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**Norm of techniques for estimation of forest economic
values**

森林资源资产评估技术规范

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Norm of techniques for estimation of forest economic values

1 Scope

This standard specifies assessment procedures and assessment methods of forest resource values as well as the verification of forest resource values.

This standard is applicable to the assessment of forest assets, forestland assets, forest landscape assets for various assessment purposes within China.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB/T 15776 Artificial afforestation technical regulations

GB/T 17775 Standard of rating for quality tourist attractions

GB/T 18005 China forest park landscape resources grade assessment

GB/T 18972 Classification, investigation and assessment of tourism resources

GB/T 26424 Technical regulations for inventory for forest management planning and design

LY/T 1646 Forest harvesting procedures

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Forest resource assets

Forest resources that are owned or controlled by specific entities and that bring economic benefits under existing levels of understanding and science.

3.8

Assessment purpose

The specific use of various economic behaviors for the assessment results. The purpose of the assessment stated in the assessment report shall be unique and the assessment report can only be valid for a specific assessment purpose.

3.9

Value type

The definition of the value attribute of the asset assessment result and its expression. The value types in forest resource assets assessment include market value, investment value, in-use value, liquidation value, residual value.

Market value: The voluntary buyer and the voluntary seller, under their respective rational actions and without any coercion, assess the estimated value of the normal fair trade on the date of assessment benchmark.

Investment value: The estimated value of the valuation object for a particular investor or a certain type of investor with a clear investment objective.

In-use value: The estimated value of the value of the assessment as an enterprise component or factor asset according to the manner and extent of its use and its contribution to the affiliated enterprise.

Liquidation value: The estimated value of an object under abnormal market conditions such as forced selling, rapid liquidation, etc.

Residual value: The estimated value of the realized value of the forest when the object of assessment is cleared due to disasters and updated.

3.10

Date of the assessment benchmark

At a specific time when the assessment conclusion begins to be established, the various pricing standards and basis selected in the process of forming the assessment conclusion are valid at that point in time, and all the pricing standards in the assessment are the effective price standards on the date of assessment benchmark.

4.3 Relevant data submitted by assessment client

4.3.1 List of forest resource assets

The list of forest resource assets shall be compiled based on the results of forest resource surveys (forest resource planning and design surveys, operational design surveys or special surveys for assessment) or forest resource archives. The minimum units shall be implemented in small shifts.

The list of forest assets to be logged during the assessment period shall be prepared based on the results of the survey on the design of harvesting operations. Due to limited conditions, the list of forest resource assets compiled based on the survey results of the logging operation design is not available, it shall explain the reasons and impact on the assessment results.

Forest resource assets such as ancient and famous trees, scattered high-value precious trees, forest landscapes, under-forest animal and plant resources, etc. shall be compiled according to professional survey data.

4.3.2 Other relevant information

Other relevant information mainly includes:

- a) Forest tenure certificate (or related ownership document);
- b) Forest resource map data within the scope of the assessment;
- c) The type, quantity and quality of forest trees with special economic value;
- d) Other relevant materials that shall be submitted for assessment purposes.

4.4 Collecting assessment data

The assessment information collected by the assessment agency shall include the following:

- a) Technical standards for forest production and related cost and expense information;
- b) Relevant cost and expense information for timber production and sales;
- c) Technical and economic indicators for local forest cultivation, forest harvesting and infrastructure;
- d) Book historical cost data for forest cultivation;
- e) The market price of timber and forest by-products of various specifications on the date of assessment benchmark, as well as the tax and fee collection standards in the sales process;

5.1.2 The scope of the proposed forest resource assets is the verification overall unit. The size and boundary of the verification unit shall be properly determined within the verification overall unit, the verification accuracy under certain reliability conditions shall be calculated; one verification unit can only be allowed to correspond to an independently used assessment value.

5.1.3 The verification work shall be carried out in accordance with the provisions of GB/T 26424 and LY/T 1646 and relevant standards of the forestry industry.

