REGIONAL ACTION PLAN FOR IMPLEMENTING THE PHILIPPINE MASTER PLAN FOR CLIMATE RESILIENT FORESTRY DEVELOPMENT Region 7, Central Visayas Region

I. Background and Rationale

The first Philippine forestry master plan which was formulated in 1990 was revised in 2003 in view of new developments in the forestry and environment sectors both at the local and international scenes. Ten years after its implementation, the Forest Management Bureau (FMB) again decided to update the 2003 revised master plan for forestry development (RMPFD), to take into consideration the potential impacts of climate change to the forestry sector. The revision was in consonance with the Climate Change Act of 2009 requiring that all government programs and policies should consider the impacts of climate change. Hence, a Philippine master plan for climate resilient forestry development (PMPCRFD) was formulated where three strategic programs were identified for implementation to ensure that the forestry sector can respond to the adverse impacts of climate change and address varying demands for forest ecosystems goods and services from multiple clients. The three major programs include the following:

- 1. Program on strengthening resilience of forest ecosystems and communities to climate change;
- 2. Program responding to demands for forest ecosystem goods and services; and
- 3. Program promoting responsive governance in the forestry sector.

This plan outlines DENR Region 7's action plan to support implementation of the PMPCRFD for CY 2016-2028.

II. Regional Profile

The Central Visayas Region (Region 7) lies at the center of the Philippine archipelago between the major islands of Luzon and Mindanao. It is bounded on the north by the Visayan Sea; on the east by the Camotes Sea; on the south by the Mindanao Sea; and on the west by the island of Negros.

2.1 Physical features

As a whole, the region is hilly and mountainous.

Its topography is characterized by relatively wide stretches of coastal lowlands with rugged hills and mountains in the interior. Bohol, however, has a level plateau upon which its agricultural areas are concentrated.

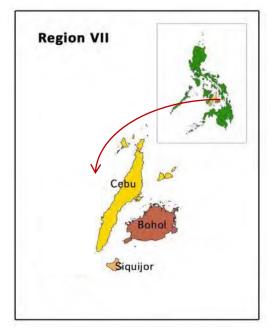


Figure 1. Location of Region 7

The province has no pronounced climate. It has a short dry season and is relatively wet the rest of the year. Higher amounts of rainfall are experienced from June to November when there are more than 15 rainy days per month. Lesser amount of rainfall and shorter number of rainy days are experienced during the remaining months. Hot months are experienced in March & April and cold months in Jan., Feb. & December.

2.2 Socio-Economic Profie

Region 7 is composed of the island provinces of Bohol, Cebu, and Siquijor. The region's premier urban and major business, industrial and services center is Metro Cebu, located in Cebu province. The other major urban city is Tagbilaran City in Bohol.

Based on the 2015 national census Region 7 has a total population of 6,041,903. Its average annual population growth rate from 2000 to 2015 is about 1.84%. Cebu is the most populated province and together with its major cities (Cebu city, Lapu-Lapu city and Mandaue city) has the highest annual population growth rate in the region (Table 1).

Provinces	Population			Annual Pop. Growth Rate			
	May 2000	May 2010	Aug. 2015	2000-2010	2010-2015	2000-2015	
REGION VII (CENTRAL VISAYAS)	4,576,865	5,513,514	6,041,903	1.88	1.76	1.84	
BOHOL	1,139,130	1,255,128	1,313,560	0.97	0.87	0.94	
CEBU (excluding the cities of CEBU, LAPU-LAPU, and MANDAUE)	2,160,569	2,619,362	2,938,982	1.94	2.22	2.04	
CEBU CITY	718,821	866,171	922,611	1.88	1.21	1.65	
LAPU-LAPU CITY (OPON)	217,019	350,467	408,112	4.91	2.94	4.23	
MANDAUE CITY	259,728	331,320	362,654	2.46	1.73	2.21	
SIQUIJOR	81,598	91,066	95,984	1.10	1.01	1.07	

Table 1. Population and Annual Population Growth Rates of Region 7

Source: PSA, CY 2000, 2010, 2015

The land used for farming in the region is not as big as the other regions. Aside from palay, the farmers also plant corn, sugarcane, abaca, coconut, tobacco and root crops. They also subsist on fishing because most islands are surrounded by water. There are also a number of home industries in the region. The people manufacture bags, fans, placemats and other household things. The food industry is alive and well in the region; an assortment of biscuits and bread, chicharon and other food items that only the region can produce. The mangoes of Cebu are also famous for its sweetness and size. Mangoes are harvested all year round. These fruits are exported to other countries.

