

Main Opinions Expressed in the Deliberations Thus Far

**~ “Seven Principles for the Reconstruction Framework”
and “Five Discussion Points” ~**

This document is a list and arrangement of the main opinions expressed thus far during deliberations within the Reconstruction Design Council on each of the five discussion points the council is considering as it works toward the release of its recommendations, which is planned to be released at the end of June this year (for further details, please refer to the proceedings of each meeting, which have already been made public). The Council expects that the release of this document will widen the national debate on reconstruction design in every aspect.

May 29, 2011

Reconstruction Design Council in response to the Great East Japan
Earthquake

May 10, 2011

Resolution of the Reconstruction Design Council
in Response to the Great East Japan Earthquake

Seven Principles for the Reconstruction Framework

We, the Reconstruction Design Council in Response to the Great East Japan Earthquake, have engaged in vigorous discussions and toured the disaster-afflicted region since our inaugural meeting on April 14.

Today, ahead of the issuance of our first set of recommendations at the end of June, we formulated the “Seven Principles for the Reconstruction Framework” and hereby present it for public release.

Guided by these seven principles and opinions received from all corners of society, we shall continue to engage in further discussions aimed at formulating a “blueprint” for reconstruction that will be a source of hope for Japan in the future.

Principle 1: For us, the surviving, there is no other starting point for the path to recovery than to remember and honor the many lives that have been lost. Accordingly, we shall record the disaster for eternity, including through the creation of memorial forests and monuments, and we shall have the disaster scientifically analyzed by a broad range of scholars to draw lessons that will be shared with the world and passed down to posterity.

Principle 2: Given the vastness and diversity of the disaster region, we shall make community-focused reconstruction the foundation of efforts toward recovery. The national government shall support that reconstruction through general guidelines and institutional design.

Principle 3: In order to revive disaster-afflicted Tohoku, we shall pursue forms of recovery and reconstruction that tap into the region’s latent strengths and lead to technological innovation. We shall strive to develop this region’s socioeconomic potential to lead Japan in the future.

Principle 4: While preserving the strong bonds of local residents, we shall construct disaster

resilient safe and secure communities and natural energy-powered region.

Principle 5: Japan's economy cannot be restored unless the disaster areas are rebuilt. The disaster areas cannot be truly rebuilt unless Japan's economy is restored. Recognizing these facts, we shall simultaneously pursue reconstruction of the afflicted areas and revitalization of the nation.

Principle 6: We shall seek an early resolution of the nuclear accidents, and shall devote closer attention to support and recovery efforts for the areas affected by the accidents.

Principle 7: All of us living now shall view the disaster as affecting our own lives, and shall pursue reconstruction with a spirit of solidarity and mutual understanding that permeates the entire nation.

The Five Discussion Points

Perspectives for the Discussion:

How we interpret the Great East Japan Earthquake.

- The defining features of the disaster
- Impacts on industry, the economy, and people's lives
- Vastness/diversity of the disaster region (spatial axis)
- The long-term path to reconstruction (time axis)
- The direction of reconstruction efforts
(“creative reconstruction”)

Community development

- Basic concepts
- Developing secure and safe communities
- Designing trailblazing communities
- Securing reconstruction actors and building the consensus needed for reconstruction
- Land use issues
- Methodology for providing reconstruction support

Local socioeconomic revival

- Reviving local industries that support the local economy and employment – manufacturing, agriculture, fisheries, tourism, renewable energies, etc.
- Securing job opportunities
- Social security and education, etc.

Reconstruction and Japan's socioeconomic revival

- Reviving Japan's economy
- “New Public Commons”
- Securing financial resources for reconstruction
- Energy/environmental policy
- Social security policy
- Strengthening national readiness for disasters
- Recording the disaster and preserving/sharing lessons learned