5.2 Verification items

5.2.1 General verification items, methods, requirements

5.2.1.1 It shall read and check the documents, certificates, drawings, materials, files, etc. related to the forest resource assets to be assessed.

5.2.1.2 It shall, based on the forest tenure certificate or valid legal documents, check the ownership (ownership, use rights) and the age of ownership, the four-to-boundary line, etc. of the forest resource assets (forestland and forest trees).

5.2.1.3 It shall, based on the map data such as forest phase map, forest distribution map and forestry basic map, check the spatial location of the forest resource assets and the trend of the boundary line.

5.2.1.4 It shall, based on the forestry protection and utilization planning, forest zoning, classified management planning approved for implementation by the county-level and above forestry authorities which are valid, check the types of land and types of forest resource assets.

5.2.2 Verification items of forestland assets

The main items to be verified for forestland assets are: forestland type, forest type, forest species, tree species, understory resources, use period, use method (referring to land rent payment method), area, location, site grade, geographical conditions.

5.2.3 Verification items of forest assets

5.2.3.1 Verification items of timber forest assets

5.2.3.1.1 The main items to be verified for young forest assets (including unforested forestland) are: origin, tree species composition, forest age (forestation time, seedling age), afforestation survival rate, afforestation preservation rate, number of plants per unit area, average diameter at breast height (DBH), average tree height, stock volume, forest growth status, occurrence of pests and diseases, loss of natural disasters, site grade, geographical conditions.

Forest landscape assets verification is carried out in accordance with GB/T 18972, GB/T 17775, GB/T 18005. In addition to verifying the same items as the forest verifications, it will focus on verifying services and features related to viewing, recreation, health care, entertainment, etc., as well as traffic conditions, surrounding environment, tourism development level, construction conditions.

5.3 Verification method

5.3.1 Verification method of forestland assets

5.3.1.1 Sampling survey method

When conducting forestland assessment for large-scale forest resource assets, it should use a sampling survey method to investigate and verify the total area of forestland assets and various types of forestland. The sampling survey method is as shown in Appendix A.

5.3.1.2 Small shift mapping method

5.3.1.2.1 Aerial film mapping method: use the recently shoot aerial film (not more than 2 years) which has a scale of not less than 1: 25000 or enlarged from 1:50000 to 1:25000, or a side-view radar picture enlarged from 1:100000 to 1:25000 for small shift mapping indoor, then carry out verification at site or field mapping.

5.3.1.2.2 Satellite mapping method: Use the recent satellite film (not more than 1 year) which has a scale of 1:25000 after computerized geometric correction and image enhancement (with a spatial resolution of less than 10 m) for small shift mapping indoors, then check it at site.

5.3.1.2.3 Topographic map small shift mapping method: Use the topographic map drawn by the surveying and mapping department with the scale of 1:10000 ~ 1:25000 to map at site. For areas without the above scale, it may use a topographic map which is enlarged from 1:50000 to 1:25000.

5.3.1.3 Measurement method

5.3.1.3.1 Locator measurement method: The method of using the locator to measure the coordinate position information of the small shift boundary control point, automatically calculate the small shift area. When using the locator to verify the forest area, the small-shift boundary control point shall be selected correctly, the positioning accuracy of the locator shall meet the requirements.

5.3.1.3.2 Compass measurement method: The method of using the compass to measure the azimuth and the horizontal distance of the small shift boundary control point. When using the compass to verify the forestland area, the control points of small shift boundary shall be correctly selected, the closure error of

5.5.1 Overview

Briefly describe the verification object, including geographical location, natural conditions, socio-economic conditions, forestry production and operation status; verification basis, purpose, requirements, organization, starting and ending time; assessment of the list of assets submitted by the entrusting party; qualification of the verification agency, composition of the verifiers, etc.

5.5.2 Verification basis

Describe the basis for verification, the standards used and the various tables.

5.5.3 Verification method

Describe the technical methods used in the verification, the method of sampling the verification object, the investigation methods of each factor.

