

**PHILIPPINE DEVELOPMENT PLAN RESULTS MATRICES 2017-2022**  
**CHAPTER 20: ENSURING ECOLOGICAL INTEGRITY, CLEAN AND HEALTHY ENVIRONMENT**

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets							Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks	
			Value	2017	2018	2019	2020	2021	2022						
<b>Societal Goal</b>															
To lay down the foundation for inclusive growth, a high-trust and resilient society and a globally competitive knowledge economy															
<b>Chapter Outcome 1</b>															
Ecological integrity ensured and socioeconomic condition of resource-based communities improved															
<b>Sub-chapter Outcome 1.1</b>															
Biodiversity and functioning of ecosystem services sustained	Forest Cover increased (M ha) <sup>e</sup>	2010	6.8	None	None	None	None	None	None	None	None	Land Cover Map	DENR	DENR-FMB and NAMRIA	No redefinition of forest Deforestation is controlled At least 80-85% survival rate of planted seedlings
<b>Aggregate Outputs</b>															
	Area of denuded and degraded forestland decreased (M ha, cumulative)	2016	7.6	7.40	7.27	7.14	6.93	6.72	6.51	6.51	Progress report	DENR	DENR-FMB	Occurrence of extreme events (e.g. typhoon, drought) Financial support is provided by the government to implement the enhanced national greening program	
	Area planted with mangroves increased (ha)	2016	18,730	329	329	329	329	329	329	1,974	Progress report	DA	DA-BFAR	The targets will be accomplished through the implementation of BFAR's Aquasilviculture Program. Annual target area shall be based on the result of field validation, i.e., if these areas can be planted with mangroves.	
	Area of forestland under effective management increased (M ha, cumulative)	2016	8.2	8.40	8.52	8.65	8.86	9.07	9.28	9.28	Progress report	DENR	DENR-FMB	Occurrence of extreme events (e.g. typhoon, drought)	
	Production and protection forests delineated increased (km)	2010	324,981	N/A <sup>f</sup>	98,100	130,799	163,499	163,499	98,100	653,997	Progress report	DENR	DENR-FMB		

<sup>a</sup> Actual data as of December 2015, or most recent available data. May not necessarily be year-end values

<sup>b</sup> May either be the cumulative or incremental target value at the end of the Plan period

<sup>c</sup> Agency accountable for delivering the outputs/outcome

<sup>d</sup> Lead agency responsible for reporting progress on indicator targets

<sup>e</sup> No numerical target provided. The value of the indicator is targeted to increase until the End-of-Plan.

<sup>f</sup> Reporting of progress on the delineated production and protection forest will commence in 2018

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets							Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks
			Value	2017	2018	2019	2020	2021	2022					
<b>Sub-chapter Outcome 1.1 (Cont.)</b>														
Biodiversity and functioning of ecosystem services sustained	Quality of coastal and marine habitats improved (ha) <sup>g</sup>										Assessment Report	DENR	DENR-BMB	Coastal Resource Assessment completed  Illegal activities and pollution are controlled  Occurrence of extreme events (e.g. typhoon, drought)
	Poor condition of coral reef	2016	1,235,484	1,235,484	1,235,484	1,235,484	None	None	None	None				
	Fair condition of coral reef	2016	1,597,089	1,597,089	1,597,089	1,597,089	None	None	None	None				
	Good condition of coral reef	2016	171,762	171,762	171,762	171,762	None	None	None	None				
	Excellent condition of coral reef	2016	12,958	12,958	12,958	12,958	None	None	None	None				
<b>Aggregate Outputs</b>														
	Coverage of protected areas in relation to marine areas increased (%) <sup>h and i</sup>	2016	0.64	None	None	None	None	None	0.76	0.76	Accomplishment Report	DENR	DENR-BMB	
	Area of marine protected areas with high biodiversity values effectively managed increased (ha) <sup>j</sup>										Progress Report	DENR	DENR-BMB	
	Poor	2016	3,432,666.96	None	None	None	None	None	None	2,170,046.99				
	Fair	2016	0	None	None	None	None	None	None	970,502.45				
	Satisfactory	2016	112,822	None	None	None	None	None	None	1,342,635.62				
	Good	2016	0	None	None	None	None	None	None	1,119,528.89				
	Excellent	2016	0	None	None	None	None	None	None	112,822				
	No baseline assessment	2016	2,170,046.99	None	None	None	None	None	None	0				
	Number of coastal municipalities and cities with delineated municipal waters increased (annual)	2016	293	80	80	80	80	80	80	480	Progress Report	NAMRIA	NAMRIA	
	Area of terrestrial protected areas with high biodiversity values effectively managed increased (ha) <sup>k</sup>										PA Monitoring and Assessment Reports	DENR	DENR-BMB	Functional PAMBs, with strong support from LGUs
	Poor	2016	1,874,925	None	None	None	None	None	None	1,095,968				
	Fair	2016	2,222,921	None	None	None	None	None	None	410,458.06				
	Satisfactory	2016	42,135.78	None	None	None	None	None	None	1,362,830.86				
	Good	2016	0	None	None	None	None	None	None	462,454.39				
	Excellent	2016	0	None	None	None	None	None	None	38,069.19				
	Area of the 13 priority inland wetlands effectively managed increased (ha) <sup>k</sup>										Accomplishment report	DENR	DENR-BMB	
	Poor	2016	178,144.33	None	None	None	None	None	None	78,385.97				
	Fair	2016	0	None	None	None	None	None	None	10,049.57				
	Satisfactory	2016	0	None	None	None	None	None	None	26,708.29				
	Good	2016	0	None	None	None	None	None	None	63,000.00				
Excellent	2016	0	None	None	None	None	None	None	0					