Responding to the impact of the nuclear accident

- Concluding the nuclear accident
- Initial initiatives
- Towards reconstruction

Interpreting the Great East Japan Earthquake

Viewpoints for the Design Discussion: The Defining Features of the Disaster

- The Great East Japan Earthquake and subsequent tsunami and nuclear accident together comprise a compound disaster that devastated wide areas of predominantly agricultural and fishing communities. Its defining features are totally different from those of the Great Hanshin-Awaji Earthquake, as this disaster led to the loss of governance and administrative functions in many municipalities.
- The Great East Japan Earthquake can be defined by three main features: i) large-scale natural disaster (super wide area damage, compound damage that included damage resulting from a nuclear accident, and long-term damage); ii) large-scale disaster compounding difficult of response (widespread tsunami damage, damage to socially vulnerable people [many essential relief personnel were affected], damage due to lack of preparedness [Existing disaster readiness measures were insufficient.]); iii) large-scale social disaster (local administrations damaged; insufficient presence of experts, logistics systems damage).
- Fukushima Prefecture, unlike other affected prefectures, suffered not only earthquake and tsunami damage, but damage as a result of the nuclear accident and the subsequent spread of harmful rumors about goods produced by the local economy. For Fukushima Prefecture, the Great East Japan Earthquake meant a total of four disasters.
- The Great East Japan Earthquake damaged not only Iwate Prefecture, Miyagi Prefecture, Fukushima Prefecture and other prefectures in the Tohoku region, but equally widespread areas of Japan. In Tokyo, for instance, the earthquake caused soil liquefaction and forced many areas to introduce planned blackouts due to damage at power stations.
- The nature of damage caused by the nuclear disaster is substantially and completely different from that caused by the earthquake and tsunami.
- Unlike the Great Hanshin-Awaji Earthquake, this disaster did not strike an urban area where economic activities are centered, so it seems unlikely that the same methodology can be applied in the coming reconstruction process.
- Unlike the Great Hanshin-Awaji Earthquake, this disaster struck regions in which many people's residences and places of work were one and the same as characterized by those in the agricultural or fishery industries. Without first reviving these local industries it will not be possible to revive the region as a whole.

Impacts on Industry, Economy, and People's Lives

- The earthquake has had an immeasurable impact, not just on the disaster region, but on the industrial and economic infrastructure as well as the future shape of the economy and society in Japan.
- The Tohoku region plays an important role in the supply chain of the Japanese economy, serving as a supply base for food and electricity as well as concentrations of manufacturing plants for automobile and electrical components, including semiconductors. The damage to these core suppliers has triggered a domino effect whereby related manufacturers nationwide have been forced to cease operations.
- The earthquake paralyzed the urban functions of the Tokyo metropolitan area, due to planned blackouts and stoppage of commuter train services making it difficult for people to travel home.
- Concern about the impact of the disaster and power shortages may lead to “hollowing out of the industrial sector” if companies decide to relocate their production bases overseas and overseas companies avoid locating their businesses in Japan. Such an effect has the potential to further weaken Japan’s potential growth rate.
- This disaster should be perceived by the people of Japan as an opportunity to recognize the limitations of modern civilization (putting an end to the myths of growth and security) and it will be necessary to develop a completely new future vision for “harmonious coexistence” between humanity and nature that displays due humility before the natural environment.
- While we should reflect on our overdependence on science and technology, so too should we recognize that without technology there can be no reconstruction. We must ensure that nature, humanity and technology can exist together in harmony.

Vastness/Diversity of the Disaster Region (Spatial Axis)

- The recommendations for reconstruction design should not focus on the single pin-point “locations” within the disaster-affected areas, but rather on wider, regional “areas.” We need to engage in detailed examinations of each area, on the basis of the diverse situations that exist in terms of geographic conditions, industrial structure and post-disaster status.
- There is great variation in geographic and post-disaster conditions of each area within the affected region. For example, the region can be divided into: i) the ria coast north of

Ishinomaki; ii) the coastal plains south of Higashimatsushima; iii) inland areas; iv) the area affected by the nuclear incident; and v) all other areas. Furthermore, in each of these areas major differences in the extent of damage can be seen in individual locations. We therefore need to give sufficient consideration to the region's vastness and diversity when discussing reconstruction.

The Long-term Path to Recovery (Time Axis)

- Full-fledged reconstruction will only be realized in the long term. For this reason, we must set out a clear roadmap towards that ultimate goal. It will be necessary to elucidate a policy direction by, for example, establishing a mid- to long-term 10-20 year vision and then further establishing short-term (rapid response), short- to mid-term (recovery period) and mid- to long-term (reconstruction period) stages within the overall vision.
- For instance, within the process to shift toward all out reconstruction work, it is important to bear in mind the following points: i) how to deal with limitations on land use, etc., and ii) how to implement measures to move residents from temporary to permanent housing while maintaining employment and jobs.
- The process towards full-fledged reconstruction will differ according to the various post-disaster conditions. The reconstruction process should not be thought of as a monolithic process. Although it is necessary to expedite reconstruction efforts, it is equally important that these are not too hasty.
- We must bear in mind that the reconstruction process for the areas affected by the nuclear accident will take longer than other areas. The first priority is for the government to bring the situation at the nuclear power station to a conclusion as soon as possible.

The Direction of Reconstruction Efforts ("Creative Reconstruction")

- The Great East Japan Earthquake struck a region that was already grappling with many of the problems facing Japanese society as a whole, including the super-aging society, shrinking of the working population, and decline of rural municipalities. We must pursue "creative reconstruction" that gives hope for the future of Japan, as a means of solving such latent challenges as stagnation of the economy and shrinking of the workforce.
- It will be necessary to seek out and identify the potential within local society and economy to lead the Tohoku region to the future, capitalizing on the region's human resources, rich

nature, history, culture and industries. The cutting-edge technology possessed by universities and industry should be fully utilized in this process as we aim for the kind of trailblazing reconstruction that is associated with technological innovation.

