

of land use, and residents' lifestyles are all combined to make the rural areas more attractive. In rural areas, it is necessary to maintain the harmony between the natural environment on the one hand and production infrastructure and living environments on the other hand. For this reason, it is necessary to create beautiful, comfortable rural areas by developing an eco-friendly production infrastructure and living environment in an integrated manner and by promoting efforts to maintain and restore beautiful scenery. It is also necessary to create rural communities by promoting the sharing of functions and cooperation with cities, such as a stable supply of food and lumber, a comfortable residential environment, a rich natural environment, distinctive regional scenery, and traditional culture.

The vitality of rural areas had declined on the whole with depopulation and the aging population as well as the sluggish performance of regional industries. However, some rural areas have revitalized their economies by making maximum use of regional resources and adopting innovative regional strategies without being constrained by stereotypes and existing frameworks. So, it is necessary for the regions to strive back and re-find their feet by taking action in cooperation with businesses and through their creative ingenuity and efforts based on their diverse attractions and value. It is also necessary to adopt a strategy of revitalizing regions as a whole through friendly competition with each other. When doing so, it is important to utilize human resources from outside the region. For instance, in order to give young people who were born and raised in cities and are interested in rural areas a chance to engage in farming, forestry work or fishing, it would be good to provide comprehensive support at all stages in the process, from acceptance, consultation and training, through to settling in.

The agricultural, forestry and fisheries industry can also expect to take on a new dimension. In other words, due to the economic growth of East Asia and changes in supply-and-demand trends for oil, the consumption of high-quality domestic primary products and biofuel is expected to increase. Under the circumstances, it is necessary to increase competitiveness by nurturing and securing well-motivated and talented young people and by heightening the added value through brand development for production regions and enhanced production-processing coordination.

As for the food supply, since it is appropriate to try to cover more than 50% of people's calorie needs by domestic production, it is necessary to increase the productivity of domestic agricultural. This should take the form of ensuring food supply capability, and enhancing competitiveness, while promoting cooperation between the food industry and other related industries and the establishment/maintenance of a production infrastructure. At the same time, it is important to keep in mind the diverse and sophisticated needs of consumers and demanders. In the long run, it is important to introduce an agricultural production system based on non-food use of agricultural produce, such as for biofuel. From the perspective of strengthening the domestic agricultural industry, it is necessary to take more concentrated and focused measures to train people, including women, who have good management skills and promote new entry from non-agricultural fields, such as well-motivated enterprises and young

people. As for the resources that have been maintained by village functions, such as farmland and agricultural water, preservation efforts need to be implemented with the participation of diverse entities, including local residents.

As for the forestry and lumber industries, with the world lumber market changing rapidly, it is important to increase their competitiveness by taking advantage of the improvement in domestic forest resources and the progress in technological development concerning wood utilization. To this end, the forestry industry and the lumber industry need to be revitalized in an integrated manner by fostering human resources as well as by promoting cost reduction measures through the expansion of the size of forest management, introduction of an efficient production system and examination of physical distribution structure, thereby reliably providing lumber in response to the needs of consumers and demanders. From the perspective of expanding the use of lumber, the Japanese wood culture and the merits of lumber should be widely disseminated.

As for the fishing industry, we are seeing growing interest in marine products as a result of global changes in eating habits. However, marine resources are decreasing. Therefore, it is necessary to promote the recovery and management of marine resources in order to ensure a stable supply of marine products. It is also necessary to concentrate support on certain management entities in order to foster their international competitiveness. Efforts should also be made to strengthen the selling power of production areas, make distribution more efficient, develop technology to culture high value-added fish, and heighten this added value through processing.

(4) Interregional exchange and linkage; encouraging internal migration to rural areas

(Interregional exchange and linkage)

In developing areas in accordance with the diversification of values and lifestyles, it is necessary to create areas with a wide range of values and amenities. To this end, it is essential for each area to develop its individual qualities through self-remedial measures utilizing diverse resources.

However, because human, cultural, tourist and management resources are widely dispersed, it is impossible to obtain all these resources in any one area. In order to advance the development of a diverse range of areas utilizing individual values and amenities, self-remedial efforts are essential. In addition, efforts to create mutually beneficial cycles of people, goods, funds, knowledge and information between multiple areas are essential.

Through these efforts, regional development can be individually tailored. In addition, ripple effects create the opportunity for a wide range of community and corporate activities and realize the expansion of production, expansion of opportunities for consumption, increase in employment, reinforcement of cultural activities and improvement of living environment so that value and amenities of the entire national land are optimized. Moreover, such exchange among areas including outside of Japan provides a good opportunity for rediscovering the importance of

regional culture and resources. Enhancement of regional pride through exchange is expected. Moreover, contact, encounters and exchange with "something different" enhance the potential for new activities on an individual as well as regional level, leading to the creation of new cultures.

