REGIONAL ACTION PLAN FOR IMPLEMENTING THE PHILIPPINE MASTER PLAN FOR CLIMATE RESILIENT FORESTRY DEVELOPMENT

Region 6, Western Visayas

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 the action plan of DENR Region 6 to support implementation of the PMPCRFD for CY 2016-2028.

II. Regional Profile

Region 6 is located in Central Philippines and lies between two large bodies of water,namely: the Sibuyan Sea and the Visayan Sea (figure 1). Its boundaries are the Visayan Sea on the east, the Cuyo East Pass on the west, the Sibuyan Sea and Romblon on the north and the Negros Island on the southwest.

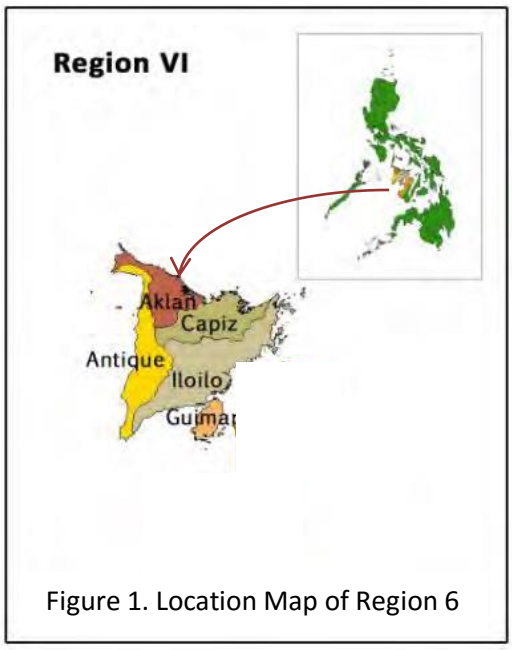

Figure 1. Location Map of Region 6

2.1 Physical features

Region 6 is characterized by relatively wide stretches of coastal lowlands with rugged hills and mountains in the interior. 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 amounts of rainfall and shorter number of rainy days are experienced during the remaining months. Hot months are experienced in March and April and cold months in Jan., Feb. and December.

2.2 Socio-Economic Profie

Region 6 covers five provinces: Aklan, Antique, Capiz, Iloilo, and Guimaras. It has ten (10) Congressional Districts and three cities. The provinces of Aklan, Antique and Guimaras each has one district; Capiz is composed of two districts while Iloilo Province has five districts;

Based on the 2015 national census, Region 6 has a total population of 4,477,247. Its average annual population growth rate from 2000 to 2015 is about 1.36%. Iloilo is the most populated province but Aklan, where the famous Boracay is located, has the highest annual population growth rate in the region for the period of CY 2000 to 2010 (Table 1). However, if the most recent period (i.e. 2010-2015) is used, Iloilo, Guimaras and Aklan have the highest annual population growth rates, indicating that tourism is influencing the population pattern in the region. The region's ethno linguistic people are called Panay-Hiligaynons (Ilonggos, Aklanons, Capiceños, Antiqueños).

Table 1. Population and Annual Population Growth Rates of Region 6

Provinces	Population			Annual Pop. Growth Rate (%)		
	May 2000	May 2010	Aug. 2015	2000-2010	2010-2015	2000-2015
AKLAN	451,314	535,725	574,823	1.73	1.35	1.60
ANTIQUE	472,822	546,031	582,012	1.45	1.22	1.37
CAPIZ	654,156	719,685	761,384	0.96	1.08	1.00
ILOILO (excluding ILOILO CITY)	1,559,182	1,805,576	1,936,423	1.48	1.34	1.43
ILOILO CITY	366,391	424,619	447,992	1.49	1.02	1.33
GUIMARAS	141,450	162,943	174,613	1.42	1.33	1.39
TOTAL	**3,645,315**	**4,194,579**	**4,477,247**	**1.41%**	**1.25%**	**1.36%**

