#### **Chapter 2 Effective Approaches for Urban and Regional Development**

#### 2-1 Goals of Urban and Regional Development

#### 2-1-1 Development Objectives

#### (1) Urban Development and Regional Development

Urban and regional development can be broadly divided into "Urban Development" and "Regional Development." The areas covered by and the issues inherent in each differ, and therefore the approaches to development also naturally differ.

Because "regional development" covers wide areas where several cities and rural areas have organically combined, it needs to tackle integrated problems such as regional disparities, depopulation problems, and regional economic stagnation. Therefore, the various structures within the region (the structure of spaces, industry structure, social structure, etc.) must be properly understood, and the resolution of development issues must be addressed from a more macro perspective.

On the other hand, although various issues are also involved in "urban development," compared to "regional development," it covers relatively limited areas, namely cities, and a more concrete set of problems such as infrastructure improvements and the upgrading of residential environments. The approach required here is one that utilizes the know-how of each individual sector.

Given the basic realization as discussed above that different approaches have been taken for the "urban development" and "regional development," this report will take these two issues as respective development objectives. With consideration given to the size of the range covered by each of these development categories, we first deal with "regional development," and then follow with a discussion of "urban development."

#### (2) Setting Development Objectives

The strategies and approaches for "regional development" and "urban development" differ depending on the development issues that must be resolved. In other words, there are as many development strategies as there are issues to be faced, and breaking down all the development strategies into a number of types, and setting objectives for them is a difficult task. Further, it is important to achieve a neutral balance in development. By breaking strategies down into simple patterns, one may lose sight of the essence of the problems, and this is seldom conducive to solving fundamental issues or stimulating development.

"Regional Development" and "Urban Development" concern multifaceted and integrated problems. It is therefore necessary to combine the various "elements" required for problem resolution in a way that is suitable for each

The issues are broadly categorized into "urban development" and "regional development."

issue, and to design comprehensive programs that are the most appropriate given the particular circumstances of each city or region.

Therefore, for this development objectives chart, both of the "regional development" and "urban development" are designated as "Development Objectives." The set of approaches possible for achieving these objectives are broken down into "Mid-term Objectives" and "Sub-targets of Mid-term Objectives" as components, and organized into a tree hierarchy.

#### 2-1-2 Effective Approaches for Urban and Regional Development

#### **Development Objective 1 Regional Development**

The aim of the effective approaches for "Regional Development" dealt with in this report is to produce scenarios and concrete overall plans based on mid- to long-term regional progress by facing issues in an appropriate manner, and to unravel complex, integrated problems.

Therefore, the "components" that make up the development objective of "Regional Development" can be divided into three broad themes.

- > The formulation of development scenarios
- > The formulation of "overall plans" that embody these scenarios
- > The construction and strengthening of systems to implement these overall plans

Further, "overall plans" can be divided into the following three categories based on the stage, depth, and needs of development.

- > "Economic Development," focusing on the regional economic development and vitalization with the objective of further promoting and spreading development
- > "Social Development," focusing on the improvements in basic infrastructure with the objective of strengthening the foundation towards regional development
- > "Environmental Protection and Disaster Prevention," focusing on the preservation of the natural environment, with the objective of minimizing the environmental burden arising from development

Based on the above, the following "components," numbered to , are designated as "Mid-term Objectives."

Planning of Regional Development Policies (the formulation of development scenarios - Regional Development Policies)

Promotion of Regional Economic Development (overall plans - Economic Development)

Development
Objective 1
Regional
Development

The term "Development Objective" used here is characteristically different from the general meaning of the term "objective" due to the specialized subject matter. It mainly reflects the meaning of the words "field," "category," and "component." However, in order to attain consistency with Approaches for the Systematic Planning of other issues, the term "Development Objective" is retained.

Improvement of Basic Human Needs (overall plans - Social Development)
Regional Promotion of Environmental Protection and DisasterPrevention Measures (overall plans - Environmental Protection and Disaster Prevention)

Capacity Development Regarding Regional Development<sup>10</sup> (the establishment and strengthening of implementation capacity)

# Mid-term Objective 1-1 Planning of Regional Development Policies

Sub-targets of Mid-term Objective

- Planning Studies
- Formulation of Regional Development Strategies

#### Mid-term Objective 1-1 Planning of Regional Development Policies

With regards to "regional development," it is important to clarify the direction and desired outcomes of future development from a broad, overall perspective, and to drive development towards this vision. Therefore, "Planning of Regional Development Policies" is given as the first Mid-term Objective.

In formulating regional development plans and making decision on the future direction, it is important to first understand the current circumstances and the development issues faced by a region, and to take stock of the resources that may be used in conjunction with development.

In order to ascertain regional trends, and decide on future directions and development strategies, it is important to not only focus on the current situation, but to accumulate basic data over a number of years.

Basic informational materials regarding most developing countries, such as statistical data and geographical information, are inadequate. There are consequently many cases of regional development plans proceeding without a proper understanding or analysis of the current situation, with the result that there are many plans of dubious effectiveness, and this impedes effective, efficient regional development. In order to accurately understand and analyze the current situation of a region, what is required, for example, is an understanding of current social and economic indicators, and the production of topographic maps and GIS.

In addition, estimated future populations and development frames are required in order to effectively decide upon a framework for future plans. However, there are many cases where issues are not adequately framed due to the inadequacy of basic materials and estimation techniques in developing countries.

Among the various projects and activities in developing countries, there are many examples of efforts that stop at localized responses to current problems and issues. This is why from a regional perspective, cases can be seen where project activities themselves are extremely ineffective, or where the effectiveness is halved. For example, a new industrial complex may have been completed, but since the layout of regional facilities was not sufficiently ascertained, the complex gives rise to traffic congestion. Another example is that of a major facility that was planned to vitalize a region, turning instead into a nuisance

<sup>&</sup>lt;sup>10</sup> In JICA (2004a), capacity development is defined as "the development process by which individuals, organizations, institutions and societies develop their abilities, individually and collectively, to perform functions, solve problems and achieve objectives."

facility because sufficient consideration was not given to land use in the surrounding area. In addition, it is also possible to imagine facilities becoming unusable immediately after planning and completion because too much attention was paid to current problems, and not enough to future visions and framings.

In order to solve these problems moving forward, analyzing the interrelationships between each of these problems, and formulating regional development strategies that incorporate mid- to long-term directions and strategies based on regional characteristics will be essential.

The actual tasks required to achieve these things may include the formulation of social and economic development frames, land use planning, new infrastructure planning, and the formulation of regional development strategies. In particular, regarding regional development, including the planning process, the proactive participation of regional inhabitants will be more than ever required. However, measures for facilitating this are not yet adequately developed, and an important task moving forward will be to develop the procedures required for participation-based regional development planning.

Land use planning is an important element in formulating regional development plans, and in doing this, it is important to pay attention to natural land use and natural environment conservation. It will also be necessary to be aware of the details of the forthcoming JICA Thematic Guideline for "Natural Environment Conservation."

#### JICA's Activities

The assessment and analysis of current regional circumstances is conducted as one component of development planning. However, these things are not dealt with as individual projects.

Significant cooperation is conducted in relation to geographical data<sup>11</sup> such as topographic maps and GIS, some of the basic informational materials in plan formation. Further, various Integrated Regional Development Projects are formulated through Development Studies.

### Mid-term Objective 1-2 Promotion of Regional Economic

**Development** 

#### Sub-targets of Mid-term Objective

- Local Industry Promotion
- System Development for Investment Promotion
- Infrastructure
   Development Supporting
   Economic Activities

#### Mid-term Objective 1-2 Promotion of Regional Economic Development

In order to enrich the lives of people living in regional areas, economic revitalization and progress is crucial. The second Mid-term Objective is therefore "Promotion of Regional Economic Development."

