

05

Modernize Agriculture and Agribusiness



Chapter 5: Modernize Agriculture and Agribusiness

Objectives/Results	8-Point Socioeconomic Agenda	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End-of-Plan Target ^h	Means of Verification	Responsible Agency ^e	Reporting Agency ^f	Assumption and Risks		
				Year ^a	Value	2023	2024	2025	2026	2027	2028							
Societal Goal																		
Economic transformation for a prosperous, inclusive, and resilient society																		
Intermediate Goal																		
Transform production sectors to generate more quality jobs and competitive products production sectors to generate more quality jobs and competitive products.																		
Chapter Outcome																		
Agriculture and agribusiness modernized	1 Protect purchasing power and mitigate socioeconomic scarring		Growth in average family income of skilled agricultural workers or farm laborers and fisherfolk (%) ^b	2015-2018	27.1 ^f	TBD	TBD	20.0-30.0	TBD	20.0-30.0	TBD	20.0-30.0	Family Income and Expenditure Survey	Department of Agriculture (DA), Department Agrarian Reform (DAR), Local Government Units (LGUs)	PSA	No major calamities, pests and diseases, or economic shocks encountered.		
			Growth in Agriculture, Forestry and Fisheries (AFF) Gross Value Added (GVA) increased [% in constant prices]	2022	0.5	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	PSA Macroeconomic Accounts	DA, LGUs	PSA	No major calamities, pests and diseases, or economic shocks encountered.		
	Crops		2022	(1.1)	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3	1.8-3.3							
	Livestock		2022	2.3	1.8-3.8	1.8-3.8	1.8-3.8	1.8-3.8	1.8-3.8	1.8-3.8	1.8-3.8							
	Poultry		2022	6.7	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9	2.0-3.9							
	Fisheries		2022	(3.5)	1.6-2.4	1.6-2.4	1.6-2.4	1.6-2.4	1.6-2.4	1.6-2.4	1.6-2.4							
	Forestry		2022	(1.4)	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	Department of Environment and Natural Resources (DENR), LGUs						
	Ratio of High Value Crops (HVC) GVA to total AFF GVA increased [%]		2021	21.0	21.3	21.7	22.0	22.4	22.8	23.1	23.1	PSA Openstat	DA	PSA	No major calamities, pests and diseases, or economic shocks encountered.			
	Level of mechanization improved (hp/ha) ^b																	
	Rice		2022	2.68 ^a	TBD	TBD	TBD	TBD	TBD	TBD	2.89 ^a	2.89	DA-Philippine Center for Postharvest Development and Mechanization (PhilMech) Study	DA	DA	Ownership and adoption of primary producer on modern mechanization technologies.		
	Corn ^l		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
	Other High Value Crops ^l		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
	Postharvest losses reduced [%]																	
	Rice		2017	14.51	TBD	TBD	TBD	TBD	TBD	TBD	13.01	13.01	DA-PhilMech Study	DA	DA			
	Yellow corn		2020	6.43	TBD	TBD	TBD	TBD	TBD	TBD	5.98	5.98						
	Onion		2022	31.61	TBD	TBD	TBD	TBD	TBD	TBD	27.61-29.61	27.61-29.61						
	White corn ^l		TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD						
	Mango ^l		2022	26.47	TBD	TBD	TBD	TBD	TBD	TBD	22.47-24.47	22.47-24.47						
	Banana (Cavendish/Latundan/Lacatan varieties) ^l		2022	14.33	TBD	TBD	TBD	TBD	TBD	TBD	10.33-12.33	10.33-12.33						

