay down the content of a training plan, the roles and responsibilities of different agencies in this task and the criteria and processes they must adopt are matters for policy decision.
4	Monitoring and Evaluation of Training	<ul style="list-style-type: none"> • When resources are allocated to approved training programs, mechanisms must be established for the periodic monitoring of the inputs and outputs of these activities. Qualitative evaluation of individual training programs and institutions must be encouraged. • Policy guidelines must specify the criteria and periodicity of monitoring and evaluation, and the roles and responsibilities of different agencies and institutions in this task.
5	Career Development Linkages to Training	<ul style="list-style-type: none"> • Whether the career development and promotion prospects of public servants are affected by training influences significantly training effectiveness. • If training contributes to their career progress and their training performance is a formal input to their evaluation, their motivation to use training will be strengthened. • Policy guidelines specifying the links between these elements are the most effective means to inform public servants on how their career progress will be

		<p>influenced by training. Guidelines must establish feeding inputs from training into his performance evaluation, and taking training into account in promotion decisions.</p> <ul style="list-style-type: none"> • A good training policy is dynamic in nature and will specify the mechanisms for the review process. Since a country's development needs and tasks change over time, there should be a provision in the policy for its periodic review and redesign whenever it becomes necessary.
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Source: Samuel Paul, "Training for Public Administration and Management in Developing Countries: A Review" World Bank Staff Working Papers, Number 584, 1983

Table 10.3.4 Professional Training Module on Spatial Planning Administration

Training Module	Sub-Module	Duration Plan
1. Overview of Spatial Planning	Introduction of GKS Spatial Planning	2 days
2. Spatial Structure Plan	Urban system planning, urban-rural-linkage system, infrastructure network system, etc.	3 days
3. Spatial Pattern Plan	Reservation and conservation zone, agriculture and cultivation zone, urban land use development zone	5 days
4. Spatial Utilization Direction and Control Direction	Middle to long term project plan, zoning regulation direction, permit direction, incentive and disincentive, and sanction direction	5 days
5. Institution Development	Institution and linkage, organization structure, capacity development, financing mechanism, cooperation strategy	3 days

Source: JICA Study Team

Table 10.3.5 Refresher Programs for Managerial Class

Training Level	Focus and Content	Duration Plan
Top administrators	Policy oriented seminars, workshops on new developments and managerial aids	3 days
Senior level officers	Advanced general management training, refresher courses on new developments	1-2 months
Middle level officers	Specialized programs in functions such as finance, personnel, new management systems and tools, sectors development program	6 months to 18 months (degree prog)
New junior staff	General induction, training in public administration and management with emphasis on field work and specific functions	6 months
Lower-level employees	Work skills and knowledge of procedures and functions	1 month

Source: JICA Study Team

3) Establishment of an Effective Coordination Mechanism on Spatial Management for the GKS Zone

At the institutional level, it is stressed that the provincial government should play a pivotal role to establish a mechanism that will produce concrete implementation strategies, promote participation of all stakeholders in decision making process, enhance coordination among all stakeholders, and contribute to capacity development of all stakeholders related to the GKS. This issue is discussed in the preceding Sections 10.3 and 10.4, Chapter 10.

4) Institutionalizing Effective Participation of Major Stakeholders

In order to realize the above proposals, the provincial government should revise Regulation No.50, 2009, on Space Organization of Regional Coordination Guidelines. The revised guideline should incorporate the following mechanisms:

- Participation of mayors, and representatives of the affected kota/kabupaten in the decision-making process of the GKS spatial management.
- Participation of experts (e.g., researchers and consultants), representatives from the private sector and civil society, in the decision making process of GKS spatial management.

The proposed mechanism is to introduce an interactive (top-down and bottom-up process) approach to planning formulation and to promote broad-based consultations with the private sector and civil society in the formulation and implementation of long- and medium-term GKS strategies. This approach not only enables the government to take account of stakeholders' view and situation in its program and to promote effective coordination among major stakeholders, but also contributes to the effective utilization of potential resources by promoting ownership of all stakeholders to activities in the GKS project. The capacity development of major stakeholders on GKS management is also expected. This aspect is further discussed in the following Section 10.5, Chapter 10.

10.4 Financing of GKS Zone Management

10.4.1 Financial Situation of GKS

GKS has the following financial problems that may hinder the effective implementation of the master plan and the GKS spatial planning:

- Central transfers dominate fiscal resources of the city/district governments in the GKS. The share of own-source revenue in the total revenue is much smaller than those for central transfers. This means that GKS is still largely dependent on the central government on revenue source and spatial management.
- GKS utilizes most of its sub-national spending on non-capital expenditures, leaving limited resources for capital expenditures. The main spending item of the non-capital expenditure is personnel expenditures.