Source: PSA, CY 2000, 2010, 2015

The major economic activities in region 6 are farming, sugar, rice and corn milling, fishing, mining and trading. Other important industries include livestock and poultry raising and cottage industries such as bamboo craft, food preservation, ceramics and confectionery manufacturing. The region has a competitive advantage in the production of seaweeds and fisheries products, mangoes, and coconut. It is the largest producer of sugar with 63% of the total sugar produced in 1996. In 1996, it was the third largest rice producer among the regions, third ranking marine fish producer, and fourth largest aquaculture supplier. About 35% of its total agricultural areas are devoted to rice production (http://www.nnc.gov.ph).

2.3 Resources

Western Visayas is one of the richest regions in the country in terms of natural resources. Its forests however have been denuded due to indiscriminate logging. Its waters abound with

numerous species of fish and other marine products. Mineral resources include copper, gold, silver, clay, limestone, coal, sand and gravel and other non-metallic. It is a key fisheries development area, with its 84 coastal municipalities, eight major fishing grounds, inland bodies of water and 43,050 hectares of fishponds (http://www.nnc.gov.ph).

Land Resources

Region 6 has a total land area of 1,229,704 hectares. Of this, 33 % or 407,317 hectares are classified as forestlands while 67% or 822,387 hectares are alienable and disposable lands (table 2). Most of the forestlands are situated in the provinces of Antique and Iloilo.

Table 2. Land Classification in Region 6

Land Classification	Area (ha)	%
Forestlands	407,317	33%
Classified Forestlands	406,625	33%
Established Timberlands	321,602	26%
Forest Reserves, National Park/ Prot. Areas & Other Reservations	85,023	7%
Unclassified forestlands	692	0.1%
Alienable and disposable lands	822,387	67%
Total	1,229,704	100%

Source: Philippine Forestry Statistics, CY 2014

Forests Resources

About 11% (138,228 hectares) of the region's land area are still forested consisting of open forest (7%), closed forest (4%), and mangrove forests (0.4%). Most of the forests are located in Antique (52,395 ha.) followed by the provinces of Aklan (36,398 ha) and Iloilo(25,667 ha.). Guimaras has the least forest, covering only an estimated area of 776 hectares. Table 3 summarizes the land cover per province in Region 6 for CY 2010.

Table 3. Land Cover of Region 6, CY 2010

Province	Land Area	Total Forest	Close Forest	Open Forest	Mangrove Forest	% of Region's Forest	% of Prov. Forested	% of total Forest Closed
Region 6	1,229,704	138,228	50,661	82,583	4,985	100.0%	11.2%	37%
Aklan	181,789	36,398	12,599	23,098	702	26.3%	20.0%	35%
Antique	252,201	52,395	20,380	31,223	792	37.9%	20.8%	39%
Capiz	263,317	22,992	14,728	6,865	1,399	16.6%	8.7%	64%
Guimaras	532,397	776	0	0	776	0.6%	5.0%	11%
Iloilo		25,667	2,954	21,397	1,316	18.6%		
% of Region		11%	4%	7%	0.4%			

Source: Phil Forestry Statistics, CY 2014

In general, there was a decrease in the forest cover of Region 6. From about 211,699 hectares in 2003 its total forest (close, open and mangrove forests) has decreased to 138,229 hectares in 2010. This means that around 73,470 hectares of forests were lost in Region 6 in a span of 7 years or an annual loss of 10,495 hectares. Among the provinces, Aklan had the highest decrease in forest cover equivalent to 28,110 hectares, followed by

Antique which lost about 27,877 hectares. Aklan is more critical in terms of biodiversity conservation since it lost almost 50% of its close forest compared to other provinces which only lost small areas of close forest. The forest cover change in Region 6 is summarized in table 4.