On the other hand, it is becoming increasingly possible to realize efficient and balanced national land management and provide social services in spite of the declining and aging population. This is achieved through appropriately sharing roles utilizing regional resources and social overhead capital by strategically linking between areas and a wide anticipatory response beyond regional boundaries.

To this end, interregional exchange and linkage should be promoted and will lead to wide-area efforts for maintenance and revitalization in advancing future regional development. Moreover, as for transportation and informational communication systems supporting these trends, each area has to make their own choices with regard to effective investment in order to realize truly necessary services, without neglecting wide-area viewpoints.

(Encouraging internal migration to rural areas)

In order to create sustainable areas with diverse values and amenities, human resources is one of the most important factors. If there is a shortage of human resources, it is necessary to secure a workforce who can take responsibility for regional development through the promotion of interregional human exchange. However, it is impossible to increase the "residential population" throughout the country as the total national population looks to drastically fall in the future. Therefore, it is necessary to promote the attractive features of each region and internal migration, taking a wide view on population structure. This includes: 1) "dual habitation population" (urban residents with a second home in other areas such as rural communities), 2) "exchange population" (e.g. tourist), and 3) "information exchange population" (Internet residents). Particularly in the case of "dual habitation," it should be noted that there are various forms of dual habitation such as in a metropolitan area and a rural area, two residences within the same metropolitan area and in a regional town and a rural community. The promotion of dual habitation is an important issue as quite a few residents in city areas are very demanding, and baby boomers, who are now of retiring age, are expected to have a huge effect on population movement.

Moreover, in promoting regional features and migration of people to rural areas, it is necessary not only to increase the numbers of, but also to make the best possible use of human resources. Human resources from outside the region may play a variety of roles in providing new experience, knowledge and know-how, as well as giving an outsider's perspective on regional resources. As in cases of management know-how of organizations and utilization of information and communication technology, there are a number of cases where abundant human resources in a certain field are precious for other areas. Therefore, internal migration should be promoted from the viewpoint of actively making use of skilled human resources from outside the region.

Section 3 Creation of a Resilient Nation Resistant to Disasters

Due to huge earthquakes and tsunamis, frequent torrential rains throughout the world, and high tides in zero-meter areas, there are concerns about an increase in the risk of a variety of unprecedented serious disasters and about wide-ranging, complex and prolonged disasters. Moreover, while local communities are losing their strength as a result of the declining population and the aging society, society's capacity to deal with disasters has been weakening as abandoned land is increasing and the number of foreign residents is expected to increase further following the globalization of the economy.

Therefore, it is necessary to create a disaster-resilient and flexible national land so that people requiring support at time of disaster can be safe and comfortable.

When doing so, it is also important to ensure strong and universally designed traffic and communication networks so that rescue and evacuation activities and information transmission will not be disrupted.

(1) Disaster countermeasures; disaster damage reduction

With regard to the creation of disaster-resilient and flexible national land, when enhancing "disaster prevention" to protect people and property from various external forces, such as earthquakes, tsunamis, volcanic eruptions, torrential rains, heavy snowfall, and high tides, there is a pressing need to specify the concept of "disaster reduction." Based on the well-balanced combination of saving one's own life, "mutual assistance" between residents and regional communities, and "public assistance" by administrative bodies, hard and soft disaster countermeasures should be implemented, with emphasis also placed on "disaster reduction."

Disaster-prevention facilities will be steadily improved using experience of previous damage and previous improvements. Also in consideration of future investment capacity, efficient and effective disaster countermeasures will be carried out by utilizing existing infrastructure, promoting measures based on the natural and social characteristics and the types of natural disasters that could occur in each region, and by utilizing information and communication technology such as sensor network technology. Since there are still many outdated facilities designed before the current anti-earthquake design standard was put in place, they should be examined properly to check if they are performing properly and living up to public expectations, while taking into account recent changes in public awareness surrounding disasters.

As for the promotion of soft measures aimed at disaster reduction, proactive steps for the disaster prevention need to be enhanced, such as the preparation of hazard maps, ensuring evacuation routes and evacuation areas, implementation of emergency drills, stockpiling of food and daily necessities, raising awareness of disaster prevention, and disaster-prevention education. As for emergency measures at time of disaster, the steps to be taken during a disaster are important, such as transmission of information and issuance of evacuation instructions. It is also necessary to make improvements to the post-disaster steps, such as the

provision of disaster and safety information, the rescue/protection/transfer of victims, the establishment of medical and home-returning systems, the preparation of equipment, materials, and manpower to implement disaster recovery promptly. All these steps should be incorporated in a comprehensive disaster-reduction system.