2.3 Resources

Region 7 has varied resources that include land, forests and biodiversity resources, water, minerals and ecotourism areas, among others.

Land Resources

Region 7 has a total land area of 948,850 hectares. Of this, 26 % or 243,522 hectares are classified as forestlands while 74% or 705,328 hectares are alienable and disposable lands (table 2). Most of the forestlands are situated in the province of Cebu where 141,091 hectares are considered forestlands.

Table 2. Land Classification in Region 7

Land Classification	Area (ha)	%
Forestlands	243,522	26%
Classified Forestlands	243,522	26%
Established Timberlands	184,980	20%
Forest Reserves, National Park/ Prot. Areas &		
Other Reservations	58,542	6%
Unclassified forestlands	0	0
Alienable and disposable lands	705,328	74%
Total	948,850	100%

Source: Philippine Forestry Statistics, CY 2014

Forests Resources

About 12% (208,015 hectares) of the region's land area are still forested consisting of open forest (11.2%), closed forest (4.3%), and mangrove forests (1.2%). Most of the forests are located in Bohol (20,889 ha.) followed by the province of Cebu (14,407ha). Siquijor has the least forest, covering only an estimated area of 903 hectares. Table 3 summarizes the land cover per province in Region 7 for CY 2010.

Table 3. Land Cover of Region 7, CY 2010

						% of	% of	% of total
		Total	Close	Open	Mangrove	Region's	Prov.	Forest
Province	Land Area	Forest	Forest	Forest	Forest	Forest	Forested	Closed
Region 7	948,850	36,199	8,723	13,723	13,752	4%	4%	24%
Bohol	411,726	20,889	0	10,267	10,622	2%	5%	0%
Cebu	509,237	14,407	8,723	2,650	3,034	2%	3%	61%
Siquijor	27,887	903	0	806	96	0.1%	3%	0%
% of Region		4%	0.9%	1.4%	1.4%			

Source: Phil Forestry Statistics, CY 2014

In general, there was a decrease in the forest cover of Region 7. From about 36,839 hectares in 2003 its total forest (close, open and mangrove forests) has decreased to 36,199

hectares in 2010. This means that around 641 hectares of forests were lost in Region 7 in a span of 7 years or an annual decrease of about 91 hectares. While there was an overall decrease in forest cover, the close forest of Cebu province has increased by about 7,804 hectares indicating that most of its open forest were adequately protected and transformed into better quality forests. In contrast, significant areas of open forests were lost in the region except in Siquijor which had a slight increase of about 806 hectares. The forest cover change in Region 7 is summarized in table 4.

Provinces	Close Forest			Open Forest			Mangrove Forest			Net
	2010	2003	Change	2010	2003	Change	2010	2003	Change	Change
Bohol	0	0	-	10,267	13498	(3,231)	10,622	6463	4,159	928
Cebu	8,723	919	7,804	2,650	12441	(9,791)	3,034	3402	-368	(2 <i>,</i> 355)
Siquijor	0	0	-	806	0	806	96	116	-20	786
Total Region 7	8,723	919	7,804	13,723	25,939	(12,216)	13,752	9,981	3,771	(641)

Table 4. Forest Cover Change in Region 7 (CY 2003-CY 2010)

* Include plantations

Source: Philippine Forestry Statistics, CY 2004 and CY 2014.

Water resources

Region 7 is drained by many river systems that are used for irrigation and domestic/ industrial purposes. Two priority watersheds, namely Caruod and Matutinao watersheds had been identified as priority watersheds that support national irrigation systems of NIA. In addition, seven (7) watershed forest reserves had been declared in Central Visayas covering approximately 104,380 hectares (table 5).