5.5.4 Verification results

Narrate, analyze, assess the results, qualification rates, verification accuracy, errors of the verification of the list of forest resource assets as submitted by the client.

5.5.5 Conclusion

Describe the credibility of the list of forest resource assets submitted by the client through verification and analysis, propose whether the list of forest resource assets is acceptable as the basis for the assessment.

5.5.6 Signature

The verification report shall be signed by the relevant personnel, attached with the "Certificate of forestry investigation planning design", chopped by the legal person of the verification agency.

5.5.7 Attached tables

The schedule mainly includes:

- a) Verification record form;
- b) A list of small-shift forest resource assets that have been surveyed;
- c) Statistical tables of physical quantities of various forest resource assets.

5.5.8 Attached figures

In the assessment of the forestry basic map provided by the entrusting party, mark the verification work to be carried out, to indicate such contents as the

A - Annual average net income;

P - Return on investment.

6.2.4 Cycle income capitalization method: the stable cyclical income of the assessed forest assets is regarded as the return of capital investment, then the value of the assets is obtained according to the appropriate investment return, the method is adopted to realize the sustainable use of forest resources. According to the specific conditions of forestry assets management, it is divided into the assessment of forest assets immediately after the selective cutting and the assessment of forest assets m years after the selective cutting.

6.2.4.1 Assessment of forest assets after selective cutting

The forest will reach the next selective cutting period after a business cycle after selective cutting. The calculation method of the income present value method of the forest asset assessment immediately after selective cutting is as follows:

$$E = K \times \frac{A_u}{(1 + P)^u - 1} - \frac{V}{P} \quad \dots\dots\dots (7)$$

Where:

E - The estimated value of the forest assets immediately after the selective cutting;

K - Stand quality comprehensive adjustment factor, the comprehensive adjustment factor is determined as shown in Appendix C;

A_u - The net income of selective cutting;

V - Annual forest management cost;

P - Return on investment;

u - Selective cutting cycle.

6.2.4.2 Assessment of forest assets m years after selective cutting

m years after the selective cutting, as the stand growth gradually approaches the next selective cutting period, the stock volume of the stand is increasing, the value of the stand is increasing, the income present value of the forest asset assessment m years after the selective cutting is calculated as follows:

$$E = K \times \frac{A_u \times (1 + P)^m}{(1 + P)^u - 1} - \frac{V}{P} \quad \dots\dots\dots (8)$$

Where:

the current wage and the production level as the assessment value of the assessed forest resource asset. The calculation formula is:

$$E = K \times \sum_{i=1}^n C_i \times (1 + P)^{n-i+1} \dots\dots\dots (10)$$

Where:

E - The assessment value;

K - The stand quality comprehensive adjustment factor, the comprehensive adjustment factor is determined as shown in Appendix G;

C_i - The production cost of the i -year based on the current wage and production level;

n - Stand age;

P - Return on investment.

7 Assessment of timber forest assets

7.1 Assessment of same age forest assets

7.1.1 The assessment of the assets of the mature and over-ripe forests shall use the wood market price reversal algorithm. See formula (1). It shall properly determine the yield rate, sales price, wood production cost, various taxes, fees, reasonable profits in the timber production stage of the wood species to be assessed.

7.1.2 The assessment of the assets of middle-aged forests and near-mature forests shall adopt the method of harvesting present value. See formula (4), the main cutting time u shall take the age between the upper limit and the lower limit of the age grade of the main cutting age of the forest management type to which this stand belongs; it shall properly determine the net income of the standard stand at the main cutting in the u -year. The technical and economic indicators take the value at the time of the date of assessment benchmark.

7.1.3 The replacement cost method should be adopted for the assessment of young forest assets. See formula (10). In the operation process of timber forests, the use of assets only forms the accumulation of capital. There is no income during the use, it shall be recovered once at the time of the main cutting. Therefore, there is no depreciation of the timber forest assets, that is, there shall be no newness rate.