When implementing disaster-reduction measures, due consideration should be given to the viewpoints of people who require support at time of disaster and of both sexes, and in order to support the smooth implementation of the measures, local public bodies should cooperate to develop a broad-based disaster-prevention and crisis-management system. Administrative bodies and private enterprises should develop multiple and diverse lifelines and also make efforts to lessen the economic and social damage of a disaster by, for instance, developing a business continuity plan (BCP) so that important business activities are not interrupted or can be restored promptly. Furthermore, in order to integrate self, mutual assistance, and public assistance, a national campaign should be carried out to encourage individuals, households, communities, corporations, and various other bodies to take action and invest in long-term disaster reduction.

In order to minimize damage caused by wide-scale disasters, such as the Indian Ocean tsunami, and to promote sustainable global development, it is important for Japan to take the initiative in making its disaster-prevention knowledge and technology available to the rest of the world. This will lead to coordinated global observation systems and disaster and disaster-prevention research utilizing international networks.

(2) Disaster-resilient national land structure

The tracts of underutilized land that are expected to increase further as Japan enters a period of full-scale population decline can be taken as a opportunity to promote the renovation of the national land structure for improved and intensified use of land and the restoration of nature in cities and other areas. When promoting the creation of a disaster-resilient and flexible national land, studies should be carried out on measures aiming at the development and utilization of the disaster-resilient national land structure in reviewing or regulating urban space allocations, such as measures for crowded city blocks to lessen the risks of urban disasters, locating more efficient disaster-prevention facilities, and ensuring evacuation areas and disaster preparedness centers by utilizing the spaces made available through the renovation. In particular, in order to minimize the damage caused by floods, studies should also be carried out on measures to alleviate damage in inundated areas.

Incidentally, disaster information, such as hazard maps, should be utilized not only in evacuation activities and disaster-prevention activities but also in creating a vision for the development of disaster-resilient regions.

Since fulfilling the multiple functions of forest and agricultural, such as land conservation, is also important in creating a disaster-resilient and flexible national land, their appropriate improvement and conservation need to be promoted.

In the metropolitan areas and center cities in provinces and prefectures, which form the core

of the economic and social functions of the country and wide-area blocks, it is necessary to enhance the complementarity and substitutability of these central functions by mutually networking them and to ensure a redundancy in traffic and communication networks, such as roundabout routes, in order to ensure emergency transportation in the event of a disaster.

It is also necessary to study measures to prevent the isolation of hilly and mountainous areas and disadvantaged areas, such as remote islands, peninsulas and heavy-snowfall areas, by using information and communication technology in order to avoid the disruption of traffic and information at time of disaster.

Section 4 Management of a Beautiful National Land for Future Generations

Rich and diverse nature has been nurtured on the islands of Japan from the south to the north including the forests, which account for 70 percent of the area of national land. Moreover, “places famous for their natural scenery” have been conserved through production activities on the part of the agricultural, forestry and fishery industry even in hilly and mountainous areas and isolated islands. In addition, rich culture and traditions reflecting the region’s characteristics have been nurtured. However, in addition to issues such as disorderly landscapes and land use realized during the period of high economic growth, we are seeing a further increase in forests and abandoned cultivated lands that have not been managed appropriately. In order to protect beautiful national land and pass it on to the next generation as we are entering into the mature society, the appropriate management and restoration of various resources which form national land is essential. Therefore, it is necessary to make multilateral efforts for managing and handing down beautiful national land through individual efforts from rural communities to cities and linkage between regions and a wide range of entities.

Moreover, efforts for preventing global warming are urgent, as the first commitment period of the Kyoto Protocol starts in 2008. Taking this as a good opportunity, national land management emphasizing recycling and symbiosis will be promoted by capitalizing on raised interest in environmental conservation among a wide range of people. Furthermore, world-leading territorial seas and exclusive economic zones should be properly used and conserved.

Through those efforts, Japan’s amenities such as history and culture as well as diverse and attractive landscapes⁸ will be increased and each person will take responsibility for managing and handing down attractive national land to future generations.

(1) Proper management of national land; recycling and symbiosis

In order to manage national land in a sustainable way, national land management emphasizing recycling and symbiosis will be promoted. In this case, not only mass circulation in the natural world but also the construction of harmonious mass circulation of human activities and natural processes through socioeconomic activities and the effective use/utilization of existing national land are important issues. Another important issue is promoting the symbiosis of humans and

⁸ An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors

nature through the maintenance and restoration of biodiversity, which is in a critical condition. Moreover, it is necessary to respond appropriately to problems such as the inhibition of the smooth movement and fluctuation of water and sediments, water pollution, beach erosion, the reduction and loss of wildlife habitats and conflicts between humans and wildlife as well as new issues in recent years such as frequent flooding, droughts and rises in sea levels.