This section will look at the detailed financial situation in the GKS using data from financial department of the Government of East Java Province.

10.4.2 Revenues

Like other local governments in Indonesia, despite fiscal decentralization the cities and districts of GKS are still dependent on the national government for their budgetary needs. This is indicated by the fact that central transfers have dominated GKS's fiscal resources.

Intergovernmental fiscal transfers consist of shared revenue from taxes and natural resources, the General Allocation Fund (DAU) and the Special Allocation Fund (DAK). The DAU is the largest instrument among Indonesia's inter-governmental fiscal transfers and aims to equalize the imbalances between different levels of government, central, provincial, and district/city. The total national DAU pool is now 26% of net national revenue (net of shared revenue), of which 10% goes to provincial governments and 90% goes to districts/cities. The DAK is distributed annually using a formula that consists of a basic allocation (BA) component and a fiscal gap (FG) component.

The DAK is an earmarked or conditional transfer aimed at financing specific needs in the regions or programs that are national priorities and not covered by the DAU. The DAK is financed from the central government budget (APBN) and is transferred directly to district/city governments based on project progress. Unlike the DAU, districts are required to provide matching funding their own APBDs at a minimum of 10% of the project budget, except for those regions with limited fiscal capacity. This ensures that district/city governments make provisions for operational costs.

Three criteria determine the allocation: 1) General criteria related to the net fiscal position of a district; 2) Special criteria, which determine eligibility based on coastal area size, conflict and under-development; and 3) Technical criteria, which are set by sectoral departments in the central government in consultation with the MoF and MoHA.

Shared revenue is the second largest transfers to sub-national governments at the national level. There are two sources of shared revenue, taxes/fees and natural resources. Shared revenues from taxes/fees mainly accrue from land and building taxes (PBB), land and building transfer fees (BPHTB) and personal income tax (PPh). According to the sharing arrangements stipulated in law No. 33/2004, district/city governments receive allocations of 81%, 80%, and 20% shares of PBB, BPHTB, and PPh, respectively. In terms of natural resource shared revenue, Law No. 33/2004 expanded coverage to include the forestry, general mining, fisheries, oil, gas, and geothermal sectors. Sub-national governments retain 80% of all revenues from shared natural resources, except for oil and gas where the central government retains a larger share.

Table 10.4.1 and Table 10.4.2 show the financial situation of city/district and provincial governments respectively, and the following are noted.

1) Central Transfer

Central government transfers dominate the fiscal resources in the city/district governments in the GKS.

- In 2009, the balancing fund accounted for 76% (Gresik), 89% (Bangkalan), 69% (Sidoarjo), 75% (Lamongan), 84% (Mojokerto district) and 82% (Mojokerto city) of the city/district's revenue. The percentage is smaller in Surabaya in which central transfers accounted for 55% of the city's revenues.
- In contrast, in East Java Province, central transfers accounted for only 31% of the province's total revenues.

2) General Allocation Fund (DAU)

The DAU is the largest contributor to the revenues of the city/district governments of the GKS.

- In 2009, the General Allocation Fund (DAU) accounted for 50-70 percent of the city/district revenues, and 17% of province's revenues. In most cities/districts, the shared tax and non-tax revenues were the second largest revenue items, except for Lamongan and Mojokerto (Kota) where the DAK was larger than the shared revenues.
- DAU allocations varied significantly between cities/districts, probably due to differing civil service wage bills.
- In Indonesia, the own-source revenues from the cities/districts play a smaller role than central transfers. There are four categories of own-source revenues (PAD): local taxes, retributions, profits from locally owned enterprises, and other eligible own-source revenues. Law No.34, 2000 stipulates seven types of local taxes and three types of retributions. Seven types of local taxes collected by the city/district governments include the following: hotel tax, restaurant tax, advertisement tax, street lighting tax, tax for type C mining, and parking tax. Three types of retributions include general services, business services, and special licensing. Some autonomy is given to sub-national governments to broaden the local tax base, as long as such broadening meets "good tax

criteria” and is approved by MOF.

3) Own-source Revenues

Like other regions the share of own-source revenues in the total revenue is much smaller than central government transfers in the GKS.

- In 2009, the share of own-source revenues from the total revenue was 17% (Gresik), 5% (Bangkalan), 32% (Surabaya), 19% (Sidoarjo), 11% (Lamongan), 9% (Mojokerto district), 7% (Mojokerto city).
- One of the main reasons why own-source revenue (PAD) contributions remain low is that taxes – especially those with the highest potentials such as income tax, and land and building taxes – are currently collected by the central government, and ironically these taxes should be the main contributors to the PAD.
- In contrast, in East Java Province, its PAD was the largest source of revenue (69%). This is because taxes collected by the provincial government were those that produced higher revenue such as taxes related to the use of engine vehicles, gasoline, water, etc.