<sup>g</sup> Baseline figures indicated in the PDP (2017-2022) Chapter 20 have been updated. Target is to maintain the baseline until 2019. No numerical target provided for 2020-2022. The value of the indicator is targetted to improve until the End-of-Plan.

<sup>h</sup> The value of the indicator includes both National Integrated Protected Areas System (NIPAS) and locally-managed marine protected areas (MPAs). Total/universe area of marine waters is 200 M ha.

<sup>i</sup> No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

<sup>j</sup> No numerical target provided. The values of the indicator for the poor and no baseline assessment categories are targetted to decrease; while values for the fair, satisfactory, good, and excellent categories are expected to increase until the End-of-Plan.

<sup>k</sup> No numerical target provided. The value of the indicator for the poor category is targetted to decrease; while values for the fair, satisfactory, good, and excellent categories are expected to increase until the End-of-Plan.

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets						Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks	
			Value	2017	2018	2019	2020	2021						2022
	Number of caves with high conservation value effectively managed increased <sup>1</sup>										Accomplishment report	DENR	DENR-BMB	
	Poor	2016	20	None	None	None	None	None	None	2				
	Fair	2016	0	None	None	None	None	None	None	14				
	Satisfactory	2016	0	None	None	None	None	None	None	3				
	Good	2016	0	None	None	None	None	None	None	1				
	Excellent	2016	0	None	None	None	None	None	None	0				
	Number of residential free patents issued increased	2016	TBD	45,858	45,000	59,785	64,785	69,786	74,786	360,000	Survey and Public Land Records	DENR	DENR-LMB	Stronger support from LGUs Integrated land information, mapping and projection system CLUPs not updated
	Number of issued Certificate of Ancestral Domain Title (CADTs) increased	2016	208	12	6	2	2	2	2	26	Certificate of Ancestral Domain Title (CADT)	NCIP	NCIP	
	Number of Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) formulated	2016	140	4	6	6	6	6	6	34	ADSDPP	NCIP	NCIP	
	Number of groundwater critical areas with management plan and monitoring wells established	2016	4	2	2	2	2	2	2	12	Groundwater Mgmt. Plan/ Report and MOA with LGUs concerned	NWRB	NWRB	Support of LGUs concerned Funding Support
	Number of Major River Basins (RB) with Comprehensive Water Assessment increased	2016	2	1	1	1	1	1	1	6	Assessment Report	NWRB	NWRB	Support of stakeholders Funding Support