Table 5. List of Watershed Forest Reserves in Region 7

Name of Reserve	Location	Area (ha)	Proc. No.
Alijawan-Cansujay-Anibongan River Watershed Forest Reserve	Duero & Jagna, Bohol	3,630	881
Argao River Watershed Forest Reserve	Argao and Dalaguete , Cebu	7,250	414
Kotkot and Lusaran River Watershed Forest Reserve	Cebu City, Danao City, Balamban, Compostela, Consolacion (Cebu)	14,121	932 Amended by 1074
Loboc Watershed Forest Reserve	Balilihan, Bilar, Batuan, Carmen, Garcia Hernandez (Bohol)	19,410	450
Wahig-Inabanga River Watershed Forest Reserve	Pilar, Candijay, Alicia, Duero, Sierra, Bullones, Carmen, Dagohoy, Danao, Inabanga, Buenavista, Jetafe (Bohol)	52,516	468
Mananga River Watershed Forest Reserve	Talisay & Milanilla, Cebu City	6,828	581
Buhisan Watershed Forest Reserve	Buhisan, Cebu	630.89	E.O. No. 36
Total		104,380.89	

Biodiversity Resources

A comprehensive inventory of biodiversity resources has not been undertaken in the Region 7. However, protected areas had been established in the region to protect the remaining biodiversity resources in the area.

The following sites in the region have been declared by law as protected areas and as initial components of the National Integrated Protected Areas System (NIPAS). These areas are habitat to important flora and fauna some of which are endemic to Region 7.

Name	Location	Area (ha)	PA Classification
Central Cebu	Cebu	29062.00	Protected landscape
Rajah Sikatuna	Bohol	10452.60	Protected landscape
Alburquerque-Loay-Loboc	Bohol	1164.16	Protected landscape &
			seascape
			Protected landscape &
Talibon Islands	Bohol	6456.87	seascape
Panglao Island	Bohol	385.67	Protected seascape
Tañon Strait	Cebu-Negros Or.	450.00	Protected seascape
Olango Island	Cebu	920.00	Game refuge and bird
			sanctuary
Caniago Strait Islands	Bohol	210.00	Wilderness area
Cebu Strait Islands	Bohol	34.00	Wilderness area
Total		49,135.30	

Table 6. List of Protected Areas in Region 7

Source: http://readtiger.com/wkp/en/List_of_protected_areas_of_the_Philippines

Ecotourism Areas

Central Visayas is one of the top eco-tourism destination in the country. Bohol is the top choice as an eco-tourism destination in Central Visayas followed by Cebu. In particular, the tarsier conservation program in Bohol is attracting many tourists while Bantayan Island has already gained a reputation as a popular tourist haven. A list of other ecotourism destinations in region 7 is provided in table 7.

Table 7. Popular Ecotourism Destinations in Region 7

Ecotourism Destinations	Location	Attraction
1. Olango Island Wildlife sanctuary	Olango island, Cebu	Bird watching for migratory birds
2. Cambuhat River and Village		
Tour	Buenavista, Bohol	River tour and visit to oyster farms
3. Malapascua Island	Malapascua Island,	Dive sites and white sand beaches
	Daanbantayan, Cebu	
4. Simply Butterflies Conservation		
Center	Bilar, Bohol	Close encounter with butterflies
5. Abatan River	Inabanga, Bohol	River tour
Source: http://www.visitmyphilippines	.com	

Regional Action Plan for Implementing the PMPCRFD, Region 7

2.4 Vulnerability to Climate Change Hazards.

Climate projections by PAGASA (2011) indicate that there will be increasing temperature in 2050. In terms of rainfall, rainy season will have more rainfall while dry season will become drier. Based on observations in the provinces of Cebu and Bohol, the estimated increase in temperature in region 7 will range from 1.8° C to 2.4° C, with higher temperature increase during the months of March to May. Meanwhile, decrease in rainfall is estimated to reach – 11.9% in Bohol. The reduction in rainfall is expected to occur from March to May, while up to 22.6% increase in rainfall is expected during the rainy months of June, July and August. (table 8 and 9).

