

SYNOPSIS OF THE TIMBERLAND VALUE SURVEY

INTRODUCTION

The Japan Real Estate Institute (JREI), a non-profit organization, annually publishes the Survey of Timberland Value since its inception in March 1959. The Survey constitutes one of JREI's regular market research projects. The purpose of the Survey is twofold; i) to reveal the nationwide trend of timberland-related values; and ii) to compile other timberland data. The Survey is a continuation of the Nippon Kangyo Bank's research and could be traced back to 1940 and 1946 for the Bare Land Value and the Stumpage Value, respectively. The Survey covers timberland throughout the nation, except for areas with difficulties in log transportation such as riverhead areas and islands.

DEFINITION

Bare Land Value

A timber tract's underlying land value per 10a (10 ares = 1,000 sq. meters = 10,760 sq.ft.) with no value ascribed to timber of any age. Both the seller and the buyer would deem the value fair if there was a timberland transaction in the area.

Stumpage Value

The price that standing timber brings in a sale. More specifically, the value corresponds to the average price of saw log per cubic meter at the local lumber market less all the costs of producing the saw log. The typical saw log has 20 - 22 centimeters (7.87 - 8.66 inches) in diameter and 3.65 - 4 meters (12 - 13.12 feet) in length. Six logs of this size approximately matches one cubic meter. The costs of producing saw log include all the expenses (such as cutting, processing, transportation, and interests), plus profit.

SURVEY DATE

March 31, 2016

METHOD

A total of 1,016 questionnaires were sent out for the year 2016 survey to experts in the forest industry throughout Japan. Most of them are employed at municipal halls or forest industry associations. There were 760 replies (response ratio of 74.8 percent). The questionnaire contained the following survey items:

(1) Bare Land Value

- (a) Bare land value for coniferous trees such as cedar, cypress, and pine by grade (superior, medium, and inferior) according to productivity and location;
- (b) Bare land value for deciduous trees such as oak by grade (superior, medium, inferior) according to productivity and location;
- (c) Typical taxable value of timberland per 10a;
- (d) Typical age and revenues in case of clear cutting;
- (e) Tree species;
- (f) Distance from the timberland to the closest lumber market;
- (g) Classification by inside or outside the city planning area; and
- (h) Reasons of year-over-year value change.

(2) Stumpage Value

- (a) Stumpage value of cedar, cypress, pine, and charcoal* timber (pine and charcoal timber only for Hokkaido);
- (b) Average price of saw log at the local lumber market for cedar, cypress, pine, and charcoal timber;
- (c) Saw log producing costs for cedar, cypress, pine, and charcoal timber;
- (d) Distance from the timberland to the closest lumber market; and
- (e) Reasons of year-over-year value change.

* Charcoal timber is also used for producing Shiitake mushrooms and wooden chips.

TABULATION OF SURVEY RESULTS

(1) Table 1: Average Bare Land Value for Coniferous Trees by Prefecture (Medium Grade, Yen per 10a)

Table 1 contains the average bare land value for coniferous trees by prefecture for each year of 1940, 1943, 1946, and thereafter. The statistics are not available for Hokkaido and Okinawa Prefectures. No data available for Chiba and Kanagawa Prefectures after 1975. Data for Tokyo and Osaka Prefectures are not included after 2002. Data for Kagawa Prefecture is not included after 2005. Data for Nara Prefecture is not included after 2010.

(2) Table 2: Average Bare Land Value for Deciduous Trees by Prefecture (Medium Grade, Yen per 10a)

Table 2 lays out the average bare land value for deciduous trees by prefecture for each year of 1940, 1943, 1946, and thereafter. The statistics are not available for Hokkaido and Okinawa Prefectures. No data available for Chiba and Kanagawa Prefectures after 1975. Data for Tokyo and Osaka Prefectures are not included after 2002. Data for Kagawa Prefecture is not included after 2005. Data for Nara Prefecture is not included after 2008.

(3) Table 3: Average Stumpage Value for Cedar, Cypress, and Pine by Prefecture (Saw Log Price, Yen per cubic meter)

Table 3 summarizes the average stumpage value for cedar, cypress, and pine after 2001 by prefecture except Hokkaido and Okinawa. Due to the current recession in the forest industry, no values can be estimated in some areas.

(4) Supplementary Table 1: Average Bare Land Value for Coniferous Trees in Hokkaido by Grade (Yen per 10a)

Supplementary Table 1 lists the average bare land value for coniferous trees in Hokkaido by grade since 1950.

(5) Supplementary Table 2: Average Bare Land Value for Deciduous Trees in Hokkaido by Grade (Yen per 10a)

Supplementary Table 2 chronicles the average bare land value for deciduous trees in Hokkaido by grade since 1950.

PREFECTURES EXCLUDED FROM AVERAGE CALCULATION

Table 1 : Chiba, Tokyo, Kanagawa, Osaka, Nara, Kagawa, Okinawa, and Hokkaido

Table 2 : Chiba, Tokyo, Kanagawa, Osaka, Nara, Kagawa, Okinawa, and Hokkaido

Table 3

Cedar: Hokkaido, Chiba, Tokyo, Osaka, Kagawa and Okinawa

Cypress: Hokkaido, Aomori, Akita, Yamagata, Chiba, Tokyo, Kanagawa, Niigata, Toyama, Osaka, Kagawa and Okinawa

Pine: Ibaraki, Saitama, Chiba, Tokyo, Toyama, Fukui, Shizuoka, Mie, Osaka, Hyogo, Wakayama, Tottori, Kagawa, Kochi, Fukuoka, Saga, Nagasaki, Kagoshima and Okinawa

NOTES

(1) Highly Urbanized Municipalities

In addition to municipalities located in the above prefectures, municipalities under excessive influence of urbanization are also excluded from average calculation.

(2) Municipalities with Unexpected Value Change Rate and/or Inconsistent Values

In arriving at the average of bare land value and stumpage value for each prefecture, the following data are excluded:

- responses with apparent wrong values due to misunderstanding survey questions; and
- new responses which could distort the average value for the prefecture.

Outliers were identified:

- by comparing the growth rate of value for each continuing municipality with those of concerns; and
- by analyzing the number of municipalities by value range.

(3) Hokkaido and Okinawa Prefectures

Data from municipalities in Hokkaido Prefecture were compiled separately due to a different tree composition in forests in the prefecture. Data from municipalities in Okinawa Prefecture were excluded from the statistics because of insufficient data.