(Harmonious mass circulation of human activities and natural processes)

As global efforts for preventing global warming are important, the reduction of greenhouse gas emissions and carbon sink measures will be addressed. Moreover, the appropriate development and conservation of forests and farmland, which play an important role in mass circulation, will be promoted. At the same time, the construction of a sound material-cycle society will be carried out through the implementation of the 3R concept (Reduce, Reuse and Recycle) in a desirable way and scale according to the nature of the circulating resources. Moreover, recycling of resources on an Asia-wide scale should be promoted in order to prevent environmental pollution. Through these efforts, harmonious mass circulation of human activities and natural processes will be developed.

(Proper management of resources)

Decreasing national land management is a concern in farm and mountain villages because of depopulation and aging as well as an increase in forests and abandoned cultivated land which are have not been managed appropriately due to changes in the industrial structure. Moreover, the ability to secure stable food resources may be affected by changes in resources/energy supply-demand environment due to growth in East Asia. Therefore, the appropriate management of forests and farmland will be promoted so that they will be passed on to future generations in a sound condition.

As for forests, the conservation and management of forests important to national land conservation and forests with a good natural environment will be advanced by the government's active cooperation with land owners. Also, the development of diverse and sound forests should be promoted through steady thinning and long-term cutting and mixed forests with coniferous and broad-leaved species.

Farmland allows us to supply agricultural products such as food to the people and to exercise agriculture's multiple functions. Therefore, good farmland should be secured and efforts should be made to maintain land use for agriculture through changes in crops and extensive management in harmony with environment.

(Sound ecosystems)

In order to ensure the symbiosis of humans and nature, the conservation and restoration of nature should be promoted. This can be achieved through networks of ecosystems (ecological networks) which organically link forests, farmland, green areas in cities, waterfronts, rivers and seas as well as wetlands, tidelands, marine forests and coral reefs, which are important wild

natural areas. In doing so, international viewpoints, such as the Ramsar Convention, as well as ecological order, need to be considered. In particular, the appropriate conservation and management of satochi-satoyama areas should be promoted as they are declining due to changes in lifestyles and industrial structure. Also, it is important to promote the restoration of environments where their original nature has been lost such as rivers, coastal zones and inner cities.

(2) National land use in river basin spheres; water circulation system

Flood control, water utilization, conservation of water quality, sediment movement, mass movement and ecosystems are closely related to national land use in river basin spheres through the water circulation system, which links forests, farmland, cities, rivers, oceans and coastal zones. In addition, the water circulation system has drastically changed over the course of the concentration of people and industries in cities and changes in industrial structures. Problems are arising such as inhibition of the smooth movement and fluctuation of water and sediments, water pollution, beach erosion, and the reduction and loss of wildlife habitats. Moreover, new issues have arisen in recent years such as frequent flooding, drought and rises in sea levels. In order to appropriately address these issues, efforts should be made to construct sound water circulation systems in river basin spheres and comprehensive integrated sediment management from the mountainside to the seaside. In addition, comprehensive afforestation and flood prevention measures in all river basins, a national land use strategy taking disaster risk in river basin spheres into consideration, and safety and security through the securing of water resources in preparation for extraordinary drought should be promoted. Moreover, cooperation systems between residents and exchange between upstream and downstream areas for proper management of the water circulation system should be developed. At the same time, systems of participation and linkage between a wide range of entities should be established in order to raise awareness of people living in upstream and downstream areas.

(3) Proper use and conservation of sea areas

As a "maritime state" surrounded on all four sides by seas, not only the territorial seas under our country's sovereignty but also exclusive economic zones and continental shelves should be examined in the National Land Plan in order to pass benefits on to the next generations. Therefore, the government as a whole needs to formulate basic plans concerning the oceans to comprehensively and systematically address these issues.

The sea area surrounding Japan is extensive and includes one of the world's largest territorial seas and exclusive economic zones, providing Japan with various resources. Therefore, with respect to problems relating to national interests such as the demarcation of continental shelves and exclusive economic zones as well as the management of isolated islands near the border, a strict and appropriate response should be promoted in accordance with international rules. At the same time, international cooperation and collaboration in the area of safety, environment and disaster prevention will be promoted.

Moreover, issues such as boosting and ensuring the safety of maritime transportation, coastal

disaster prevention, industries in coastal zones, and an increase in waterfront amenities should be promoted, and issues such as the revitalization of the fisheries industry and fishing villages will be actively addressed. In addition, efforts will be made to promote and conserve isolated islands where measures for fostering migration and employment creation have been implemented. Efforts from the viewpoint of ocean conservation are also important. This includes countermeasures against marine pollution, the conservation and restoration of the natural environment, and the conservation and creation of attractive landscapes. Furthermore, technological developments and R&D for the development and conservation of minerals, energy and fishery resources will be promoted.