	Observed Baseline in ^o C (1971-2000)				0) Change in 2050 in ^o C (2036-2065)			
Provinces	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Bohol	26.6	28	28.2	27.8	1.8	2.3	2.3	1.9
Cebu	26.8	28.4	28.2	27.9	1.9	2.4	2.1	1.9

Table 8. Seasonal temperature increases in 2050 under medium-range emission scenario, Region 7

Source: PAGASA, 2011

Table 9. Seasonal rainfall change (in %) in 2050 under medium-range emission scenario in Region 7

	Observed Baseline (1971-2000)				Observed Baseline (1971-2000) Change in 2050 (2036-206					065)
Provinces	DJF	DJF MAM JJA SON			DJF	MAM	JJA	SON		
Bohol	376.1	209.6	412.9	514.5	21.2	-11.9	18.9	22.6		
Cebu	324	228.3	595.1	607.4	19.6	0.5	18.9	17.8		

Source: PAGASA (2011)

With more rains during the rainy season, floods, soil erosion and landslide may be aggravated endangering lives and properties of communities. Cebu province is among the top 10 provinces in the Philippines that is susceptible to landslide. On the other hand, with less rains during the dry season, water availability for irrigation and domestic use will be adversely affected. The region is already categorized as a water stressed region and this condition is expected to worsen with climate change. Other hazards to which the region is vulnerable is summarized in table 10.

Table 10. Provincial Vulnerability to Climate Related Hazards & Poverty Incidence in Reg. 7

		V	ulnerability			2012 Poverty Index
Region/ Province	Typhoons	Earthquake	Tsunamis	Water stress	Combined Climate Risks	Poverty Incidence among families (%)
Region 7						28.8
Bohol	Low	Medium	Medium	High	Medium	32.5
Cebu	Low	Low	High	High	Medium	22.4
Siquijor	Low	Low	Low	High	Medium	24.6

Source: NSCB website: http://www.nscb.gov.ph

III. Development Challenges in the Forestry Sector of Region 7

The challenges faced by the forestry sector in Region 7 is summarized in the succeeding discussions

1. There is a need to strengthen the protection of existing forests and rehabilitate degraded forestlands in Region 7. While in general there was only a slight decrease in forest cover in Region 7 due to an increase in close forest in Cebu and an increase in mangrove forests in Bohol, large tracks of open forests were also lost in these provinces indicating that this type of forest is highly threatened by human activities. With increasing demand for wood and fuelwood/ charcoal as a result of increasing population and expanding economic/ tourism activities in this region, accessible forests will be highly threatened. This situation will also adversely affect availability of non timber products which support its tourism industry. Thus, it is necessary to protect the existing forests and expand further forest plantation/ orchard development in forestlands to further enhance ecosystems services to local communities.

2. Protection and rehabilitation of watersheds to ensure adequate supply of water for irrigation, domestic use and power generation. Most of the lands in key watersheds of Region 7 are classified as A&D lands and as such are mostly used for agriculture and other non forest uses, such as for residential purposes. The ability of the region to continuously supply irrigation and domestic water as well as hydro electric energy may be compromised if land uses within the watersheds are not harmonized. There may be a need to encourage private land owners in some A & D lands to develop agroforestry, fruit orchards or forest plantations by integrating fruit/ forest trees in their farming systems so that agricultural use complements watershed conservation. This may require some form of subsidy to land owners to motivate them to shift to watershed friendly land uses. At the same time, the completion of forest land use plans integrated into the comprehensive land use plans of LGUs must be facilitated to harmonize land uses from ridge to reef.

3. Sustained protection of biodiversity resources is a major challenge for region 7. Its forest cover change data shows that close forest has significantly increased in Cebu (7,804 hectares) indicating an improvement in the quality of forest in this province and consequently in biodiversity resources. However, illegal trade of wildlife resources had been reported in some areas. Since most of its ecotourism attractions, such as river tour, trekking, and diving, are linked to the quality of forest resources, it is imperative to continue the protection of existing forests and its associated biodiversity to sustain the ecotourism activities in the region.

4. Reducing the impacts of climate change hazards should be given priority attention. Region 7 is highly vulnerable to climate related hazards such as landslides and storm surge. The increased frequency and intensity of these hazards, aggravated by changes in climatic conditions, will continue to endanger the lives and properties of communities. Most LGUs and majority of the population are not prepared for hazards and communities are not organized for disaster risk reduction. LGUs and communities must be capacitated in disaster risk management.