Table 4. Forest Cover Change in Region 6 (CY 2003-CY 2010)

Provinces	Close Forest			Open Forest			Mangrove Forest			Net Change
	2010	2003	Change	2010	2003	Change	2010	2003	Change	
Aklan	12,599	25,148	(12,549)	23,098	39195	(16,097)	702	166	536	(28,110)
Antique	20,380	20,967	(587)	31,223	59012	(27,789)	792	293	499	(27,877)
Capiz	14,728	15,260	(532)	6,865	8442	(1,577)	1,399	935	464	(1,645)
Guimaras	0	0	-	0	0	-	776	406	370	370
Iloilo	2,954	3,851	(897)	21,397	36965	(15,568)	1,316	1059	257	(16,208)
Total*	50,661	65,226	(14,565)	82,583	143,614	(61,031)	4,985	2,859	2,126	(73,470)

* Include plantations

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

Water resources

Region 6 is drained by many river systems that are used for irrigation and domestic/ industrial purposes. It has six (6) watershed forest reserves covering approximately 59,208 hectares (table 5). The Aklan River Watershed Forest Reserve in Aklan has an area of 23,185 hectares located in the municipalities of Madalag and Libacao. The proclaimed watersheds In the Province of Antique are the Mau-it-Tipulu-an River Watershed Forest Reserve and Dalanas River Watershed Forest Reserve with a total area of 16,295 hectares located in the municipalities of Sibalom and Barbaza. For the Province of Capiz, the Pan-ay River Watershed Forest Reserve is located at the Municipality of Tapaz with an area of 4,350 hectares. Two proclaimed watersheds are in the Province of Iloilo namely: Maasin Watershed Forest Reserve and the Jalaur River Watershed Forest Reserve with a total area of 15,378 hectares and located in the Municipalities of Maasin and Calinog (http://r6.denr.gov.ph).

Table 5. List of Watershed Forest Reserves in Region 6

Name of Reserve	Location	Area (ha)	Proc. No.
Aklan River Watershed Forest Reserve	Madalag and Libucao	23,185	600
Dalanas River Watershed Forest Reserve	Barbaza	8,558	603
Jalaur River Watershed Forest Reserve	Calinog	9,228	601
Maasin Watershed Forest Reserve	Maasin	6,150	16
Pan-ay River Watershed Forest Reserve	Tapaz	4,350	599
Tipulu-an Mau-it River Watershed Forest Reserve	Sibalom	7,737	605
Aklan River Watershed Forest Reserve	Madalag and Libucao	23,185	600
Total		59,208	

Source: Philippine Forestry Statistics, CY 2014.

Biodiversity Resources

A comprehensive inventory of biodiversity resources has not been undertaken in Region 6. However, three protected areas had been established in the region which serve as habitat of

important and vulnerable species of flora and fauna. The list of protected areas in region 6 is presented in table 6.

Table 6. List of Protected Areas in Region 6

Name	Location	Area (ha)	Established
Northwest Panay Peninsula National Park	Aklan-Antique	12,009.29	2002
Sibalom National Park	Antique	5,511.47	2000
Taklong Island Marine Reserve	Guimaras	1,143.45	1990
Total		18663.85	

Ecotourism Areas

Region 6 is one of the busiest regions in terms of tourism. It is home to the famous Boracay island which is frequently visited by tourists all over the world because of its fine white beach. Guimaras island is also becoming a favourite destination for both local and foreign tourists. Other beaches in Iloilo likewise offer alternative areas for tourists.

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. For Region 6, the estimated increase in temperature will range from 1.8ºC to 2.4ºC, with higher temperature increase during the months of March to May. Meanwhile, decrease in rainfall is estimated to range from –5.3% to -13.4%. These reduction in rainfall is mostly expected from March to May, while up to 21.7% increase in rainfall is expected during the rainy months of June, July and August. (table 7 and 8).