- There are many possibilities for a blueprint for the future of Japanese society as a whole, such as “a society that values lifelong activity” (one that develops each individual’s skills over the course of their life and fully utilizes the abilities of every generation), “a society that lives in harmony with the environment” (renewable energy, harmonious coexistence with nature), or “a safe and secure society” (disaster preparedness, independence and cooperation, social security). While regional needs should be prioritized in the process of reconstruction, it is equally important for us to bear in mind a long-term target for the kind of society we wish to create.
- Following the earthquake, Japan received a great deal of support and cooperation from around the world. It is important that we maintain these bonds of solidarity and, under a concept of joint action, aim for reconstruction that is not inward looking, but rather open to the international community, starting with our Asian neighbors.

Community development

Basic Concepts

- The people of the affected regions expect the formulation of a reconstruction plan that is based on regional and community empowerment.
- The main actors for the implementation of reconstruction should be the regional municipalities. These are the bodies that are closest to the local residents and have the greatest understanding of local circumstances, enabling a truly detailed response.
- The fundamental principle of community development is that the public, NPOs, local businesses and municipalities work together with the support of the national government in a social alliance that has the understanding of the entire nation.
- The role of the national government is to set the overall policy for reconstruction (vision, ideals, types of assistance, etc.) and to create the structures that are required to provide appropriate support in the areas of human resources, know-how and financing. The role of prefectural governments is to back up local municipal governments, supporting those which have experienced a weakening of their administrative functions.
- There is a need to ensure an appropriate combination of “self-reliance,” “mutual assistance”

and “public assistance” when implementing reconstruction. The strong bonds of regional society (cooperation) are especially important. Furthermore, without self-reliance, there is the risk of moral hazard, whereby people become dependent on assistance.

- A fundamental principle for community development is to revitalize areas of urban sprawl into a more compact form, taking into account future changes in regional demographics and population decrease. This could include consideration of elements such as safety and security (including crime prevention), urban aesthetics and ease of daily life, and the environment.
- Sustainable community development will not be possible unless the various infrastructure for daily life is ensured and enhanced, including regional industries and employment.
- In the process of post-disaster reconstruction, it will be necessary to convert land use demarcations over a wide area. An important focus when doing this will be the maintenance and revitalization of local communities.
- We must bear in mind the strong wishes of land owners to stay on and return to their land.
- In the case of the Great Hanshin-Awaji Earthquake, reconstruction was primarily carried out through land use planning and urban revitalization. There is a need to thoroughly investigate whether or not already existing methodologies can be used for reconstruction on this occasion.

Developing Safe and Secure Communities

- Looking at the post-disaster situation in the affected regions, little damage was done to locations which were already inhabited during the Taisho era (1912-1926) compared to areas which experienced urban sprawl in the years that followed.
- There is a need to think about community development from a historical perspective and investigate past memories of disaster and past initiatives for disaster prevention.
- There is a need to verify the effectiveness of seawalls against tsunami. Furthermore, there is a need to consider the optimum combination of seawalls, levees, and relocation to higher ground, examining how effective each measure is at preventing a disaster, costs, and the required implementation times.
- Fundamentally, residential areas should be relocated to safe areas such as higher ground as a countermeasure against tsunami. This, however, is something that is easy to discuss but hard

to implement. For example, it entails combined consideration of a number of policies, including the development of seawalls and levees, enhancement of the functions of protective embankments utilizing transport infrastructure, and the raising of land through man-made earthworks and embankment building.

- In order to develop safe and secure communities, it is necessary to implement zoning that takes into account disaster risk when creating land use plans.
- When engaging in construction of facilities for community development, it is important to keep in mind the concept of dual use and thereby plan for how areas will be utilized during times of disaster.
- The implementation of actions that assist people during evacuations in times of disaster is vital. Beyond structures to communicate information and facilitate evacuations, disaster prevention education and related campaigns also have an important role to play.
- When developing infrastructure for reconstruction, we should pay due consideration to the creation of a wide-area transportation network that takes disaster scenarios into account.

Designing Trailblazing Communities

- Given the shrinking of the population, work for community development should aim to create compact societies that consider the needs of the elderly and vulnerable by concentrating each municipality's residential, employment, educational, entertainment, respite, social security, and health functions, among others.
- In the Tohoku region, there is a need to plan for industrial promotion and community development programs that utilize renewable energy sources such as solar power, wind power, geothermal power, hydraulic power and biomass power (the creation of eco-towns).
- It may be possible to separate residential and industrial zones within the process of reconstruction. This would allow industrial zones to proceed with streamlining efforts while residential zones could aim to maintain natural scenery and the feeling of being a real home for residents. Given that the abiding wish of the residents in the disaster-affected region is to return to their former livelihoods, there is perhaps great significance in aiming to move forward with trailblazing, model initiatives which can fill these people with hope.
- In order to present a vision of a "town of hope" as soon as possible, the needs of each locality should be met and support should be carried out through the so-called "top runner

approach” even if there is a difference in the speed by which each affected area is reconstructed.

