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

Region 9, Zamboanga Peninsula

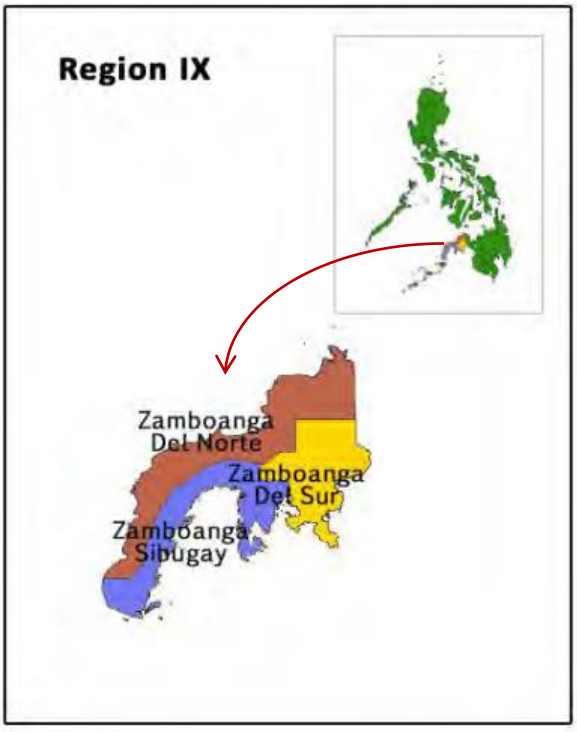
I. Background and Rationale

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 9's action plan to support implementation of the PMPCRFD for CY 2016-2028.

Figure 1. Location of Region 11



II. Regional Profile

Region 9, also known as the Zamboanga Peninsula Region, lies at the Southern most portion of the Philippine archipelago. Located at the western tip of the island of Mindanao, Zamboanga Peninsula is strategically situated in close proximity to Sabah, Malaysia, Brunei Darussalam and Indonesia. Thus, its appellation as the Philippines' gateway to the Brunei-Indonesia-Malaysia-Philippines East ASEAN Growth Area or BIMP-EAGA.

2.1 Physical features

Region 9 lies between the Moro Gulf (part of the Celebes Sea) and the Sulu Sea. Along the shores of the peninsula are numerous bays and islands of varying sizes. The peninsula is connected to the rest of Mindanao through an isthmus situated between Panguil Bay and Pagadian Bay. The region consists of the three Zamboanga provinces and the highly-urbanized independent city of Zamboanga, The boundary between the peninsula and the mainland is officially marked by the border between the provinces of Zamboanga del Sur and Lanao del Norte (http://countrystat.psa.gov.ph/?cont=16&r=9

One potential advantage of the province is its good climatic condition. It belongs to the third and fourth types of climate. The southern part enjoys the third type which is dry from the months of February to April and wet during the rest of the year while the northern part enjoys the fourth type where rainfall is more or less evenly distribute throughout the year except for the month of February which is hot season. The province is not within the typhoon belt.

The topographic condition of the province ranges from plain, slightly rolling, rolling to hilly to mountainous. Most plain to nearly level lands are evident at the outskirts of every municipality and the neighboring coastal barangays. Some small patches of level lands are found along rivers.

2.2 Socio-Economic Profie

Region 9 is composed of three provinces, namely, Zamboanga del Sur, Zamboanga del Norte and Zamboanga Sibugay. It is considered a melting pot of many cultural groups. Cebuanos, Boholanos, and Ilonggos are the majority groups. Others include Maguindanaos, Maranaos, T'bolis, Bagobos, B'laans, Samals, and Agtas. Smaller communities of Ilocanos, Tagalogs, Warays, and Bicolanos are also found. Zamboanga City is the center of trade, commerce, transportation, communication, education, technology, tourism, and religion in the region.

Zamboanga Peninsula's economy is basically rooted in agriculture with farming and fishing as the main economic activities of families. The Agriculture/Fishery/Forestry Sector contributes about 50% of the GRDP, followed by the Services Sector at 35%. The Industry Sector meanwhile, contributes the remaining 15% of the regional economy. The industry sector of Region 9 is characterized by a proliferation of micro, small and medium-scale companies. Most manufacturing activities are based in the cities of Zamboanga, Dipolog, and Pagadian. (http://www.dti.gov.ph/regions/region9/r9-profile-of-region)

Based on the 2015 national census, Region 9 has a total population of 3,629,783. Its average annual population growth rate from 2000 to 2015 is about 1.64%. Zamboanga del Norte is the most populated province. However, Zamboanga city and Isabela City have the highest annual population growth rate in region 9 (Table 1).