<sup>1</sup>No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets							Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks	
			Value	2017	2018	2019	2020	2021	2022						
<b>Sub-chapter Outcome 1.1 (Cont.)</b>															
Biodiversity and functioning of ecosystem services sustained	Employment from ecotourism and sustainable resource-based industries increased <sup>m</sup>	2016	TBD	None	None	None	None	None	None	None	None	Accomplishment/ Monitoring Report	DENR	DTI, DOT, DENR-BMB, DENR-FMB	
<b>Aggregate Outputs</b>															
	Number of biodiversity-friendly enterprises recognized increased <sup>m</sup>	2016	TBD	None	None	None	None	None	None	None	None	Monitoring Report	DENR	DENR-BMB, DOT, DOST	
	Number of jobs generated from reforestation and non-timber/agroforestry enterprises, i.e. NGP CBFM increased (M) <sup>m</sup>	2016	3.29	None	None	None	None	None	None	None	None	Monitoring Report	DENR	DENR-FMB	
	Number of Community Fish Landing Centers (CFLC) established <sup>n</sup>	2016	132	300	200	93	None	None	None	None	None	BFAR CFLC reports and NAPC reports on fisherfolk associations	DA	DA-BFAR	Secured agreement from the LGUs on the use of land that will be allocated for the establishment of the fish landing centers
	Percentage of new and existing CFLC operationalized <sup>o</sup>	2016	0	10	30	50	70	90	100	100	100	BFAR CFLC reports and NAPC reports on fisherfolk associations	DA	DA-BFAR	Peace and order ensured in the locality
<b>Sub-chapter Outcome 1.2</b>															
Environmental quality improved	Percentage of priority water bodies within water quality guidelines increased (e.g. BOD, DO, pH, temperature, P, N, fecal coliform) <sup>p and q</sup>										Regular Water Quality Monitoring Report	DENR	DENR-EMB	Need to treat water to be suitable for drinking  Sufficient resources (human power, functional monitoring instruments and equipment and other logistics).  Strong support of LGUs, water districts/private sector and concerned government agencies (e.g., DILG) in the implementation of measures to improve water quality (e.g., waste water treatment facilities, sanitation and sewerage facilities).	
	Public water supply	2016	0	None	None	None	None	None	None	None					
	Food production	2016	70	None	None	None	None	None	None	None					
	Recreational	2016	80	None	None	None	None	None	None	None					
	Percentage of highly urbanized and other major urban centers within ambient air quality guideline value (i.e., PM10 and PM2.5) increased <sup>r</sup>	2015	47	None	None	None	None	None	None	None	None	Accomplishment Report, Air Quality Status Report	DENR	DENR-EMB	Functional Air Quality Monitoring Stations; Regulated sources of Air pollution  Strong support of LGUs, industries/private sector and concerned government agencies (e.g., DTI) in the adoption of cleaner and environment-friendly technologies

<sup>m</sup> No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

<sup>n</sup> End-of-Plan targets to be completed in CY 2019.

<sup>o</sup> Vis-à-vis the actual number of CFLC established in the previous year.

<sup>p</sup> No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

<sup>q</sup> Total number of priority water bodies are as follows: (i) 6 for public water supply; (ii) 10 for food production; (iii) 15 for recreation.

<sup>r</sup> Total number of highly urbanized and other major urban centers is 38.

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets							Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks	
			Value	2017	2018	2019	2020	2021	2022						
<b>Aggregate Outputs</b>															
	Number of public utility vehicles that converted to cleaner fuels increased														
	Compressed natural gas <sup>p</sup>	2016	33	None	None	None	None	None	None	None	None	Semi-Annual Monitoring Report	DOTr	LTFRB	Strong support of PUB franchises
	Electric/Hybrid <sup>p</sup>	2016	10	None	None	None	None	None	None	None	None	Semi-Annual Monitoring Report	DOTr	LTFRB	Strong support of PUB franchises
	Solid waste diversion rate increased (% ,cumulative)	2015	Metro Manila: 48; Outside MM: 46	55	60	65	70	75	80	80	80	Accomplishment Report	DENR	DENR-EMB	Availability of funds and strong support from LGUs
	Area assessed and mapped for soil fertility status and soil fertility management increased (ha)	2016	1,000,000	450,000	450,000	450,000	450,000	450,000	450,000	2,700,000	2,700,000	Soil fertility analysis and mapping report	DA	DA-BSWM	Availability of funds
	Area of land degradation hotspots decreased (ha)	2016	2,300,000	2,250,000	2,200,000	2,150,000	2,100,000	2,050,000	2,000,000	2,000,000	2,000,000	Accomplishment Report	DA	DA-BSWM	Availability of funds and strong support from LGUs
	Interim rehabilitation measures monitored and implemented in 4 abandoned mines increased (% ,cumulative)														
	Bagacay	2016	82.5	88.75	88.75	95	100	100	100	100 <sup>q</sup>	100 <sup>q</sup>	Accomplishment Report and Monitoring Report	DENR	DENR-MGB	Subject to the management agreement between PMO and MGB in regarding the implementation of final mine rehabilitation
	Palawan Quicksilver	2016	58.33	85	95	100	100	100	100	100 <sup>r</sup>	100 <sup>r</sup>				Cooperation of concerned Agency/LGUs and Availability of funds
	Romblon Marble	2016	10	45	70	85	95	100	100	100 <sup>r</sup>	100 <sup>r</sup>				Cooperation of concerned Agency/LGUs and Availability of funds
	Silica Sand Mine	2016	15	N/A <sup>u</sup>	45	70	85	95	100	100 <sup>v</sup>	100 <sup>v</sup>				Cooperation of concerned Agency/LGUs and Availability of funds
	Percentage of the 36 surface metallic mines (operating/suspended) compliant with Annual Environmental Protection and Enhancement Program (EPEP)/Care and Maintenance Program (CMP) maintained (%)	2016	100	100	100	100	100	100	100	100	100	Monitoring and Audit Report	DENR	DENR-MGB	Compliance of mining companies
	Number of eco-labeled products increased	2016	52	None	None	None	None	None	None	None	None	Progress Report	DTI	PCEPSDI	Strong support from business or industries
	Total energy savings in government offices increased (PHP million) <sup>w</sup>	2015	113.69	None	None	None	None	None	None	None	None	Certificates of energy savings	DOE	DOE-EUMB	Active participation of government offices