- Creating trailblazing communities requires the promotion of branding concepts, capitalizing on the pride local residents have in their own way of life.

Securing Reconstruction Actors and Building the Consensus Needed for Reconstruction

- In formulating regional reconstruction plans and promoting reconstruction projects, frameworks that actually meet the needs of local residents are indispensable. Such frameworks should seek to seamlessly match needs with the specialists that can respond to them.
- When moving forward with reconstruction projects, a “community development corporation” should be established in each area, comprising residents with a strong attachment to their community, in order to ensure the participation of local residents and their leadership of the reconstruction process. These corporations should be operated through “mutual assistance.” A wide variety of human resources could participate in these corporations, including university researchers, consultants, and other experts from the private sector.
- It is important to aim for the creation of truly participatory societies which value lifelong activity and gender equality. This should be realized through a consensus-based process that encourages the active participation of a variety of people including women, the elderly, and the disabled.
- Mechanism like fund system may be needed for local municipalities to conduct the required reconstruction projects.
- It may be useful to employ information and communication technology (ICT) to create a better environment for communication among local residents.

Land Use Issues

- The collection and publication of information related to changes in land conditions following the Great East Japan Earthquake (for example, information related to land ownership or demarcation) is urgently required for the implementation of reconstruction.

- In undertaking community development for reconstruction, there is a need to quickly collect ideas on the ways and means of responding to property rights in flooded areas.
- It may be possible for the national government or prefectural governments to consider purchasing and effectively using land in flooded areas that now face issues regarding property demarcation or ownership rights.
- Within the discussion of whether the national government or prefectural governments should purchase flooded land, some consideration should be paid to the point that there are downsides to purchasing unprofitable land using public funds. If the result is that local residents relocate to other areas, this will not lead to regional revitalization and reconstruction.
- In order to proceed smoothly with reconstruction projects, within the consideration of the transfer of land use rights, discussion should be implemented on a system to combine the procedures outlined in the City Planning Act, Act on Establishment of Agricultural Promotion Regions, Agricultural Land Act, Act on Development of Fishing Ports and Grounds, Natural Parks Act, and the Forest Act.
- In order to overcome conflicts of interest relating to the transfer of land use rights, consideration should be given to a certain degree of forcible settlement to enable work to proceed; for example, in cases where three-quarters of the parties involved are in agreement.
- Forcible measures to enforce the transfer of land use rights should be thought about very carefully, as conflicts of interest related to this issue may become serious.
- Measures are required to deal with speculative moves to buy up land by developers anticipating the mass movement of people.
- The utilization of “community development corporations” may be a good example as a mechanism to separate land owners and land use rights in such a way as to allow the entire community to use land regardless of ownership.

Methodology for Providing Reconstruction Support

- When implementing community development for reconstruction, it is necessary to first decide on the ultimate image for a community and avoid proceeding in an ad-hoc manner.
- Discussion should be carried out on the creation of a “Special Reconstruction Zone” system, in order to utilize the finances and know-how of the private sector while establishing

detailed support measures that take into account unique regional characteristics so that the full potential of each city, town and village can be drawn out to the maximum extent possible. Such a system would comprise a package of temporary and zone-limited deregulation, tax incentive, and financial support and break.

Local Socioeconomic Revival

Reviving Local Industries that Support the Local Economy and Employment

Manufacturing Industry

- The Tohoku region plays an important role in international supply chains. In order for its international competitiveness to be duly harnessed, it is important to consider reconstruction from the perspective of utilizing the region's sophisticated technological prowess.
- It is becoming increasingly apparent that more and more manufacturing companies are withdrawing from the disaster-affected region. Incentives must be provided so that competitive companies in the Tohoku region, including those in the region's vibrant component manufacturing industry or its traditional food processing industry, can remain in business, and also so as to attract new companies.
- The cost of living in the Tohoku region is comparatively low. Companies should therefore find the area attractive. It is important that we work to attract companies through comprehensive community development efforts focusing on the improving the region's quality of life in education, culture, and medical care.
- The manufacturing industry has a large capacity to absorb employment. There is a need to create new industries which can in turn become a core for growth, through, among other efforts, technological innovation, by promoting investment in research and development.
- It is necessary to ensure that local companies continue their businesses in their respective areas by promoting, among other efforts, the rebuilding of affected factories. Financial measures should also be considered in order to avoid a regional depression brought on by the difficulties faced by the region's financial institutions.
- It is essential to utilize discerning human resources capable of making comprehensive judgments on the potential for rebuilding and the value of each company to the region when providing assistance to local companies that have the potential to rebuild their businesses.

