



# CARAGA

## LAND AND TIMBER

### ASSET ACCOUNTS:

#### CHALLENGES AND APPROACHES

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## Outline

- Overview
- Challenges and Approaches
- Policy Implication
- Conclusion and Recommendation



**Table 1: TWG Listing of Land Cover Classification**

1	Closed Forest
2	Open Forest
3	Mangrove Forest
4	Plantation Forest
5	Built-up Areas
6	Annual Crop
7	Perennial Crop
8	Barren Land
9	Grassland
10	Fallow
11	Wooden Grassland
12	Shrubs
13	Marshland/Swamp
14	Fish pond
15	Inland Water
16	Sandbars

**Table 2. Land cover classification (Interim)**

1	Artificial Surfaces
2	Herbaceous Crops
3	Woody Crops
4	Multiple or Layered Crops
5	Grassland
6	Tree-covered areas
7	Mangroves
8	Shrub-covered areas
9	Shrubs and /or herbaceous vegetation, aquatic or regularly flooded
10	Sparsely natural vegetated areas
11	Terrestrial barren land
	Inland water bodies
13	Coastal water bodies and inter-tidal areas
14	Permanent snow and glaciers

**Table 3: DENR-NAMRIA: Land Cover Classification**

1	Closed Forest
2	Open Forest
3	Mangrove Forest
4	Built-up Areas
5	Annual Crop
6	Perennial Crop
7	Barren Land
8	Grassland
9	Fallow
10	Wooden Grassland
11	Shrubs
12	Marshland/Swamp
13	Fish pond
14	Inland Water

**Table 4: SEEA2012-Central Framework**

1	Artificial Surface
2	Crops
3	Grassland
4	Tree-covered areas
5	Shrub-covered areas
6	Regularly flooded areas
7	Inland water bodies
8	Terrestrial barren land

**Table 5. Comparison of Land Cover Classification**

<b>Interim Land Cover Classification</b>	<b>SEEA 2012 – Central Framework</b>
<b>Artificial surfaces (including urban and associated areas)</b>	Artificial surfaces
<b>Herbaceous crops</b>	Crops
<b>Woody crops</b>	
<b>Multiple or layered crops</b>	
<b>Grassland</b>	Grassland
<b>Tree-covered areas</b>	Tree-covered areas
<b>Mangroves</b>	
<b>Shrub-covered areas</b>	Shrub-covered areas
<b>Shrubs and /or herbaceous vegetation, aquatic or regularly flooded</b>	Regularly flooded areas
<b>Sparsely natural vegetated areas</b>	
<b>Inland water bodies</b>	Inland water bodies
<b>Coastal water bodies and inter-tidal areas</b>	
<b>Terrestrial barren land</b>	Terrestrial barren land
<b>Permanent snow and glaciers</b>	