(4) Creation of attractive national land; protection of the entire national land

Japan's national land consists of the coexistence of something old and new as well as something natural and artificial. It is represented by buildings such as temples and shrines which still remain throughout the country, beloved places famous for natural scenery written about in waka and haiku poetry, abundant nature changing with each season, farmland landscapes such as scattered villages emerging from the Middle Ages onwards, as well as dynamically changing cities. In addition, underlying qualities of which residents are so proud are found in all areas throughout Japan, such as an aesthetic appreciation of nature, distinctive food cultures and a diligent national character, motivating everyone to visit and experience Japan.

However, we have seen the creation of characterless cities lacking amenities and the disorderly expansion of urban land use during the post-war period of rapid economic growth. Therefore, it is not really possible to say that we have created a national land with regions rich in nature, history and culture. Moreover, there is a risk that attractive national land will not be passed on to the next generation due to an increase in forests where management measures such as thinning have not been implemented sufficiently and abandoned cultivated land, as well as little-used/unused land in cities.

Therefore, the creation of diverse and good landscapes where nature and/or humans exist in harmony should be promoted. This can be achieved by handing down regional history, traditions and culture, improving the quality of national land infrastructure, urban conservation and development rooted in history, the appropriate development and conservation of forests, and the conservation and restoration of the natural environment. At the same time, the creation of an attractive national land rich in amenities should be promoted by creating, handing down and improving existing amenities, and appropriately managing national land.

(Handing down distinctive regional cultures)

Japan has distinctive regional cultures based on its long history such as historic buildings, landscapes including traditional cityscapes, traditional arts, festivals, and traditional handicrafts. Accumulation of those things is a part of creating a beautiful national land. These elements are very attractive to tourists and should be marketed overseas. However, such traditional regional cultures are on the verge of extinction as a result of the declining and aging population. Therefore, these regional cultures need to be preserved and passed on to the next generation. At the same

time, regional cultures should be created emphasizing harmony with existing cultures.

("Land Managed by the People")

The decline in the management of national land is a concern because of the declining population, changes in industrial structures and a shortage of successors. Therefore, although appropriate management on the part of land owners is fundamental, "Whole Nation Land Care" should be promoted. This is an idea whereby the whole nation works to pass on a beautiful and affluent national land to the next generation. This is achieved through direct participation in national land management such as afforestation and conservation work of green areas by urban residents, conservation work of farmland and agricultural water-use facilities by local residents, and management of neighboring satoyama areas, little-used/unused land and waterfront areas as well as indirect national land management through donations and contributions, with the assistance of with public entities such as the government. Thus, individuals play an active role in managing and leaving behind a beautiful national land.

Section 5 Development of Local Communities Based on "New Public Relations"

This section describes new regional development strategies based on cross-sectional viewpoints based on sections 1 to 4 above.

It is becoming difficult to continue providing services such as public transport, health care and welfare as a result of changes in socioeconomic trends such as the declining and aging population. A more detailed response than before is required; there are various issues facing regional development.

On the other hand, as awareness of the importance of quality of life has increased, forms and areas of responsibility of private entities such as individuals, NPOs and companies are diversifying and upgrading. We are now seeing a situation where these activities create national values beyond personal benefits.

Therefore, a range of private entities should be regarded as responsible for regional development. There is more possibility that regional issues will be accurately addressed through the construction of systems to foster organic linkage between them as well as with the government.

Taking into account these trends, regional development will be addressed using an idea called the "new public." This is an idea whereby private entities with public values and intermediaries between private and public will be classed as "public" entities so that they support the life of local residents and maintain regional vitality. Currently, both individuals and companies have raised awareness of the need to enhance satisfaction through social contribution. Systems for new regional management and solving regional issues should be constructed based on these trends. Moreover, the implementation of transparent regional development strategies should be aimed at by a range of entities through exchange between people with different backgrounds through dual habitation. In addition, the realization of distinct areas utilizing unique features should be aimed at.

(1) Regional development systems centered on the “new public”

Region-based communities, which used to be the driving force behind regional management, have weakened following urbanization. Therefore, functions of region-based communities have now shifted to administration. Rural communities still play a vital role, however some of their activities are stagnant as a result of the declining and aging population.