4) Fiscal Position among Local Governments

The city of Surabaya has the strongest fiscal position of all the cities/districts in the GKS.

- Kota Surabaya received around twice to eight times more than the revenues of other cities/districts. In addition to the DAU, Kota Surabaya had far higher own-source revenues than other city/districts in the GKS. This is not such a surprise, given the higher number of taxable businesses and services in the city.
- In Gresik, Surabaya, Sidoarjo, and Lamongan, the shares of other eligible own-source revenue were rather high compared with other city/districts. This other own-source revenue can be derived from the sale of assets held by local governments, interest receivables, and receivables from the procurement of goods and services.

10.4.3 Financing

Law No.33, 2004 requires the regional governments to report financing inflows and outflows separately from revenues and expenditures. It defines financing as any receipts that need to be repaid and/or payments that will be recovered, either in the current budget year or in subsequent budget years. Hence, net financing should cancel out any surplus, or deficit, in the respective budget years. The financial data show that provincial and district-governments prefer investing surpluses rather than accumulating reserves.

Like other local governments in Indonesia, the regional governments with surpluses in the GKS prefer to invest their funds in shares of regional government-owned companies or by giving loans to other regional governments.

Table 10.4.1 Summary of the Financial Situation in Four city/district Governments in GKS (Fiscal Year 2009)