Table 1. Population and Annual Population Growth Rates of Region 9

Provinces	Population			Annual Pop. Growth Rate		
	May 2000	May 2010	Aug. 2015	2000-2010	2010-2015	2000-2015
REGION IX (ZAMBOANGA PENINSULA)	**2,831,412**	**3,407,353**	**3,629,783**	**1.87**	**1.21**	**1.64**
ZAMBOANGA DEL NORTE	823,130	957,997	1,011,393	1.53	1.04	1.36
ZAMBOANGA DEL SUR (excluding ZAMBOANGA CITY)	836,217	959,685	1,010,674	1.39	0.99	1.25
ZAMBOANGA CITY	601,794	807,129	861,799	2.98	1.26	2.38
ZAMBOANGA SIBUGAY	497,239	584,685	633,129	1.63	1.53	1.60
CITY OF ISABELA	73,032	97,857	112,788	2.97	2.74	2.89

Source: PSA, CY 2000, 2010, 2015

2.3 Resources

The region has vast forest resources. Logs, lumber, veneer and plywood are once among its major export products. It is also richly endowed with mineral deposits both metallic and non-metallic. Metallic reserves include gold, silver, copper, chromite, iron, lead, and manganese ore. The non-metallic minerals consist of coal, clay, asbestos, limestone, quartz, silica, phosphate rock and marble.

Situated outside the typhoon belt and surrounded by five of the Philippines' richest fishing grounds, the region enjoys several distinct advantages: It is the no. 1 commercial marine fish producing region in the country, contributing 16.48% of the national fish production and 37% of Mindanao's total production (BAS 2004 data). The whole industry employs approximately 35,000 workers not counting those employed in the allied industries such as shipping, stevedoring, cold storage, etc. It has also extensive areas developed as aqua farms for brackish water and freshwater fishes. It supplies 70% of the Philippine domestic requirements for dried fish. There are to date a total of 104 big dried fish processors in the region.

It supplies 75% of the country's total domestic requirements for canned sardines. Hence, its appellation as the Sardines Capital of the Philippines. To date, there are eight major canning factories based in Zamboanga City.

Land Resources

Region 9 has a total land area of 1,467,011 hectares. Of this, 54 % or 790,125 hectares are classified as forestlands while 46% or 676,886 hectares are alienable and disposable lands (table 2). Most of the forestlands are situated in the provinces of Zamboanga del Norte and Zamboanga Sibugay.

Table 2. Land Classification in Region 9

Land Classification	Area (ha)	%
Forestlands	790,125	54%
Classified Forestlands	769,415	52.4%
Established Timberlands	352,135	24%
Forest Reserves, National Park/ Prot. Areas & Other Reservations	417,280	28%
Unclassified forestlands	20,710	1.4%
Alienable and disposable lands	676,886	46%
Total	1,467,011	100%

Source: Philippine Forestry Statistics, CY 2014

Forests Resources

About 12% (176,918 hectares) of the region's land area are still forested consisting of open forest (8.2%), closed forest (2%), and mangrove forests (1.8%). Most of the forests are located in Zamboanga del Norte (82,757 ha.) followed by the province of Zamboanga Sibugay (42,379 ha) and Zamboanga City (29,377 ha.). Zamboanga del Sur has the least forest, covering only an estimated area of 19,309 hectares. Table 3 summarizes the land cover per province in Region 9 for CY 2010.

Table 3. Land Cover of Region 9, CY 2010

Province	Land Area	Total Forest	Close Forest	Open Forest	Mangrove Forest	% of Region Forested	% of Prov. Forested	% of total Forest Closed
Region 9	1,467,011	176,918	29,906	120,488	26,523	12%	12%	17%
Zamboanga del Norte	661,811	82,757	9,032	73,133	592	6%	13%	11%
Zamboanga City	805,200	29,377	15,294	9,107	4,976	%6	11%	20%
Zamboanga del Sur		19,309	795	12,409	6,105			
Zamboanga Sibugay		42,379	2,523	25,839	14,018			

Source: Phil Forestry Statistics, CY 2014

In general, there was a decrease in the forest cover of Region 9. From about 182,195 hectares in 2003 its total forest (close, open and mangrove forests) has decreased to 176,918 hectares in 2010. This means that around 5,276 hectares of forests were lost in Region 9 in a span of 7 years or an annual loss of 753.71 hectares. While there was an overall decrease in forest cover in the region, Zamboanga Sibugay and Zamboanga City had a net increase in forest cover. In terms of forest loss, the province of Zamboanga del Norte and Zamboanga del Sur are most critical in Region 9. These provinces registered forest cover loss in all types of forests. In contrast, Zamboanga City, Isabela City and Zamboanga

Sibugay registered an increase in close forest from 2003 to 2010. The forest cover change in Region 9 is summarized in table 4.