In order to consider a future course for regional development, conventional region-based communities based on residents' associations, elementary school PTAs, and local shop owner associations are needed. In addition to region-based communities, various entities are encouraged to continue their activities through shared goals and loose linkage. Those entities include; 1) NPOs, which are growing especially in cities, 2) educational institutions such as universities, 3) various individuals inside and outside the region, 4) companies, and 5) the government. In doing so, it is necessary to do more than outsource governmental work to the private sector. In continuing to upgrade and improve the efficiency of governmental work, a range of entities are expected to participate voluntarily and continuously with a shared affinity for the region developed by experiencing its unique culture and nature in order to tackle everyday issues that the communities are facing. This, in turn, will help meet regional needs and supply necessary services. As mentioned above, the construction of a regional management system and a system to solve regional issues should center on the idea of the “new public.” This can be achieved by reinforcing services and expanding the entities that play public roles. Up until now these roles have been played by a combination of the government and a range of cooperating entities.

Regional development by the “new public” is applied to a wide variety of regional issues such as elderly care, support for child-raising, crime- and disaster-prevention measures, residential development, environmental conservation, management of national land infrastructure, and regional transportation. Its areas of responsibility are distributed as follows based on the conventional distinction between public and private:

- 1) The private sector proactively began to carry out activities that had been carried out by the government (i.e. management of road cleaning by residents' associations and companies).
- 2) Areas which have never been carried out by the government nor by private entities but because of new demand generated with changes of the time require response (i.e. voluntary operation of community buses by local residents, transportation service using private cars by NPOs in areas with no public transport).
- 3) Activities which are carried out by private entities in conventional private spheres, at the same time including public values (i.e. boosting central built-up areas utilizing vacant shops).

Expansion of those activities has led to self-realization on the part of participants through social contribution and has contributed to improvements in quality of life in terms of, for example, securing safety and security, improvements in disaster-prevention capabilities, and responses to environmental problems. In addition, the expansion of these activities has a multitude of meanings as it is expected to have an impact on the regional economy, the creation of new employment, the diversification and reinforcement of social services, and the alleviation of the

burden on the administrative and financial sectors.

In order to further such regional development by the "new public," it is essential to secure participants. It is necessary for individuals, the most basic unit, to be actively involved in the local community regardless of generation, sex, occupation or nationality. In particular, while the participation of baby boomers can be expected over the next ten years, the possibility of an uneven distribution of the number of participants and the promotion of the participation of the younger generations required for sustainable regional development by the "new public" should be noted. Therefore, the conversion of social and economic systems should be encouraged by raising awareness with respect to participation in residents' organizations at various levels including the government and the private sector.

Moreover, the government needs to not only become one of the "new public," but also to further develop infrastructure to enable the smoothly functioning of regional development by the "new public" in which a wide range of private entities participate.

These efforts are expected to bring about an affluent society because a great number of varied entities will participate as members of the "new public." This will result in an increase in "life satisfaction" and services tailored to recipients' needs.

(2) Regional development through self-remedial measures; ideas and activities led by private entities

There is more possibility that regional values and features will be rediscovered as a result of greater regional autonomy and independence following further decentralization and changes in values emphasizing non-economic spheres. On the other hand, there is a risk of falling into a vicious circle whereby regional revitalization is weakened with the declining and aging population as well as changes in the industrial structure, which in turn leads to further declination. Each area needs to embrace a sense of urgency in the knowledge that not only regional development but also their maintenance will be difficult if they fail to make self-remedial efforts. Voluntary and comprehensive regional efforts should be promoted to endow residents with a sense of regional pride through values and qualities distinct from other areas. In doing so, not only the government but also a range of private entities should be regarded as the main actors, and regional development should be promoted through their initiatives and activities. The national and local governments provide the necessary support for issues that are difficult for regions to solve on their own.

Reviewing past examples of regional development, it can be seen that there has been a trend of actively utilizing initiatives and activities of a wide range of private entities as follows. These efforts should be further supported.

- 1) Discovery, review, refinement, utilization and sharing of highly competitive regional resources such as efforts for adding value, branding, and combining multiple resources.
- 2) Securing of human resources from outside the region and a wide range of regional participants, and promotion of innovation by loose organization of them.
- 3) "Small circulation of funds"- regional funds will be reinvested in the region, and securing of funds through promotion of investments with "vision" through CSR and individuals' willingness

to contribute.

4) Stimulation of internal migration, regional exchange and strategic linkage.

5) Utilization of information and communication technology for information transmission between regions and restoration/strengthening of communities.

There are rural communities in need of maintenance and struggling to survive in the face of the declining and aging population. In these communities, everyday life such as shopping – particularly for elderly people –, regional transportation, health care and welfare as well as maintenance of water channels and ceremonial functions are affected. In addition, it is a concern that various problems may arise such as the loss of traditional cultures, the deterioration of farmland and forests, and a reduced disaster-response ability. Therefore, rural community residents are facing a difficult situation whereby they cannot live a secure life. Moreover, following various municipality mergers, while the capabilities of municipalities such as upgrading and diversification of the administration as well as the services they provide have been strengthened from a wide-area viewpoint, it is difficult to reflect residents' needs in local government policies in communities facing severe fundamental challenges such as a geographically remote location.