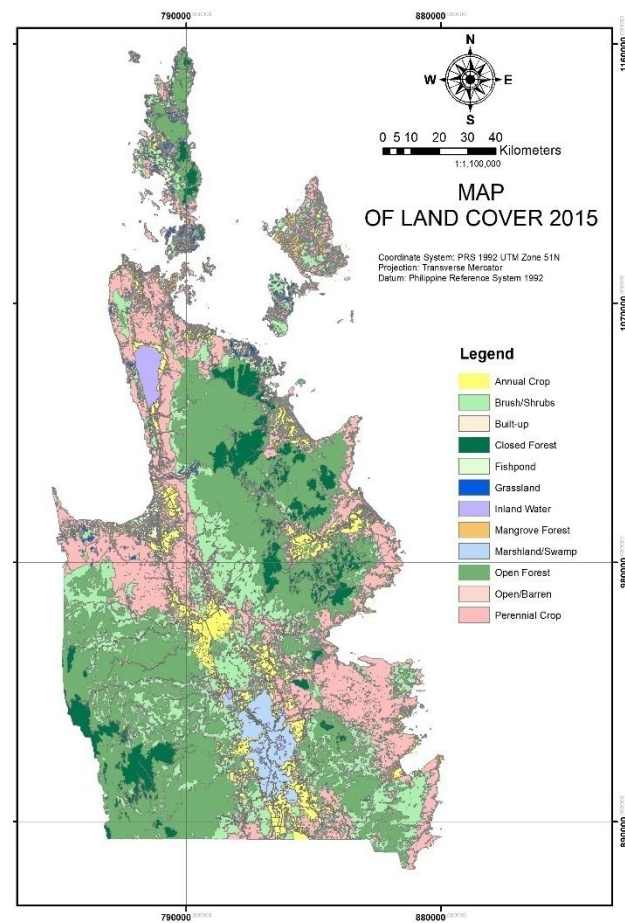
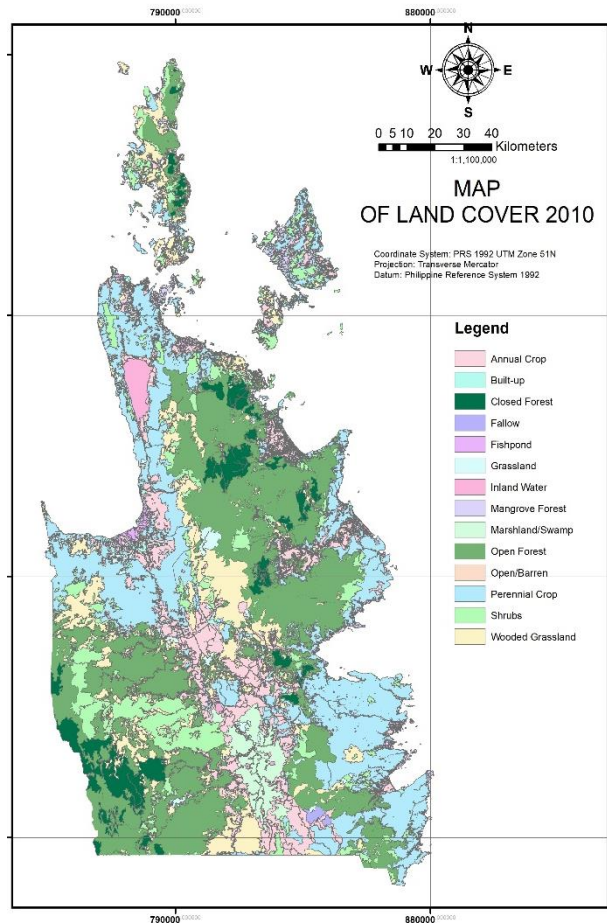
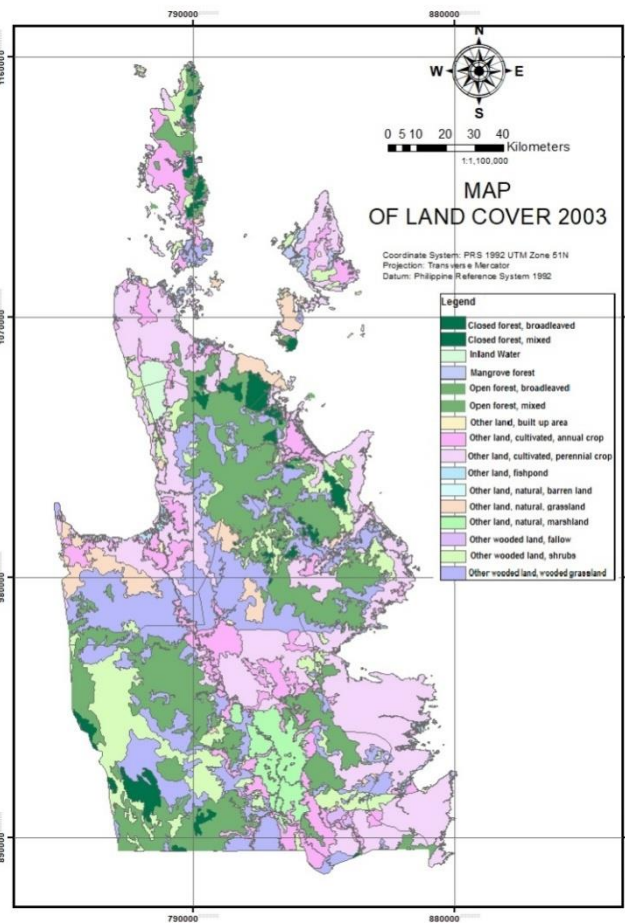
**Table 6. Comparison of Land Cover Classification**