In order to achieve regional economic vitalization, factors such as the vitalization of regional industries, and the innovations of new companies and entrepreneurs are essential. The diminishing vitality of regional areas has been indicated, and one factor contributing to this is the flow of the labor force to urban areas, resulting from, for example, reductions in local labor absorption capacity, and young people leaving their home towns. The issue is to prevent decline in the regional vitality, and the measures towards the issue may help in

<sup>&</sup>lt;sup>11</sup> Refer to JICA (2004c)

making regional areas more attractive, and in restoring pride in and attachment to the areas.

One of the concrete measures for that is the promotion of agriculture and fisheries in developing countries. The issue here is the creation of added value, and improved access to markets. Another issue is promotion of small- to midscale industries, involving small and medium enterprises and local industry. It is necessary to focus on advancement not only in domestic markets but also in overseas markets. Advancement into large-scale industries is also desirable. However, regional progress has a potentially large effect on the traditions and lifestyles of regional inhabitants, so it is essential that the form and speed of development be carefully examined.

In addition, the tourism industry has a wide-ranging influence, with economic impact in many industries such as transportation and accommodation, and the food and beverage industry. It also leads to increases in employment, tax revenue, and the inflow of foreign funds. Tourism promotion plans are present in many regional areas as part of regional economic vitalization strategies, and it is essential that we pay attention to these points as we move forward with regional development.

It is important to examine local industrial development not just from the perspective of regional development, but also with a view to how industrial promotion will be done. In order to achieve this, it is necessary to be aware of the details of the JICA Thematic Guideline for "Promotion of Small and Medium Enterprises."<sup>12</sup>

In addition, in order to further promote local industry, it will be necessary to devise strategies to assist the poor in these regional areas, so it is necessary to take into consideration the details of "Development Objective 2: Maintenance and Improvement of Income Level of the Poor" of the Thematic Guideline for "Poverty Reduction Issue."<sup>13</sup>

In order to revitalize regional economies, it is important that local industries be promoted by using inherent local resources such as people and the physical environment. However, depending on the region, the ability of these factors to revitalize local economies may be limited, and in some cases, external stimuli that act as catalysts to induce regional economic development may be required.

In many developing countries, stimulus packages and improvements of systems and laws to attract outside industries are being aggressively implemented with the aim of pushing regional economic development forward and achieving fresh vitality. The enticement of industry from outside does not

<sup>&</sup>lt;sup>12</sup> In the JICA Institute for International Cooperation (2002), the Development Objectives identified are "1. Development and Operation of a Conducive Business Environment to the Growth of SMEs," "2. Development of SMEs that Increase Industrial Competitiveness," and "3. Development of SMEs Contributing to Revitalizing Local Communities and Creating Employment."

<sup>&</sup>lt;sup>13</sup> In the JICA Institute for International Cooperation (2003a), under Development Objective 2 "Maintenance and Improvement of Income Levels of the Poor," the Mid-term Objectives identified are "2-1 Maintenance and Improvement of Income through Sustainable Agriculture and Fisheries," "2-2 Maintenance and Improvement of Income through Expansion of Non-agricultural / Fishery Employment Opportunities," and "2-3 Development of Industrial Infrastructure."

only create employment opportunities for those that work there, it also gives rise to new employment and economic effects in related local industries. Further, the entry of new industries advances the technological capabilities of regional industries, leads to human resource development, and therefore has pronounced effects on regional development and promotion.

Institutional development aimed at promoting investment should not be approached only from a regional development perspective, but the way in which systems for trade and investment will be developed is also essential, and the JICA Thematic Guideline for "Trade and Investment Promotion" are pertinent to this.

Infrastructure supports the economic growth of countries and regions, and through the redistribution of wealth, it improves and ensures a sustained increase in individual quality of life, and infrastructure also performs the role of inducing private sector investment. In particular, promoting the advancement of economic infrastructure such as roads, bridges, ports and harbors, railways, airports, power stations, electricity distribution infrastructure, gas pipelines, electronic communications infrastructure, and irrigation provides a foundation for economic growth, and contributes to the reduction of poverty. However, the inadequacy of infrastructure is evident in many developing countries, and an important task will be to continue with infrastructure improvements that adequately meet needs.

Although individual improvements in infrastructure are important for luring industry, the development of industrial zones to receive inflows of industrial activity will also be an effective measure.

Improvements in economic infrastructure should not be considered only from a regional development perspective, since it is also important to respond to the issues of each individual sector. Therefore, it will be necessary to heed the forthcoming JICA Thematic Guideline for "Industrial Infrastructure."

#### JICA's Activities

As part of the formulation of Integrated Area Development Projects, an important component for regional development will be the formulation of regional development plans that take into account important factors for economic development. Within this area, activities include proposing measures and systems for promoting local industry and investment, and the proposal of infrastructure projects for economic development, from a regional development perspective.

<sup>&</sup>lt;sup>14</sup> In the JICA Institute for International Cooperation (2003b), the Development Objectives identified are "1. Strengthening Responsive Capacity for Promoting Trade and Investment within the International Framework," "2. Capacity Building for Trade Promotion," and "3. Capacity Building for Foreign Direct Investment Promotion."

<sup>15</sup> Refer to JICA (2004b)

### Mid-term Objective 1-3 Improvement of Basic Human Needs

Sub-targets of Mid-term Objective

- Development of Essential Social Infrastructure
- Strengthening the Community Approach

#### Mid-term Objective 1-3 Improvement of Basic Human Needs

As part of the various projects and activities being conducted in developing countries, aiming to achieve regional economic revitalization by responding to current problems and issues is important. At the same time, it is important to raise the living standards of people living in these regional areas by improving basic living conditions, and this includes improving the living conditions of the poor. Therefore, "Improvement of Basic Human Needs" is given as the third Mid-term Objective.

An essential task is establishing an improved social infrastructure that is fundamental to everyday life such as water supply and sewage systems, schools, and medical facilities.

When establishing these types of social infrastructure it is important not to focus on individual facilities, but to approach planning the establishment of infrastructure from a regional perspective. Further, it is desirable to plan and develop the social facilities related to healthcare and education, with a view to establishing a regional network that can act as a base for public services.

Infrastructure gives rise to economic development, and through this, it is possible to improve standards of living. On the other hand, however, large-scale infrastructure projects in particular, depending on their characteristics, may expand the gap between the rich and poor classes. In order to ameliorate these effects and to achieve the redistribution of benefits through economic development, therefore, it is also necessary to take the poor class into consideration at the program level.<sup>16,17</sup>

Furthermore, there is also a concern that large-scale infrastructure projects in developing countries may involve the involuntary resettlement of residents. It is therefore important to ensure that activities remain within the "JICA Guidelines for Environmental and Social Considerations."

In order to continue improving social infrastructure, it is necessary to take the poor into consideration, and it is therefore also necessary to heed the details of "Development Objective 3 Fulfillment of Basic Human Needs of the Poor" of the JICA Thematic Guideline for "Poverty Reduction." <sup>18</sup>

In order to push regional development forward, the local residents, not just governmental institutions, must play a central role. By persuading local residents to think about how they might improve regional living conditions and how they can autonomously improve the residential environment, and also encouraging them to act, can lead to the resolution of the various regional issues. It is therefore important to support the various NGO activities, resident activities, and community activities taking place in many regional areas in developing countries.

<sup>&</sup>lt;sup>16</sup> "Program level" may refer to integrated approaches that go beyond country / regional levels and sectors.

<sup>&</sup>lt;sup>17</sup> Refer to JICA (2004d)

<sup>&</sup>lt;sup>18</sup> In the JICA Institute for International Cooperation (2003a), under Development Objective 3 "Fulfillment of Basic Human Needs of the Poor," the Mid-term Objectives identified are "3-1 Improvement of Educational Standards of the Poor," "3-2 Improvement of Health Conditions of the Poor," and "3-3 Improvement of Living Conditions of the Poor."