No	DESCRIPTION	Gresik		Bangkalan		Surabaya		Sidoarjo	
I	REVENUE								
1.1	LOCAL REVENUE	157,633,849,936.00	17%	32,722,860,492.08	5%	882,616,888,643.00	32%	258,422,578,156.98	19%
1.1.1	Local Taxes	58,234,000,000.00	6%	7,361,351,860.00	1%	486,582,620,000.00	17%	121,679,000,000.00	9%
1.1.2	Retributions	15,245,784,629.00	2%	18,132,673,517.00	3%	244,573,056,153.00	9%	39,361,287,444.00	3%
1.1.3	Profit from locally owned enterprises	6,194,426,200.00	1%	1,147,135,661.04	0%	43,601,522,306.00	2%	8,945,672,428.30	1%
1.1.4	Other eligible own-source revenues	77,950,639,107.00	8%	6,081,699,454.04	1%	107,859,690,184.00	4%	88,436,618,284.68	7%
1.2	BALANCING FUND	725,980,034,379.00	76%	626,381,012,567.00	89%	1,542,368,257,097.00	55%	922,306,346,754.00	69%
1.2.1	Shared Tax and Non-Tax Revenue	152,272,674,379.00	16%	78,706,652,567.00	11%	747,948,686,097.00	27%	210,768,410,754.00	16%
1.2.2	General Allocation Grant (DAU)	511,333,360,000.00	54%	478,768,360,000.00	68%	765,885,571,000.00	27%	666,155,936,000.00	50%
1.2.3	Special Allocation Grant (DAK)	62,374,000,000.00	7%	68,906,000,000.00	10%	28,534,000,000.00	1%	45,382,000,000.00	3%
1.2.4	Shared Tax and Assistance from Province								
1.3	OTHER LEGITIMATE INCOME	71,391,017,000.00	7%	46,878,509,144.00	7%	360,299,521,575.00	13%	159,838,358,864.02	12%
1.3.1	Grant Revenue							1,000,000,000.00	
1.3.2	Emergency Fund								
1.3.3	Tax-Sharing Funds from the Provincial and Local Governments	58,602,000,000.00	6%	22,766,131,802.32	3%	347,453,581,575.00	12%	118,211,409,439.13	9%
1.3.4	Adjustment Fund	6,950,742,000.00	1%	10,645,575,150.00	2%	10,215,940,000.00	0%	34,505,466,000.00	3%
1.3.5	Assistance from the Provincial or other Local Governments	5,838,275,000.00	1%	13,466,801,192.00	2%	2,630,000,000.00	0%	6,121,483,424.89	0%
	Total Revenue	955,004,901,315.00		705,982,381,203.40		2,785,284,667,315.00		1,340,567,283,775.00	
II	LOCAL EXPENDITURE								
2.1	INDIRECT EXPENDITURE	676,836,721,250	63%	410,732,244,714.00	56%	122,937,716,896.3	29%	842,382,960,114.53	58%
2.1.1	Personnel Expenditure	428,823,511,729.81	40%	370,601,879,622.00	50%	916,054,161,145.00	22%	606,405,553,614.53	42%
2.1.2	Interest Expenditure					9,102,500,000.00	0%	6,122,071,800.00	0%
2.1.3	Subsidy Expenditure								
2.1.4	Grant Expenditure	45,861,000,000.00	4%	4,780,150,000.00	1%	277,420,507,818.00	7%	44,315,000,000.00	3%
2.1.5	Social Assistance Expenditure	111,838,961,020.00	10%	2,109,445,160.00	0%	5,000,000,000.00	0%	125,746,184,700.00	9%
2.1.6	Assistance to the Provincial and other Local Governments	278,500,000.00	0%			1,800,000,000.00	0%	8,801,650,000.00	1%
2.1.7	Revenue Sharing to the Provincial and other Local Governments	87,984,739,500.00	8%	32,240,769,932.00	4%			49,992,500,000.00	3%
2.1.8	Unexpected Expenditure	2,050,000,000.00	0%	1,000,000,000.00	0%	20,000,000,000.00	0%	1,000,000,000.00	0%
2.2	DIRECT EXPENDITURE	391,800,791,220.49	37%	328,547,258,428.66	44%	2,969,258,113,289.00	71%	601,291,802,206.00	42%
2.2.1	Personnel Expenditure	66,587,422,814.49	6%	55,080,475,339.00	7%	293,691,284,537.00	7%	48,099,756,019.00	3%
2.2.2	Purchase of Goods and Services	189,538,784,652.00	18%	105,813,917,180.66	14%	863,711,120,387.00	21%	266,592,370,503.00	18%
2.2.3	Capital Expenditure	135,674,583,754.00	13%	167,652,865,909.00	23%	1,810,855,708,365.00	43%	286,599,675,684.00	20%
	Total Expenditure	1,068,637,503,470.30		739,279,503,142.66		4,197,635,282,252.00		1,443,674,762,320.53	
	Surplus / (Deficit)	(113,632,602,155.30)		(33,297,121,939.26)		(1,412,350,614,937.00)		(103,107,478,545.53)	
III	FINANCING								
3.1	Inflow	117,632,402,156.30		33,642,121,939.26		1,579,082,113,082.00		145,507,478,545.53	
3.1.1	Carry Over from Previous Year	73,632,402,156.30		32,556,724,185.26		1,579,082,113,082.00		136,407,478,545.53	
3.1.2	Transfer from Reserve								
3.1.3	Loans and Bonds Received								
3.1.4	Local Loan Received	44,000,000,000.00		1,085,397,754.00					
3.1.5	Borrowing Repayment								
3.1.6	Local Revenue Receivable								
3.1.7	Revenue from Revolving Fund							9,100,000,000.00	
3.1.8	Sales of Financial Assets								
3.2	Outflow	4,000,000,000.00		345,000,000.00		14,850,000,000.00		42,400,000,000.00	
3.2.1	Transfer in to Reserve Fund								
3.2.2	Capital Investments	4,000,000,000.00		345,000,000.00		3,850,000,000.00		13,800,000,000.00	
3.2.3	Payment of Loan Principal					11,000,000,000.00		28,600,000,000.00	
3.2.4	Local Lending								
	Total Financing Expenditure	113,632,402,156.30		33,297,121,939.26		156,423,211,308,200.00		103,107,478,545.53	
3.3	Net Financing	(199,999.00)		(0.00)		(15,188,149,814,500.00)		(199,999.00)	

Source: Bureau of Finance, East Java Province

Table 10.4.2 Summary of Financial Situation in Three city/district Governments and East Java Provincial Government