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				Year ^a	Value	2023	2024	2025	2026	2027	2028									
			Calamans ^g	2022	17.07	TBD	TBD	TBD	TBD	TBD	13.57-15.57	13.57-15.58								
			Fisheries ^g	2021	16.00	TBD	TBD	10.00	TBD	TBD	5.00	5.00	DA-National Fisheries Research and Development Institute (NFRDI) Study	DA	DA					
Subchapter Outcome 1.1																				
Efficiency of agriculture, forestry and fisheries (AFF) production enhanced	1 Protect purchasing power and mitigate socioeconomic scarring		Growth in AFF labor productivity increased (%)	2021	-8.7	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	2.3-5.5	PSA Labor Statistics	DA, DAR, LGUs	PSA	No major calamities, pests and diseases, or economic shocks encountered				
	4 Create more jobs															Increased adoption of primary producers on modern and sustainable technologies and innovations				
			Yield of major commodities increased (MT/ha, cumulative)										PSA Openstat	DA	PSA	No major calamities, pests and diseases, or economic shocks encountered				
			Palay	2022	4.11	4.34	4.50	4.62	4.76	4.90	5.03	5.03								
			White Corn	2022	1.99	2.11	2.16	2.22	2.26	2.31	2.35	2.35								
			Yellow Corn	2022	4.24	4.93	5.08	5.17	5.28	5.38	5.49	5.49								
			Banana	2021	27.87	28.12	28.26	28.41	28.56	28.71	28.86	28.86								
			Coconut	2021	3.90	3.80	3.90	4.20	4.30	4.70	4.90	4.90								
			Pineapple	2021	42.61	43.46	44.33	45.22	46.12	47.04	47.99	47.99								
			Mango	2021	3.99	4.4	4.62	4.85	5.09	5.35	5.61	5.61								
			Sugarcane	2022	53.81	54.50	56.00	58.00	58.00	60.00	61.00	61.00								
			Cassava	2021	11.84	12.23	12.38	12.52	12.61	12.7	12.79	12.79								
			Coffee	2021	0.3	0.63	0.82	0.86	0.91	0.95	1.00	1.00								
			Cacao	2021	0.32	0.35	0.39	0.43	0.47	0.52	0.57	0.57								
			Rubber	2021	1.8	1.84	1.87	1.91	1.95	1.99	2.03	2.03								
			Abaca	2021	0.47	0.48	0.49	0.49	0.50	0.51	0.51	0.51								
			Volume of production increased ('000 MT, cumulative)										PSA Openstat	DA	PSA	No major calamities, pests and diseases, or economic shocks encountered				
			Hog	2022	1,737	1,768.27	1,800.09	1,832.50	1,865.48	1,899.06	1,933.24	1,933.24								
			Goat	2022	70	71.26	72.54	73.85	75.18	76.53	77.91	77.91								
			Dairy	2022	30.28	30.83	31.38	31.94	32.52	33.11	33.7	33.7								
			Chicken	2022	1,867	1,904.34	1,942.43	1,981.28	2,020.90	2,061.32	2,102.55	2,102.55								
			Chicken Egg	2022	708.5	722.67	737.12	751.87	766.90	782.24	797.89	797.89								
			Lowland Vegetables	2021	860.86	1,332.87	1,539	1,778	2,054	2,372	2,740	2,740								
			Highland Vegetables	2021	360.86	478.99	537.65	576.11	617.31	654.66	694.27	694.27								
Subchapter Outcome 1.1																				
Efficiency of agriculture, forestry and fisheries (AFF) production enhanced (cont.)	1 Protect purchasing power and mitigate socioeconomic scarring		Tilapia	2022	303.95	313.07	322.46	332.14	342.1	352.36	362.94	362.94					PSA Openstat	DA	PSA	
	Bangus		2022	390.1	413.5	438.31	464.61	492.49	522.04	553.36	553.36									
	Seaweeds		2022	1,544.96	1,575.86	1,607.38	1,639.52	1,672.31	1,705.76	1,739.88	1,739.88									
	Shrimp		2022	56.22	57.34	58.49	59.66	60.85	62.07	63.31	63.31									
	Tiger Prawns		2022	33.96	34.96	35.96	36.96	38.96	40.96	42.96	42.96	DENR's Philippine Forestry Statistics	DENR-FMB	DENR-FMB						
	Logs ('000 m3)		2021	827.02	843.56	860.43	877.64	895.19	913.1	931.36	5,321.29									
	Almaciga resin ('000 kg)		2021	413.89	422.17	430.61	439.22	448.01	456.97	466.11	2,663.09									
	Bamboo Poles ('000 pcs)		2021	3,404.49	959.28	978.47	998.04	1,018.00	1,038.36	1,059.12	6,051.26									