<b>DENR-NAMRIA</b>	<b>SEEA 2012-Central Framework</b>
<b>Built-up areas</b>	Artificial surfaces
<b>Annual crop</b>	Crops
<b>Perennial crop</b>	
<b>Grassland</b>	Grassland
<b>Fallow</b>	
<b>Wooden Grassland</b>	
<b>Closed forest</b>	Tree-covered areas
<b>Open forest</b>	
<b>Mangrove forest</b>	
<b>Brush/Shrubs</b>	Shrub-covered areas
<b>Marshland/Swamp</b>	Regularly flooded areas
<b>Open/Barren</b>	Terrestrial barren land
<b>Fishpond</b>	Inland water bodies
<b>Inland water</b>	

**Table 7a: Land Covers, Caraga: 2003, 2010 and 2015 (in has)**

<b>Land Cover</b>	<b>2003</b>	<b>2010</b>	<b>2015</b>
<b>Closed Forest</b>	64,728.7	99,811.7	125,937
<b>Open Forest</b>	431,831.6	558,447.3	571,786
<b>Mangrove Forest</b>	26,730.8	25,897.8	27,050
<b>Inland water</b>	23,652.2	36,161.5	41,753
<b>Built-up</b>	4,001.7	21,948.0	26,697
<b>Annual crop</b>	201,655.6	188,098.8	159,251
<b>Perennial crop</b>	461,995.5	469,789.8	438,698
<b>Fishpond</b>	5,842.8	7,392.0	6,329
<b>Open/Barren</b>	1,243.7	5,312.8	9,703
<b>Marshland/Swamp</b>	55,700.6	45,269.9	44,921
<b>Grassland</b>	65,487.8	32,265.1	33,426
<b>Fallow</b>	3,484.3	3,395.8	-
<b>Brush/Shrubs</b>	189,988.4	193,565.7	409,313
<b>Wooded grassland</b>	331,146.7	208,163.8	-
<b>Total</b>	<b>1,867,491</b>	<b>1,895,520</b>	<b>1,894,865</b>







**Table 7b: Re-aligned Land Cover for Comparability**

(Published) DENR-NAMRIA				(Re-aligned with 2015) DENR-NAMRIA			
	2003	2010	2015	2003	2010	2015	
Closed Forest	64,728.70	99,811.70	125,937.00	64,728.70	99,811.70	125,937.00	Closed Forest
Open Forest	431,831.60	558,447.30	571,786.00	431,831.60	558,447.30	571,786.00	Open Forest
Mangrove Forest	26,730.80	25,897.80	27,050.00	26,730.80	25,897.80	27,050.00	Mangrove Forest
Built-up	4,001.70	21,948.00	26,697.00	4,001.70	21,948.00	26,697.00	Built-up
Annual Crop	201,655.60	188,098.80	159,251.00	201,655.60	188,098.80	159,251.00	Annual Crop
Perennial Crop	461,995.50	469,789.80	438,698.00	461,995.50	469,789.80	438,698.00	Perennial Crop
Open/Barren	1,243.70	5,312.80	9,703.00	1,243.70	5,312.80	9,703.00	Open/Barren
Grassland	65,487.80	32,265.10	33,426.00	65,487.80	32,265.10	33,426.00	Grassland
Fallow	3,484.30	3,395.80	-	-	-	-	Fallow
Wooded Grassland	331,146.70	208,163.80	-	-	-	-	Wooded Grassland
Brush/Shrubs	189,988.40	193,565.70	409,313.00	524,619.40	405,125.30	409,313.00	Brush/Shrubs
Marshland/Swamp	55,700.60	45,269.90	44,921.00	55,700.60	45,269.90	44,921.00	Marshland/Swamp
Fishpond	5,842.80	7,392.00	6,329.00	5,842.80	7,392.00	6,329.00	Fishpond
Inland Water	23,652.20	36,161.50	41,753.00	23,652.20	36,161.50	41,753.00	Inland Water
<b>Total</b>	<b>1,867,491</b>	<b>1,895,520</b>	<b>1,894,864</b>	<b>1,867,491</b>	<b>1,895,520</b>	<b>1,894,864</b>	<b>Total</b>