No	DESCRIPTION	Lamongan		Mojokerto (Kab)		Mojokerto (Kota)		East Java Province	
I	REVENUE								
1.1	LOCAL REVENUE	111,254,225,595.00	11%	66,901,098,700.00	9%	24,185,398,400.00	7%	4,629,195,945,000.00	69%
1.1.1	Local Taxes	15,165,760,000.00	2%	26,460,700,500.00	3%	5,832,746,000.00	2%	3,967,125,000,000.00	59%
1.1.2	Rebutions	23,784,502,700.00	2%	20,538,971,600.00	3%	12,482,136,400.00	4%	62,590,578,000.00	1%
1.1.3	Profit from locally owned enterprises	13,087,924,395.00	1%	2,903,236,100.00	0%	1,094,872,000.00	0%	219,293,650,000.00	3%
1.1.4	Other eligible own-source revenues	59,216,038,500.00	6%	6,998,190,500.00	1%	4,775,644,000.00	1%	380,186,717,000.00	6%
1.2	BALANCING FUND	735,106,591,717.00	75%	644,264,334,069.30	84%	290,547,636,800.00	82%	2,049,440,405,214.00	31%
1.2.1	Shared Tax and Non-Tax Revenue	69,827,762,717.00	7%	77,412,663,069.30	10%	25,709,376,800.00	7%	912,961,055,214.00	14%
1.2.2	General Allocation Grant (DAU)	581,718,829,000.00	59%	502,176,671,000.00	66%	238,050,260,000.00	68%	1,118,478,350,000.00	17%
1.2.3	Special Allocation Grant (DAK)	83,560,000,000.00	9%	64,675,000,000.00	8%	26,788,000,000.00	8%	18,001,000,000.00	0%
1.2.4	Shared Tax and Assistance from Province								
1.3	OTHER LEGITIMATE INCOME	135,341,407,950.00	14%	63,811,828,059.00	8%	37,783,078,400.00	11%	13,286,000,000.00	0%
1.3.1	Grant Revenue							13,286,000,000.00	
1.3.2	Emergency Fund					9,234,042,400.00	3%	0,00	
1.3.3	Tax-Sharing Funds from the Provincial and Local Governments	38,118,808,550.00	4%	40,939,585,775.00	5%	18,155,652,600.00	5%	0,00	
1.3.4	Adjustment Fund	80,906,666,000.00	8%	3,887,798,200.00	1%			0,00	
1.3.5	Assistance from the Provincial or other Local Governments	16,279,100,000.00	2%	18,984,444,084.00	2%	10,393,383,400.00	3%	0,00	
	Total Revenue	981,702,225,262.00		764,977,260,828.30		352,516,113,600.00		6,691,922,350,214.00	
II	LOCAL EXPENDITURE								
2.1	INDIRECT EXPENDITURE	651,532,043,584.25	63%	581,757,409,805.00	65%	153,854,458,655.21	36%	4,778,519,535,487.00	57%
2.1.1	Personnel Expenditure	525,353,213,806.00	51%	489,221,918,177.00	55%	131,528,469,290.00	31%	1,303,778,731,928.00	16%
2.1.2	Interest Expenditure	29,271,000.00	0%	56,228,000.00	0%	150,000,000.00	0%	-	
2.1.3	Subsidy Expenditure							-	
2.1.4	Grant Expenditure	52,935,450,000.00	5%	14,232,890,000.00	2%	14,569,696,500.00	3%	586,097,494,380.00	7%
2.1.5	Social Assistance Expenditure	24,913,400,000.00	2%	29,756,689,500.00	3%	5,161,900,000.00	1%	97,602,703,620.00	1%
2.1.6	Assistance to the Provincial and other Local Governments	2,452,580,500.00	0%	3,524,771,256.00	0%			1,915,500,691,045.00	23%
2.1.7	Revenue Sharing to the Provincial and other Local Governments	45,319,007,000.00	4%	43,534,500,000.00	5%			801,701,792,100.00	10%
2.1.8	Unexpected Expenditure	528,121,278.25	0%	1,430,412,872.00	0%	2,444,392,865.21	1%	73,542,086,441.00	1%
2.2	DIRECT EXPENDITURE	384,005,687,325.00	37%	312,313,268,599.64	35%	272,415,857,700.00	64%	3,616,645,679,240.00	43%
2.2.1	Personnel Expenditure	27,593,268,770.00	3%	60,192,469,375.00	7%	21,220,982,100.00	5%	521,706,544,279.00	6%
2.2.2	Purchase of Goods and Services	132,874,429,594.00	13%	109,543,570,884.64	12%	114,383,275,050.00	27%	2,180,138,521,300.00	26%
2.2.3	Capital Expenditure	223,537,988,961.00	22%	142,577,228,340.00	16%	136,811,600,550.00	32%	914,800,613,661.00	11%
	Total Expenditure	1,035,537,730,909.25		894,070,678,404.64		426,270,316,355.21		8,395,165,214,727.00	
	Surplus / (Deficit)	(53,825,505,647.25)		(129,093,417,576.34)		(73,754,202,755.21)		(1,703,242,864,513.00)	
III	FINANCING								
3.1	Inflow	81,977,088,847.25		143,394,116,227.34		78,594,939,055.21		2,061,246,528,540.00	
3.1.1	Carry Over from Previous Year	46,779,487,247.25		134,651,962,197.34		77,794,939,055.21		2,061,246,528,540.00	
3.1.2	Transfer from Reserve	10,363,000,000.00						0,00	
3.1.3	Loans and Bonds Received							0,00	
3.1.4	Local Loan Received							0,00	
3.1.5	Borrowing Repayment					800,000,000.00		0,00	
3.1.6	Local Revenue Receivable	24,834,601,600.00						0,00	
3.1.7	Revenue from Revolving Fund							0,00	
3.1.8	Sales of Financial Assets			8,742,154,030.00				0,00	
3.2	Outflow	28,141,583,200.00		14,300,698,651.00		4,840,736,300.00		358,003,664,027.00	
3.2.1	Transfer in to Reserve Fund							0,00	
3.2.2	Capital Investments	28,100,000,000.00		10,742,309,330.00		3,365,736,300.00		352,692,000,000.00	
3.2.3	Payment of Loan Principal	41,583,200.00		3,558,389,321.00				0,00	
3.2.4	Local Lending					1,475,000,000.00		0,00	
	Total Financing Expenditure	53,835,505,647.25		129,093,417,576.34		73,754,202,755.21		1,703,242,864,513.00	
3.3	Net Financing								