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				Year ^e	Value	2023	2024	2025	2026	2027	2028					
			Share of AFF research and development (R&D) government budget to total AFF GVA increased (% cumulative)	2022	0.587	0.6	0.7	0.8	0.9	1.0	1.1	1.1	Department of Budget and Management (DBM) General Appropriations Act Report	DOST- Department of Science and Technology - Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD)	DOST-PCAARRD and DA	
			Share of actual agrarian reform beneficiaries (ARB) with emancipation patent (EP) or certificate of land ownership award (CLOA) to total potential ARBs increased (% cumulative)	2022	93.73	94.52	95.65	96.84	97.83	98.90	100.00	100.00	Department of Agrarian Reform (DAR) Administrative Data	DAR	DAR	
			Share of individual ARBs with registered e-titles to total ARB population of collective CLOAs for subdivision increased (% cumulative)	2022	1.55	11.80	49.90	83.60	94.08	100.00	N/A ^m	100.00	DAR Administrative Data	DAR	DAR	
Aggregate Outputs																
	1 Protect purchasing power and mitigate socioeconomic scarring 4 Create more jobs		Area covered by registered EPs/CLOAs increased (has., annual)	2022	4,968,093	27,940	40,032	41,948	35,310	38,972	39,456	5,191,752	DAR Administrative Data	DAR	DAR	Landholdings may be added to the scope balance after the conduct of the CF review and validation of EO 75 land inventory; projection based on absorptive capacity
			Number of ARBs benefitted increased (annual)	2022	2,924,574	24,550	35,255	36,927	30,921	33,631	34,189	3,120,047	DAR Administrative Data	DAR	DAR	ARB projection based on average award area of 1.2 has per ARB
			Area of collective CLOAs issued with individual e-titles (annual)	2022	24,986	140,000	520,000	460,000	143,140	80,757	N/A ^m	1,368,883	DAR Administrative Data	DAR	DAR	Existing terms of implementation of SPLIT Project shall be extended/restructured
			Number of ARBs benefitted (count, annual)	2022	17,605	116,667	433,334	383,334	119,284	67,298	N/A ^m	1,137,522	DAR Administrative Data	DAR	DAR	ARB projection based on average award area of 1 ha. per ARB
		5.a.1p.1	Number agricultural and residential land free patents issued to women and men increased	2021	43,095	25,900	80,000	100,000	150,000	200,000	250,000	812,000	LMB, DENR Administrative Data	LMB, DENR	LMB, DENR	
		5.a.1p1.1	Number agricultural and residential land free patents issued to women ⁿ	2021	22,180	TBD	TBD	TBD	TBD	TBD	TBD	TBD				
		5.a.1p1.2	Number agricultural and residential land free patents issued to men ⁿ	2021	20,915	TBD	TBD	TBD	TBD	TBD	TBD	TBD				
		5.a.1p.2	Number of holders of emancipation patents and certificates of land ownership increased											DAR	DAR	