Under these conditions, the government should strive to always be aware of residents' concerns and desires regarding the maintenance of community connections and ties. On this basis, the government should commit itself to building consensus concerning the future image of how to live. This should include merging and restructuring central and core communities based on residents' initiatives and opinions and promoting information provision and sufficient communication with residents. In doing so, it is important for a range of private entities such as region-based communities and the government not to be in conflict with each other but to cooperate.

Chapter 4. Realization of the Plan

Section 1 Direction of National Land Infrastructure Investment

With the advent of an age of population decline as well as other trends, and without wasting time until the effect of the socioeconomic burden begins to surface, it is necessary to correct the unipolar, uniaxial national land structure and strive to create a national land on which diverse wide-area blocks can develop independently. To this end, it is important to improve the quality of the national land infrastructure through more focused and efficient infrastructure investment based on individual regional characteristics. This will ensure that the accumulation of infrastructure will contribute to stable economic growth, regional vitality, and the creation of a safe and beautiful national land.

The investment environment for national land infrastructure is expected to become severe following increases in investment to maintain and improve the existing infrastructure. Against this background, it is necessary to strategically develop a national land infrastructure that will also be useful for the next generation, while keeping firmly in mind the ideal form of regional communities envisioned in the wide-area regional plans. To this end, it is necessary to make

well-focused investments from multiple perspectives, such as □ investment to realize national and regional strategies for autonomy, □ investment to resolve region-specific problems, and □ investment necessary to ensure security and safety in people's lives. Possible strategies should be considered in the course of formulating plans for social infrastructure development.

(National government strategies for national land infrastructure investment)

The national government should focus its strategic investment on sustainable development, such as an international traffic gateway and national arterial traffic and information networks, the development and conservation of forests for national land conservation purposes, the creation of a nation-wide crisis management network, ensuring the security and safety of maritime transportation, innovation and human resources development as the backbone of national growth, enhancement of the international competitiveness of the agricultural, forestry and fisheries industries, global warming countermeasures, and the creation of a cyclical society.

The national and local governments should conduct objective studies to ensure the fairness and transparency of investment effects and processes concerning, for instance, investments necessary for the independence of wide-area blocks (e.g., the development of transportation infrastructure for direct exchange and cooperation between wide-area blocks and between Japan and its East Asian neighbors) and investments necessary for the appropriate maintenance or renovation of the existing national land infrastructure. Based on these studies, they should select appropriate methods and procedures.

On the other hand, with regard to investment in complex projects to solve various problems involving a single prefecture, such as disaster prevention in wide-area blocks that are covered by the wide-area regional plans, efforts to restore sound resource-recycling and a hydrological cycle, the development of sustainable intra-city and inter-city public transport systems, and the improvement of the regional production infrastructure, the national government should provide support, keeping the following points in mind. That is to say, the government should give priority according to its overall evaluation concerning the synergy effects generated through, on the one hand, the application of the services and local regulations that are based on the regional climate and selected by local residents and, on the other hand, through comprehensive and cross-cutting policy development, cost-benefit performance for the national economy, a sound cost-recovery structure, a fair and transparent investment process, and citizen participation and cooperation. The national government should also consider how to develop a framework to monitor project outcomes.

(Innovation and handing down technology to future generations)

Furthermore, in order to enhance the quality of the national land and everyday life, not only high technology but also technological innovation to create national land infrastructure needs to be promoted by deploying social technologies integrating human and social science in order to solve problems related to disaster prevention, the rejuvenation of the national land

infrastructure, and the environment. We should also promote the development and securing of engineers for such innovations. It is also necessary to promote technological development with regard to sensor technology and robots that have the potential to drastically increase convenience, safety and mobility by making use of innovative information and communication networks and the technology to transport man and goods at supersonic speeds, as well as to study how to strategically utilize them for the construction of a new national land structure.

In addition, it is necessary to develop ways to hand down to the next generation the skills of engineers involved in fields such as development, maintenance, and operation of national land infrastructure regardless of government and corporate frameworks.

(Management of existing national land infrastructure)

Moreover, in order to promote the well-planned use of the existing national land infrastructure, it is important to promote its optimum management and utilization by incorporating the concept of asset management employed by the private sector in addition to the conventional concept of public property management, as well as maximize the functions of the national land infrastructure. At the same time, it is important to also appropriately deal with natural conditions such as earthquakes, typhoons, heavy rainfall, and heavy snow. When doing so, it is important to promote investment to maintain the functions of the national land infrastructure such as the improvement of the facilities built before the current earthquake-resilient code was introduced and the removal of snow in heavy-snowfall areas, investment to update appropriately prioritized functions, as well as the prompt restoration and improvement of the national land infrastructure damaged by disasters, not to mention the minimizing of lifecycle costs. Furthermore, while keeping in mind market value and conservation and restoration of the environment, it is also important to assess the utilization of national land infrastructure and promote more effective utilization of ineffective assets, by, for example, disposing of them or converting them.