7.1.4 Under the conditions of open, active and well-developed forestry asset trading market, it should use the market transaction price comparison method.

E - The assessment value;

AI_1 - Annual net income of the rich year after entering the stable production period;

AI_2 - Annual net income of the poor year after entering the stable production period;

P - Return on investment.

8.2.2.2 Assessment method of bamboo with limited time

The annuity capitalization method is, based on the premise of sustainable management of bamboo forest, or is transferred indefinitely, when the bamboo forest is operated or transferred for a limited period (n years), the calculation formula of bamboo forest assets is:

a) Flower year bamboo forest

$$E_n = \frac{A}{P} \times \left[1 - \frac{1}{(1+P)^n} \right] \quad \dots\dots\dots (20)$$

b) Bamboo forest in rich year and poor year

$$E_n = \left[\frac{AI_1 \times (1+P) + AI_2}{(1+P)^2 - 1} \right] \times \left[1 - \frac{1}{(1+P)^n} \right] \quad \dots\dots\dots (21)$$

8.2.2.3 Market transaction price comparison method

The market transaction price comparison method of the asset assessment of bamboo forests with reasonable structure (including flower year bamboo forest as well as the bamboo forest in rich year and poor year) is as shown in Figure (2).

9 Assessment of economic forest asset

9.1 Assessment of economic forest assets in pre-production period

The pre-production assessment of economic forest assets should use the replacement cost method. Under the conditions of open, active and well-developed economic forest trading market, it may also use the market transaction price comparison method. The replacement cost method is as shown in formula (10), the market transaction price comparison method is as shown in formula (2).

9.2 Estimation of economic forest assets in the initial production period

9.2.1 Replacement cost method

The market transaction price comparison method of the economic forestry in the abundance period is as shown in formula (2).

9.4 Assessment of economic forest assets during decline period

The output of economic forests during the decline period has dropped significantly. One year is not as good as one year. Continued operation will be high-cost and low-yield, and even losses will occur. Therefore, it shall be harvested and renewed in time. The economic forest assets at this stage can be assessed using the residual value method. Especially in the economic forest of arbor species, its residual value is mainly the value of forest trees.

10 Asset assessment of shelter forest and special purpose forest

10.1 Assessment of shelter forest assets

The shelter forest is a forest with the main purpose of protecting soil and water, preventing wind and sand, improving the ecological environment. The assessment of shelter forest assets shall consider the value of forest trees and the value of ecological services.

10.2 Assessment of experimental forest assets

The experimental forest is a forest with the main purpose of providing experimental or scientific research experimental sites. The assessment of the experimental forest assets should use the net income present value method and the cost method. When adopting the net income present value method, the forecast of income shall be carried out under the condition of satisfying the original business purpose; when adopting the cost method, the input of historical cost shall be considered.

10.3 Assessment of the mother forest assets

The mother forest is a forest with the main purpose of cultivating excellent seeds. The assessment of the mother tree forest assets should be carried out in accordance with the method of assessment of economic forest tree assets. In the assessment, it shall fully consider the characteristics of the high value of the mother wood and the preservation value of the excellent seed resources.

10.4 Assessment of asset of landscape forest, places of interest, revolutionary memorial forest

See the methodology for assessment of forest landscape asset.

10.5 Assessment of environmental protection forest assets

11.2 Forestland expected price method

The forestland expected price method is based on the premise of sustainable forest use, assumes that both the income and the expenditure on the forestland in each rotation period is the same. The calculation starts from the forestation of the land without forest, and the net income of the infinite number of rotations is fully converted to present value and summed up as the assessment value of the forestland asset to be assessed. Its calculation formula is:

$$E = \frac{A_u + A_a (1+P)^{u-a} + A_b (1+P)^{u-b} + \dots - \sum_{i=1}^u C_i \times (1+P)^{u-i+1}}{(1+P)^u - 1} - \frac{V}{P} \dots\dots (27)$$

Where:

E - Forestland's expected price;

A_u - The net income of stand during main cutting in the u^{th} year;

A_a, A_b - The net income of thinning or others at the a^{th} year and b^{th} year in a rotation period;

C_i - The direct investment in forestry in each year;

V - Average indirect cost of forest production;

u - Rotation period;

P - Return on investment.

