Private and Municipal Forests and the Forestry Planning System in Japan – Trends and Problems after World War II

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In this paper, the author explains the characteristics of the Japanese forestry planning system and points out some of the problems found therein from the viewpoint of the management of privately-owned forests relating to the economic background and governmental policy.

The forestry planning system is a centralized type of planning, the planning beginning at the top and flowing downward and outward the periphery. In order to make this planning system an effective instrument, the district forestry planning founded under the system must approach the problem of how to combine the resources of the forest with the district's inhabitants and the forest owners; and further, the extent of the effective union of the district and the local timber manufacturing must be examined.

Preface

This paper is intended to explain the character of the Japanese forestry planning system and point out some of the problems found therein from the viewpoint of the management of privately-owned forests. The Forestry Planning System covers government forests also, but in that case there is necessarily an element of public benefit involved so that in the practical application of the system no particular contradiction arises. Therefore I have taken up the problems in the Forestry Planning System here in relation to privately-owned forest management only.

Since the relationship between private forest afforestation and those who are responsible for carrying it out is very important when discussing the problem of privately-owned forests, I first discuss the problem of the relationship to the economic background and governmental policy. In conclusion I discuss the basic attitudes necessary in forming forestry laws in the future.

Developments in postwar afforestation and those responsible for it

i. Among the systems that underwent radical change after the war there was that of agricultural land. In this reorganization the tenant farmers became independent and achieved stability in management. In another area, Japan's forestry was considered a sector important for the recovery after the war, and so experienced an inflationary trend. The indiscriminate cutting during the war and the little planting activity during and just after
the conflict however, caused a rather low level of forestry activity to continue until about 1950 (Ogawa 1970). After that, however, afforestation began to progress as the condition of those taking part in it and the system itself improved with the discontinuance of the wartime control system, the free participation of forestry cooperatives through revision of the Forest Law, promotion of forest rehabilitation through the Temporary Afforestation Measures Act, and further, with the establishment of afforestation subsidies and the forestry extension system.

So, around 1950 forestry entered the first rapid afforestation period during which, up to 1956, almost all of the 1.5 million hectares of land to be reforested was planted. The greatest proportion of this land was privately owned (Fujisawa 1982).

Those who carried out the afforestation during this period were middle-level farmers who lived in an area where they could combine this activity with rice growing, having been freed by the agricultural reorganization and having achieved high productivity in rice culture. After the agricultural reorganization farming households saw a rise in farm income and stability in household finances due to progress in agricultural techniques and increases in the price of agricultural products. As a result, surplus income could be invested in silviculture. During this period it was possible to carry out forest planting with afforestation subsidies if there was a private source of labor available. This was promoted by the "Forestry Techniques Extension System." Technical guidance personnel were placed in each prefecture and, as the need arose, went into each district to explain the necessity of reforestation and give guidance in techniques. Awards for "Superior Forestry Households" and "Model Forests" were established, along with districts which were the subject of concentrated technical guidance. The main stimulus to the desire of the agricultural household to carry on afforestation was that young trees of small diameter were being sold at high prices so that a return on investment could be realized in a relatively short time.

The second rapid afforestation period which began in the latter half of the 1950's was carried on, as in the first period, by middle-level farmers. A characteristic of this second period, however, is the progress in forest conversion afforestation. That is to say, cutting away of low-quality broadleaf trees was followed by total reforestation with coniferous species. This is not unconnected with the pulp manufacturers' use of small-girth trees. As a result, advanced-growth broadleaf timber, becoming scarce, could be sold for a very high price, and even limb wood was not left unused.

However, as a result of this forest conversion reforestation, the farmers were no longer able to use the byproducts of third charcoal for firewood or making charcoal, or to use the undergrass for livestock feed or compost. Thus, this development joined with the liberalization of agricultural products to cause an outflow of agricultural workers from forestry towns, to the extent that these settlements were sometimes totally depleted.

