

**PHILIPPINE DEVELOPMENT PLAN RESULTS MATRICES 2017-2022**

**CHAPTER 8: EXPANDING ECONOMIC OPPORTUNITIES IN AGRICULTURE, FORESTRY, AND FISHERIES**

Objectives/Results	Indicator	Baseline <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 Risk		
		Year	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>Intermediate Goal</b>																
Reducing inequality																
<b>Chapter Outcome 1</b>																
Economic opportunities in agriculture, forestry, and fisheries expanded	Growth of Gross Value Added (GVA) in Agriculture, Forestry and Fisheries (AFF) increased (% in real terms)	2015	0.1	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	PSA	DA	PSA	Sound macroeconomic and reforms in food security policies instituted.	
	Crops	2015	-1.8	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	PSA	DA	PSA	Good agricultural and climate change adaptation practices adopted by farmers.	
	Livestock	2015	3.8	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	PSA	DA	PSA		
	Poultry	2015	5.7	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	3.0-4.0	PSA	DA	PSA		
	Forestry	2015	-26.7	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0	PSA	DENR	PSA		
	Growth in Value of Production of Fisheries increased (% at constant prices)															
	Commercial	2015	-3.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	PSA	DA-BFAR	PSA	Good fishery and climate change adaptation practices adopted by fisherfolk.	
	Municipal	2015	-2.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	PSA	DA-BFAR	PSA		
	Aquaculture	2015	0.8	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	PSA	DA-BFAR	PSA		
	Growth in the value of agriculture and fishery exports increased (% FOB value, cumulative)															
2015	-21.6	2.0	5.0	7.0	9.0	9.0	9.0	9.0	9.0	9.0	PSA	DA	PSA	Strong global demand and international prices remain stable.		
<b>Sub-chapter Outcome 1.1</b>																
Agriculture, forestry and fisheries productivity within ecological limit improved	Yield of major commodities increased (MT/ha, cumulative)															
	Palay	2015	3.9	4.0	4.2	4.3	4.4	4.4	4.5	4.5	4.5	PSA	DA	PSA		
	White Corn	2015	1.7	2.0	2.0	2.1	2.2	2.4	2.5	2.5	2.5	PSA	DA	PSA		
	Yellow Corn	2015	4.2	4.3	4.5	4.6	4.8	4.9	5.0	5.0	5.0	PSA	DA	PSA		
	Banana	2015	20.5	21.7	22.3	23.0	23.6	24.3	25.0	25.0	25.0	PSA	DA	PSA		
	Coconut (in nuts/ha)	2015	4,180	4,280	4,280	4,500	4,500	4,500	4,720	4,720	4,720	PCA	PCA	PCA		
	Pineapple	2015	41.1	41.9	42.3	42.7	43.2	43.6	44.0	44.0	44.0	PSA	DA	PSA		
	Mango	2015	4.8	5.0	5.1	5.2	5.3	5.4	5.5	5.5	5.5	PSA	DA	PSA		
	Sugarcane	2015	54.4	59.0	61.0	63.0	65.0	67.0	70.0	70.0	70.0	PSA	SRA	PSA		
	Cassava	2015	12.2	15.1	15.9	16.7	17.7	18.4	19.3	19.3	19.3	PSA	DA	PSA		
	Coffee	2015	0.6	0.6	0.7	0.8	1.0	1.4	2.0	2.0	2.0	PSA	DA	PSA		
	Cacao	2015	0.4	0.9	0.9	1.0	1.1	1.2	1.3	1.3	1.3	PSA	DA	PSA		
	Rubber	2015	1.8	1.9	2.0	2.2	2.3	2.5	2.6	2.6	2.6	PSA	DA	PSA		
Abaca	2015	0.52	0.51	0.52	0.53	0.54	0.55	0.56	0.56	0.56	PSA	DA-PhiFIDA	PSA			

<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/achievement of outcomes.