Source: Bureau of Finance, East Java Province

10.4.4 Overall Expenditure Picture

The GKS utilizes most of its sub-national spending on non-capital expenditures, leaving limited resources for capital expenditure. In 2009, the share of capital expenditure from the total expenditure was 13% (Gresik), 23% (Bangkalan), 20% (Sidoarjo), 22% (Lamongan), 16% (Mojokerto). It was also low in East Java Province (only 11%). On the other hand, the share was higher in cities like Mojokerto (32%) and Surabaya (43%).

The main spending item of non-capital expenditures is personnel expenditures. Among non-capital expenditures, personnel expenditures were the main spending item. In 2009, regency governments spent about 40-50% of their budgets on personnel expenditures. However, the shares of personnel expenditure in Surabaya and Mojokerto Cities were comparatively lower than others, say, 22% in Surabaya and 31 % in Mojokerto City.

With respect to East Java Province, the share of personnel expenditure was much smaller, amounting to 16%, and its capital expenditures was also small at 11%. Like other local governments, spending on goods and services is big in the GKS. The share of spending on goods and services in the GKS ranged from 12 % to 27% of total expenditures. Especially in Gresik district and East Java Province, the shares were higher than the capital expenditures. In sum, the GKS is largely dependent on the central government with respect to the source of revenue for spatial management and its allocation of resources is not optimal.

10.4.5 Measures for Strengthening Local Financial Capacity

1) Establishment of the Local Government Development Fund

In addition for the need to improve its allocation of resources, the GKS also needs to develop its own-sources revenues for the smooth implementation of its spatial plans. One way to raise the financial resources of the local governments is to establish a Local Government Development Fund. The fund has the following mechanisms which is similar to that of the Municipality Development Fund in Thailand and other countries.

- Local governments are able to borrow funds to finance specific development projects through the Local Government Development Fund (LGDF) established by the Ministry of Home Affairs, or the Ministry of Finance.
- A special committee should be established and they will meet each month to decide on the recipients of these loans.
- The LGDF is financed by local governments' contributing 10% of their budget each year to the fund.
- Local governments are then allowed to borrow funds equal to their contribution at no interest once every four years.
- Local governments can also borrow an amount equal to ten times their contribution at concessional rates of around 4% for a 10-15 year term.
- The loans have a one year grace period on the principal payments.

2) Issuance of the East Java Development Bonds

Issuance of city bonds at international bond markets was popular in Kobe City and Yokohama City, Japan which allowed them to procure a huge amount of capitals for large-scale economic infrastructures in their growth stage during the 1970s. The issuance of an “**East Java Development Bonds**” at international bond markets with the central government's endorsement for PPP projects in particular should be explored.

10.5 Community Participation

10.5.1 Community Participation in Spatial Planning Process

Law No 26, 2007 on Spatial Management states that some of the community' or society's major roles include the following:

- Participating in the preparation of a spatial plan;
- Participating in the spatial utilization; and
- Participating in the control over spatial utilization.

However, it is expected at least from the experience of the formulation of development plans, that communities have limited voice in the process, especially inputs from the Kecamatan, or villages, still remain insignificant. In general, this form of enabling citizens is commonly not recognized by citizens, and is usually only practiced by the village elite, thereby resulting in programs that did not necessarily answer communal needs.

It has only been recent that the Government of Indonesia has adopted an advanced model for promoting people's participation in the policy making process of local authorities, including the provincial governments, cities/districts, sub-districts, and villages. Since the policy is fairly new it will be too early to assess its impact on local governance. At this point, it is expected that local authorities will have varied successful experiences dependent on such factors as leadership and method of people's participation, capacity of constituents, local political and social structures, and so forth. In order for the Indonesian model to be effective, each local authority should learn from their own experience, as well as the experiences of others, so that they can establish their own workable method of policy making.