5. Collaborative management is necessary to address the overlapping mandates of different agencies in the management of forests and forestlands. However, to be effective, the

capabilities of members of the collaborative management bodies must be upgraded. Most LGUs for instance, lack technical capability and financial resources to manage and implement devolved forestry programs. Also,,they have inadequate capability to enforce forestry laws and regulations and mobilize communities in forest protection activities. Most of them do not have approved forest land use plans which can complement their comprehensive land use plans and local development plans.

IV. Regional Comparative Advantage and Competitive Goods and Services: Opportunities for Forestry Development

While lots of challenges exist in the forestry sector, the region has inherent comparative advantages and competitive goods and services which can be strengthened to maximize the forestry sector's contribution to regional development. The comparative advantages of Region 7 include the following:

- 1. It has vast areas of agricultural lands in Bohol suited for the production of rice and other agricultural crops;
- 2. Presence of watershed reservations that provide water for irrigation, power generation and for domestic use;
- 3. Extensive areas of forests, protected areas, lakes, rivers, caves, beaches and other biodiversity resources (such as tarsier in Bohol), which support ecotourism;
- 4. Existing plantations of mahogany, gmelina and mango trees that provide livelihood to local population and which have potential for agroforestry and forest plantation development;
- 5. Established markets for various products such as mango, rice, fuelwood and other non-timber products;
- 6. Presence of mangroves and coastal resources that support fisheries and ecotourism;
- 7. The conducive climate for vegetable and cut flower production in Cebu;
- 8. Skilled furniture and handicraft makers;
- 9. Interested investors in coffee and cacao plantations; and
- 10. Less exposure to typhoon.

The following are the region's competitive goods and services which can be supported through its regional action plan for PMPCRFD implementation, to maximize the forestry sector's contribution to regional and national development.

- 1. Ecotourism
- 2. Mango products;
- 3. Water production for domestic use and to support rice production;
- 4. Timber production
- 5. Wood furniture and handicrafts
- 6. Fuelwood
- 7. Vegetable and cut flowers in Dalaguete, Cebu
- 8. Fisheries products such as "danggit" and other sea foods

The matrix of comparative advantage and competitive goods and services of Region 7 as

identified by DENR Region 7 is attached as annex 1.

V. Regional Action Plan for Implementing the Philippine Master Plan for Climate Resilient Forestry Development

The regional action plan for implementing the PMPCRFD addresses the forestry challenges and maximizes the opportunities provided by the comparative advantages and competitive goods and services of the region. It focuses on ensuring the health and resiliency of forest ecosystems and communities to climate change hazards so that forest resources can sustainably provide and meet the increasing demands for forest ecosystems goods and services. Equally important is the institutionalization of climate responsive governance where various stakeholders collaborate and participate in making decisions in the management of forest resources and ecosystems.

5.1 The Forestry Sector Vision

The region adopts the vision of the Philippine master plan for climate resilient forestry development as follows:

Climate resilient and sustainably managed watersheds and forest ecosystems, providing environmental and economic benefits to society

To achieve the vision and address the challenges in the forestry sector, the region has adopted the following goals of the PMPCRFD:

- 1. To place all forestlands under sustainable management in order to meet demands for forest goods and services and to promote resilience to climate change;
- 2. To strengthen resilience of forest dependent communities to climate change hazard;
- 3. To place all forestlands of the region under appropriate land management arrangements; and
- 4. To sustainably manage watersheds in partnership with stakeholders.

5.2 Strategic Programs

Considering the identified issues and the region's comparative advantages and competitive goods and services, Region 7 will focus on the following strategic forestry activities:

- 1. Protection of existing forests and biodiversity resources to support ecotourism, hazard mitigation and watershed management for power generation, irrigation and domestic water supply;
- 2. Forest Plantation development to address local demand for timber and fuelwood;
- 4. Rehabilitation of other protection forests to mitigate climate change hazards such as flooding and landslide;

- 5. Agroforestry farm development to diversify livelihood & support mango production;
- 6. Rehabilitation of degraded mangroves for fisheries and disaster risk reduction
- 7. Institutionalizing collaborative management.