Table 7. Seasonal temperature increases in 2050 under medium-range emission scenario, Region 6

Provinces	Observed Baseline in °C (1971-2000)				Change in 2050 in °C (2036-2065)			
	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Aklan	26.1	27.9	27.8	27.4	1.9	2.4	2.1	1.8
Antique	26.6	28.4	27.9	27.7	1.9	2.2	1.9	1.8
Capiz	25.9	27.7	27.8	27.3	1.9	2.4	2.2	1.9
Iloilo	26.4	28.2	27.9	27.6	1.9	2.4	2.1	1.9

Source: PAGASA, 2011

Table 8. Seasonal rainfall change (in %) in 2050 under medium-range emission scenario in Region 6

Provinces	Observed Baseline (1971-2000)				Change in 2050 (2036-2065)			
	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Aklan	431.2	322.7	862.5	883.7	14.9	-13.4	-5.5	11.1
Antique	297.9	288	995.3	841.4	17	-12.6	21.7	11.9

Provinces	Observed Baseline (1971-2000)				Change in 2050 (2036-2065)			
	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Capiz	469.7	342	814.2	889.1	17.5	-12.9	-5.3	12.9
Iloilo	324.8	290.6	932.8	828.3	20.4	-13.3	3.8	3.9

Source: PAGASA (2011)

With more rains during the rainy season, floods, soil erosion and landslide may be aggravated endangering lives and properties of communities especially in Antique. On the other hand, with less rains during the dry season, water availability for irrigation and domestic use will be adversely affected. While the region is not yet a water stressed region, water availability is expected to worsen with climate change. The region is vulnerable.to landslide, having been ranked third among the regions of the country in terms of vulnerability to landslide.

III. Development Challenges in the Forestry Sector of Region 6

The challenges faced by the forestry sector in Region 6 is summarized in the succeeding discussions

1. Protection of existing forests is a major concern in the region. Its forests cover has decreased from 211,699 hectares in 2003 to only 138,229 hectares in 2010 equivalent to an annual decrease in forest cover of about 10,496 hectares. This situation has significantly diminished the ability of forests to provide ecosystem services to communities and as a result, could hardly meet local demands for wood, and other non wood forest products. The critical provinces in region 6 in terms of forest destruction are Aklan and Antique where higher rates of forest losses were registered.

2. Protection and rehabilitation of watersheds to ensure adequate supply of water for irrigation and domestic use. Most areas of the key watersheds of Region 6 (such as the Jalaur River Forest Reserve) are already cultivated and used for other non forest uses. The ability of these watersheds to continuously supply irrigation and domestic water may be compromised if these are not rehabilitated immediately. Since region 6 is one of the rice producing regions, the continuous degradation of watersheds will have adverse impacts on food production of the country. As such, there is an urgent need to motivate upland settlers/ farmers to adopt agroforestry by integrating fruit/ forest trees in their farming systems so that forest land uses complements watershed conservation.

3. Loss of Biodiversity is a critical problem that is going on unnoticed. A closer examination of the forest cover loss data in Region 6 would show that large areas of close forests (14,565 hectares) had been destroyed in the region in a span of 7 years from 2003 to 2010. Since close forests are known to contain rich biodiversity resources, large scale destruction of this type of forest imply loss of habitat of important biodiversity species. Among the provinces, Aklan has lost the largest area of close forests covering 12,549 hectares or 50% of its close forest areas in 2003.

4. Reducing the impacts of climate change hazards is a pressing concern in the region that should be given priority attention. Western Visayas is highly vulnerable to climate and geological related hazards such as floods, landslides, storm surge, erosion, and sea level

rise. 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 have limited capabilities for disaster risk reduction.

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. They also lack the 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 Advantages 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 6 include the following:

1. It has vast areas of agricultural lands in the province of Iloilo which are developed into production of rice and other crops;
2. Presence of watershed reservations that provide water for dams and other reservoirs for irrigation and for domestic use and has potential for power generation;
3. Extensive areas of beaches and rivers, caves, waterfalls and biodiversity resources in key areas that are potential for ecotourism;
4. Existing pasture areas in Iloilo and Antique that can be developed further for grazing purposes to meet local demand for meat;
5. Existing mahogany, coconut and mango plantations that provide livelihood to local population and which have potential for agroforestry farms;
6. Established markets for various products such as mango, rice, cattle, coconut and fuelwood and other non-timber products;
7. Presence of watersheds, mangroves and coastal resources that support fisheries
8. Significant areas of natural forests that provide raw materials for handicraft making; and
9. Relatively high rainfall and less destructive typhoons in most provinces.