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

Objectives/Results	Indicator	Baseline <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 Risk
		Year	Value	2017	2018	2019	2020	2021	2022					
	Volume of production increased ('000 MT, cumulative) <sup>e</sup>													
	Hog	2015	2,120.3	2,128.2	2,156.6	2,185.1	2,257.1	2,374.8	2,475.5	2,475.5	PSA	DA	PSA	
	Goat	2015	77.5	79.0	79.9	80.5	81.4	82.2	83.0	83.0	PSA	DA	PSA	
	Dairy	2015	20.4	22.6	23.6	24.5	26.9	29.4	31.8	31.8	PSA	DA	PSA	
	Chicken	2015	1,660.8	1,741.4	1,793.4	1,845.4	1,975.8	2,093.0	2,246.2	2,246.2	PSA	DA	PSA	
	Chicken Egg	2015	444.6	473.2	486.2	499.2	525.7	543.5	553.3	553.3	PSA	DA	PSA	
	Vegetables	2015	1,614.3	1,780.2	1,841.8	1,910.0	1,986.7	2,072.9	2,171.7	2,171.7	PSA	DA	PSA	
	Tilapia	2015	311.7	293.5	311.1	329.8	349.6	370.5	392.8	392.8	PSA	DA-BFAR	PSA	
	Bangus	2015	392.7	415.8	432.4	449.7	467.7	486.4	505.9	505.9	PSA	DA-BFAR	PSA	
	Seaweeds	2015	1,566.4	1,726.9	1,813.3	1,903.9	1,999.1	2,099.1	2,204.0	2,204.0	PSA	DA-BFAR	PSA	
	Tiger prawns	2015	49.6	60.1	66.1	72.7	79.9	87.9	96.7	96.7	PSA	DA-BFAR	PSA	
	White Shrimp	2015	2.1	2.6	2.9	3.1	3.5	3.8	4.2	4.2	PSA	DA-BFAR	PSA	
	Logs (m <sup>3</sup> )	2015	842.0	867.3	893.3	920.1	947.7	976.1	1,005.4	1,005.4	DENR's Philippine Forestry Statistics	DENR-FMB	DENR-FMB	
	Almაცა Resin ('000 kg)	2015	445.0	458.4	472.1	486.3	500.9	515.9	531.4	531.4	DENR's Philippine Forestry Statistics	DENR-FMB	DENR-FMB	
	Bamboo ('000 pc)	2015	1,097.0	1,129.9	1,163.8	1,198.7	1,234.7	1,271.7	1,309.9	1,309.9	DENR's Philippine Forestry Statistics	DENR-FMB	DENR-FMB	
	Postharvest losses of key agricultural commodities reduced (% , cumulative)													
	Rice	2015	14.0	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	12.0	12.0	DA-PhilMech's Loss Assessment Studies	DA	DA-PhilMech	
	Corn	2015	6.61	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	N/A <sup>f</sup>	5.2	5.2	DA-PhilMech's Loss Assessment Studies	DA	DA-PhilMech	
<b>Aggregate Outputs</b>														
Technical support services for perennial crops provided	Program area for perennial crops provided with technical support services increased (ha) <sup>g</sup>													
	Mango	2015	592	508	4,416	4,420	4,425	4,429	4,434	22,632	Validation Reports by the DA-HVCD Program	DA	DA	
	Coffee	2015	5,980	13,705	4,120	6,592	9,888	10,877	11,964	57,146	Validation Reports by the DA-HVCD Program	DA	DA	
	Cacao	2015	5,448	24,715	4,220	6,330	8,229	9,875	11,850	65,219	Validation Reports by the DA-HVCD Program	DA	DA	
	Rubber	2015	3,524	7,393	91	500	850	1,445	2,457	12,736	Validation Reports by the DA-HVCD Program	DA	DA	
	Banana	2015	670	1,138	1,677	1,679	1,680	1,682	1,684	9,540	Validation Reports by the DA-HVCD Program	DA	DA	
	Pineapple	2015	38	37	186	190	194	197	201	1,005	Validation Reports by the DA-HVCD Program	DA	DA	
	Cassava	2015	222,993	269,640	281,591	291,355	302,352	314,598	329,053	1,788,589	Validation by the DA-Corn Program	DA	DA	
	Abaca	2015	134,195	135,275	136,355	137,435	138,515	139,595	140,675	827,850	Validation by PhilFIDA	DA-PhilFIDA	DA-PhilFIDA	
	Coconut	2015	220,199	146,239	206,500	400,000	400,000	400,000	400,000	1,952,739	PCA	PCA	PCA	