Table 4. Forest Cover Change in Region 9 (CY 2003-CY 2010)

Provinces	Close Forest			Open Forest			Mangrove Forest			Net Change
	2010	2003	Change	2010	2003	Change	2010	2003	Change	
Isabela City	2,263	0	2,263	0	2791	(2,791)	833	608	225	(303)
Zamboanga City	15,294	13220	2,074	9,107	9517	(410)	4,976	3,940	1,036	2,700
Zamboanga del Norte	9,032	11908	(2,876)	73,133	88068	(14,935)	592	676	(84)	(17,895)
Zamboanga del Sur	795	4519	(3,724)	12,409	16686	(4,277)	6,105	11,681	(5,576)	(13,577)
Zamboanga Sibugay	2,523	5	2,518	25,839	13153	12,686	14,018	5,423	8,595	23,799
Region 9 Total*	29,907	29,652	255	120,488	130,215	(9,727)	26,524	22,328	4,196	(5,276)

* Include plantations
Source: Philippine Forestry Statistics, CY 2004 and CY 2014.

Water resources

Region 9 is drained by many river systems that are used for irrigation and domestic/ industrial purposes. It has four proclaimed watershed forest reserves covering approximately 10,844 hectares (table 5).

Table 5. List of Watershed Forest Reserves in Region 9

Name of Reserve	Location	Area (ha)	Proc. No.
Region 9			
Ambogoc Watershed Forest Reserve	Dapitan City	176	611
Buug Watershed Forest Reserve	Buug	108	81
Pasonanca Watershed Forest Reserve	Brgy Upper Pasonanca, Dulian, Baluno, Capisun Zamboanga City	10,560	199
Siocon Watershed Forest Reserve	Siocon	612	155
Total		**10,844**	**1,046**

Source: Philippine Forestry Statistics, CY 2014

Biodiversity Resources

Region 9 has established protected areas which are repository of biodiversity resources and serve as tourist destinations. These protected areas are summarized in table 6.

Table 6. List of Protected Areas in Region 9

Name	Location	Area (ha)	PA Classification
Jose Rizal Memorial	Zamboanga del Norte	439	Protected Landscape
Mount Timolan	Zamboanga del Sur	1,994.80	Protected Landscape

Name	Location	Area (ha)	PA Classification
Aliguay Island	Zamboanga del Norte	1,191.89	Protected landscape & seascape
Dumanquilas	Zamboanga del Sur	25,948	Protected landscape & seascape
Great and Little Santa Cruz Islands	Zamboanga del Sur	1,877	Protected landscape & seascape
Selinog Island	Zamboanga del Norte	1,294.35	Protected landscape & seascape
Buug	Zamboanga del Sur	1,095	National Biotic Areas
Pasonanca Natural Park[7]	Zamboanga del Sur	12,107	National Parks
TOTAL		45,947.04	

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

Nature-Based Tourism Areas

Nature-based tourism in region 9 is mainly anchored on its forest and marine resources as well as on its historical sites. Beaches, mountains, caves, gardens, culture, people – all form part of the tourist destinations of region 9. Numerous waterfalls dot the provincial landscapes together with lakes caves, beaches, and scenic mountains that make for a hard-to-beat nature package. Zamboanga del Norte abounds with natural beauty – lush forest parks and falls, scenic beaches and coves plus historical landmarks.

Zamboanga del Norte shares Zamboanga del Sur's birth. But even before these provinces existed separately; its Shrine City of Dapitan was already renowned as the home of the country's most famous exile, national hero Dr. Jose P. Rizal just before his martyrdom. Dapitan also hosts a world-class and the region's leading resort – Dakak Beach Resort.

Zamboanga Sibugay also boasts its Looc Labuan Beach in Tungawan, Litayon Island, Baluran Falls in Imelda, the Moalboal Caves, and the intriquing sea snakes in Olutanga among others.

.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 9, the estimated increase in temperature will range from 1.9ºC to 2.2ºC. Meanwhile, decrease in rainfall is estimated at–0.7% in Zamboanga del Norte. The rest of the provinces will have an increase in rainfall ranging from 2.6% to 22%. (table 7 and 8).