Agriculture

- The Tohoku region is an important food base for Japan, accounting for one quarter of the nation's rice supply. In addition to other damage, the tsunami flooded farmland around coastal plains.
- In order to implement reconstruction for agriculture, it is necessary i) to promote the creation of high added-value within the industry by utilizing branding concepts and reconstructing the industry into one that encompasses primary, secondary, and tertiary industries; ii) to reduce costs through the large scale concentration of farmlands; and iii) to diversify the way farms are run by utilizing them for the production of biomass and other sources of renewable energy.
- When considering reconstruction for agriculture, it is important to bear in mind the dual perspective of the promotion of agriculture *and* the reconstruction of agricultural communities, whether in single farm units or agricultural village units.
- It is useful to consider separating rights of farmland ownership and usage in the context of community revival.
- The reassignment of land use rights in order to promote communal farm management should not be carried out forcefully, from the perspective of protecting local communities. Given the continued aging of society and shrinking of the population, the reconstruction of the agriculture and fisheries industries is crucial for the reconstruction of the entire disaster-affected region. To this end, it may be possible to adopt measures whereby support for these industries is shared with urban residents, from the perspective of national land conservation.

Fisheries

- Affected fisheries can largely be divided into two categories: 1) Communities in which the fisheries industry is inseparable from the daily lives of the public as the area's only realistically available occupation; and 2) Fishing port cities, which form vibrant hubs for fishing boats from other areas to unload their catch. Cities in this category are the core of the regional economy, having large transaction volumes, and handling a wide range of service such as distribution, processing, logistics, and other related issues. Depending on the size of the fishing port, the needs for reconstruction will differ.
- The fisheries industry comprises the functions of a wide range of related businesses. As a whole, it has the potential to employ a large number of people, and serves as the foundation

for survival of coastal areas and the livelihoods of the people there. The Great East Japan Earthquake ruptured the functions of the entire fisheries industry, including processing facilities. There is a need for the early reconstruction of various facilities.

- Bearing in mind differences among coastal fisheries, offshore fisheries and deep-sea fisheries, it may be necessary to promote the reorganization/concentration of fishing ports while simultaneously working toward large-scale concentration/streamlining initiatives. In so doing, a disaster prevention perspective focused on preparations against future tsunami also requires due consideration.
- Matters to be considered toward the revival of the fisheries industry include i) the integrated development of individual fisheries as well as the entire industry, distribution, and processing; ii) moves by fisheries cooperatives to create stock companies and joint-venture businesses; and iii) the establishment of “special zone for fisheries reconstruction.”
- A mechanism must be considered by which the work of fishery operators and fishery processing operators, among others, are integrated in a vertical structure encompassing all matters of business from production to sales activities. The revitalization of fisheries requires that the industry covers all relevant primary, secondary, and tertiary functions.
- The perspective of maintaining community-based fisheries by providing them with greater added value will become important for the revitalization of the fisheries industry.
- In order for the fisheries industry to be revitalized, the uniquely Japanese system for fishing rights and structures focused on fisheries cooperatives need to be reviewed, including the possibility of granting fishing rights to outside parties.
- Fishing rights are part of the traditional and conservative rights structures inherent in fishing communities. The lifting of such rights must be discussed carefully.

Tourism, Renewable Energies, etc.

- The number of foreign nationals visiting Japan has fallen dramatically since the Great East Japan Earthquake. There is a need to make efforts to encourage tourists not to avoid Japan or refrain from travel to the Tohoku region. This can be achieved by conveying accurate information to media both in Japan and overseas.
- Harmful rumors triggered by the nuclear accident have had a severe impact on the tourism industry. This is an area which requires a response from the government.

- For the field of tourism, it may be possible to promote initiatives with a view to creating synergy between tourism and other industries. These could include i) the development of tourist sites that utilize the brand appeal of national parks and world heritage sites: ii) initiatives to communicate to the nation and the world the deliciousness of regional food and beauty of the local natural environment; and iii) experiential tourist activities in conjunction with the agriculture and fisheries industries.
- In the Tohoku region, there is a need to plan for industrial promotion and community development programs that utilize renewable energy sources such as solar power, wind power, geothermal power, hydraulic power and biomass power (the creation of eco-towns).

Securing Job Opportunities

- The revitalization of employment in the disaster-affected region is an urgent task and the most important issue for the reconstruction process.
- The creation of an environment in which the people of the disaster-affected region can obtain income through work is important for the rebuilding of their lives. Ingenuity must be exercised to create jobs for the public through recovery and reconstruction efforts such as those for clearing away of debris, construction of temporary housing, and community development for reconstruction.
- For the time being the securing of employment in the disaster-affected region will largely be dependent on demand created by reconstruction efforts. In the mid- to long-term, however, it will be necessary to revitalize the local economy itself.
- As reconstruction projects advance, it is expected that the number of job opportunities in the disaster-affected region will increase, especially those related to construction. As such, vocational training programs need to be enhanced so that the people of the region can acquire the technical skills and knowledge required for reconstruction work.