11.3 Annuity capitalization method

The annuity capitalization method is a method based on the premise of realizing the sustainable use of forests, meanwhile the forestland has stable income every year, to calculate the value of forestland assets according to the appropriate investment return, as shown in the formula (6).

11.4 Assessment of forestland with limited period of right of use

The forestland expected price method and the annuity capitalization method all require the forestland to have indefinite period of right of use. When the forestland has a finite period (n years) of right of use, its calculation formula is:

a) Forestland expected price method

$$E_n = \left[\frac{A_u + A_a (1+P)^{u-a} + A_b (1+P)^{u-b} + \dots - \sum_{i=1}^u C_i \times (1+P)^{u-i+1}}{(1+P)^u - 1} - \frac{V}{P} \right] \times \left[1 - \frac{1}{(1+P)^n} \right] \dots\dots (28)$$

- a) Rotation due to the decline of land force;
- b) The cost of afforestation after rotation is different;
- c) The net profit after rotation is different from the rotation period.

11.6.2 The assessment of the assets of different-age forestland should use the cyclic income capitalization method and the market transaction price comparison method. The market transaction price comparison method is as shown in formula (26), the cyclic income capitalization method is as shown in formula (7) ~ (9) and (12) ~ (14). Due to the structure and management characteristics of different-age forests, the value of land and the value of forests shall be segmented when using the cyclic income capitalization method. There are two ways to divide, the proportional factor method and the surplus value method:

- a) The proportional factor method is to divide the present value of the income of the different-age forests calculated by the cyclic income capitalization method into two parts: the forestland value and the forest value, according to the specified proportion (contract or local forest management habits).
- b) The surplus value method is to subtract the existing forest value balance on the forestland from the different-age income present value as calculated by the cyclic income capitalization method, as the value of forestland.

11.7 Assessment of bamboo forestland assets

The assessment of bamboo forestland asset should use the income present value proportional factor method, the annuity capitalization method, the market transaction price comparison method. The income present value proportional factor method is as shown in formula (15) ~ (18). The proportional factor is determined according to the specified provisions (contract or local forest management habits). The annuity capitalization method is as shown in formula (6) and formula (19) ~ formula (21). The market transaction price comparison method is as shown in formula (26).

11.8 Assessment of economic forestland assets

The assessment of economic forestland assets should use the forestland expected price method, the annuity capitalization method, the market transaction price comparison method. The annuity capitalization method is as shown in formula (6). The market transaction price comparison method is as shown in formula (26). The forestland quality adjustment factor shall consider the tree species, variety and forest age, in addition to the general provisions. The calculation formula of the forestland expected price method is:

$$E = \frac{S}{N} \sum_{i=1}^N K_i \times K_{bi} \times G_i \quad \dots\dots\dots (33)$$

Where:

E - The assessment value;

S - The effective use area of forest landscape assets to be assessed;

K_i - Forest landscape quality adjustment factor;

K_{bi} - Tourism consumption level adjustment factor, the adjustment factor is determined as shown in Appendix C;

G_i - The market price of the effective use area of the reference case unit;

N - The number of reference transaction cases.

12.2 Annuity capitalization method

For the forest landscape asset which is relatively mature in market development, relatively stable in average annual income, almost perfect in development, construction, management of landscape resources, the value assessment should use the annuity capitalization method, as shown in formula (6).