<sup>e</sup> The volume of production is used as a proxy indicator for productivity of livestock and poultry, fishery species and forest products due to data constraints.

<sup>f</sup> No target since the impact of government intervention will only be evident after one year or more. Moreover, the conduct of the survey to measure the progress of the indicator is not done on an annual basis.

<sup>g</sup> Aggregate Output Indicators pertaining to program area, number of enterprises assisted and beneficiaries, either groups or individuals, may not be unique area or enterprises/beneficiaries, as an area/enterprise/group/individual may receive different and/or more than one machinery/equipment, technical support services and livelihood projects.

Objectives/Results	Indicator	Baseline <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 Risk
		Year	Value	2017	2018	2019	2020	2021	2022					
Technical support services for staple crops provided	Program harvest area for staple crops provided with technical support services increased (ha) <sup>9</sup>													
	Palay	2015	355,782	173,524	198,456	377,614	380,364	383,225	386,065	1,899,248	Validation by the DA-Rice Program	DA	DA	
	Yellow corn	2015	535,163	545,217	549,088	552,986	556,912	560,867	564,849	3,329,918	Validation by the DA-Corn Program	DA	DA	
White corn	2015	201,138	219,390	221,342	223,312	225,300	227,305	229,328	1,345,978					
Technical support services for livestock, poultry and dairy provided	Number of group beneficiaries provided with technical support services increased <sup>9</sup>	2015	530	557	1,020	1,121	1,229	1,351	1,485	6,763	(i) NLP Annual Report; (ii) Annual Dairy Farm Registration & Herd Inventory; and (iii) Annual Dairy Entity Registration	DA-NLP, DA-NDA (for Dairy)	DA-NLP, DA-NDA (for Dairy)	Strong technical support services under production, research and development, marketing capacity building. For dairy, animal procurement proceeds as planned.
Technical support services for fisheries provided	Number of fisherfolk provided with production support increased <sup>9</sup>	2015	118,732	195,599	209,291	223,941	239,617	256,390	274,338	1,399,177	Agency Annual Report	DA-BFAR	DA-BFAR	
Agricultural and fisheries machinery, equipment and facilities distributed	Number of group beneficiaries provided with agricultural and fishery machineries and equipment increased <sup>9</sup>	2015	3,899	8,066	5,960	7,501	7,699	7,783	7,854	44,863	(i) DA; (ii) PhilFIDA Annual Reports; (iii) BFAR Annual Report; (iv) PCA thru its PAPs for coconut; and (v) NLP Annual Report	DA, DA-PhilFIDA, PCA, DA-BFAR, DA-NLP	DA, DA-PhilFIDA, PCA, DA-BFAR, DA-NLP	The Mechanization Masterplan is followed. Increased awareness and interest for modern farm machineries and equipment.
Production forest, for tree plantation and non-timber forest products increased	Area within the production forest, for tree plantation and non-timber forest products increased (ha, cumulative)													
	Tree plantation	2015	649,941	662,940	676,199	689,723	703,517	717,588	731,940	731,940	Philippine Forestry Statistics	DENR-FMB	DENR-FMB	Expansion of the Coverage of the National Greening Program (EO 193); Integrated Forest Management Agreement; and Community-Based Forest Management Agreement.
Non-Timber Forest Products	2015	402,347	410,394	418,601	426,973	435,513	444,223	453,108	453,108	Philippine Forestry Statistics	DENR-FMB	DENR-FMB		
<b>Sub-chapter Outcome 1.2</b>														
Agriculture, forestry and fishery-based enterprises increased	Growth in the Value of Output of AFF-based enterprises increased (% in real terms)	2014	-3.6	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5	PSA	DA	DA	
<b>Aggregate Output</b>														
Technical support for AFF-enterprises provided	Number of AFF-enterprises with technical support increased <sup>9</sup>	2015	240	268	263	220	230	235	240	1,456	DA	DA	DA	
<b>Chapter Outcome 2</b>														
Access to economic opportunities by small farmers and fisherfolk increased	Growth in labor productivity of farmers and fisherfolk increased (% in real terms)	2015	4.6	5.0-6.0	5.0-6.0	5.0-6.0	5.0-6.0	5.0-6.0	5.0-6.0	5.0-6.0	PSA	DA	PSA	Employment opportunities between sectors allow greater mobility.
<b>Sub-chapter Outcome 2.1</b>														
Access to value-chains increased	Growth in approved private investments in AFF-related activities increased (% in real terms)	2015	175.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	PSA	Philippine Investment Promotion Agencies	PSA	