Forestry and reliance on foreign timber from the 60's

The characteristics of the supply and demand patterns were: a) greatly reduced demand for firewood and charcoal and a great increase in demand for rough timber; b) a sharp decrease in the stature of domestic timber and a sharp increase in the importance of foreign timber to meet the rough timber demand; c) the increase in the demand for rough timber derived from the demand for pulp, veneer and plywood materials (Ogawa 1970). These three characteristics are interrelated. That is to say, the demand for firewood and charcoal had diminished because the increase in demand for pulp material caused a sharp rise in the price of domestic timber, which in turn caused the cheaper foreign timber to be imported in larger and larger amounts. In foreign timber, types similar to Japanese cedar and cypress were especially imported in large quantities from America after 1961, having a great effect on domestic forestry to the extent that both loggers and lumber mill operators in the interior who relied exclusively on domestic products were inevitably forced out of business. As a result, the amount of cutting and reforestation in private forests diminished, creating a loss of stability in the livelihood of agricultural forestry workers. In order to avoid the reduction in cutting and reforestation on privately-owned forest land, afforestation by public corporations and companies as public afforestation projects, and afforestation by forestry cooperatives based on the Forestry Structure Improvement Project began to appear.

Afforestation by forestry cooperatives as forestry structure improvement projects

Two measures were adopted in order to relieve the stagnant situation in forestry production. One was the "Forestry Structure Improvement Project" and the other was the establishment of public forestry corporations which were to carry out cooperative afforestation on privately-held forest land. The Forestry Structure Improvement Project was based on the Basic Forestry Law and carried out when that law went into effect in 1964.

The Forestry Structure Improvement Project, in the final analysis, had as its aim the alleviation of the problem of the scattering of small plots of land and low productivity land use prevalent in private forests; thus, to help forestry respond to the internationalization of the economy.

The Project has a set menu to put into effect which includes measures for enlarging the scale of the forests involved, building logging roads to increase efficiency of opera-

and went on to establish measures for a fully tion, investment in machinery and other facilities, and development of a production organization. It also grants subsidies to municipalities, forest cooperatives, and other cooperative organization within the designated districts. Also, to help the farming household enlarge the scale of holdings, it promotes the coordination and aids in procedures connected with obtaining land for the individual owner to reorganize his area into an efficient configuration by acquiring new land under the 1966 "New Common-Right Forest Land Modernization Act." Further, placing emphasis on measures to increase the scale of operations resulted in the "Forest Land Operation Plan" which turned wooded land into land for forestry operations, and

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In order to promote afforestation during the serious scarcities of timber prevalent in 1958, the "Profit Sharing Reforestation Temporary Measures Law" was passed mainly at the urging of the pulp manufacturers. Here the landowner and the planter become co-managers and co-owners of the trees, but are exempted from being sued for claims separately as is provided in civil law. At the same
time, in order to promote profit sharing af-
forestation, a system of low interest loans
mediated through the local government agen-
cies was established.

With these measures to deal with the stag-
nation in afforestation of the period, in the
main prefectures public afforestation corpora-
tions were set up which became responsible for
the activity of expansion in afforestation
developing in the latter part of the 1960’s. At
this time afforestation, which up to that time
had been carried out by individual forest
owners, municipalities owning forests, or in
profit sharing arrangements with borrowed
privately-owned forests, was surpassed by af-
forestation by public corporations. Even now
the role assumed by public forestry corpora-
tions and other public organs in afforestation
continues to increase.

Since the afforestation by public corpora-
tion is totally dependent on a system of sub-
sidies, the oil crisis of 1973 which caused a
drop in the price of timber which in turn
meant that the small-girth trees from thin-
ning could not be sold, resulted in making it
difficult to pay back borrowed capital.

Another public organ that carries on af-
forestation is the “Forestry Development
Public Corporation” which executes profit-
sharing afforestation limited to protection
forest which was previously reforested as
public land by the national government.

It must be added here that much of the
work carried out by the Public Forest Cor-
poration was taken up by the Forestry Develop-
ment Public Corporation uses the labor force of
the forestry cooperatives. In this sense the for-
yest cooperatives act as sub-contractors for
these public corporations.

Characteristics of the Forestry Planning
System and some connected problems

The evolution of the Forestry Planning System
and the contents of the present system

"The Forestry Planning System" was es-
blished in 1951 at the same time as the
revision of the Forestry Law. The present system,
however, was evolved only after the
next revision of the Forestry Law in 1962
which it used as a basic model; revised after-
wards as the "Basic Forestry Law" in 1964
and again in 1968 on the occasion of the
establishment of the "Forestry Operations
Plan" provided for in the new revision of the
Forestry Law; and revised finally in 1979
when the Forest Lands Development
Licencing System was established.

Here we shall examine the evolution of the
Forestry Planning system, concentrating on
those parts that have been subject to revision
(Fujisawa 1982).