**Table 8: Comparison of Land Cover for Comparability**

<b>(Re-aligned with 2015) DENR-NAMRIA</b>				<b>SEEA 2012 - Central Framework</b>			
	2003	2010	2015	2003	2010	2015	
Built-up	4,001.70	21,948.00	26,697.00	4,001.70	21,948.00	26,697.00	Artificial Surfaces
Annual Crop	201,655.60	188,098.80	159,251.00	663,651.10	657,888.60	597,949.00	Crops
Perennial Crop	461,995.50	469,789.80	438,698.00				
Grassland	65,487.80	32,265.10	33,426.00	65,487.80	32,265.10	33,426.00	Grassland
Closed Forest	64,728.70	99,811.70	125,937.00	523,291.10	684,156.80	724,773.00	Tree-Covered Area
Open Forest	431,831.60	558,447.30	571,786.00				
Mangrove Forest	26,730.80	25,897.80	27,050.00				
Open/Barren	1,243.70	5,312.80	9,703.00	1,243.70	5,312.80	9,703.00	Terrestrial Barren Land
Fallow	-	-	-	524,619.40	405,125.30	409,313.00	Shrub-covered Area
Wooded Grassland	-	-	-				
Brush/Shrubs	524,619.40	405,125.30	409,313.00				
Marshland /Swamp	55,700.60	45,269.90	44,921.00	55,700.60	45,269.90	44,921.00	Regularly Flooded Areas
Fishpond	5,842.80	7,392.00	6,329.00	29,495.00	43,553.50	48,082.00	Inland Water Bodies
Inland Water	23,652.20	36,161.50	41,753.00				
<b>Total</b>	<b>1,867,490</b>	<b>1,895,520</b>	<b>1,894,864</b>	<b>1,867,490</b>	<b>1,895,520</b>	<b>1,894,864</b>	<b>Total</b>