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				Year ^a	Value	2023	2024	2025	2026	2027	2028					
		5.a.1p2.1	Number of holders of emancipation patents (total) ^b	2021	516,843	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DAR Administrative Data			
			Number of female holders of emancipation patents ^a	2021	420,826	TBD	TBD	TBD	TBD	TBD	TBD	TBD				
			Number of male holders of emancipation patents ^a	2021	96,017	TBD	TBD	TBD	TBD	TBD	TBD	TBD				
			Mandated credit allocation (25% of total loanable amount) for agriculture, fisheries, and rural development (AFRD) financing complied (%)	2022 (June) ^b	41.3	100	100	100	100	100	100	100	Bangko Sentral ng Pilipinas (BSP) Report	DA, Landbank of the Philippines (LandBank), Development Bank of the Philippines (DBP), Banks	DA	
			Share of small farmers and fishers borrowing from formal credit sources to total number of small farmers and fishers availing credit increased [% cumulative] ^b	2021	63.0	TBD	TBD	TBD	TBD	TBD	TBD	TBD	ACPC Small Farmers and Fisherfolk Indebtedness Survey (SFFIS)	DA, LandBank, DBP, Banks	DA	
Subchapter Outcome 1.2																
Access to markets and AFF-based enterprises expanded	1 Protect purchasing power and mitigate socioeconomic scarring		Growth in the total value of approved investments in agribusiness increased [% in real terms]	2021	[24.0]	10.0	10.0	10.0	10.0	10.0	10.0	10.0	PSA Openstat	Investment Promotion Agencies	PSA	Conducive investment environment is attained
	4 Create more jobs		Growth in the value of A&F exports increased [% FOB value]	2022	12.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	PSA Trade Statistics	DA, DTI	PSA	The productivity and competitiveness of the AFF sector is enhanced to attract investments No major calamities, pests and diseases, or economic shocks affecting trade of AFF products encountered
Aggregate Outputs																
	1 Protect purchasing power and mitigate socioeconomic scarring		Percentage of total certified ATI learning sites for agriculture (LSAs) turned into agripreneurs	2022	8.0	TBD	TBD	15.0	TBD	TBD	20.0	20.0	DA-Agricultural Training Institute (ATI) RBME, annual report, evaluation studies	DA	DA	Necessary market linkage provided. Adequate support services provided to the certified LSAs
	4 Create more jobs		Percent increase in the number of beneficiaries linked to markets through KADIWA Retail selling activities and market linkage (from the baseline)	2022	283 ^a	10.0	10.0	10.0	10.0	10.0	10.0	10.0	DA-Agribusiness and Marketing Assistance Service (AMAS) Report	DA	DA	No major calamities, pests and diseases, or economic shocks affecting trade of AFF products encountered.
Subchapter Outcome 1.3																
Resilience of AFF value chains improved	1 Protect purchasing power and mitigate socioeconomic scarring 4 Create more jobs		Proportion of primary producers covered by agricultural insurance to total number of primary producers registered in the RSBSA increased (%)	2021	33.4	37.6	38.9	45.7	48.1	50.8	53.3	53.3	Philippine Crop Insurance Corporation (PCIC) Annual Report	PCIC	PCIC	No major calamities or pests and diseases encountered

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Notes:	
^a	Actual data as of December 2021, or most recent available data.
^b	May either be the cumulative or incremental target value at the end of the plan period.
^c	NEDA Board Committees/Cabinet Cluster/IACs responsible for the outcomes, and the implementing agencies responsible for delivering the outputs.
^d	Lead/responsible agency for reporting progress on indicator targets.
^e	Income of families whose household head is engaged as skilled agricultural workers or farm Laborers and fishermen, as defined in the Philippine Standard Industrial Classification.
^f	Baseline and targets will be updated upon the release of the official 2021 data from the Family Income and Expenditure Survey in the 1st quarter of 2023.
^g	Data will be sourced from studies to be conducted by PhilMech. Accomplishments will be provided by 2028 or by end-of-Plan.
^h	The values provided in the narrative of the PDP Chapter 5 are based on the study of UPLB and DA-BAR, while the revised values are based on the PhilMech Study.
ⁱ	Study to be conducted in 2023-2024. Data will be available in 2025.
^j	The study on white corn, mango, and calamansi post-harvest losses is for finalization in 2024-2025. Study on banana is scheduled this 2023. Targets for these commodities may be included in the Plan's midterm updating. There are no annual targets as the studies on the level of mechanization and postharvest losses cannot be done yearly. Targets can only be set at the end of plan implementation.
^k	An update shall be reported by 2026 from 5-year data analysis (2022-2025). Reduction of postharvest losses as projected from government-led interventions (cold-chain investments and adoption of modern technologies). Implementation timelines could be prolonged by procurement and construction activities.
^l	Accomplishment on these subchapter outcome indicators will also contribute to the attainment of PDP Chapter 3.1 Outcome 1.1 (Sufficient and stable supply of food commodities attained) and outcome 1.2 (Access of consumers to affordable, safe, and nutritious food expanded).
^m	Outcome targets will already be completed by 2027.
ⁿ	Included the indicators classified as SDG Tier 1 indicators. DENR and DAR will still generate sex-disaggregated data to devise targets.
^o	Baseline data provided is as of June 2022. This will be updated upon release of full-year 2022 data.
^p	Actual number of beneficiaries in 2022.