Many of various community activities are implemented in accordance with specific aims or to respond to each issue. From the perspective of regional development, however, linking these activities with each other and establishing regional partnership are important.

Regarding community development, it will be necessary to heed the forthcoming JICA Guideline for "Community Development."

#### JICA's Activities

In the area of basic human needs, JICA has contributed with the formulation of plans, and technical cooperation in individual technologies for the establishment and improvement of the facilities for water supply and sewage, health and medicine, and education services. However, these cooperation activities have not proceeded on the basis of regional development plans that recognize the interrelationships between the issues, and they have been limited to responses to individual sector objectives. In addition, there are many cases where governmental efforts in facility maintenance are inadequate, and we also conduct cooperation and make recommendations with the aim of establishing community-based maintenance systems.

# Mid-term Objective 1-4 Regional Promotion of Environmental Protection and Disaster-Prevention Measures

Sub-targets of Mid-term Objective

- Restoration and Protection of Natural Environment
- Prevention of Daily-Life-Induced and Industrial Pollution (i.e. Air and Water Pollution)
- Promotion of Disaster Prevention Measures

### Mid-term Objective 1-4 Regional Promotion of Environmental Protection and Disaster-Prevention Measures

The development of processes in harmony with the natural environment, the preservation and restoration of regional environments, and the strengthening of disaster prevention capacities are important in "Regional Development." "Regional Promotion of Environmental Protection and Disaster-Prevention Measures" is therefore given as the fourth Mid-term Objective.

As development progresses, problems arise, including deterioration of the natural environment and ecology, such as trees, greenery and waterside areas. In addition, the areas where development has not progressed also suffer from problems that contribute to the erosion of the natural environment, such as the excess logging of trees by the poor in remote regional areas. In order for regional progress to continue in a sustainable manner, it is essential that development undertaken proceed in harmony with the natural environment and ecology of the region and surrounding area. These natural environments are not just a habitat for living things, but also have a diverse range of functions, including as "open spaces (safe / disaster prevention areas)," in "expressing regional characteristics (scenery)," and in "environmental conservation," providing peacefulness in the lives of regional inhabitants. It is therefore imperative that the conservation and restoration of the natural environment proceeds in conjunction with regional development.

Conservation and restoration of the natural environment should not only be approached from a regional development perspective, but is also necessary to take action in response to individual sector issues. Therefore, it will be necessary to heed the forthcoming Guideline for "Natural Environment Conservation."

As regional development progresses, it is expected that the burden on the atmosphere will increase due to emissions from increased numbers of vehicles and new industrial zones in the region.

In addition, new industrial zones and rising regional populations lead to increases in factory and industrial wastewater, and domestic wastewater, and this gives rise to water pollution in oceans, bays, lakes, rivers and the like.

Promoting strategies for avoiding daily-life-induced and industrial environmental pollution in regional areas is important for sustainable regional development.

There are a number of places in developing countries relying on groundwater as the main source of water supply, and therefore groundwater management strategies will also be important in securing safe water.

There are limits to what can be achieved with waste management at the individual village and town level, and the establishment of regional waste management systems is also important.

These issues should not be approached from a regional development perspective only, but actions should also be taken in response to individual sector issues. It will therefore be necessary to heed the forthcoming JICA Guideline for "Air Pollution," "Water Pollution," and "Industrial Waste Management."

Regional development that allows a safe community to be managed is an extremely important issue.

In order to minimize damage caused by earthquake, wind, flood and fire, developing regional spaces to adequately cope with natural disasters is important. At the same time, other strategies that encourage the cooperation of regional inhabitants with government in institution building for example, are also important.

It is also important to conduct training, and to establish rescue and relief systems in anticipation of large-scale disasters in regions where natural disasters can be expected, or where they consistently occur with some frequency.

These issues should not be approached from a regional development perspective only, but actions should also be taken in response to individual sector issues. It will therefore be necessary to heed the forthcoming Thematic Guideline for "Disaster Management (Disaster Prevention)."

#### JICA's Activities

JICA has conducted cooperation relating to mining and environmental pollution in many countries, and has regarded the environmental management as one of the most important issues. Currently, particularly regarding regional development, we pay close attention to environmental and social concerns, conducting screening and scoping in accordance with the "JICA Guidelines for Environmental and Social Considerations" before formulating plans. There are cases where the conservation and restoration of the natural environment are dealt with as one of the components in formulating regional development plans. On the other hand, although there have been studies and plans that have as their main objectives dealing with daily-life-induced and industrial environmental

pollution, there are almost no regional development plans that deal with this as a component.

Mid-term Objective

1-5

Capacity

Development

Regarding Regional

Development

#### Sub-targets of Mid-term Objective

- Enhancement of Formulation and Implementation System of Regional Development Plans
- Decentralization
- Strengthening of Interregional Cooperation
- Human Resource Development

### Mid-term Objective 1-5 Capacity Development Regarding Regional Development

In order to implement all of the objectives mentioned above, strengthening the capacity of related institutions starting with government institutions involved in regional development, the establishment of systems for advancing regional development, and human resource development will also be necessary. "Capacity Development Regarding Regional Development" is therefore given as the fifth Mid-term Objective.

Central and local governments in the relevant countries are the institutions chiefly involved in the formulation of the main body of plans for regional development; however, systems for planning and implementing regional development are not well established in many developing countries. In particular, since the concept of regional development is not clearly defined, there are many cases where responsibility is not consistently allocated among relevant departments.

There are also cases where legal systems, and broader administrative institutions and systems are not well developed, and hence increasing governmental capacity by strengthening the system of planning and developing law and institutions is important.

In addition to planning capacity, the strengthening of capacity for the postplanning implementation of regional development plans is also important.

Possible tools (measures) for achieving this may include the creation of manuals for the regional development, gathering of statistical data, the establishment of regular updating systems, the establishment of GIS (Geographical Information Systems), and the topographic mapping.

These issues should not be approached from a regional development perspective only, but actions should also be taken in response to individual sector issues.

Although the decentralization of government has begun in many developing countries, the reality of vulnerable financial foundations, and the nonexistence of systems and frameworks for implementation mean that these tasks are not progressing sufficiently.

Although the importance of the decentralization of government is well understood in developed countries, environments and conditions in these countries are not adequate to enable its implementation. Therefore, it will be necessary to work towards the creation of environments that allow the autonomous formulation of regional development plans, while continuing support for systems and the financial side, and keeping in mind the issues of strengthening cooperation between central and regional government as well as human resource development.

These issues should not be approached from a regional development perspective only, but actions should also be taken in response to individual sector issues. It will therefore be necessary to heed the forthcoming JICA Thematic Guideline for "Government Decentralization."

In order to further propel regional development, it will be necessary to consider the allocation of roles, competition, and cooperation not only within the region, but also between related regional areas. Assume, for example, that two adjacent regional areas with similar development directions both target the same industry and succeed in attracting the development of a large-scale industrial complex. The regions would be competing with one another, and from a wider regional perspective, the effectiveness of such regional development may be extremely low, or it may even have negative effects. It is important for each individual reaching to fully utilize its individual characteristics and potential in advancing development; however, it is also essential that more effective and efficient regional development be pursued through interregional cooperation and the allocation of certain roles. Regarding this, it is naturally necessary to consider regional development on the basis of the direction of higher-level plans, such as national economic development plans.

Various sectors also exist within regions, and it is necessary to pursue regional development with a cross-cutting and integrated view of these sectors. In order to achieve this, it will be necessary to build and strengthen cross-sectoral institutions such as local government alliances, and to strengthen cross-sectoral interaction.

In order to improve the capacity of regional development systems, it is important to strengthen the capacity of the human resources involved. In the past, the human resources in government-related institutions were seen as important. However, these are not the only people involved in regional development; the residents and the companies in the region are also involved, and it is important to develop human resources in each of these areas to enable all three parties to tackle regional development together.