## Valuation of Land or Source of Data for the revaluation :

√ DEPARTMENT ORDER No. 016-2000 (March 21, 2000) for AGUSAN del NORTE

√ DEPARTMENT ORDER No. 013-2015 (April 10, 2015) for AGUSAN del NORTE

√ DEPARTMENT ORDER No. 84-96 (August 21, 1996) AGUSAN del SUR

√ DEPARTMENT ORDER No. 30-05 (February 26, 2006) AGUSAN del SUR

√ DEPARTMENT ORDER No. 80 – 2015 (October 4, 2015) for AGUSAN del SUR

√ DEPARTMENT ORDER No. 54-95 (May 9, 1995) for SURIGAO del NORTE

√ DEPARTMENT ORDER No. 60-02 (September 16, 2002) for SURIGAO del NORTE

√ DEPARTMENT ORDER No. 61-2013 (December 25, 2013) for SURIGAO del NORTE

√ DEPARTMENT ORDER No. 52-95 (April 27, 1995) for SURIGAO del SUR

√ DEPARTMENT ORDER No. 20-02 (September 16, 2002) for SURIGAO del SUR

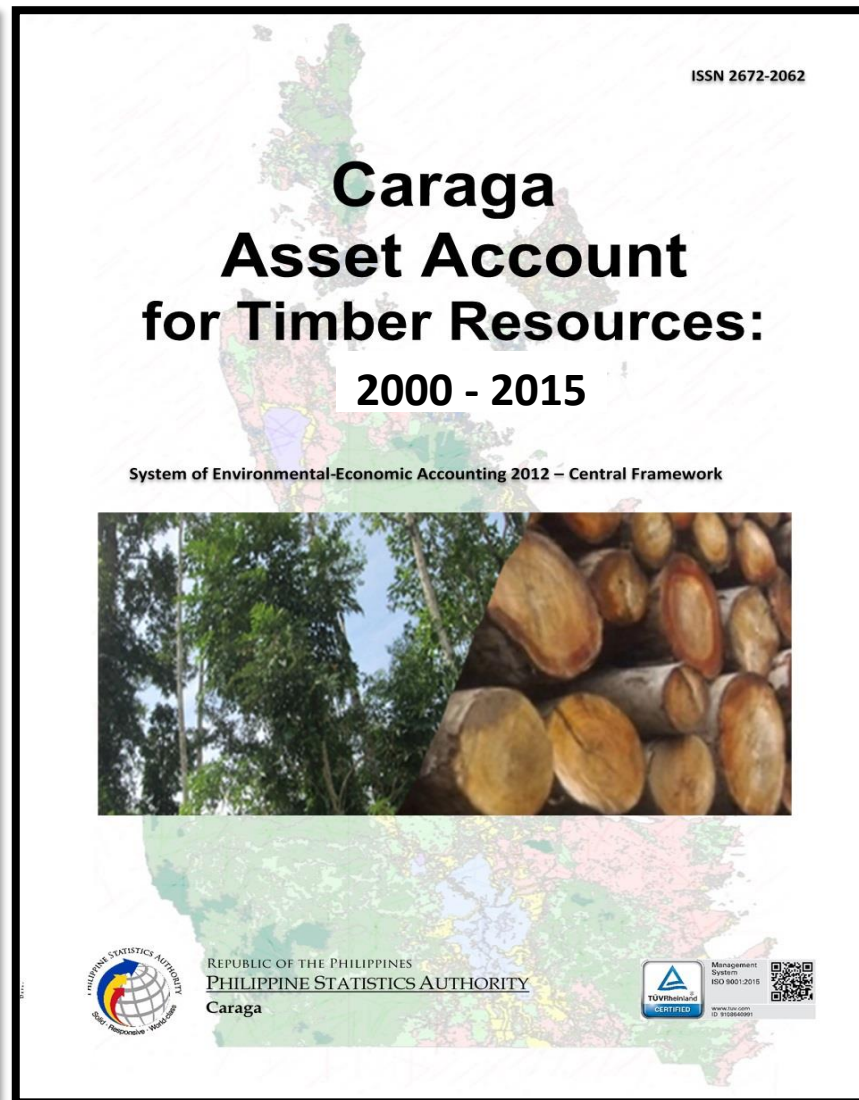
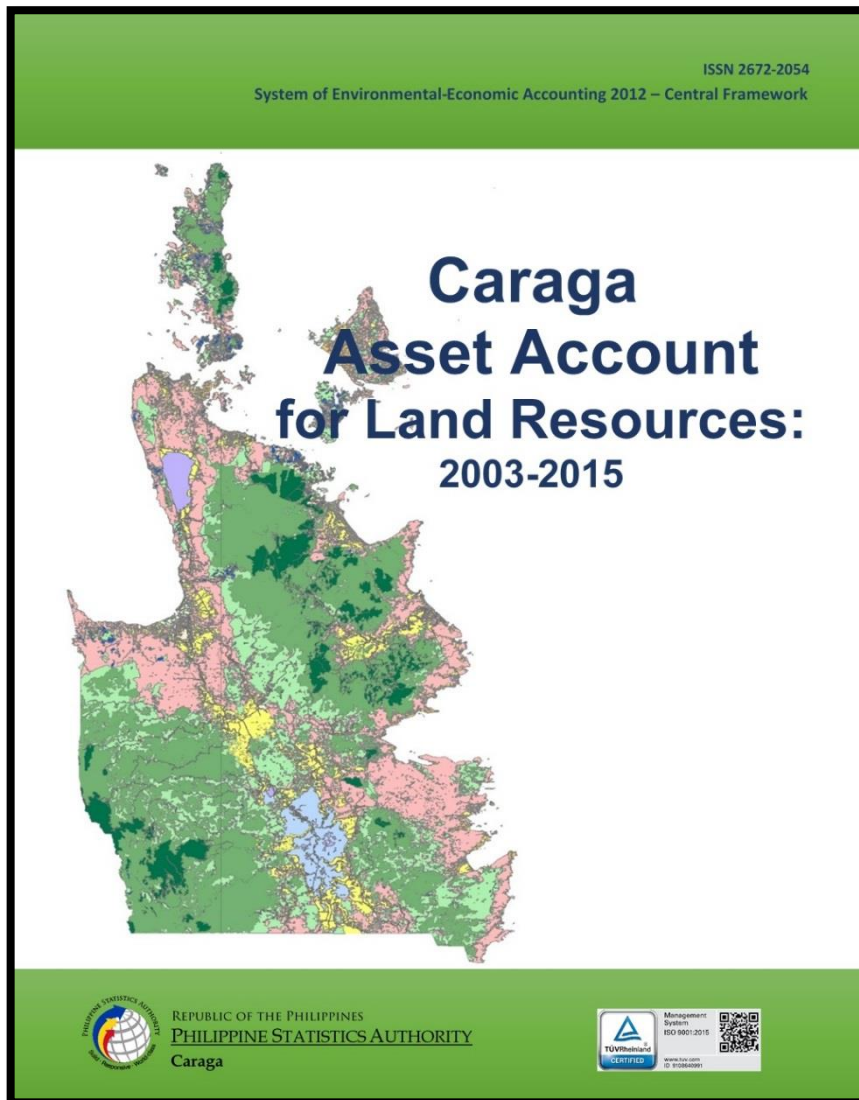
√ DEPARTMENT ORDER No. 30-05 (February 26, 2006) for SURIGAO del SUR