Social Security and Education

Social Security

- Looking at reconstruction from the perspective of social security, there are many issues that need to be addressed, including medical issues such as the establishment of an efficient regional medical care system, as well as nursing care and welfare issues (e.g. ensuring

sufficient people to act as care givers, how to assist the disabled and their family members, and how to help the underprivileged). It may be possible to use the current reconstruction effort as an opportunity to create a welfare community model based on principles of solidarity and mutual assistance.

- The field of medical care is grappling with a variety of issues, such as a lack of medical resources and insufficient collaboration among medical institutions. As part of reconstruction endeavors, it may be necessary to build a regional medical information network.
- It is thought to be possible to create a database of the medical examinations records of the people of the disaster-affected region. This database would include their medical history related to nursing care, and be stored and managed in a centralized manner, so as to ensure continuity in the delivery of medical care, welfare, and nursing care services.
- Some welfare facilities and other institutions damaged by the tsunami have found it difficult to continue in business, as a result of which increasing numbers of skilled workers in the field of nursing care are losing their jobs. It is essential that facilities to provide nursing care and other services be rebuilt and that their staff members be reemployed.

Education, etc.

- The creation of an environment must be considered in which children affected by the disaster and other vulnerable people can carry on with their lives and engage in academic studies with a sense of safety, and do not lose future educational opportunities. A system of continual support must be created to assist children orphaned by the disaster until they become adults. This system should comprise mental care, services to arrange foster families, and scholarship programs.
- It is important that the disaster-prevention and community-base functions of elementary and junior high schools be enhanced and strengthened.
- Given the great frequency at which Japan is hit by earthquakes, there is a need to enhance education on disaster prevention for students at the primary and secondary education levels so that they can develop abilities to respond to and deal with disasters.
- Universities in the disaster-affected region lost human resources after the Great East Japan Earthquake partially because of harmful rumors stemming from the nuclear accident. The personnel structure of these universities needs to be rebuilt as a matter of urgency.

- In order to prevent harmful rumors and Fukushima-targeted discrimination from spreading further, unbiased education on radiation should be enhanced and public understanding further deepened.
- Regional culture can act as source of comfort. As such, it should not be ignored when promoting regional reconstruction.

Responding to the Nuclear Accident's Impact

Concluding the Nuclear Accident

- It is impossible to consider reconstruction following the disaster without also addressing problems in areas affected by the nuclear accident. It is necessary to pay even more scrupulous consideration to assistance and reconstruction in the nuclear disaster area.
- A major premise for considering reconstruction is that the national government works to bring the nuclear accident to a conclusion as quickly as possible. The national government should be responsible for emergency, recovery, and reconstruction measures in response to the nuclear disaster.
- Compared to other disaster-affected areas, it is necessary to maintain a more long-term perspective for the reconstruction process for the area affected by the nuclear accident. The public should understand that the current disaster will not truly have come to a conclusion until Fukushima recovers.

Initial Initiatives

- In order to respond to the harmful rumors spreading as a result of the nuclear accident, it is important to work to dispel such rumors and restore a sense of security and trust in Japan by transmitting accurate information through continuous information disclosure, including the release of primary data that has a strong scientific grounding.
- Consideration needs to be given to assistance for maintaining employment for companies suffering from the harmful rumors that have spread as a result of the nuclear accident, as well as recovery assistance for local corporations, and other forms of assistance.
- It is important to extend psychological and economic assistance to disaster victims, who have been forced to evacuate from their homes as a result of the nuclear power station accident. At the same time, it is important to engage in efforts to maintain communities and

ensure the functions of municipal governments within evacuation areas, so that those who have evacuated and dispersed to different parts of Japan are not isolated.

- A thorough investigation into the cause of the nuclear power station accident, along with an assessment of its impact and verification of the appropriateness of the response, should be conducted so as to gain international trust.
- It is vital that irradiated soil be decontaminated immediately. It will be necessary to work to gather and provide primary information in addition to conducting ongoing expert assessments on the radiation contamination situation of soil.
- There are physical, chemical, and biological methods for eliminating radioactive substances; however, sufficient knowledge of these methods has yet to be acquired. Now is the time for related research institutes in Japan to come together and swiftly establish decontamination methods, while conducting verifications on the local level.
- It will be necessary to conduct monitoring in an integrated, planned, and continuous manner based on a unified national policy and standards. This will enable fishery operators and farmers to engage in business free from anxiety and alleviate consumer concerns over product safety.