10.5.2 Legal Framework for Community Participation

1) Community Rights

Article 60 of Law No 26, 2007 states that in the spatial planning, every person has a right to the following:

- (1) Recognize the spatial plan;
- (2) Experience a space added-value as a result of spatial management;
- (3) Acquire proper treatment for the damage evoked from development activity performed in accordance with the spatial management;
- (4) Propose an objection to authorized official on development which inapt??? it with the spatial management of the region;
- (5) File a suit to annul a permit and restrain a development which is inapt??? with the spatial plan to authorized official; and
- (6) File a suit to government and/or permit holder if the development activity which is inapt?? with the spatial plan result in a loss.

2) Community Obligations

Article 61 of Law No 26, 2007 states that every person is obliged to the following rights in the development of spatial planning:

- (1) Abide the prevailing spatial plan;
- (2) Utilize space according to the spatial utilization permit issued by authorized official;
- (3) Comply with the rules stipulated in the requirements to obtain a spatial planning permit; and,
- (4) Provide with access to area that is designated by regulation as a public property.

3) Community Roles

Article 65 of Law No 26, 2007 mentions the following spatial planning management attributes:

- (1) Spatial management administration is executed by the government with society's involvement.
- (2) Society's role in spatial management is carried out by:
 - Contributing in the preparation of a spatial plan;
 - Participating in the spatial utilization; and
 - Participating in the control over spatial utilization.
- (3) Further stipulation on criteria and procedures of the society's role will be stipulated by government regulation.

Society's role in the spatial planning stage shall be the following:

- (1) Provide inputs regarding:
 - Determining the direction of regional development;
 - Development potentials and problems;
 - Formulation of spatial plans; and
 - Preparation of spatial structure and the spatial pattern plans.
- (2) Submit objections towards the draft of spatial planning; and,
- (3) Cooperate with the government, local authorities and/or other entities.

Society's role in the spatial utilization stage shall be through the following:

- (1) Contribute spatial utilization activities in accordance with local wisdom (to local experiences?) and spatial planning which already has been stipulated;
- (2) Submit inputs regarding spatial utilization policies;
- (3) Help provide support for technical, expertise and/or fund assistance in the management

of spatial utilization;

- (4) Contribute to the efficiency, effectiveness, and harmony on the ground, sea, air, and in the earth spatial utilization by taking into account local wisdom and in accordance with the law stipulation;
- (5) Contribute spatial management cooperation with government, local authorities, and/or other parties responsible for spatial planning objectives;
- (6) Help maintain defense functions and in the improvement of sustainability for environmental functions and natural resources;
- (7) Contribute in investments, business, and/or professional services.

Society's role in the spatial utilization control stage should be the following:

- (1) Help provide inputs regarding the zoning and permit direction, provision of incentives and disincentives as well as the imposition of sanctions;
- (2) Contribute in the monitoring and supervision of the implementation of spatial utilization, assigned spatial planning, and the fulfillment of minimum service standards in the field of spatial planning;
- (3) Report to appropriate agencies/authorities in terms of finding spatial utilization activities that violate the spatial plan that has been established, whether there were indications of environmental damage and / or pollution, do not meet minimum service standards and / or problems that occur in society in the implementation of spatial planning; and
- (4) Object on public officials' decisions that are incompatible with spatial planning goals.

4) Administrative Sanctions

(The project per se, or its officials, as well as members of society?), can be subject to administrative sanctions, as mentioned in Article 63, Law No 26, 2007 which states the following administrative sanctions with reference to Article 62 thereat:

- (1) Written warning;
- (2) Temporary cessation of activities;
- (3) Temporary suspension of public services;
- (4) Closing location;
- (5) Revocation of permit;
- (6) Revocation of permit;
- (7) Demolition of buildings;
- (8) Recovery of function space; and / or
- (9) Administrative fines.

10.5.3 Enhancement of Community Participation Process

Society's role and its rights in the GKS Zone spatial planning can be channeled through spatial planning institutions, particularly through the provincial level, like the East Java BKPRD the GKS Development Coordination Board (BKSP GKS), as well as the technical division/department or agency related to spatial planning in the provincial level, i.e. East Java Province Development Planning Board (Bappeprov Jawa Timur), and the East Java Public Work Human Settlement and Spatial Planning Agency.

There is also a need to establish an effective mechanism that will enhance community participation not only in the planning process of the spatial plan, but also with other crucial development policies and strategies. The following two mechanisms are proposed:

1) Study on the Identification and Dissemination of Best Practices on People's Participation in Local Governance

Although there are weaknesses in the use of the existing Musrenbang in planning and monitoring processes, it has been observed that a different kind of Musrenbang has emerged with the growth of multi-stakeholders and the introduction of new methods to local governments through village grants and village consultations. The good examples in this new Musrenbang include the Basic Program for Participatory Development and the Kecamatan Development Program.