Broadly, there are two aspects to human resource development, the first being the strengthening of quantity. In many regional government bodies, a poor financial situation means that human resources involved in regional development are limited, and it is important to strengthen volume through the expansion of governmental human resources, and the participation of regional residents and businesses in regional development.

Another aspect is the strengthening of the quality of human resources. In recent years, the contents of regional development are becoming more sophisticated, involving diversified needs and various factors, and it will be necessary to improve the technology used by, and strengthen the skills of the people involved in, handling these issues.

#### JICA's Activities

JICA's approach involves dispatching policy advisors to central and regional governmental bodies, engaging in the improvement of administrative capacity and human resource development. JICA also conducts training on the planning methods for regional development, and the advancement of self-government.

#### Development Objective 1 Regional Development

Mid-term Objective 1-1 Plann	Mid-term Objective 1-1 Planning of Regional Development Policies (Regional Development Policies)			
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities	
Planning Studies	Analysis of the present condition of the region Topographic mapping GIS data creation	60, 63, 72, 76	- Examples of technical cooperation relating to topographic mapping and GIS data creation are given below A Study on the Establishment of GIS Map Data for Cambodia (Cambodia), The Establishment of GIS Base Map Data for Mekong River Basin in Lao People's Democratic Republic (Laos), The Study on Urgent Establishment of Topographic Mapping in the East Timor (East Timor), The Establishment of Comprehensive Geographic Database System for the National Rehabilitation and Development in Republic of Angola (Angola), etc.	
Formulation of Regional Development Strategies	Formulation of population/development frameworks Formulation of social economic framework Formulation of land use planning Formulation of infrastructure development plan Promotion of participatory regional development plan Formulation of regional development strategies (vision of strategies)	10, 14, 16, 32, 37	- Falls under development study categories for Integrated Regional Development M/Ps (masterplans) Examples of Integrated Regional Development M/Ps are given below The Development Study on Comprehensive Regional Development Plan for the Western Part of Kalimantan (Indonesia), The Study on the Cebu Integrated Area Development Master Plan (Philippines), The Sub-regional Development Study of the Upper-southern Part of Thailand (Thailand), Kilimanjaro Region Integrated Development Plan (Tanzania), The Study on Regional Development of Konin Province in the Republic of Poland (Poland)	

Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Local Industry Promotion	Development and promotion of indigenous industry Vitalization of local and service industry Revitalization and promotion of agriculture, forestry and fishing, and industry  * Please refer to the JICA's guideline for Promotion of Small and Medium Enterprises.  * Please refer to Development Objective 2: Maintenance and Improvement of Income Level of the Poor of Development Objectives Chart for Poverty Reduction. (Approaches for Systematic Planning of Development Projects for Poverty Reduction, JICA)		- Economic development is an important component of regional development within Integrated Regional Development M/Ps, the essential elements of which are the promotion of regional industry the improvement of systems for promoting investment, and the improvement of infrastructure to support economic activity.
System Development for Investment Promotion	Attraction of industries from the outside Law and system development for the attraction from the outside Promotion of the tourism-related industries * Please refer to the JICA's guideline for Trade and Investment Promotion.	4, 20, 27, 29, 35	- The following are examples of Integrated Regional Development M/Ps where these elements are major themes Study for Promotion of Investments and Exports for the Balanced Economic Development in Republic of Chile (Chile) Study on Economic Development Focusing on the Eastern Region, of the Republic of El Salvador (El Salvador) The study on the Regional Development plan for the lower northeast and the upper east regions in the Kingdom of Thailand (Thailand), Integrated Regional Development Study of Northern Jordar (Jordan), Study on the Regional Development Plan for the Eastern Black Sea Region in the Republic of Turkey (DOKAP) (Turkey), The Study for the Land Use Plan in the Coastal Zones of the Tourist Planning Units in the Republic of Costa Rica)

Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Infrastructure Development Supporting Economic Activities	Industrial complex development Promotion of economic infrastructure (i.e. roads, bridges, ports, railroads, airports, power plants, equipment of electrical transmission and distribution, gas pipelines, telecommunications equipment and irrigation facilities) development  * It will be essential to link this with the forthcoming JICA's guideline for Industrial Infrastructure.		

Mid-term Objective 1-3 Improvement of Basic Human Needs (Social Development)			
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Development of Essential Social Infrastructure	Development of social infrastructure (water supply and sewerage system, schools and medical facilities) Networking among the hubs of public social services locally provided (i.e. healthcare and education Field) * Please refer to Development Objective 3: Fulfillment of Basic Human Needs of the Poor of Development Objectives Chart for Poverty Reduction. (Approaches for Systematic Planning of Development Projects for Poverty Reduction, JICA)	72, 41	- The Study on Urgent Establishment of Topographic Mapping in the East Timor (East Timor), The Reconstruction Support for the Gujarat-Earthquake Disaster in Devastated Area in India (India)
Strengthening the Community Approach	Supporting and strengthening the community activities Networking among the local community activities * It will be essential to link this with the forthcoming JICA's guideline for Community Development.	Tech. 1	- Study on Economic Development, Focusing on the Eastern Region, of the Republic of El Salvador (El Salvador), NGO partnerships - Project on Strengthening Sulawesi Rural Community Development to Support Poverty Alleviation Programmes (Indonesia)

Mid-term Objective 1-4 Regional Promotion of Environmental Protection and Disaster-Prevention Measures (Environmental Protection and Disaster Prevention)				
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities	
Restoration and Protection of Natural Environment	Restoration and protection of forest resources Restoration and protection of stream environment Protection of ecology and biological environment Environmental restoration and protection of coastal area Conservation of cultural and historic resources * It will be essential to link this with the forthcoming JICA's guideline for Conservation of the Natural Environment.	31, 36	- The following are examples of Integrated Regional Development M/Ps where conservation and restoration of the natural environment in particular is taken up as an essential component The Study on the Integrated Development Master Plan of the Angonia Region (Mozambique), Development Study for Promotion of Local Economy in the Republic of Palau (Palau)	
Prevention of Daily-Life- Induced and Industrial Pollution (i.e. Air and Water Pollution)	Promotion of preventive measures for daily-life-induced and industrial pollution Promotion of waste control system by regional unit * Please refer to the JICA's guideline for Air Pollution, Water Pollution, and forthcoming Industrial Waste Management			
Promotion of Disaster Prevention Measures	Promotion of establishment of community preparing for natural disaster  * It will be essential to link this with the forthcoming JICA's guideline for Disaster Management (Disaster Prevention).	41	-The Reconstruction Support for the Gujarat-Earthquake Disaster in Devastated Area in India (India)	

, ,	city Development Regarding Regional Development		
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Enhancement of Formulation and Implementation System of Regional Development Plans	Development of law related to development planning Improvement of administrative Capability of Local Governments Preparation of regional development manual Development of statistics and establishment of the periodical updating system Development of GIS (Geographical Information System) and mapping Promotion of residents involvement in regional development planning  * It will be essential to link this with the forthcoming JICA's guideline for Democratization and Governance.	Tech. 2, Tech. 6	- Individual experts " policy advisors, " urban and regional development advisors " - Regional Development Policies for Local Government (Indonesia), The Cebu Socio-Economic Empowerment and Development Project (Philippines)
Decentralization	Formulation of law and system of decentralization Development of financing system of regional development  * It will be essential to link this with the forthcoming JICA's guideline for Government Decentralization.		- Individual experts " policy advisors "
Strengthening of Interregional Cooperation	Building and strengthening of cross-sectoral organizations (i.e. local government alliance) Enhancement of implementation capability of the organizations		
Human Resource Development	Increase of the number of staff members concerning regional development Improvement of the quality of staff members concerning regional development	Tech. 3, Tech. 5	- Counterpart training, country specific training - "African Institute for Capacity Development: AICAD" (Kenya), "Sokoine University of Agriculture Centre for Sustainable Rural Development: SCSRD" (Tanzania)

- : JICA has certain experiences of "Examples of Means for Achieving Sub-targets of Mid-term Objectives" as one of the objectives or activities of the projects.
- : JICA has experiences of "Examples of Means for Achieving Sub-targets of Mid-term Objectives" as components of the development studies and development plans.