Towards Reconstruction

- It will be important to promote industries related to renewable energy as new options for those formerly employed in the nuclear power industry. Fukushima Prefecture should spearhead the dissemination of renewable energy in Japan.
- It may be possible to develop Fukushima Prefecture as a center for research and work related to the cleanup of radioactive contamination. A long-term survey on the impact of environmental radioactive contamination on humans could be undertaken, and the prefecture could also be used as a place to consider the role of medicine as well as the use of renewable energies in the future.

Reconstruction and Japan's Socioeconomic Revival

Reviving Japan's Economy

- Japan's economy cannot be revived without reconstruction of the disaster-affected areas. Likewise, true reconstruction of the disaster-affected areas is not possible without the

revival of Japan's economy. From this perspective, we should aim to achieve reconstruction from the disaster at the same time as we work toward revival.

- The framework for reconstruction should be integrated with the Government's growth strategy, and knowledge and funding from the private sector should be incorporated into reconstruction efforts in order to break out of the "two lost decades."
- There are many possibilities for a blueprint for the future of Japanese society as a whole, such as "a society that values lifelong activity" (one that develops each individual's skills over the course of their life and fully utilizes the abilities of every generation), "a society that lives in harmony with the environment" (renewable energy, harmonious coexistence with nature), or "a safe and secure society" (disaster preparedness, independence and cooperation, social security). While regional needs should be prioritized in the process of reconstruction, it is equally important for us to bear in mind a long-term target for the kind of society we wish to create.
- The key factor behind the economic stagnation in Japan to date has been an overall lack of demand. After the disaster, however, the main factors are now severely restricted supply due to ruptured supply chains and a lack of electricity. It will be necessary to eliminate these supply restrictions in the process of working to support reconstruction.
- In consideration of the supply restrictions faced, financial and monetary measures need to be employed as a form of macro-level stabilization policy in order to prevent deflation and stagflation.
- Due to disaster damage and power shortages, there is the possibility that Japan will see the "hollowing out" of its industries and companies moving to relocate their offices overseas.
- In order to respond to the harmful rumors spreading as a result of the nuclear accident, it is important to work to dispel such rumors and restore a sense of security and trust in Japan by transmitting accurate information through continuous information disclosure, including the release of primary data that has a strong scientific grounding.
- Japan should advertise the superiority of its products to the world (Cool Japan), while also employing creative undertakings between the private and public sectors in order to protect the "Brand Japan" that is recognized globally.

New Public Commons

- The perspective of the “New Public Commons” will be tremendously important as a form of social cohesion when promoting community-building and nation-building during work toward reconstruction.
- The role of the “New Public Commons” is extremely significant, as it features not only the participation of the government and corporate sectors, but also of civil society. This includes the activities of various organizations, such as social businesses and NPOs, as well as the goodwill donations of each citizen and their volunteer activities.

Securing the Financial Resources for Reconstruction

- The disaster is not only a problem for people living in the affected areas; it should be taken in on a personal level by all Japanese. Assistance, social solidarity, and burden sharing among the entire population will be necessary to advance reconstruction.
- It is impossible to talk about reconstruction without discussing financial resources, and it is impossible to discuss financial resources without discussing a vision for reconstruction. This should be the basic attitude when addressing the issue of financial resources for reconstruction and it will be necessary to orchestrate such discussion.
- In drafting the reconstruction framework, Japan must pay heed to critical economic and social trends that differ from the time of the Great Hanshin-Awaji Earthquake, including the rise in the rate of population aging, growing social security benefit payments, and stringent financial restrictions.
- Considering the critical financial situation of contemporary Japan and other factors, reconstruction should be mainly financed by the currently living generation, without shifting the burden to future generations. If reconstruction bonds are issued, financial resources for reimbursement should be guaranteed.
- It is necessary to avoid response measures to this disaster that lead to a new financial crisis or other risk. Abandoning the goal of restoring fiscal health is not an option.
- Japan may forfeit its future if it does not work to extricate itself from the current fiscal situation and other matters.
- Thought should go into having future generations bear the burden for things for which they will benefit from such as infrastructure development.
- Amidst a situation in which the birth rate continues to fall and the aging of society continues

to advance, if the burden is shifted to future generations it will become much greater in the years to come.

- Before discussing financial resources for reconstruction it is necessary to thoroughly investigate the necessity for reconstruction-related projects and the effects of costs invested while revising existing expenditures.
- Multifaceted considerations should be paid to a temporary reconstruction solidarity tax as a means for securing financial resources for reconstruction, taking into account income tax, corporation tax, consumption tax, taxes on fossil fuels, and real estate tax.
- There is diverse discussion on the appropriateness of all taxes, so it is necessary to mobilize all ideas in considering the best combination.
- Serious consideration should be paid to the implementation of a reconstruction tax.
- It will be necessary to design a system that incorporates private financing initiatives (PFI) and other private sector funding as a source for funding infrastructure development and other reconstruction, without relying on public sector funds alone.
- Thought should be paid to honoring use-specific donations and donors with awards and other means.