These activities are grouped into four strategic programs as discussed in the succeeding sections

a. <u>Program to Strengthen Resilience of Forest Ecosystems and Communities to</u> <u>Climate Change Hazards</u>

Effective climate change mitigation and adaptation strategies will be integrated into the regional forestry action plan to meet the multiple objectives of preventing further forest degradation, reducing disaster risks, maximizing productivity, and reducing vulnerability to climate hazards.

Objectives

- 1. To align land uses within watersheds and forest ecosystems by integrating the forest land use plans of 42 LGUs into their comprehensive land use plans;
- 2. To undertake vulnerability assessment and adaptation planning in 10 priority watersheds;
- 3. To formulate the integrated watershed management plan of 6 priority watersheds;
- 4. To protect 98,530 hectares of existing forests and plantations starting in 2016 gradually increasing to 196,850 hectares in 2028;
- 5. To diversify livelihood of local communities by providing assistance in the development of 1,110 hectares of agroforestry farms;
- 6. To rehabilitate 3,354 hectares of protection forests through assisted natural regeneration and
- 7. Rehabilitate 1,300 hectares of degraded mangrove areas

Strategic Activities, Targets and Period of Implementation

The activities that will be implemented to strengthen resilience of forest ecosystems and communities to climate change hazards, and their implementation period and targets are summarized in table 11.

Table 11. Summary of Activities and Period of Implementation to Strengthen Resilience of Communities and Ecosystems to Climate Change Hazards

Strategic Programs and Activities	Targets and Implementation Period				
	2016	2017 -2022	2023 -2028	Total	
1. Vulnerability assessment and adaptation	0	10	0	10	
planning in priority watersheds (no.)					
2. Formulation of integrated watershed	0	6	0	6	
management plans (no.)					
3. Updating of IWMP (No)	0	1	0	1	
4. FLUP formulation (no. of LGUs)	0	42	0	42	

Regional Action Plan for Implementing the PMPCRFD, Region 7

Strategic Programs and Activities	Targets and Implementation Period						
	2016	2017 -2022	2023 -2028	Total			
5. Protection of existing forests and plantations including mangroves (ha)	98,530	149,850	196,850	196,850			
6. Mangrove rehabilitation (ha)	1000	300	0	1,300			
7. Agroforestry development (mixed crops in ha)	0	1,110	0	1,110			
8. Rehabilitation of protection forests (ANR) in ha.	3354	0	0	3,354			
 Training on vulnerability assessment, adaptation planning, integrated pest management, IWM, FLUP (no. of training) 	0	11	0	11			

b. Program to Address Increasing Demands for Forest Goods and Services

Considering the regional comparative advantages, and its competitive goods and services, the regional action plan of Region 7 will give more focus on addressing demands for fuelwood, cattle, agroforestry products such as pineapple and pili, water, biodiversity for ecotourism, and the need to reduce disaster risks and improve environmental conditions especially in urban centers..

Objectives

The specific objectives of this program are:

- 1. To develop 10,000 hectares of fuelwood plantations;
- To protect and conserve existing watersheds and establish 12,490 cu. meters of structural measures in priority watersheds to ensure water availability for power generation, domestic and industrial use and for irrigation to support production of rice and other agricultural crops;
- 3. To develop forest parks, and green belts in key cities of the region

Strategic Activities, Targets and Period of Implementation

The activities, targets and their period of implementation to address demands for forest goods and services are summarized in table 12.

Table 12. Summary of Activities, Targets and Period of Implementation to Address Demands	
for Forest Goods and Services	

Strategic Activities	Targets and Implementation Period						
	2016	2017 -2022	2023 -2028	Total			
1. Demarcation of forestland boundaries & forest management zones (ha.)	0	243,522	0	243,522			
2. Fuelwood/ bio energy plantation dev't in all provinces (ha)	0	2,400	7,600	10,000			
3. Watershed rehabilitation							
Vegetative SWC (ha)	0	156	0	156			
Structural soil and water conservation (cu. Meters)	0	12,490	0	12,490			
Organization and capacitation of watershed management bodies , such as the watershed management council (no.)	0	15	6	21			

Regional Action Plan for Implementing the PMPCRFD, Region 7

Strategic Activities	Targets and Implementation Period					
	2016	2017 -2022	2023 -2028	Total		
4. Support to urban forestry in major cities and urban						
centers (LGUs assisted)	0	26	9	35		

c. Institutionalizing Responsive Governance in Forestry

The governance of forestlands and protected areas in the region has been complicated, by overlapping institutional mandates and overlapping tenure at the forest management unit level. With different policy issuances, such as the local government code, indigenous peoples rights act, national integrated protected area system act and the water code, among others, DENR no longer has exclusive jurisdiction over forest ecosystems. This overlapping mandates have resulted to overlapping tenure instruments at the forest management unit level. In many instances, CADTs, protected areas, watershed reserves, and CBFMAs overlap with each other, leading to confusion on who is accountable for the management of the allocated forestlands and protected areas.