The 1962 revision of the forestry planning
system was concerned chiefly with three
points: 1) The organization of forestry plan-
ning which had, up to then, been divided into
tree levels, basic forestry planning adminis-
tered by the Minister of Agriculture and
Forestry; forestry district operations plan-
ning, administered by the prefectural gover-
nors; and the forestry district execution plan-
ning, administered also by the governors,
was reformed into two levels, national forestry
planning of the national and local level, and
basic forestry planning administered by the
governors; 2) The licencing system for cutting con-
iferous trees of regular forests which had not
yet reached optimum age was replaced with a
system requiring only the statement of
afforestation in protection forests and other restricted
forests were removed from forestry planning.

The 1964 revision accompanied the Basic
Forestry Law established in the same year.
In Article 10 of the new law the "long range outlook concerning demand, supply and reserves of the chief forestry products must be recorded and reported to the Diet." This section was then eliminated from the
Forestry Law. The local forestry planning
was made to conform to basic forestry plan-
ing and to the long-range outlook of the
national forestry planning which was to set
up ten-year plans at regular five-year inter-
vals.

The 1968 revision was called the "Third
Period Revision" and defined the position of
forestry operations planning by the different
forestry owners within the forestry planning
system.

The 1974 revision concerned mainly four
items: 1) It provided that National Forest Planning be done by district, and added to the
categories of cutting, reforestation, tend-
ing, and protection which were already in the
planning, categories concerning the district
forests to which the planning applied, forest
development targets basic to the full develop-
ment of the forests, plus the new category
concerning the conservation of forest lands;
2) It delineated the character of forestry plan-
nning as one which must give appropriate
consideration to the support and progress in
public benefit derived from forests in terms of
a superior natural environment, conserva-
tion, configuration, etc.; 3) It instituted a
licencing system for land use accompanying
conversion of forest land; 4) enabled "Joint
Forestry Operation Planning" to be set up for
areas that were heretofore in the forestry
operations planning system.

The present Forestry Planning System has
four sectors; 1) Basic Planning for forest res-
erves; 2) National forest planning; 3) dis-
trict forestry planning; 4) forestry operations
planning.

Basic planning for forest reserves describes
the Government’s target for forestry. The Basic
Planning for forest reserves is a general plan purpose of making clear the basic govern-
mental policy for attaining this target. In
Article 10 of this law it is provided that basic
planning concerning forestry resources and the
system requiring only the statement of
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As can be understood from the previous
discussion, the forestry planning system is a
structure for carrying out governmental poli-
cy concerning the national forest reserves
and is a centralized type of planning, the
planning beginning at the top and flowing
downwards and out toward the periphery.
This can be said also of the forestry opera-
tions planning, which is made up for indi-
vidual businesses by the forest owners them-
selves. In the forestry operations planning,
while the argument that management should
seek efficient administration of forestry opera-
tions within individual forest management, it
should be understood that the essential func-
tion of the forestry operations planning, as
part of the forestry planning system, is to put

Forestry operations planning belongs to a
system in which the private or municipal
forest owner draws up of his own free will a
plan for his forest operations over a five-year
period, receives official acknowledgement of
the plan from the prefectural governor or the
Minister of Agriculture and Forestry and,
hopefully, carries it out deliberately and effi-
ciently. Within this forestry operations plan-
n ing there are the "Single Owner Operations
Planning" and the "Joint Forestry Operations
Planning." The former is an operations plan
carried out individually by a relatively large
number of large-scale owners, while the latter
has merit for the smaller owners (Oka 1980).
Thus, for smaller owners, through coopera-
tive organized planning, a) installations for
outfeeding become possible, b) logging roads
and other such facilities can be constructed,
c) a stable labor force is made available, d)
timber distribution is more economical, e)
collective undertaking of forestry cooperative
operations becomes possible, with a guaran-
tee of continuing production activity (Fukushima 1982). The smallest entity to which the "Joint Forestry Operations Plan-
ing" is applicable, according to the Forestry
Law enforcement ordinances, is two owners
with a combined land area of 30 hectares or
more.

