

Table II - Preliminary data and information provided by Annex I Party on carbon stocks and area estimates (First sentence of Article 3.4)

Land system	Area (ha)	Carbon stock in 1990 (t C)
Forest lands	25,212,000	1,420,917,000
Agriculture lands	5,243,000	258,064,000
Rangelands/grasslands	<i>cf. Note</i>	<i>cf. Note</i>
Wetland/tundra	NE	NE
Other	69,628	24,722
<b>Total (as listed above)</b>	<b>30,524,628</b>	<b>1,679,005,722</b>

N/E: Not Estimated

Note: Grasslands is included in agriculture lands.

#### EXPLANATORY TEXT (Table II)

. Forest lands

1. Description of land categories, including any land categories not covered

"Land with trees and/or bamboo growing in a group, and/or land provided for collective vegetation of trees and/or bamboo (Article 2.1, the Japanese Forest Law).

2. Carbon pools - distinctions and assumptions

Same as the explanatory note for Article 3.3, Table .2.

3. Data sources

Forestry Statistics used as forestry resource information.

4. Methods

Carbon stock is estimated as follows, using stem volume in all forests, referring to the Survey of Current Status of Forest Resources, 1990, along with expansion coefficient, wood density and carbon content.

Division	Area (1,000ha)	Volume (1,000m <sup>3</sup> )	Expansion Coefficient	Wood Density	Carbon Content	Carbon Stock in 1990 (1,000tC)
Man-made Forest	10,327	1,597,844	1.7	0.4	0.5	543,267
Natural Forest	14,885	1,539,737	1.9	0.6	0.5	877,650
Total	25,212	3,137,581				1,420,917

5. Possible changes in carbon stocks

As plantations established in postwar years are still in the growing stage, carbon stock is increasing even if felling volume is subtracted out.

6. Uncertainties

Uncertainty is considered relatively low since complete enumeration was implemented for the Survey of the Current Status of Forest Resources, which forms the base of estimation for sequestration.

. Agriculture lands

1. Description of land categories, including any land categories not covered

Corresponding divisions: paddy fields, normal patches, fruit farms, grasslands, and facilities

2. Carbon pools - distinctions and assumptions

- 1) For data for areas of each soil group over the entire country, a requirement for estimation, the synthesis report "Fundamental Survey Of Soil Fertility Conservation," surveyed until 1976, contains the most recent data. Lacking more recent information, the figures presented here use figures from 1990 and assume that the data for area component ratio by type of soils has not changed since 1990.
- 2) The "Fundamental Survey of Environmental Quality for Soil", being surveyed by fixed-point observation including 20,000 data points of 250 ha each in various areas across the country, will take 5 years to complete. Lacking more recent information, data on carbon stocks in soils from 1989 to 1993 were used here, and the figures presented here assume that such data has not changed since 1990.

3. Data sources

Statistics and Information Department / The Ministry of Agriculture, Forestry and Fisheries of Japan  
"Statistics of agricultural lands and acreage under cultivation"

4. Methods

Carbon stocks in 1990 were estimated using the following data:

- Total carbon stocks in cultivated soils from "Fundamental Survey of Environmental Quality for Soil (3rd, 1989 ~ 1993)"
- Area of agricultural lands in 1990

5. Possible changes in carbon stocks

It is necessary to keep in mind that even if total carbon stocks in agriculture lands decline as a result of the decline in the total area of such lands increased to carbon emissions do not necessarily result.

6. Uncertainties

Uncertainty is low for carbon stocks in soils based on the "Fundamental Survey of Environmental Quality for Soil." However, because of the age of the references for the data of sections of each soil group, the general uncertainty is considered to be between M and L..

. Other (Urban green spaces)

1. Description of land categories, including any land categories not covered

Corresponding divisions: Square parks, Neighborhood parks, Community parks, Comprehensive parks, Sport parks, Large scale parks, Specific parks, National government parks, Buffer greenbelts, Ornamental green spaces, Greenways, Specified community parks, and Green space conservation zones

2. Carbon pools - distinctions and assumptions

Carbon pools include above- and below-ground biomass.

3. Data sources

Surveyed by Ministry of Construction.

4. Methods

Carbon Stock = A × PW × BI × k, where

- A : area (ha)
- PW : percentage of planted tree area vis-a-vis park area
- BI : biomass increase in a year
- k : 0.5 ; carbon content

5. Possible changes in carbon stocks

Possible changes in carbon stocks depend on the definition of activities shown in Article 3.4 of the Kyoto Protocol.

6. Uncertainties

In the Second National Communication of Japan, uncertainties of the estimate for the category "LUCF" was prescribed as "M (Middle)" and reported to UNFCCC.