Apart from overlapping mandates and overlapping tenure, the different demands for forest ecosystems goods and services from multiple clients, which often times are conflicting, requires collaborative management of forests and forestlands. In view of this situation, the forestry sector in the region will enhance the skills and capabilities of its personnel so that it can effectively collaborate with other stakeholders in implementing programs on strengthening resilience to climate change hazards and respond to demands for forest ecosystems goods and services.

Objectives

The primary objectives of this program are the following:

- 1. To establish clear accountability in the management of forestlands;
- 2. To promote active participation of stakeholders in the management of forests and forestlands;
- 3. Keep track of progress in the implementation of the Philippine forestry master plan and
- 3. Strengthen the capabilities of DENR and other stakeholders in implementing forest management programs related to enhancing resilience to climate change and responding to demands for forest goods and services from multiple clients.

Strategic Activities and Targets

The activities, targets and their implementation periods to institutionalize responsive governance in the forestry sector in Region 7 are summarized in table 13.

Table 13. Summary of Activities, Targets and Period of Implementation to Institutionalize Responsive Governance in Region 7

Strategic Programs and Activities	Targets per Implementation Period						
	2016	2017 -2022	2023 -2028	Total			
Promoting Responsive Governance							
1. Inventory of forest occupants (No.)	0	656	244	900			
2. Tenure issuance in open access forestlands (ha)	0	92	25	117			
3. Organization and capacitation of multi-sectoral collaborative management bodies (region and province)	0	4	4	4			
4. Creation and operationalization of regional/ provincial TWG on climate change (no.)	0	4	4	4			
5. Capability enhancement for DENR/ LGUs (no. of trainings)	0	28	7	35			
6. Semi-annual / annual monitoring and evaluation of PMPCRFD implementation (No.)	2	12	12	26			
7. Performance assessment of tenure holders (No.)	0	6	6	12			

d. <u>Support programs</u>

Cross cutting support programs will focus on facilitating implementation of the three major forestry programs in the region. These are designed to inform the public of the important role of forest ecosystems in mitigating the adverse impacts of climate change and in securing water supply and other forest ecosystems goods and services. These are also intended to develop sustainable financing mechanisms, promote science based decision making and improve accountability through forest certification and improved data base.

Objectives

The support programs aim to:

- 1. Generate stakeholders' support in the implementation of the Philippine master plan for climate resilient forestry development;
- 2. Develop a data base management system to establish appropriate baseline data as basis for management decisions and monitoring and evaluation
- 3. Identify sustainable sources of financing for implementing the forestry master plan
- 4. Institutionalize a system for certifying sustainably managed forests and industries
- 5. Provide research based information for forest management decision making, vulnerability assessment and climate change adaptation planning

Strategic Activities, Targets and Period of Implementation

The strategic activities, targets and period of implementation to achieve the objectives of this program are summarized in table 14,

Table 14. Summary of Support Program Activities, Targets and Implementation Period

Strategic Activities	Targets per Implementation Period							
	2016	2017 -2022	2023 -2028	Total				
1. Information, education and communication campaign (no. of LGUs)	5	25	10	40				
2. Upgrading of regional MIS facilities (no.)	0	8	8	8				
3. Implementation of forest certification (Provinces)								
4. Identification and assessment of sustainable sources of financing in forestry projects (No. of sites assessed)	0	6	6	12				
5.Forestry research (no. of studies)	1	6	6	13				

VI. Plan Implementation

This regional action plan shall be implemented by DENR Region 7 in collaboration with LGUs, NCIP, CBFMA/ CADT holders, private investors, and other relevant stakeholders. Orientation/ information campaign about the regional action will be undertaken for LGUs and key stakeholders to encourage them to participate in its implementation.

