

Five proposals for realizing genuinely sustainable forest management

— From forest resources management to a profitable forest industry —

Basic understanding

1. Forests form the foundation of Japan's national land, and constitute a resource with a diverse range of economic and public benefit functions. This resource is owned jointly by all people of Japan, and they equally share the rights and obligations to ensure the sustainability of the nation's forests.

In the Committee's interim proposals, we presented the following understanding relating to the forest industry, which has evolved and grown on the back of Japan's valuable forests. That is, "Only by realizing genuinely 'sustainable forest management,' not just from the perspective of simply managing a resource, but also from the viewpoint of fostering an effective industry, will forestry become a growth industry that can create the future. This will also lead to a recycling-based low-carbon society^{Note 1} in line with Japan's new policy objectives, and enrich Japan through the effective utilization of its forest resources." The Committee has examined and researched a broad range of policies, including local surveys overseas, that can bring this understanding to fruition.

Note 1: The "21st Century Environmental Nation Strategy," approved by Cabinet in June 2007, stated the need for an integrated promotion of a "low-carbon society," a "recycling-based society", and "a society in harmony with nature" to achieve the goal of becoming a "sustainable society" that can overcome global warming and other environmental crises. Forestry is a future-oriented industry that can indeed bring about the realization of each of these societies.

2. The Government formulated the "Forest and Forestry Revitalization Plan." In view of the details of the Interim Report, the Government's progress in tackling this by giving direction to the "revitalization" of forests and the forest industry is recognized. However, considering this Plan is little more than a conventional business model of consolidating and efficiently "managing" forests through forest management programs^{Note 2}, even if the aim of a domestic timber self-sufficiency rate of 50% over the next ten years is met with shipments of 50 million cubic meters of timber from 10 million hectares of plantation forests, the Committee cannot but feel some concern about the outlook subsequent to that ten-year period.

Note 2: Forest management programs are plans to be drawn up by forest owners or forestry contractors to facilitate consolidated forestry operations under the revision to the forest planning system based on the Forest and Forestry Revitalization Plan. The Government will begin receiving programs from April 2012.

3. After the Revitalization Plan and the publication of this Committee's interim proposals, at 2:46 pm on March 11, 2011, the Great East Japan Earthquake struck, drastically transforming the Japanese landscape and severely impacting on the state of mind of the Japanese people. The first essential step is the reconstruction of the area affected by this disaster of an unprecedented size, scale and complexity, followed by Japan's revitalization and regeneration. Forests are not merely a source of raw material for reconstruction. In the aftermath of the nuclear power accident, there are demands for the restructuring of Japan's energy policies with a view to realizing a recycling-based low-carbon society, so it is critical that the forest industry,

which is also a source of supply of the carbon-neutral energy^{Note 3} wood biomass^{Note 4}, fully exercise its role in this respect.

Note 3: Carbon-neutral energy is a form of energy that has a neutral effect on the volume of carbon circulating in the environment. When wood is used for energy, the volume of CO₂ emitted into the atmosphere when burning the wood for energy is the same as the volume of CO₂ absorbed from the atmosphere in the course of the life of the tree from which the wood was sourced.

Note 4: Wood biomass is biomass (organic matter of a biological origin, other than fossil fuels) originating from trees.

4. The Committee proposes a course for a profitable forest industry based on the concept of forming an integrated view of the supply side and the demand side, and classifying the five points of 1) mechanism for gathering and providing forest information, 2) optimum form of subsidies for forest management, 3) development of methods for matching timber supply with timber demand, 4) development of technologies and human resources, and 5) response to changes in energy policies into short-term response and medium- to long-term response. To tackle these issues, an integrated approach among the industrial, academic and public sectors and government ministries and agencies is essential, so there is a need to establish an organization — Forest Industry Development Committee (tentative name) — with the jurisdiction for this within the government.

Remarks: It is envisaged that forest industry development committees will also be established at the local level, although the proposal does not specify central or local regarding this organization.

Moreover, it is envisaged that the short-term response is on a scale of about three years, while the medium- to long-term response is a period of from five to ten years.

5. The Government should continue its steady progress in realizing the Forest and Forestry Revitalization Plan, and, based on the following five proposals, develop policies that can give rise to a profitable forest industry and genuinely sustainable forest management.

Proposal I: Establish the mechanism for gathering and providing effective forest information to realize genuinely sustainable forest management

Short-term response

1. Fundamental to this proposal is the early confirmation of property boundaries by cadastral survey, but as an interim measure until this can be completed, establish a mechanism for separating present land ownership and usage (management) with the agreement of the parties concerned using GIS^{Note 5}, GPS^{Note 6} and other information to contribute to forest consolidation (gathering of various forest-related information including land adjustment, taxation and other forms of administrative information by forest industry development committees (hereinafter referred to as “committee”)).

Note 5: GIS is an acronym for Geographic Information System. It is a computer-based system for geographical data reference that creates, stores, maintains and integrates map data and various kinds of additional information.

Note 6: GPS is an acronym for Global Positioning System. It is a navigation system that determines current surface location using satellites. Both systems are used extensively in the forest industry.

2. Enter this information into a digital database, and provide forest information such as ownership and lot numbers to the minimum level necessary for consolidation by forest owners or forestry contractors.

Medium- to long-term response

1. Make rights-related registration mandatory to facilitate the early completion of cadastral surveys and promote an awareness of management responsibilities.