Unmarked: JICA has little experience or only has experiences of the dispatch of short-term experts or project formulation advisors.

<u>Development</u> <u>Objective 2</u> Urban Development

#### **Development Objective 2 Urban Development**

Although the objective of urban development is smaller in scale in terms of land area compared to regional development, it is essential to remember that the factors that must be considered in order to achieve the objectives are wideranging and various (cross-sectoral), are interrelated in a complex way, and always changing (dynamic). Therefore, it is important to be sufficiently aware of the fact that there are many cases in which objectives must be achieved by addressing approaches in related sectors and fields, and not just the issuespecific approaches of urban development.

Regional promotion and the correction of regional disparities are essential in regional development; however, regarding urban development, it is essential to keep in mind the fact that the various developmental elements within cities must be appropriately controlled.

Therefore, the major issue in urban development is "the appropriate management of concentrating and expanding urban areas (city areas), and the maintenance, restoration, and creation of better living environments," and this can be broadly broken into the following components.

- > The formulation of urban development policies and development projects (for better living environments)
- > The implementation of urban development policies and projects

"The implementation of urban development policies and projects" can further be broken into the following five structural components of, and tasks for, implementing urban development.

- > "Formulation of Land Use Planning" that aim towards healthy urban spaces
- > "Development of Urban Infrastructure" for urban progress and raising living standards
- > "Improvement of Living Environment" for healthy living spaces
- > "Urban Environment Conservation and Enhancement of Urban Disaster Prevention Capability" for urban safety and sustainable development
- > "Capacity Enhancement" for sustained urban management

Based on the above, the following "components," numbered from to are designated as "Mid-term Objectives."

Planning of Urban Development Policies

Formulation of Land Use Planning

Development of Comprehensive Urban Infrastructure

Improvement of Living Environment

Urban Environment Conservation and Enhancement of Urban Disaster Prevention Capability

Enhancement of Urban Management Capability

Mid-term Objective
2-1
Planning of Urban
Development
Policies

Sub-targets of Mid-term Objective

- Planning Studies
- Formulation of Comprehensive and Long-term Urban Development Policies
- Measures for Various Urban Issues
- Strengthening of Urban Alliances

#### Mid-term Objective 2-1 Planning of Urban Development Policies

In solving urban problems that require cross-sectoral approaches in urban development, it is essential that a consensus be built between all of the various stakeholders including government (central and local), the private sector, residents, and NGOs. "Planning of Urban Development Policies" is important because it communicates the basic consensus between the various stakeholders. Furthermore, it is imperative that urban development and progress is sustainable, and it is important to formulate policies that act as progress milestones.

The first essential step in formulating the various types of frames and projects is to have basic information, such as statistical data, available. Although in terms of scale, urban development covers a smaller and more limited area compared to regional development projects, information related to urban areas changes rapidly, and in various ways, and therefore an important and essential issue in tackling urban development is the furnishing of data from which such dynamic information can be easily obtained in a timely fashion. In order to facilitate this, activities for "Planning Studies" are implemented such as comprehensive assessments of the current state of urban areas, the creation of topographic maps and GIS data.

Mid- to long-term policy formulation is not conducted in a large number of

developing countries, and this gives rise to many situations where remedies to problems take over, and plans that take the future into account cannot be developed. It is important not to respond in a shortsighted manner to the various problems that may arise in cities, but to formulate "urban development plans" that take the probable future direction of the relevant city into account. Development cannot proceed without plans, and it is essential to recognize that formulating long-term plans is fundamentally important.

Furthermore, there are various causal factors involved in urban problems, and it is essential that the basic stance towards solving these problems involve integrated approaches. An integrated approach to problem-solving is defined as one in which the necessary strategies and their interrelationships, and the conditions required for the implementation of these strategies, in respect of finances, organizations, technology, human resources, and systems are arranged in an integrated fashion, and one in which the problem resolution strategies and their implementation stages (staged plans), and the desired direction of and prerequisites for implementation are clear.

It is also necessary to continue examining the various elements from all different possible perspectives, in order to "respond to the various urban issues." "The various urban issues" refers to the fact that characteristics unique to each individual city exist as part of the issues inherent in, or faced by, these cities. Moreover, it is essential that these individual characteristics be sufficiently understood before issues of urban development are tackled.

Where populations undergo further concentration, cities tend to expand, moving beyond being a single cohesive territory (for example, a city as an administrative unit), and it is difficult only for a single administration to examine or solve urban problems. Where this happens, it is important to consider cooperative links between the central city and adjacent cities. The formation of cross-sectional organizations such as urban government alliances, and the strengthening of their ties is one possible strategy here, and it is clear that "strengthening of urban alliances" is also essential for policy formation.

#### JICA's Activities

JICA conducts an assessment and analysis of the current state of cities as part of the proposal stage of urban development; however, basic urban planning studies like those seen in Japan are not undertaken as independent, individual projects.

JICA conducts cooperative activities in the creation of topographic maps and GIS data that would be the basic information required for project proposals.

Because of diversification of urban development issues including the environment, disaster prevention, welfare and tourism, the formation of urban development plans that respond to these needs is continuing.

### Mid-term Objective 2-2 Formulation of Land Use Planning

Sub-targets of Mid-term Objective

- Land Use Regulations
- Solution of Urban Area

#### Mid-term Objective 2-2 Formulation of Land Use Planning

When it is considered that various, diverse factors are "concentrated" in cities, the necessity of management towards the appropriate positioning of these individual elements becomes apparent. In order to create favorable city spaces, land use regulations are one of the most basic and highly essential factors in urban planning. The urban problems of developing countries are many, including disorderly sprawl, and the problem of slums, and these arise because land use regulations/guidance measures are not implemented, and/or there is no structure in place for appropriately guiding people that flow in from rural areas, or it is ineffective. Achieving appropriate land use must involve implementing appropriate guidance measures in conjunction with land use regulations.

The following points must be considered when developing countries seek to implement land use regulations/guidance.

- > Formulating land use plans should be a participatory process.
- > The land expropriation process should be transparent, and just and equitable.
- > Zoning standards, and the standards for building regulations, should be clear and credible.

Further, encouraging the development of commercial centers and urban centers, and creating safer, more secure, better city environments through the redevelopment of older city areas, for example, are important tasks in "preventing and resolving urban area issues<sup>19</sup>," and this is given as a sub-objective for creating better city spaces. The creation of healthy city spaces also enables responses to urban economic problems, and measures that address urban economy may also initiate a cycle that produces competitive urban spaces.

#### JICA's Activities

Land use planning is incorporated as one item in urban planning/development M/Ps, and land use policies and guidance measures are proposed as part of the formulation of the M/Ps.

In addition, individual experts act as "urban planning/development advisors" as part of cooperation in designing systems of land use regulations and zoning regulations.

Urban area issues: A collective term for the phenomenon of social and economic dilapidation in the central areas of cities (old city areas, central city areas). The advancement of motorization in cities and suburbanization of commerce and trade can cause residential environments to change, and the various problems that may arise from this include decreased nighttime populations, the occurrence of city slums due to the inflow of the lower-income class, reduction of purchasing power and household savings, the deterioration of residential and urban facilities, stagnation of commercial activity, and sharp increases in crime rates. Strategies for dealing with these problems include the revival of commerce and trade districts in central city areas, the promotion of urban redevelopment projects, etc. that encourage effective and intensive land use, the revival of low-income communities in decayed central city areas, and the establishment of government redevelopment assistance (systems) for achieving these things. Further, solving urban area issues makes it possible to attract people into the central city area, and this is connected with the suppression of urban sprawl.