Section 2 Improvement/Utilization of National Land Information; Monitoring the Plan

(Improvement and utilization of national land information)

National land information allows for the analysis and examination of the geographic dimensions of people's activities, such as society, economy, and culture. A range of information will increase its added value and become more convenient. Recent advances in information and communication technology have made it considerably easier to combine a range of national land information, not only static data such as maps, statistics, and ledgers, but also dynamic data such as the movement of people and goods. The improvement and utilization of such national land information should be aggressively promoted, as it is effective in all aspects of activities concerning the national land, such as the utilization, improvement, and conservation of national land, the improvement of administration and making it more efficient, ensuring the security, safety and convenience of everyday life, the promotion of innovation, and the creation of new industries and services.

Therefore, the national and local governments should promote the improvement of basic national land information, such as the development of land-sea maps, the implementation of cadastral surveys, basic statistical information such as national census, and the improvement of information concerning land use and the natural environment, as well as promote the standardization and distribution of information. It is also necessary to promote the active utilization of the geographic information system (GIS), which is a useful tool for efficiently collecting, improving, analyzing, and utilizing diverse land-related information. Since this information is created not only by the national and local governments but also by diverse entities both at home and abroad, including universities, research institutes, corporations and NPOs, it is important to promote the distribution and mutual exploitation of these data among all entities. To this end, social rules and mechanisms should be established and human resource development promoted. Considering recent municipal mergers, it is also important to ensure the continuity of municipal statistical data.

(Monitoring and evaluating the national land plan)

The improvement and utilization of national land information not only have far-reaching impacts on socioeconomic activities but are also useful for the management of national land plans. In order to enhance the guidelines for the entities engaged in the National Land Sustainability Plan, it is necessary to establish a “national plan management cycle” for efficient and effective progress management through the formulation, promotion, and evaluation of plans. To that end, it is necessary to monitor the plans by constantly gathering, organizing, and analyzing a variety of information on national land in a comprehensive and systematic manner. This should cover a variety of information, including economic and social conditions, land use, natural environment, and existing national land infrastructure. In order to carry out the monitoring once the plans have been drafted, it is necessary to study specific monitoring procedures and systems, such as efficient and effective GIS operations. It is also necessary to investigate the possibility of setting up monitoring indicators to make people feel that their everyday life has improved.

Section 3 Review of Various Measures Related to the Plan

In order to realize the national land and quality of life envisioned in the new plan, the government will provide comprehensive support through strategic and prioritized investment in national land infrastructure, and effective management through the formulation, promotion and evaluation as shown in sections 1 and 2. In addition, prioritized measures based on the Regional Plan aimed at strengthening international competitiveness, support for developing infrastructure to allow the private and public sectors to realize regional strategies efficiently and effectively, and support and development of an environment fostering regional knowledge and creativity will be supported through the implementation of measures by category as shown in part 2. Furthermore, from the viewpoint of enhancing and promoting the effectiveness of the plan, assessments of these measures will be constantly carried out and remedial action taken.

Moreover, it is necessary take the formulation of the plan as an opportunity to inspect national land policy-related systems and investigate the possibility of a new framework.

Section 4. Linkage with the National Land Use Plan

The National Land Use Plan (National Plan) based on the National Land Use Planning Act is a long-term vision that presents the future “use” of national land across the country in accordance with the land-use classification of national land, such as farmland, forest, and residential land, and will exert its full effect together with the National Spatial Strategies (National Plan). Therefore, the two plans should be formulated in an integrated manner, and possible necessary measures for the National Land Use Plan should also be considered taking into account changes in socioeconomic situations.

With regard to national land use, there are various problems, such as low-quality use of national land, like disaster-vulnerable urban areas, placing excessive burdens on national land and the global environment, and a decline in the level of national land management, as well as new conditions, such as the growing public awareness of security, environmental issues and spiritual richness, and expanding the move to protect and nurture regional strengths. Therefore, when developing national land use plans, it is necessary to present the direction of sustainable national land management focusing on three perspectives: “circulation and symbiosis” (development of a material-circulation system in harmony with human activities, development sound hydrological cycle systems in river basin areas, conservation and restoration of nature, etc.), “security and safety,” and “beauty” (overall high aesthetic quality of national land, such as human activities in perfect harmony with the ecological system).