Characteristics of the Forestry Planning System

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Problems with the Forestry Planning System

First of all, it is extremely difficult to bring "self-motivation" for management of individual operations under the forestry planning system. The reason is that this planning, with its centrally controlled configuration, has been combined into the aims of government policy for the national forestry resources. If the planning was done at the points of execution, the character and mode of execution of forestry operations planning would have to be revised. It is doubtful, however, whether this would be possible considering the present low level of maturity in private and municipal forest management, the volume of forest reserves and their quality, the quality of planning for and establishing managerial targets. Secondly, the aim of planning is the full developments of the forest itself and is thus limited in its scope. That is to say that it is concerned from both the point of view of quality, (of what types of trees the forest is structured, their age and rank,) and quantity in developing forest reserves which can function in the production process. In that sense, the planning concerns the development of a production base. Therefore, when considering the organization and heightening of functions of the economic activity be filled by the Forestry Improvement Extension Personnel, on the other hand, has only increased with the Joint Forestry Operations Planning, and its later form, the "Core Forestry Districts Promotion Measures Projects" since the 1977 crisis.

In order to make the forestry planning system an effective instrument, fundamentally the individual forestry operation plans should be given their place within individual economies and district forestry planning should be accomplished by municipality as the unit of local economy giving the planning a configuration of from point of execution to center instead of vice versa. In other words, in setting up forestry operations planning, the participation of the owners themselves is very important (Shimotori 1971).

Of course, considering that forestry is one nation's industry, it is natural that there should be a national plan. But this plan should never be simply for the purpose of securing a certain simple volume of raw material resources to meet the demand of the timber industry. That is why it is necessary to...
have an industrial plan created at the bottom or points of execution, where there can be full comprehension of the conditions of those who actually carry out forestry operations and the system by which the industry works.

R. Ohsaki also comments on this point that, first of all, it should be remarked that the basic plan concerning forest reserves is the central support, and the long-range outlook of the demand for important forestry products as well as the supply are related to this in a subsidiary fashion. In this way, when considering the problems of afforestation and cutting, the forestry planning must use the standards concerning forest land use, labor force, capital investment structure, etc. from the standpoint of those actually involved in forestry production (Ohsaki 1970). He thus points up the problems with planning that is totally at the mercy of timber demand, ignoring those actually taking part in the industry.

From the aspect of managerial techniques, for long-range forest planning it is necessary that cutting and renewal should be a consciously unified aim based on the forest's ecology. That is to say, it should be thought impossible without this kind of long-range planning to secure the function of public benefit of the forest, increase forest resources, or raise the level of forestry productivity.

Simply basing a plan on the natural situation, however, is not really enough. The involvement with human beings must also be fully taken into account. That is, it is here that the economic aspects of planning appear. And it is within the involvement with human beings that the aspects of national economy and individual economy are tied together. In fact, in order to, as it were, "bring the planning down to earth," it is necessary to see the importance of individual economies.

Further, in order to establish a forestry plan in a particular district, the tree-type structure, tree size, quality, and quantity of forest reserves, etc. all the special characteristics obtaining in a particular stand of forest must be determined at the same time. There must be an appropriate grasp of the existing configuration of the labor force, the amount, and the labor outflow situation within the district economy where it is important to know to what extent all these can be tied together. In other words, district forest planning within the forest planning system must approach the problem of how to combine the physical resources of the forest and the district's inhabitants and the forest owners; and further, the extent of the effect of the union of the district and the local timber manufacturing must be examined. For this the forestry cooperative must be considered very important as fulfilling the role of intermediary and guide.

In passing, it is necessary to touch upon the development of the forestry cooperatives which have been mentioned as the cooperative industry of those who actually carry out the operations, and to what extent there is a connection to the household economies of those who are members of the cooperative. Certainly the forestry cooperatives developed instead of individual economies; it might even be said that as the individual economies got weaker, the tendency for the development of forestry cooperatives got proportionately stronger. This, however, was a temporary phenomenon, and it would be a mistake to consider it a permanent and stable trend (Noguchi 1981). There are two points important for the forestry cooperatives to maintain a base for development; 1) that there is a stable re-use of workers who carry out operations and 2) there is an increase in the contracts from individual forestry households which are the subjects of operations. For the latter, however, it is absolutely necessary that the individual forestry household be stable, since in unstable conditions there would be no investment in afforestation and care in expectation of future income.

Recently there has been an increase in areas where the forestry cooperatives have performed the role of coordinator and supervisor in the formation of the district forestry. Here, in the district forestry operations planning process an important role is being played in forest management by locally oriented cooperative organizations.

Finally, I would like to reiterate that I believe that the problem lies in not beginning the planning at the bottom, at the "individual forestry plan," thence to the district forest planning on which coordination of the national forest planning with supply and demand of the national economy can be based.

References


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Part V

POLICY ANALYSIS USING FOREST SECTOR MODELS