12.3 Simulation development method (also known as hypothesis development method)

This method is the most commonly used method for forest landscape asset assessment. The simulation development method assumes that under the scientific, reasonable and effective development and construction conditions of scenic spot, predict the investment, operating cost, operating income of future development and construction, sum up the discounted value of the net income as the assessment value of the forest landscape assets. The calculation of the simulation development method is divided into two stages, one is the development and progressing stage, the other is the stable operation stage. In the development and progressing stage, the investment cost, operating cost and investment profit are calculated year by year and converted into the present value. In the stable operation stage, the excess profit is converted into the present value by the annuity capitalization formula, the sum of the discounted values of the two stages is used as the assessment value of the forest landscape assets of the scenic spot. Its calculation formula is:

$$E = \sum_{i=1}^n \frac{A_i - C_i - F_i}{(1 + P)^i} + \frac{AI}{P(1 + P)^n} \quad \dots\dots\dots (34)$$

Where:

Appendix A

(Normative)

Sampling survey method

A.1 Overview

The sampling survey method is a survey method based on probability theory. The application of this method shall take the assessment object as the sampling overall unit, according to the requirements of random, systematic, stratified sampling survey methods, set a certain number of sample plots in the sample overall unit as samples, to perform determination at site, then assess the quantity and status of the forest resource assets of the object.

A.2 Sampling technique

A.2.1 Simple random sampling survey method

Simple random sampling is a survey method that estimates an overall unit from the determined value of sample by randomly extracting a sufficient number of total unit components at equal probability.

A.2.1.1 Determining the sampling overall unit

The determination of the overall unit scope is related to the purpose of the verification. When the verification is only to know the total amount of forest assets of the entire assessment object, the entire assessment object can be used as a sample overall unit. If it needs to know some of them or the amount of assets of a certain type, it needs to use this part of the area or type as the sampling overall unit.

A.2.1.2 Determining the shape and size of sample plot

A square plot should be used in the forest resource survey, but a circular plot can also be used when the terrain is flat and the visibility is good.

In the sampling overall unit, the determination of the size of the plot area shall consider the survey method, the age of the stand, the consistency within the stand, the work efficiency. The plot area should be 0.067 hm^2 .

A.2.1.3 Determining the number of sample units

After the shape and size of the plot are determined, calculate the number of sample units required:

Appendix B

(Normative)

Small shift sampling

B.1 Overview

The small-shift sampling method is a verification method for forest resource asset that uses a random or typical sample method to extract a certain number of small shifts from the list of forest resource assets, to conduct a local survey to confirm the correctness of the forest resource asset list.

B.2 Technical methods

B.2.1 Determination of the verification object and quantity

B.2.1.1 Quantity of verification small shift

The number of small shifts to be verified shall be determined based on factors such as the purpose of the assessment and the status of the stand. The verification area shall comply with the relevant provisions of GB/T 26424.

B.2.1.2 Extraction of verification small shift

The sampling method of the verification small shift can be based on the specific situation of the object to be evaluated, using random sampling method, mechanical extraction method or typical sample selection method.

B.2.1.2.1 Random sampling method

The order number of the small shift is given in the order of the list of forest resource assets until the end. Then, use a random number table or a computer random number generator to obtain the random number. If the value is less than or equal to the total number of small shifts, the corresponding small shift is considered to be drawn, until the number of small shifts scheduled to be extracted.

B.2.1.2.2 Mechanical extraction method

According to the order of the forest resource assets list, the small shift areas will be added one by one, the accumulated area will be recorded one by one in small shifts until the end.

Divide the total accumulated value of the small shift area by the number of small shifts to be extracted, to obtain an interval value (step size), then use the random number table to obtain a value smaller than the interval value as the

Appendix C

(Normative)

Determination of the comprehensive adjustment factor K value of forest quality and the P value of investment return

C.1 Determination of the K-value of the comprehensive quality adjustment factor of the stand

In the assessment of forest resource assets, since the forest stands are not the standardized products, their market value changes with the growth status of the stand, the site conditions and the geographical location (geography level). The assessment values measured by various assessment methods are the values of the overall forest stand under a certain state. To implement these values into each specific stand to be assessed, a forest quality adjustment factor K shall be used to link the proposed forest stand to the price of the reference stand. The magnitude of the K value has a large impact on the results of the assessment.