With more rains in most areas of Region 9, floods, soil erosion and landslide may be aggravated endangering lives and properties of communities particularly in Zamboanga Sibugay. Some areas in the region are also vulnerable to storm surge especially the coastal communities. The projected increase in temperature in 2050 is also expected to result to more forest fires thereby adding to the threat of destruction of existing forests in the region.

Table 7. Seasonal temperature increases in 2050 under medium-range emission scenario, Region 9

Provinces	Observed Baseline in ºC (1971-2000)				Change in 2050 in ºC (2036-2065)			
	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Zamboanga del Norte	27	27.9	27.6	27.5	2	2.1	2.2	2
Zamboanga del Sur	26.8	27.6	27.3	27.2	1.9	2.1	2	1.9
Zamboanga Sibugay	27.1	27.9	27.5	27.5	2	2	1.9	2

Source: PAGASA, 2011

Table 8. Seasonal rainfall change (in %) in 2050 under medium-range emission scenario in Region 9

Provinces	Observed Baseline (1971-2000)				Change in 2050 (2036-2065)			
	DJF	MAM	JJA	SON	DJF	MAM	JJA	SON
Zamboanga del Norte	324.5	279.7	599.1	718.1	2.6	1.7	-0.7	5.4
Zamboanga del Sur	294.5	298.7	593.8	663.2	3.6	0	9.9	7.1
Zamboanga Sibugay	284.1	290.5	597.2	674.1	4.8	10.3	22	8.9

Source: PAGASA (2011)

III. Development Challenges in the Forestry Sector of Region 9

The challenges faced by the forestry sector in Region 9 are summarized in the succeeding discussions

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1. There is a need to continue the protection of existing forests and rehabilitate degraded forestlands in Region 9. With a general decrease in forest cover, availability of forest goods particularly timber correspondingly decreased. This trend had to be reversed by developing more plantation forests to supply the increasing demand for timber not only in region 9 but including the demands from other non-timber producing regions of the country.

2. Protection and rehabilitation of watersheds to ensure adequate supply of water for irrigation, domestic use and power generation. Most of the watersheds in the region are severely degraded, leading to inadequate supply of irrigation water during the dry season. This situation greatly affects the productivity of agricultural lands and leads to lower income of farming communities.

3. Loss of Biodiversity is a critical problem that is going on unnoticed in the provinces of Zamboanga del Norte and Zamboanga del Sur. These provinces registered a net loss in forest cover in all types of forests (close, open and mangrove forests). If forest destruction in

these provinces is not addressed immediately, significant biodiversity resources may be lost due to habitat destruction.

4. Reducing the impacts of climate change hazards should be given priority attention. Some areas in region 9 are highly vulnerable to flooding, soil erosion, 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 specially in Zamboanga Sibugay .

5. Collaborative management is necessary to address the overlapping mandates of different agencies (DENR, NCIP, DAR, LGUs) 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 9 include the following:

1. It still has wide areas of agricultural lands developed for the production of rice, corn and other crops;
2. Less exposure to typhoon;
3. Presence of watershed reservations that provide water for dams and other reservoirs for irrigation and for domestic use;
4. Extensive areas of forests, lakes, rivers, caves, and beaches that are potential for nature-based tourism;
5. Existing plantations of rubber, coconuts and timber trees that provide livelihood to local population and which have potential for agroforestry farms;
6. Established markets for various products such as rubber, rice, fuelwood and other non-timber products;
7. Presence of mangroves and coastal resources that support fisheries and tourism
8. Relatively high rainfall 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. Nature – based tourism
2. Rubber

3. Coconut
4. Water production for domestic use and to support rice production;
5. Wood/ Timber
6. Abaca and bamboo products
7. Fuelwood
8. Fisheries products such as sardines and sea weeds

The matrix of comparative advantages and competitive goods and services of Region 9 as identified by DENR Region 9 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 also adopts 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 9 will focus on the following:

1. Protection of existing forests to support ecotourism, hazard mitigation and watershed management for irrigation and domestic water supply;
3. Forest Plantation development to address demands for timber and fuelwood;
4. Rehabilitation of other protection forests to mitigate climate change hazards such as flooding;
5. Agroforestry farm development to diversify livelihood & support production of rubber, bamboo, abaca 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 align land uses within watersheds and forest ecosystems by integrating the forest land use plans of 48 LGUs into their comprehensive land use plans;
2. To undertake vulnerability assessment and adaptation planning in 29 priority watersheds;
3. To formulate the integrated watershed management plan of 27 priority watersheds;
4. To protect 237,597 hectares of existing forests and plantations starting in 2016 gradually increasing to 521,397 hectares in 2028;
5. To diversify livelihood of local communities by developing 47,083 hectares of agroforestry farms;
6. To rehabilitate 26,041 hectares of protection forests through assisted natural regeneration and
7. Rehabilitate 7,747 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.)	1	28	0	29
2. Formulation of integrated watershed management plans (no.)	1	26	0	27
3. Updating of IWMP (No)				
4. FLUP formulation (no. of LGUs)	5	43	0	48
5. Protection of existing forests and plantations including mangroves (ha)	237,597	393,219	521,397	521,397
6. Mangrove rehabilitation (ha)	450	4,074	3,223	7,747
7. Agroforestry development (mixed crops in ha)	3,406	43,677	0	47,083
8. Rehabilitation of protection forests (ANR) in ha.	12314	13,727	0	26,041
9. Training on vulnerability assessment, adaptation planning, integrated pest management, IWM, FLUP (no. of training)	0	12	12	24

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 9 will give more focus on addressing demands for timber, fuelwood, agroforestry products such as rubber and bamboo, water supply, 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 204,444 hectares of forest plantations for timber production;
2. To establish 19,105 hectares of fuelwood plantations;
3. To protect, conserve and rehabilitate priority watersheds for domestic and industrial use and for irrigation to support production of rice and other agricultural crops;
4. To assist at least 12 LGUs in developing forest parks, and green belts in key cities of the region; and
5. To capacitate 29 watershed management bodies

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	790,125	0	790,125
2. Development of seed production areas in all provinces(no.of sites)	0	3	3	3
3. Establishment of mechanized nurseries (no.)	0	0	0	0
4. Fuelwood/ bio energy plantation dev't in all provinces (ha)	2,077	14,428	2,600	19,105
5.Development of forest plantations for timber	5,995	75,949	122,500	204,444
6. Watershed rehabilitation				
Vegetative SWC (ha)	0	280	0	280
Structural soil and water conservation (cu. Meters)	0	2,433	3500	5,933
7. Organization and capacitation of watershed management bodies , such as the watershed management council (no.)	2	27	0	29
8.Support to urban forestry in major cities and urban centers (LGUs assisted)	0	6	6	12

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 9 are summarized in table 11.

Table 11. Summary of Activities, Targets and Period of Implementation to Institutionalize Responsive Governance in Region 9

Strategic Programs and Activities	Targets per Implementation Period			
	2016	2017 -2022	2023 -2028	Total
Promoting Responsive Governance				
1. Inventory of forest occupants (No.)	0	12,704	0	12,704
2. Tenure issuance in open access forestlands (ha)	0	45	0	45
3. Organization and capacitation of multi-sectoral collaborative management bodies (region and province)	0	16	0	16
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)	4	24	24	52
6. Semi-annual / annual monitoring and evaluation of PMPCRFD implementation (No.)	2	12	12	26
7. Performance assessment of tenure holders (No.)	1	6	6	13

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)	5	43	43	48
2. Upgrading of regional MIS facilities (no.)	0	4	4	4
3. Implementation of forest certification (Provinces)	0	3	3	3
4. Identification and assessment of sustainable sources of financing in forestry projects (No. of sites assessed)	0	6	3	9
5.Forestry research (no. of studies)	1	8	4	13

VI. Plan Implementation

This regional action plan shall be implemented by DENR Region 9 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 9

	Competitive Goods and Services							
Comparative advantages	**Rubber**	**Fuelwood**	**Rice**	**Timber**	**Fisheries**	**Tourism**	**Fruits**	**Others (Bamboo, abaca, etc)**
Wide areas of agricultural lands			Region wide					
Existing proclaimed watersheds			Region wide					
Existing tree plantations	All provinces			All provinces				All provinces
Existing fruit orchards							All provinces	All provinces
established markets	All provinces	All provinces	All provinces	All provinces	All provinces	All provinces	All provinces	All provinces
Less exposed to typhoon	All provinces	All provinces		All provinces			All provinces	All provinces
High rainfall	All provinces	All provinces		All provinces				All provinces
caves						All provinces		
beaches/islands						All provinces		
lakes and rivers						All provinces		
mangroves and coastal resources					All provinces	All provinces		
Business Investors	All provinces				All provinces	All provinces	All provinces	