<sup>p</sup> No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

<sup>q</sup> Interim rehabilitation turned over to PMO.

<sup>r</sup> Interim rehabilitation completed and turned over to LGUs.

<sup>u</sup> Reporting on the progress of the implementation of rehabilitation measures in Silica Sand Mine will commence in 2019.

<sup>v</sup> Interim rehabilitation completed.

<sup>w</sup> No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

Objectives/Results	Indicator	Baseline Year <sup>a</sup>	Annual Plan Targets							Plan Target <sup>b</sup>	Means of Verification	Responsible Agency <sup>c</sup>	Reporting Entity <sup>d</sup>	Assumptions and Risks
			Value	2017	2018	2019	2020	2021	2022					
<b>Sub-chapter Outcome 1.3</b>														
Adaptive capacities and resilience of ecosystems and communities increased	Resilience index improved <sup>x</sup>	TBD	TBD	None	None	None	None	None	None	None	TBD	TBD	TBD	Effectiveness of implementing CCA and DRRM strategies
<b>Aggregate Outputs</b>														
	Number of LGUs with reviewed Climate Change (CC)/Disaster Risk Reduction Management (DRRM)-enhanced plans increased <sup>w</sup>													
	Comprehensive Land Use Plans (CLUPs)	2016	552	None	None	None	None	None	None	None	Progress Report	HLURB	HLURB	Availability of resources at the LGU level
	Comprehensive Development Plans (CDPs)	2016	37	None	None	None	None	None	None	None	Progress Report	DILG	DILG	Availability of resources at the LGU level
	Local Disaster Risk Reduction and Management Plans (LDRRMPs)	2016	1,522	None	None	None	None	None	None	None	Progress Report	OCD-NDRRMC	OCD-NDRRMC	Availability of resources at the LGU level
	Local Climate Change Action Plan (LCCAPs)	2016	1,114	None	None	None	None	None	None	None	Progress Report	CCC	CCC	Availability of resources at the LGU level
	Number of LGUs with operating early warning systems (EWS) in place increased	2016	1,180	None	None	None	None	None	None	None	Progress Report	DILG	DILG	Availability of resources at the LGU level
	Number of LGUs with fully-functional DRRM operations centers increased <sup>w</sup>										Progress Report	DILG	DILG	Availability of resources at the LGU level
	Permanent	2016	775	None	None	None	None	None	None	None				
	Temporary	2016	810	None	None	None	None	None	None	None				
	GHG emissions per sector reduced (million MT CO2e)										Monitoring, Reporting and Verification; and National Communication	CCC	CCC	Implementation of low carbon strategies/clean/environment friendly technologies
	Energy <sup>y</sup>	2010	55.7	None	None	None	None	None	None	None				
	Industrial <sup>y</sup>	2010	11	None	None	None	None	None	None	None				
	Agriculture <sup>y</sup>	2010	47.8	None	None	None	None	None	None	None				
	LUCF <sup>z</sup>	2010	-83.2	None	None	None	None	None	None	None				
	Waste <sup>y</sup>	2010	15.3	None	None	None	None	None	None	None				
	Transport <sup>y</sup>	2010	25.3	None	None	None	None	None	None	None				

<sup>x</sup> Resilience index to be developed. No numerical target provided. The value of the indicator is targetted to increase until the End-of-Plan.

<sup>y</sup> No numerical target provided. The rate of increase of the value of the indicator is targetted to decrease until the End-of-Plan.

<sup>z</sup> No numerical target provided. The value of the indicator is targetted to decrease until the End-of-Plan.