<sup>9</sup> Aggregate Output Indicators pertaining to program area, number of enterprises assisted and beneficiaries, either groups or individuals, may not be unique area or enterprises/beneficiaries, as an area/enterprise/group/individual may receive different and/or more than one machinery/equipment, technical support services and livelihood projects.

Objectives/Results	Indicator	Baseline <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 Risk
		Year	Value	2017	2018	2019	2020	2021	2022					
<b>Sub-chapter Outcome 2.2</b>														
Access to technology increased	Share of small farmers adopting new technologies to total number of small farmers trained with new technologies increased (% , cumulative)	2015	18.0	N/A <sup>f</sup>	N/A <sup>f</sup>	30.0	N/A <sup>f</sup>	N/A <sup>f</sup>	60.0	60.0	Study for the Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System	DA	DA	
	Share of small fisherfolk adopting new technologies to total number of small fisherfolk trained with new technologies increased (% , cumulative)	2015	18.0	N/A <sup>f</sup>	N/A <sup>f</sup>	30.0	N/A <sup>f</sup>	N/A <sup>f</sup>	60.0	60.0	Study for the Agriculture and Fisheries Extension Results-Based Monitoring and Evaluation System	DA	DA	
<b>Aggregate Output</b>														
AFF research, development, and extension (RD&E) activities conducted	Share of AFF research and development (R&D) government budget to total AFF GVA increased (% , cumulative)	2015	0.3	0.3	0.4	0.6	0.7	0.9	1.1	1.1	DBM's GAA Report	DA and DOST-PCAARRD	DOST-PCAARRD	DOST National Harmonized R&D Agenda was approved and implemented.
	Number of new technologies increased	2015	68	138	127	129	142	140	150	826	(i) DA; (ii) PPAs of PhilMech; (iii) PCC Technology Board Report; and (iv) PhilFIDA Annual Reports	DA	DA	
	Number of beneficiaries provided with extension services increased <sup>g</sup>	2015	107,017	91,866	99,933	101,373	104,787	105,184	107,253	610,396	Agency Annual Report	DA-ATI	DA-ATI	
<b>Sub-chapter Outcome 2.3</b>														
Access to innovative financing increased	Share of small farmers borrowing from formal credit sources to total number of farmers availing credit increased (% , cumulative)	2015	62.0	N/A <sup>f</sup>	64.0	N/A <sup>f</sup>	66.0	N/A <sup>f</sup>	68.0	68.0	DA-ACPC's Small Farmers and Fisherfolk Indebtedness Survey	DA-ACPC	DA-ACPC	
	Share of small fisherfolk borrowing from formal credit sources to total number of fisherfolk availing credit increased (% , cumulative)	2015	53.0	N/A <sup>f</sup>	55.0	N/A <sup>f</sup>	57.0	N/A <sup>f</sup>	59.0	59.0	DA-ACPC's Small Farmers and Fisherfolk Indebtedness Survey	DA-ACPC	DA-ACPC	
	Share of small farmers and fisherfolk with agricultural insurance to total number of farmers and fisherfolk increased (% , cumulative)	2015	5.5	10.3	14.4	18.5	22.6	26.7	30.8	30.8	DA-PCIC Annual Report	DA-PCIC	DA-PCIC	The premium subsidy for farmers and fisherfolk from the National Government were made available; The organizational capacity of PCIC to handle the expected increase in business were improved.
<b>Aggregate Output</b>														
Institutional capacity building on innovative financing for small farmer/fisherfolk organizations provided	Number of small farmer/fisherfolk organizations participated in institutional capacity building on innovative financing increased (cumulative)	2015	342	189	240	375	575	875	1,325	1,325	DA-ACPC ICB Program	DA-ACPC	DA-ACPC	
	Proportion of LGUs with established partnerships for the implementation of agricultural insurance to the total number of LGUs increased (% , cumulative)	2015	49.5	57.9	66.3	74.8	83.2	91.6	100.0	100.0	Reports from Regional Offices	DA-PCIC	DA-PCIC	