The determination of the K value shall take into account the growth status, site quality, geography level and other major factors (four factors in total) of the stand, to respectively calculate the adjustment factor K_i of each factor, finally determine the total stand mass adjustment factor K, the expression as follows:

$$K = f(K_1, K_2, K_3, K_4, K_5) \dots\dots\dots (C.1)$$

C.1.1 Determination of the adjustment factors K_1 and K_2 of the stand growth status

The stand growth adjustment factors K_1 and K_2 are usually determined by comparing the main growth status indicators (such as number of trees, tree height, DBH, accumulation, etc.) in the forest stand with the growth status indicators of the reference stand.

The reference forest stand has different meanings in different assessment methods. In the calculation of various cost calculation methods, the reference stand shall be the average level of the same age in the local forest. In the harvest present value method, the reference stand shall be the standard stand in various harvest tables. In the current market price method, it shall be the transaction stand as a reference case.

C.1.1.1 Timber forest

C.1.1.1.1 For the young and unforested forestland, K_1 and K_2 are adjusted by two indicators: plant retention rate (r) and tree height (h).

Appendix D

(Normative)

Determination of the use fee of forestland in the assessment

D.1 Overview

Since the value of forestland is reflected in the forest trees growing on the forestland, the two are inseparable. Therefore, in the assessment of forest assets, the determination of forestland's use fee (land rent) shall be determined according to the specific conditions of the assessment project, disclosed in the assessment report.

D.2 The land use fee will not be paid after the date of assessment benchmark

When the forestland's use fee is no longer paid after the date of assessment benchmark, the use value of the forestland is transferred to the forest asset value during the forest growth process. Therefore, the forestland's use fee shall not be deducted for the assessment of various forest species assets.

D.3 The land use fee will be paid after the date of assessment benchmark

When the forestland's use fee is required after the date of assessment benchmark, the evaluator shall reasonably calculate and properly deduct the forestland's use fee during the assessment of various forest species assets due to the different payment methods for forestland's use fees.

D.3.1 Income method

Any provisions (contracts), if existed, shall be implemented, otherwise they shall be determined and deducted based on the price of the forestland's use fee at the date of assessment benchmark.

D.3.2 Market price inverse calculation method

The deduction of forestland's use fee shall be determined according to the forest harvesting plan, the payment time of the forestland's use fee and relevant agreements.

D.4 Cost method

The forestland's use fee that has been paid before the date of assessment benchmark or payable under the contract (agreement) shall be included in the replacement cost calculation.

- h) Implementation process and situation of assessment;
- i) Assessment assumptions;
- j) Assessment conclusions;
- k) Description of special event;
- l) Explanation of the use restrictions of the assessment report;
- m) Date of assessment report;
- n) Signature of evaluator and the legal representative, official seal by the assessment agency.

E.5 Report user

The assessment report's user includes the assessment's entrusting party, other users of the assessment report agreed in the business agreement, the users of the assessment report as specified by the national laws and regulations.

E.6 Stated purpose of assessment

The purpose of the assessment stated in the assessment report shall be unique and the statement shall be clear.

E.7 Target of assessment and scope of assessment

The assessment report shall include the target of the assessment and the scope of the assessment. It shall specifically describe the basic situation of the assessment target, usually including the legal ownership status, economic status, physical status, etc.

E.8 Value type and its definition

The assessment report shall identify the type of value and its definition and shall explain the reasons for choosing the type of value.

E.9 Date of assessment benchmark

The assessment report shall state the date of assessment benchmark and shall be consistent with the date of assessment benchmark as agreed upon in the business engagement. The assessment report shall indicate the factors that are considered when selecting the date of assessment benchmark. The date of assessment benchmark can be the current time point, or it can be the past or future time point.

E.10 Assessment basis

This is an excerpt of the PDF (Some pages are marked off intentionally)

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