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. Rice
3. Mango products;
4. Coconut

5. Water production for domestic use and to support rice production;
6. Fuelwood and timber products
7. Handicrafts
8. Cattle raising
9. Fisheries products such as prawns, crabs, and mussels

The matrix of comparative advantages and competitive goods and services of Region 6 as identified by DENR Region 6 is attached as annex 1.

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

The region 6 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, the forestry programs in Region 6 will focus on the following:

1. Protection of existing forests to support ecotourism, hazard mitigation and watershed management for power generation, irrigation and domestic water supply;

2. Grazing land management to take advantage of the region's existing pasture areas;
3. Forest Plantation development to address local demand for fuelwood and timber;
4. Rehabilitation of other protection forests to mitigate climate change hazards such as flooding;
5. Agroforestry farm development to diversify livelihood & support production of mango and other fruit trees;
6. Rehabilitation of degraded mangroves for fisheries and disaster risk reduction
7. Institutionalizing collaborative management

a. Program to Strengthen Resilience of Forest Ecosystems and Communities to Climate Change Hazards

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 harmonize land uses within watersheds and forest ecosystems by integrating the forest land use plans of 20 LGUs into their comprehensive land use plans;
2. To undertake vulnerability assessment and adaptation planning in 12 priority watersheds;
3. To formulate the integrated watershed management plan of 9 priority watersheds;
4. To protect 167,728 hectares of existing forests and plantations starting in 2016 gradually increasing to 275,808 hectares in 2028;
5. To diversify livelihood of local communities by developing 19,727 hectares of agroforestry farms;
6. To rehabilitate 1,900 hectares of protection forests through assisted natural regeneration and
7. Rehabilitate 1,400 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 9.

Table 9. 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 planning in priority watersheds (no.)	0	6	6	12
2. Formulation of integrated watershed	0	9	0	9

Strategic Programs and Activities	Targets and Implementation Period			
	2016	2017 -2022	2023 -2028	Total
management plans (no.)				
3. FLUP formulation (no. of LGUs)	0	20	0	20
4. Protection of existing forests and plantations including mangroves (ha)	167,728	218,592	275,808	275,808
6. Mangrove rehabilitation (ha)	1,000	400	0	1400
7. Agroforestry development (mixed crops in ha)	6,077	13,650	0	19,727
8. Rehabilitation of protection forests (ANR) in ha.	1,900	0	0	1,900
9. Training on vulnerability assessment, adaptation planning, integrated pest management, IWM, FLUP (no. of training)	0	6	6	12

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 6 will give more focus on addressing demands for fuelwood, timber, cattle, agroforestry products such as mango, water for irrigation, power, and domestic use; 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 15,000 hectares of fuelwood plantations;
2. To develop 75,703 hectares of forest plantations for timber production;
3. To protect and conserve existing watersheds and rehabilitate 10,900 hectares in priority watersheds for power generation, domestic and industrial use and for irrigation to support production of rice and other agricultural crops;
4. To develop 203 hectares of pasture areas to address local demands for meat; and
5. 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 10.

Table 10. 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	407,317	0	407,317
2. Development of seed production areas in all provinces(no.of sites)	0	5	5	5
3. Establishment/ maintenance of mechanized nurseries (no.)	0	1	1	1
4. Fuelwood/ bio energy plantation dev't in all	0	4,800	10,200	15,000

Strategic Activities	Targets and Implementation Period			
	2016	2017 -2022	2023 -2028	Total
provinces (ha)				
5. Development of forest plantations for timber		26,171	49,532	75,703
6. Management of grazing lands (ha)	203	203	203	203
7. Watershed rehabilitation				
Vegetative SWC (ha)		207	210	417
Structural soil and water conservation (cu. Meters)	0	27,000	38,000	65,000
Rehabilitation of watersheds	0	6,300	4,600	10,900
Organization and capacitation of watershed management bodies , such as the watershed management council (no.)	0	11	11	11
8. Support to urban forestry in major cities and urban centers (LGUs assisted)	0	46	0	46

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 ecosystems goods and services from multiple clients.