<sup>f</sup> No target since the impact of government intervention will only be evident after one year or more. Moreover, the conduct of the survey to measure the progress of the indicator is not done on an annual basis.

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<b>Sub-chapter Outcome 2.4</b>														
Access of small farmers and fisherfolk to land and water resources increased and protected	Share of actual Agrarian Reform Beneficiaries (ARBs) with emancipation patent (EP) certificate of land ownership award (CLOA) to total potential ARBs increased (% , cumulative)	2016	89.1	90.0	91.0	93.2	95.5	97.7	100.0	100.0	DAR Annual Report	DAR	DAR	All "problematic" Comprehensive Agrarian Reform Program (CARP)-covered landholdings transformed into "workable landholdings"; LAD CIAs deliver their respective targets/commitments.
	Share of registered small fisherfolk with preferential access to municipal waters over the total number of registered small fisherfolk increased (% , cumulative)	2015	7.9	12.8	13.7	14.6	15.6	16.7	17.9	17.9	Agency Annual Report	DA-BFAR	DA-BFAR	
<b>Aggregate Outputs</b>														
Land under CARP distributed	Area distributed under CARP increased (ha, cumulative)	2016	4,823,037	4,871,625	4,925,466	5,047,971	5,170,477	5,292,982	5,415,487	5,415,487	DAR Annual Report	DAR	DAR	Gross area covered may include non-CARPable lands. All "problematic" CARP-covered landholdings transformed into "workable landholdings"; LAD CIAs deliver their respective targets/commitments.
	Number of ARBs with EP/CLOAs increased (cumulative)	2016	2,807,108	2,853,361	2,899,433	3,004,138	3,108,844	3,213,549	3,318,254	3,318,254	DAR Annual Report	DAR	DAR	All "problematic" CARP-covered landholdings transformed into "workable" landholdings; LAD CIAs deliver their respective targets/commitments.
	Area of collective CLOAs subdivided increased (ha, cumulative)	2016	1,114,792	1,157,735	1,204,175	1,318,891	1,433,607	1,548,323	1,663,039	1,663,039	DAR Annual Report	DAR	DAR	
Support to registered fisherfolk	Number of registered fisherfolk provided with livelihood projects increased	2015	127,320	227,283	243,193	260,216	278,431	297,922	318,776	1,625,821	Agency Annual Report	DA-BFAR	DA-BFAR	

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		Year	Value	2017	2018	2019	2020	2021	2022					