2. Promote the transfer of ownership or land-use rights from forest owners or forestry contractors who are unable to fulfill their management responsibilities.

3. Promote the consolidation of land-use rights by separating forest ownership and land-use rights and have forestry contractors draw up consolidated management programs for consideration and approval by the committee.

Proposal II: Make drastic alterations to the form of government subsidies so that only commercial forests are subject to forest management and non-commercial forests are converted to natural forests

Short-term response

1. Forest owners or forestry contractors classify their forests as commercial or non-commercial forests depending on individual management factors such as access to the road network for consideration and approval by the committee.
2. Alter the structure of government subsidies for commercial forests to encourage the ingenuity and entrepreneurship of forest owners or forestry contractors by making the direct payment of a set amount depending on the scale of operation the basis of these subsidies. The committee will assess the cost-effectiveness of the subsidies.
3. Draw up a roadmap for converting non-commercial forests ^{Note 7} to natural forests, and subsidize the management of these forests until they have been converted to natural forests in line with this roadmap. Government subsidies will cease once the conversion to natural forest has been completed.

Note 7: Non-commercial forests are productively unprofitable forests, and the costs required to convert these forests to natural forests will in effect be met by government subsidies. The term natural forest used here is defined as forests that ultimately do not require any artificial management or care.

4. In addition to basic government subsidies and with the consideration and approval of the committee, introduce preferential taxation measures ^{Note 8} covering areas such as inheritance tax for forest owners who make a consistent and active contribution to creating and maintaining the public benefit nature of their forests.

Note 8: This includes making the inheritance tax deferral system to be adopted by the government even more convenient.

Medium- to long-term response

1. Consolidate the use of adjacent commercial forests by promoting the separation of forest ownership and use (management) (Proposal I), and concentrate management resources in profitable commercial forests under the initiative of the private sector. At that time, introduce financial measures to facilitate the availability of operating capital.
2. Seek the integrated management of commercial forests, regardless of whether they are owned by the national or local governments or privately owned, through the consolidation of forest utilization under private-sector initiative. In conjunction with this, examine the forms of management that can generate profit over the long term.
3. Transfer all non-commercial forests to public management, regardless of the ownership classification. After conversion to natural forest has been completed and certified by the committee, the natural forests will be managed by the Ministry of the Environment

Proposal III: Develop methods for matching timber supply and demand to ensure the forest industry transforms into a strategic forward-looking industry that functions as a market-oriented business.

Short-term response

1. Under current conditions where there is an inevitable contraction of the established domestic market, there is a need to promote wide-ranging measures for utilizing timber in public buildings. Moreover, there is also a need for a structure (for example, the extensive use of IT) in which the supply side coordinates and matches timber supply with the demand side (timber processing, housing, biomass, regional heating, and export) when drawing up plans for timber logging and shipment.
2. Introduce a structure for the prior matching of new markets, such as the use of biomass as an energy source and overseas exports of timber, with the supply side. For example, in the case of exports, the government (committee) plays a central role in analyzing the needs and the various systems (customs duties, quarantine, and building codes and standards) relating to the importing country, and examining and putting forward the necessary measures.

Medium- to long-term response

Further building upon the short-term response, develop an IT-based production, distribution and processing structure for B to B (transactions between businesses) and B to C (transactions between businesses and consumers). Moreover, develop a supply structure that enables “on-demand shipments” so that various demands for timber quantity and quality anticipated for the market 10-20 years from now can be met promptly, and that only the necessary volume of timber is shipped at the required time.

Proposal IV: Transform the existing hierarchical theory-based forestry education and research into practical and comprehensive technical development and human resources training with a view to a profitable forest industry.

Short-term response

Existing educational and research institutions, headed by universities, are hierarchical for each academic discipline, and are therefore not necessarily the most practical for and responsive to the range of issue facing the forest industry. The human resources training contained in the Forest and Forestry Revitalization Plan is not beyond the scope of the existing forestry technician training, and this, in a sense, will suffice for the time being. Therefore, introduce a structure under which the committee certifies experts in the forest industry with extensive knowledge in forest management and outstanding practical achievements in field forestry work as “forest industry development consultants” (tentative name).

Medium- to long-term response

Transform the current system into one that can better respond to new challenges (management, marketing, business matching, and development of new technologies) based on an examination and assessment of the roles and functions of existing education and research institutions by the committee.

Proposal V: Position the forest industry as a key industry for the revitalization of the Tohoku region, and develop it as a model region for a recycling-based low-carbon society in response to changes in energy policies.

Short-term response

Position wood biomass as a regional resource (source of power generation and heating), and review the determined “purchase price” after a set period (about 3-5 years) to ascertain whether this is contributing to the efficient utilization of forest resources centering on the cascade method of use ^{Note 9} as a part of the changes in energy policies.

Note 9: The cascade method of use is a form of use in which the resource or the energy is used not just once; rather, the resource whose properties have changed after use or the waste material generated during use is used for other purposes, then subsequently used for yet other purposes. In this way the resource cascades through different levels of utilization. A single tree is processed into raw material such as timber products or boards, chips for pulp, or pellets, and the wood biomass produced during these processes is used for power generation or heating, so the resource is utilized to its maximum efficiency.

Medium- to long-term response

Present specific measures for the strategic utilization of power and heating using wood biomass in energy policies at the national and local level.