Strategic Activities, Targets and Implementation Period

The activities, targets and their implementation periods to institutionalize responsive governance in the forestry sector in Region 6 are summarized in table 11.

Table 11. Summary of Activities, Targets and Period of Implementation to Institutionalize Responsive Governance in Region 6

Strategic Programs and Activities	Targets per Implementation Period			
	2016	2017 -2022	2023 -2028	Total
Promoting Responsive Governance				
1. Inventory of forest occupants (No. Of LGUs)	0	79	0	79
2. Tenure issuance in open access forestlands (ha)	0	25,000	25,000	50,000
3. Organization and capacitation of multi-sectoral collaborative management bodies (region and province)	0	7	7	7
4. Creation and operationalization of regional/ provincial TWG on climate change (no.)	0	6	6	6
5. Capability enhancement for DENR/ LGUs (no. of trainings)	1	18	18	37
6. Semi-annual / annual monitoring and evaluation of PMPCRFD implementation (No.)	1	12	12	25
7. Performance assessment of tenure holders (No.)	0	6	6	12

d. Support programs

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 12,

Table 12. 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)	20	101	101	101
2. Upgrading of regional MIS facilities (no.)	0	6	6	6
3. Implementation of forest certification (Provinces)	0	5	5	5
4. Identification and assessment of sustainable sources of financing in forestry projects (No. of sites assessed)	0	7	7	7
5.Forestry research (no. of studies)	0	10	5	15

VI. Plan Implementation

This regional action plan shall be implemented by DENR Region 6 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.

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ANNEXES

Annex 1. Comparative Advantages and Competitive Goods and Services, Region 6

Comparative advantages	COMPETITIVE GOODS AND SERVICES										
	Fruits (Rambutan, Mango, coconuts)	Cattle	Fuel-wood	Rice	round wood	wood furniture	water	ecotourism	fisheries	non timber products (handicraft)	Others, (cacao, coffee & mineral)
vast areas of agricultural lands				Iloilo, Guimaras							
Existing watershed reservations				Iloilo			Aklan, Iloilo, Antique	Aklan, Iloilo, Antique			
grazing lands		Northern Iloilo and Northern Antique									
less typhoons	Guimaras			Iloilo, Guimaras	Region wide						
more rainfall	Aklan, Iloilo, Guimaras		Guimaras		Region wide		Region-wide			Region-wide	Region-wide (Cacao, coffee)
dams for irrigation and power				Iloilo			Iloilo, Aklan, Antique				
Existing plantations	Coconut in Aklan		Iloilo		Region wide	Region wide				Bamboo crafts	
fruit orchards	Mangoes in Guimaras										
established markets	Guimaras		Iloilo	Iloilo, Guimaras			Region-wide	Region-wide	Region-wide	Region-wide	Region-wide
skilled / handicraft & furniture makers						Region wide				Bamboo crafts	

Comparative advantages	COMPETITIVE GOODS AND SERVICES										
	Fruits (Rambutan, Mango, coconuts)	Cattle	Fuel-wood	Rice	round wood	wood furniture	water	ecotourism	fisheries	non timber products (handicraft)	Others, (cacao, coffee & mineral)
Natural forests								Region wide		Region wide	
Protected areas							Aklan, Iloilo, Antique	Region wide		Region wide	
caves & water falls								Region wide			
beaches & coastal res.								Region wide	Region wide		
lakes and rivers							Region wide				
mangroves									Region wide		
coffee/cacao investors											Region wide
Mineral deposits											Antique, Guimaras