Energy/Environmental Policy

- A path for future energy strategy must be revised in account of the current nuclear accident. Comprehensive and multifaceted considerations must be made promptly concerning the stable supply of electricity, response to frameworks for cutting greenhouse gas emissions, and promoting the implementation of renewable energies.
- In promoting reconstruction projects, Japan should aim to construct a low-carbon society by utilizing and developing solar, wind, hydraulic, biomass, and other renewable energies.
- In order to present Japan's image domestically and overseas as a world-leader in the utilization of renewable energies, it will be necessary to promote research and experiments through industry-academia collaborations that endeavor to create commercially viable renewable energies.
- There is the possibility that Japan's potential growth rate will fall markedly if manufacturers leave Japan or if foreign companies avoid entering the Japanese market. It is therefore necessary to prioritize efforts to eliminate power restrictions and work to ensure the stable

supply of electricity.

- A thorough investigation on the cause of the nuclear power station accident, along with an assessment of its impact and verification of the appropriateness of the response, should all be conducted so as to gain international trust.
- A full overhaul of safety review standards and the safety review system for nuclear power stations is necessary.
- While some feel that the positioning of nuclear power stations should be revised in response to the current nuclear accident, other believe that Japan's economy would fail without nuclear power, given its lack of natural resources. In either case, this does not necessarily have to be an "all-or-nothing" issue.

Social Security Policy

- It is necessary to change the structure of society from "Japanese-style life security," which is based on the traditional long-term stable employment of the male household head, to a more comfortable society that is driven by the participation of all members of society.
- In Japan, the ratio of the working population to the retired is falling faster than any other advanced country in the world. Moreover, as a result of population aging, various other problems are becoming more prominent, including the weakening of communities, increases in vulnerable transportation users, the collapse of medical care systems, and increases in the number of people that require nursing care.
- As the super aging of the population advances, the role carried out by the social security system will be significant when considering how to ensure stable lives in the disaster-affected areas following reconstruction. In that respect, the comprehensive reform of social security and tax that is currently being discussed by the Government will be a major premise for considering a reconstruction framework.
- Since before the disaster, a comprehensive reform of social security and tax was being considered as a pressing issue. Japan should ensure consistency with these considerations in its response to the disaster.

Strengthening National Readiness for Disasters

- Most of Japan's population and resources are concentrated in its coastal areas. The recent

disaster has compelled us to recognize anew the fact that Japan is a country that faces serious risks in the form of earthquakes and tsunami.

- In strengthening national readiness for disasters over the long-term, it is important to avoid competing with nature, and to consider natural disasters as a part of life in Japan. It is also important to incorporate ideas such as “disaster reduction” or “disaster containment” as a way to minimize damage.
- It is necessary to specify a method for future damage forecasting along with a direction for future earthquake and tsunami countermeasures while also analyzing the mechanisms that caused the current earthquake and tsunami. This should be conducted after scientifically re-verifying the extent to which past disaster prevention measures were effective in reducing damage, and should include improving the precision of tsunami forecasting and methods for conducting evacuation calls.
- Taking this disaster as a lesson, countermeasures to major ocean-trench earthquakes, including the possible “Tokai Earthquake,” “Tonankai Earthquake,” and “Nankai Earthquake,” and their possible accompanying tsunami, should be reconsidered. In addition, consideration should also be paid to countermeasures to disasters resulting from an urban-based earthquake, such as a fire.
- It is worth considering the preparation of regional disaster preparedness stations as a precaution against future earthquakes and other disasters.
- Japan should reexamine the role of its national land policies from the perspectives of correcting the overpopulation of Tokyo, balanced land formation, and nation-building founded on disaster-reduction and disaster-containment.
- It is likely necessary to examine alternate locations throughout Japan that would back up the functions of Tokyo in preparation for future major disasters.
- It is necessary to separate the issues of the relocation of capital functions and reconstruction work when engaging in dialogue. The relocation of capital functions should only be discussed once the path to reconstruction becomes visible.

Recording the Disaster and Preserving/Sharing Lessons Learned

- It may be possible to create a “Memorial Forest” or “Memorial Hill” in the disaster-affected area as part of a national initiative.

- It may be possible to survey the causes and countermeasures to the disaster by convening an interdisciplinary, first-rate academic study group. It also may be possible to establish an office in the Tohoku region to compile an archive on information related to the disaster and to conduct international surveying and research on disasters in an effort to communicate and develop disaster-related experiences among the next generation.
- It may be possible to establish March 11 as “Social Solidarity Day” in order to commemorate those who lost their lives in the disaster, deepen community bonds, and implement emergency response drills.