# Mid-term Objective 2-3 Development of Comprehensive Urban Infrastructure

#### Sub-targets of Mid-term Objective

- Improvement of Transportation Facilities
- Improvement of Facilities of Water and Sewerage, Public Sanitation
- Improvement of Energy Facilities
- Improvement of Information and Telecommunications Facilities
- Improvement of the Other Infrastructure Essential to the Urban Area

### Mid-term Objective 2-3 Development of Comprehensive Urban Infrastructure

Establishing an improving infrastructure is absolutely essential as a foundation for allowing city residents to lead safe and convenient lifestyles, and for facilitating economic activity.

Many developing countries struggle with the problem of infrastructure inadequate to meet demands due to the rapid inflow of people to urban areas and the concentration of economic activity (this is known as the "advancement of urbanization").

Depending on the city's level of progress, and differences in industrial structure, the effects of infrastructure improvements do vary, and thus infrastructure improvements that are effective in solving each individual city's problems are required.

Furthermore, urban infrastructure will form part of urban spaces over a long period, and it is therefore important to progress with facility improvements that fit in with the city's mid- to long-term development strategy. Transport infrastructure in particular, starting with roads, forms the anatomy of the city, and it is therefore necessary to give sufficient consideration to land use plans and plans for the distribution of various facilities, and also to the direction of future urban progress.

Representative examples of urban infrastructure may include transport and traffic infrastructure, water supply and sewage, energy generation and supply systems, and the information and communications infrastructure. Handling urban infrastructure improvements from an "urban development" perspective only is inadequate, and approaches based on the JICA Guidelines for other sectors are necessary.

The desired effects of urban infrastructure are not produced by establishing facilities only, and it is necessary to give due consideration, starting from the planning stage, to the post-establishment operation and maintenance of these facilities. Because there are many cases in developing countries where knowhow and human resources are inadequate in dealing with infrastructure operation and maintenance, it is necessary to transfer the technology necessary for these tasks in conjunction with the establishment of facilities.

Further, in many cases, inadequate funds available for infrastructure are a stumbling block, and in order to achieve the optimal effect within a minimum budget, it is necessary to establish an appropriate priority hierarchy for tasks in accordance with development strategies, based on development policies. Private sector participation can also exert some influence on funding and know-how.

#### JICA's Activities

There are several infrastructure improvement projects proposed as part of urban development/project M/Ps, which should be prioritized.<sup>20</sup> In addition, there is great technical cooperation conducted in individual sectors, including urban traffic plans, water supply and sewage plans, and waste management plans.

## Mid-term Objective 2-4 Improvement of Living Environment

Sub-targets of Mid-term Objective

- Improvement of Living Environment of Existing Urban Area
- Improvement of Housing Environment of Poverty Area

#### Mid-term Objective 2-4 Improvement of Living Environment

Living environments are one of the Basic Human Needs (BHN). Since population inflow and concentration is particularly pronounced in city areas, an extremely important development objective is the upgrading of the extremely poor living environments found in low-income areas (slums) as a strategy for dealing with poverty<sup>21</sup>, by providing the necessary infrastructure and dwellings, for example. Further, community-based improvements in living environments largely contribute to the maintenance of social order, through the prevention of crime, for example.

When a built-up area that has already been formed is in an environment or conditions that do not meet standards, significant effort is needed to make improvements to that area. In particular, improvements to a dense residential area, or an area with many nonconforming houses, are addressed by first developing an area plan for that area and then recreating its city blocks through land readjustment or modifying the buildings themselves in the area to make them comply with the required standards, such as the Building Standard Law.

In taking these measures, comprehensive approaches by the government such as improving living standards, implementing appropriate economic policies, and reforming housing policies are important as well as mutual understanding of the residents and persons involved. In addition, if there are historic buildings, it is important to make consideration of them.

Approaches to the issue of housing supply can be divided into approaches that focus on the supply side of the issue and approaches that focus on the demand side of the issue (house buyers)<sup>22</sup>. The major policies concerning the supply side include direct supply of housing by a public agency and requiring private sector housing developers to provide low-cost housing. Demand-side

<sup>&</sup>lt;sup>20</sup> Concrete examples for the various issue-specific approaches are given regarding urban infrastructure improvement activities on a sector-by-sector basis. Please refer to these.

<sup>&</sup>lt;sup>21</sup> Refer to "Mid-term Objective 3-3 Improvement of Living Conditions of the Poor" in the JICA Institute for International Cooperation (2003a).

The major policies concerning the supply side include the direct supply of housing by a public agency and the requirement of private sector housing developers to provide low-cost housing. Demand-side policies involve providing assistance to house buyers (in the form of home financing or tax cuts for acquiring a house). Public and private measures concerning rental housing have not yet resulted in any decisive breakthrough. A major challenge in this regard will be expanding the private sector rental housing market by implementing such measures as developing a related financial assistance scheme.

The implementation of tax cuts for acquiring a house assumes that the property registration and taxation systems are somewhat mature, and in recent years, the implementation and spread of home financing, a basic issue resolution strategy in developing countries, has proceeded in a positive manner.

policies involve providing assistance to house buyers (in the form of home financing or tax cuts for acquiring a house). Public and private measures concerning rental housing have not yet resulted in any decisive breakthrough. A major challenge in this regard will be expanding the private sector rental housing market by implementing such measures as developing a related financial assistance scheme.

Improving the poor residential environment of slums is a high-priority issue that has been raised in the UN Millennium Development Goals. It has been demonstrated in several countries that an effective approach to improving slums is to address this issue from the perspective of urban poverty measures and community development, within a framework that is not limited to housing improvements but that also, giving due consideration to past experience, permits the residents themselves to have ownership of the improvements.

#### JICA's Activities

Regarding housing supply, in order to facilitate the construction of collective residences and low-cost housing, JICA is undertaking cooperation in the form of development studies and technical cooperation projects for plan formation, design standardization, and technical development. In addition, there are several cooperation activities involved in the planning stages, such as housing redevelopment projects, and land readjustment projects.

Slum upgrading activities that involve diverse schemes are beginning to be undertaken. Pilot projects are incorporated into development studies, and we are employing participatory approaches in cooperation with NGOs; in the "Development Project for Upgrading Sri Lanka's Slum Districts," we are drawing out residential needs and establishing networks between relevant parties, and connecting this to facility improvements financed by "yen loans." There is now good selection of projects available for implementation, such as grass-roots technical cooperation projects and activities involving collaboration with domestic and local NGOs, and it will be possible to further advance cooperation in this area.

Mid-term Objective
2-5
Urban Environment
Conservation and
Enhancement of
Urban Disaster
Prevention
Capability

### Mid-term Objective 2-5 Urban Environment Conservation and Enhancement of Urban Disaster Prevention Capability

In order to secure the sustainability of cities, and achieve improvement in the quality of city environments, we are advocating the idea of improving environments through a reduction of environmental burdens, and this can be achieved, for example, through "cities that coexist with nature (ecocities)<sup>23</sup>." It is also important to maintain the objectives of environmental impact countermeasures and disaster resistance strengthening, with the basic aim of

<sup>&</sup>lt;sup>23</sup> Cities that coexist with nature (ecocities)" refers to cities that have achieved a high-quality city environment by reducing the environmental burden, achieving the coexistence of people with nature, and creating amenity (comfort and space/elbow-room) (source: The Ministry of Land Infrastructure and Transport's "Creating Cities That Coexist with Nature" web site).

Sub-targets of Mid-term Objective

- Reduction of
- Environmental Burden
- Development of Urban Amenity (i.e. Green Space and Waterfront)
- Enhancement of Urban Disaster Prevention Capability

preserving the health and safety of city residents.

Because sources of environmental burdens are concentrated in cities, it is necessary to control these sources and implement land use regulations, including controlling the distance between these sources and residential areas. It is also necessary to control the flow of waste materials and similar items that are generated. Burdens on the environment<sup>24</sup> that are created by urban areas also present a pressing issue<sup>25</sup>, because they threaten the health and lives of the residents.