Financing of the regional action plan for implementing the PMPCRFD will come both from the government and the private sector. Government financing will primarily come from existing programs/ projects of the DENR and to some extent from existing programs of the LGUs, especially those related to disaster risk reduction, climate change adaptation and the formulation/ updating of the comprehensive land use plans which integrates the FLUP, protected area management plans, ADSDPP and the watershed management plans as mandated under existing guidelines. Fund sourcing will be undertaken for activities and programs which are not included in existing programs and projects of DENR, LGUs and other agencies. Where there are opportunities for donor assistance, unfunded programs and projects will be submitted for possible financial support. Attachment 4 presents the distribution of regional forestry targets by fund sources.

References

Climate Change Commission. (2011). *National Framework Strategy on Climate Change* 2010-2022. Malacanang, Manila.

FMB/DENR (2003). Revised Master Plan for Forestry Development: Condensed Report.

Forest Management Bureau with Assistance from the FAO of UN. DENR, Visayas Avenue, Quezon City.

FMB/DENR. (2015). 2014 Philippine Forestry Statistics. FMB, DENR, Quezon City.

FMB/DENR. (2004). 2003 Philippine Forestry Statistics. FMB, DENR, Quezon City.

NCSO, (2015). Population by Region Census Years 2000, 2010 and 2015.

National Commission on Indigenous Peoples (NCIP). (2012). *Ancestral Domain Areas in the Philippines in Hectares*. Quezon City, Philippines.

National Economic Development Authority/Philippine Development Plan (NEDA/PDP).

(2011). *Philippine Development Plan 2011-2016*. Pasig City: National Economic and Development Authority. Manila, Philippines.

http://readtiger.com/wkp/en/List_of_protected_areas_of_the_Philippines http://www.visitmyphilippines.com



Annex 1.	Comparative	Advantages and	Competitive	Goods and	Services, Region 7	
----------	-------------	----------------	-------------	-----------	--------------------	--

						COMPETITI	/E GOODS	AND SERVIO	CES				
Comparative advantages	Mango/	Fuel- wood	Rice	Timber (mahogany & gmelina	Wood furniture	Souvenir items & handicraft	Water	Eco- tourism	Fisheries	Vegetable	Cacao & coffee	Cutflower	Others (minerals, abaca,etc)
Vast areas of Agric. lands			Bohol										
Watersheds			Bohol				Bohol	Bohol					power in Bohol
Less typhoons	Cebu & Bohol	Cebu, Bohol & Siquijor		Cebu, Bohol & Siquijor						Dalaguete Cebu			
More rainfall		Bohol	Bohol	Bohol			Bohol				Cebu & Bohol		
High elevation										Dalaguete Cebu		Dalaguete Cebu	
Dams for irrigation and power			Bohol				Bohol						power in Bohol
Existing tree plantations				Cebu & Bohol	Cebu city								
Fruit orchards	Cebu & Bohol												
Established markets	Cebu & Bohol	Cebu & Bohol	Bohol	Cebu & Bohol	Cebu city	Cebu, Bohol & Siquijor				Dalaguete Cebu	Cebu & Bohol	Dalaguete Cebu	Abaca in Bohol
Skilled handicraft & furniture makers					Cebu city	Cebu, Bohol & Siquijor							

		COMPETITIVE GOODS AND SERVICES											
Comparative advantages	Mango/	Fuel- wood	Rice	Timber (mahogany & gmelina	Wood furniture	Souvenir items & handicraft	Water	Eco- tourism	Fisheries	Vegetable	Cacao & coffee	Cutflower	Others (minerals, abaca,etc)
Processing plants					Cebu city	Cebu, Bohol & Siquijor							
Natural forests								Bohol & Cebu					
Protected areas								Cebu, & Bohol					
beaches & marine res.								Cebu, Bohol & Siquijor	Cebu, Bohol & Siquijor				
waterfalls & caves								Cebu and Bohol					
rivers								Cebu, Bohol & Siquijor	Cebu, Bohol & Siquijor				
mangroves		Bohol & Cebu						Cebu & Bohol	Cebu, Bohol & Siquijor				
coffee/cacao investors											Bohol & Cebu		