√ DEPARTMENT ORDER No. 012-2015 (April 10, 2015) for SURIGAO del SUR



**LIST OF GOVERNMENT and NON-GOVERNMENT PROGRAMS**

<b>I. Government sector</b>		
<b>A. DENR</b>	Agroforestry	B. LGUs/OGAs
<b>1. Regular</b>	Urban Parks	C. PAF II & III
Urban Forestry	Assisted Natural Regeneration	<b>II. Non-government sector</b>
Contract Reforestation	Ecosystem Research	TLA
CBFM	Rubber Plantation	IFMA
Dipterocarp Plantation	Integrated Social Forestry	SIFMA
Coastal Environmental Project	Congressional Initiatives	TFLA
USUFRUCT	Roadside/Island Planted (KILOMETER)	CBFMA
DEFPPA	<b>2. Foreign Assisted Projects</b>	PLA/FLGLA
Watershed Rehab	CFP Quirino	ITPLA
CEP	RP German DNSIP	PRIVATE LANDS
Tree Farming	OECE II	ADOPT A MT. (Mines)
Mangrove Rehabilitation	WRDP-WMIC	Citizenry
Protected Areas Rehabilitation	CHARM	Others
Regular Contract Reforestation	LIUCP	<b>NGP</b>
	SALT	<b>NGP (timber+indigenous)</b>
	FSL II-JBIC	





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