Urbanization sometimes results in a loss of the natural environment and a deterioration of the residential environment. The establishment and promotion of urban amenities not only ensures favorable public spaces but also has the secondary effect of mitigating pollution and ensuring the availability of evacuation sites in the event of disasters. It is also necessary to preserve historic and cultural resources and to make full use of them in urban development.

When the population is heavily concentrated in one area, a disaster may not only be immensely harmful and have an immeasurable effect on the population but may also require a wide variety of sacrifices. Accordingly, it has become increasingly necessary to implement disaster preparedness and response strategies, starting with fireproofing buildings, promoting the reinforcement of disaster-resistant structures for urban facilities and establishing urban disaster prevention and preparedness facilities. In addition to these traditional approaches of preventing disasters themselves, disaster preparedness and response strategies should also incorporate processes that focus on disaster risk awareness and the ability to assess and manage these risks, and the need for these strategies is also growing.

In investigating appropriate disaster preparedness and response strategies, it is essential to evaluate the level of the threat that a disaster poses to a city, and to quantify the risk of a disaster. These are important steps to complete before formulating "disaster preparedness and response strategies" that are properly positioned within urban plans. One possible example related to creating urban areas that are resistant to disaster is the incorporation of community-based strategies, such as the strengthening of systems involved in disaster preparedness and the education of organizations involved in developing urban areas, into environmental improvement undertakings.

#### JICA's Activities

There are relatively few examples of environmental conservation strategies being incorporated into urban development/planning M/Ps. However, there are several technical cooperation projects in operation that are related to the environment.

<sup>&</sup>lt;sup>24</sup> Urban environmental problems include "urban hydrology-related issues," "industrial environmental pollution," "urban sanitation problems," and "the environmental impact of traffic." Refer to JICA (1995).

<sup>&</sup>lt;sup>25</sup> Refer to the relevant JICA Thematic Guidelines with regard to pollution control.

# Mid-term Objective 2-6 Enhancement of Urban Management Capability

Sub-targets of Mid-term Objective

- Establishment and Improvement of Urban Development Planning and the Implementation System
- Update and Dissemination of Basic Data
- Development of Human Resources and Technical Capabilities to Manage Urban Development Issues

#### Mid-term Objective 2-6 Enhancement of Urban Management Capability

In order to make development strategies that were formulated as urban development milestones operational, it is important to appropriately conduct these strategies in correspondence with the changes that occur in urban areas.

There are people from many levels and sectors involved in urban planning and urban development. However, the capacities of these individuals and organizations, and the frameworks for cooperation between them, are not adequate. Furthermore, the establishment of democratic governance has fallen behind, and it is undeniable that there are still cases of corruption, and decision making not being conducted in a fair and equitable manner in many countries. Therefore, it is important that the skills and ownership of the people involved in urban planning and urban development, including residents, are increased, and that systems and frameworks that go beyond the organizational level are created, and that they act as an integrated whole.

Vertical and horizontal relationships exist in almost all countries as a background to planning and implementation.

Vertical relationships refer to those among "central government - local government - the urban society<sup>26</sup> and the private sector," and horizontal relationships refer to those among "adjacent cities," "cities and adjacent districts," "government ministries / departments (for each jurisdictional area / public works project)," and "budgeting - planning - implementation (- public relations)." Frequently, some of the adverse effects of urban planning and urban development (project duplication, inadequate information sharing, etc.) have their origins in these interrelationships, and it is therefore essential to clarify the roles and duties<sup>27</sup> of each entity so that a system can be established that allows each entity to function in an integrated manner<sup>28</sup>, while at the same time strengthening their capacity for implementation. In addition, it is also essential that the actual details of support aimed at establishing and modifying implementation systems take the level of urbanization present in developing countries into account.

Measures for dealing with urban problems differ depending on the issues involved. For countries and cities in the very early stages of progress, these

<sup>&</sup>lt;sup>26</sup> For this mid-term objective, "the urban society" is a general term for NGOs, communities, and CBOs.

<sup>&</sup>lt;sup>27</sup> For example, local governments implement urban plans, and provide and manage public services, whereas central governments monitor/encourage/support these activities of local governments, and these activities include developing measures to deal with problems that go beyond the jurisdictional area of a single city, such as the operation of infrastructure facilities and the provision of services. Central governments also conduct activities such as formulating the legal system and policies, large-scale infrastructure construction, and the allocation of budgets. In the private sector, large corporations are the main proponents of development projects, and small and medium-size companies are responsible for creating employment. The urban society is the main proponent in tackling community-level issues such as residential environments and disaster preparedness, cooperating to ensure that plans are formulated and implemented in a democratic and fair manner. Further, in districts where there are a large number of relocated residents, the urban society plays an important role in organizing these residents.

<sup>28 &</sup>quot;System" here refers to the continuous flow of activities, and procedures/systems/regulations relating to management, for realizing urban planning and urban development. These include the formulation of policies and plans, the arrangement of financing, the consensus process, implementation, operation and maintenance, monitoring and evaluation, and improvements and modifications.

measures may be the development of administrative capabilities, basic legal system and the establishment of partnerships between government and local communities that allow the sustained operation and maintenance. Possible activities for the cities that can accomplish some level of economic growth are, for example, outsourcing utilizing the private sector and NGOs, expansion of the funding sources, and environmental improvements with the aim of attracting service industries.

Due to the existence of red tape and the non-transparency of government in many developing countries, mechanisms for conveying/sharing information, materials, data gained from studies and observations among urban development related organizations are not well established. In addition, there are very few cases where such information is properly organized and regularly updated within individual organizations. Therefore, it is essential to establish systems for the mutual conveyance and sharing of information within and between these organizations, and for regular updating as required.

When participatory and democratic processes are incorporated in urban planning and urban development, it is also essential that basic information regarding cities, such as master plans and urban planning proposals, are configured and expressed so as to be easily understandable, and made public to residents and the private sector.

"Developing leaders" of urban society that will be the proponents of sustainable urban development, such as government officials, and specialists and educators, is a most fundamental issue, and a high level of support is required for this in all stages of progress.

In relation to issues specific to cities, an ideal situation is to have the individuals actually responsible for performing the work acquire knowledge and specialized skills through training programs (including distance learning such as e-learning), so that they can disseminate the acquired knowledge and skills to others, eventually contributing to the establishment and improvement of planning and implementation systems for urban development.

In addition, an effective undertaking from a long-term perspective is the establishment of secondary education and technical certification systems in urban fields, the development of educators and advisors, and support for the establishment of the network formed by these specialist human resources. The establishment of educational institutions and training institutions in conjunction with this also largely contributes to future human resource development.

#### JICA's Activities

Regarding human resource development, JICA raises the level of policy advisors and improves administrative capacity through the dispatch of specialists to central and local government bodies. Training in relation to planning methods, etc. related to urban development is also conducted.

#### Development Objective 2 Urban Development

Mid-term Objective 2-1 Plann	ning of Urban Development Policies		
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Planning Studies	Analysis of the present condition of the urban area Topographic mapping GIS data creation	65, 66	- Examples of technical cooperation relating to the topographic mapping and GIS data creation are given below Establishment of Graphic Information Base of National Capital Region, Republic of the Philippines (Philippines), Topographic Mapping of Bangkok Metropolitan Area, Kingdom of Thailand (Thailand)
Formulation of Comprehensive and Long- term Urban Development Policies	Formulation of population/development frameworks Formulation of urban development visions and development strategies Formulation of urban development plan	42, 47, 51	- Falls under components of development studies, such as urban planning/development M/Ps Examples of urban planning/development M/Ps are as follows Urban Development Planning Study on Gerbangkertosusila Region (Surabaya metropolitan area) (Indonesia), Master Plan Study of the Infanta-Real Area Urban Development Project (Philippines), Development Planning Study for Waigaogiao Zone in Shanghai Pudong New Area (China).
Measures for Various Urban Issues	Environmental planning Disaster prevention planning Welfare planning Tourism planning Planning for enhancement of employment opportunity		-With regards to Integrated Area Development Project Studies, the promotion of tourism and expansion of employment opportunities are formulated in a secondary manner.
Strengthening of Urban Alliances	Building and strengthening of cross-sectoral organizations (i.e. local government alliance of urban area)  Promotion of cooperation among the urban areas for effective urban management		- Falls under components of development studies, such as urban planning/ development M/Ps.