Because, in one way or another, successful examples of best practices have some kind of effective mechanisms on the community's involvement in government projects, it is essential to conduct a study in order to identify these projects and disseminate. In the near future, Indonesia will accumulate hundreds of experiences and practices on new models of policy making. A study on the current good experiences and the promotion of mechanisms such as the "Technical Cooperation among Local Authorities", will hasten the principle of modeling which will help other local governments and communities.

2) Provision of Training Programs on Leadership and People's Participation

In addition to such a study the provision of the proper training programs for local leaders and civil society is also essential. Although Indonesia's new models of local policy making are relatively excellent, they do not readily redound down to good performances from the local governments. It all still depends on the capacity of leaders in being good and effective leaders and the ability of the local people to contribute positively to public endeavors. It is in this respect wherein good practices can best disseminate the methods of great leadership and excellent public participation to other communities. The provision of the proper training programs on leadership and people's participation will serve this purpose.

It should also be noted that whereas forms of participation have different contexts, there are some essential factors that define active and meaningful participation. These include:

- Participation calls for voluntary involvement in actions to which one feels committed, sharing the decisions, responsibilities, benefits and consequences of those actions.
- There are motivating factors that impel people to participate, including common interests,

needs, goals, beliefs, tangible gains and benefits, perception of the ability in intervene and change or influence a situation.

- For community participation to evolve and remain viable the people must actively take part and be part of an action together with others; knowing, understanding and identifying with the community purpose as well as taking part in the belief in collective action.
- People must have freedom to express their opinions and ideas and the freedom to consider alternatives and to choose from among them.
- Participation is having power to influence, negotiate and decide on matters that affect the people.
- To succeed, there must be mutual trust, group solidarity and organization which are interdependent and mutually reinforcing. For an organization to be effectively functional there must be group cohesion which in turn is engendered by an environment of trust.
- Whether loose or structured, organization is necessary for certain basic functions. These include tasks like fostering a sense of belonging and solidarity; setting common goals; allocating responsibilities and authority; planning and carrying out activities; using community and other resources suitable to the activities, thus avoiding wastage and ensuring that individual and community activities are directed toward the agreed objectives.

These essential factors of participatory approaches, as well as, new roles and tasks of local governments and communities should be understood by community leaders, members of civil society, and by staff/personnel, and council members of the local authorities. Therefore, the provision of training for developing leadership skills and participatory approaches based on best practices from the Indonesian experiences is required for the effective application of Indonesia's policy making model.

11. THE WAY FORWARD

The GKS Zone is a regional economic unit endowed with sufficient resources; its spatial sphere encompasses a 50 km radius. The Surabaya Metropolitan Area (SMA), the core part of the GKS Zone, covers a 20 km radius and has a “compact city” attributes. The SMA, being the second largest urban cluster in Indonesia, has great promise in becoming an economic powerhouse in Indonesia.

Strategic resource allocation into the SMA and GKS, in the medium term, is a feasible policy from a national development point of view; and to realize this, the enhancement of the zones’ gateway functions will be critical, especially the expansion of the capacities of its ports and airport(s).

The fleshing out of the spatial plan for GKS revealed that the zone has ample natural attributes and environmental resources that merit protection and conservation through proper management practices. Likewise, its agricultural area holds great potential, and if tended sustainably through sound water management, conscientious land conversion, etc, it will yield robust contribution to the national food security program. An add-on is the large potentials of its auxiliary sectors, such as agro-processing and agro-product diversification, i.e., animal husbandry, fishery, and various other enterprises that will make the zone a well-designed economic, industrial, and agricultural cluster with active agropolitan units, vibrant urban centers, green spaces, well-defined transportation modalities, etc.

This Final Report is a compendium of the major outcomes and recommendations from the spatial plan, which was carried out giving due consideration to striking a balance between economic growth and environmental protection through the vision “Green, Growing, Global GKS.” A vision which is aggregated in the far-ranging strategies and comprehensive measures presented in this report. Although the documentation of the report and the manner of presentation basically followed government guidelines, it could be said that the spatial planning still has room for improvement.

Thus, the report is subject to further clarification by relevant agencies and authorities concerned for the official approval in accordance with the Spatial Planning Law (Law No. 26/2007). Through the process, the Spatial Plan for the GKS Zone 2030 shall be a definitive tool and guide on sustainable development for the people and the government not only in the GKS Zone, but in Indonesia as a whole.