Mid-term Objective 2-2 Formulation of Land Use Planning			
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Land Use Regulations	Formulation of land use planning Introduction of zoning Creation of development permission system Support for introducing landowning and land registration system Formulation of land use regulations (i.e. review of zoning, easing of regulations regarding building types, land use planning by respective local governments, tax allowance and subsidies)	45, 48	- Individual experts "urban planning advisors" (cooperation with regards to land use regulations and zoning regulations)  - There are actual examples of these being proposed as items in urban planning/development M/Ps.  - Study on and Provision for Housing and Settlements Development through KASIBA and Land Readjustment in Jakarta Metropolitan Area (Indonesia), City Planning Manual, The Study on Applied Technology for Making City Plan (Thailand)
Solution of Urban Area Issues	Promotion of development of business and urban centers in urban areas Redevelopment of built-up area	43, 44, 50, 56	- Study on Urban Renewal Housing Project in Jakarta (Indonesia), Master Plan and Feasibility Study on Kemayoran Urban Housing Development Project in the Republic of Indonesia (Indonesia), The Study for Urban Redevelopment Plan and Case Study in the Bangkok Metropolitan Area in the Kingdom of Thailand (Thailand), The Feasibility Study on the Urban Development of the Central District of Barranquilla. The Republic of Colombia. (Colombia)

Mid-term Objective 2-3 Deve	lopment of Comprehensive Urban Infrastructure		
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Improvement of Transportation Facilities	Promotion of planning and development of transportation facilities  * Please refer to the JICA's guideline for Transportation	42	Infrastructure improvement is incorporated as a component of urban development/planning M/Ps.     Urban Development Planning Study on Gerbangkertosusila Region (Surabaya metropolitan area) (Indonesia), Study on Urban Renewal Housing Project in Jakarta (Indonesia), The Study on Infrastructure Information Management System of the Dakar Metropolitan Area in the Republic of Senegal (Senegal)
Improvement of Facilities of Water and Sewerage, Public Sanitation	Promotion of planning and development of facilities regarding water and sewerage, and sanitation * Please refer to the JICA's guideline for Water Resources	43	
Improvement of Energy Facilities	Promotion of planning and development of facilities related to the energy  * It will be essential to link this with the forthcoming JICA's guideline for Energy Supply.		
Improvement of Information and Telecommunications Facilities	Improvement of infrastructure of information and telecommunications  * Please refer to the JICA's guideline for Information and Communications Technology.	53	
Improvement of the Other Infrastructure Essential to the Urban Area	Promotion of planning and development of the other infrastructure Introduction of measures for achievement of urban facilities development by zoning (i.e. land readjustment projects)		

Mid-term Objective 2-4 Improvement of Living Environment			
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities
Improvement of Living Environment of Existing Urban Area	Implementation of study to improve living environment of the congested residential area and planning based on the study (removal of deteriorated houses, development of infrastructure i.e. roads and parks, improved housing construction for the residents)  Land use planning, land readjustment, district planning and building agreement conclusion  Development and improvement of land law system Study and technical assistance regarding development of architectural standard and improvement of housing quality  Regulations on private developers and building contractors, and development of their leadership Public housing provision  Development of housing financing	45, 46, 49, Tech. 8, Tech. 9, Tech. 10	- Study on Land Provision for Housing and Settlements Development through KASIBA and Land Readjustment in Jakarta Metropolitan Area (Indonesia), The Feasibility Study on the Introduction of Land Readjustment in Malaysia (Malaysia), The Study on Application Scheme of Land Readjustment in National Urban Development Trust (Thailand), The Project on the Development of Appropriate Technology for Multi-story Residential Building and Its Environmental Infrastructures for Low Income People (Indonesia), The Project on Research and Training Center on New Technology for Housing in the People's Republic of China (China), Research on Performance assessment and product certification for residential building (China), "Urban Improvements" training course
Improvement of Housing Environment of Poverty Area	Support for establishment of land using rights system (support for residents to acquire their lands) Housing improvement Loans to community groups (micro-financing)	54	-The Study on the Environmental Improvement of Unplanned Urban Settlement in Lusaka, Republic of Zambia (Zambia), "Improvement of Residential Environment" training course

Mid-term Objective 2-5 Urban Environment Conservation and Enhancement of Urban Disaster Prevention Capability				
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities	
Reduction of Environmental Burden	Measures for air pollution Measures for water pollution Measures for the waste		Almost no examples of these are included as items in urban development/planning M/Ps.     However, there are many examples of environmentally related development studies, technical cooperation projects.	
Development of Urban Amenity (i.e. Green Space and Waterfront)	Development of green space and waterfront Formulation of guideline on landscape and greenery Planning and development of parks Preservation and use of historic and cultural resources		It is also possible for improvements to greenery/waterways to be taken up as individual items in urban development/planning M/Ps.	
Enhancement of Urban Disaster Prevention Capability	Promotion of structural improvement of urban facilities for disaster prevention Development of urban disaster-prevention facilities (i.e. storage facility of fire fighting and rescue operation, quakeproof fire preventive water pool and evacuation facilities) Support for planning and operating the measurements against disaster Promotion of fireproofing buildings	40	Study on Development for Securing System of Building Safety (Thailand), " Construction Administration " training course	

Mid-term Objective 2-6 Enha	Mid-term Objective 2-6 Enhancement of Urban Management Capability			
Sub-targets of Mid-term Objectives	Examples of Means for Achieving Sub-targets	Case No.	JICA's Main Activities	
Establishment and Improvement of Urban Development Planning and the Implementation System	Enhancement of support function of the national government for local governments Enhancement of interagency cooperative system of the organizations presiding public projects of urban area Establishment of effective operating system of urban facilities (achievement of coordination among local governments) Promotion of involvement of residents and private sectors concerning urban development Legal system development of urban development and land condition ordering to promote improved town development (non-statutory urban plan) Strengthening of urban development financing		-There are actual examples of the strengthening of administrative capacity for urban developments being proposed as components in urban planning/development M/Ps. There is also cooperation in the form of individual experts: "urban planning/development advisors."  -" Cities I/II " training course	
Update and Dissemination of Basic Data	System development of information disclosure and sharing among the related organizations Development of the related data and establishment of update system Promotion of information disclosure to residents and private sectors regarding urban development		- "Remote Sensing/Geographical Information Systems " distance learning	
Development of Human Resources and Technical Capabilities to Manage Urban Development Issues	Development of human resources and non- governmental organizations to manage the issues Development of technical experts, educators and advisers Human resources networking Development of higher education system and qualification system for technical experts development of the concerning facilities		- Counterpart training, special arrangements on a country-by-country basis - "Integrated Urban Public Transport Planning Project I/II/II" training course, "Urban Public Transport I/II" training course, "Authentication/Standards Systems Related to Vehicle Environments /Ssafety" training course	

<sup>:</sup> JICA has certain experiences of "Examples of Means for Achieving Sub-targets of Mid-term Objectives" as one of the objectives or activities of projects.

: JICA has experiences of "Examples of Means for Achieving Sub-targets of Mid-term Objectives" as

formulation advisors.

components of development studies and development plans.

Unmarked: JICA has little experience or only has experiences of the dispatch of short-term experts or project