

08

Advance Research and Development, Technology and Innovation



Chapter 8: Advance Research and Development, Technology and Innovation

Objectives/Results	8-Point Socioeconomic Agenda	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End-of-Plan Target ^a	Means of Verification	Responsible Agency ^c	Reporting Agency ^d	Assumption and Risks
				Year ^a	Value	2023	2024	2025	2026	2027	2028					
Societal Goal																
Economic transformation for a prosperous, inclusive, and resilient economy																
Intermediate Goal																
Transform production sectors to generate more quality jobs and competitive products																
Chapter Outcome 1																
Basic research and development and knowledge creation strengthened			Gross expenditure on research and development (R&D) as a proportion of gross domestic product (GDP) increased	2018	0.32	0.35	0.4	0.5	0.6	0.8	1	1	Department of Science and Technology (DOST) survey, every two years	DOST	DOST	
			Number of researchers full time equivalent (FTE) increased (% per million population)	2018	174	250	300	350	400	450	500	500	DOST survey, every two years	DOST	DOST	
			Number of researchers FTE in both the public and private sectors with at least a master's degree in the appropriate fields of science and ten years of productive scholarship and professional R&D work or a doctoral degree and five years of productive scholarship and professional research and development (R&D) work	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST survey, every two years	DOST	DOST	
Aggregate Outputs																
			Number of R&D facilities and infrastructure increased	2022	1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Department of Science and Technology (DOST), CHED, Department of Agriculture (DA), Department of Health (DOH), Department of National Defense (DND)	DOST	
			Laboratories	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST, DA	DA-Bureau of Agricultural Research (BAR)	
			Experimental Stations	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST, DA	DA-BAR	
			University science and technology parks	2022	1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Knowledge, innovation, science, and technology (KIST) Parks	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Philippine Economic Zone Authority (PEZA)	TBD	

Chapter 8: Advance Research and Development, Technology and Innovation

Objectives/Results	8-Point Socioeconomic Agenda	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End-of-Plan Target ^a	Means of Verification	Responsible Agency ^c	Reporting Agency ^d	Assumption and Risks
				Year ^a	Value	2023	2024	2025	2026	2027	2028					
			Monitoring sites and stations (Network of facilities established for monitoring and validation R&D purposes)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	PhilSA, DOST, DENR	TBD	
Chapter Outcome 2																
Market-driven and customer-centered research and development advanced			Global Innovation Index (GII) Ranking of academe-industry-government R&D linkages improved	2022	64th	62nd	59th	57th	55th	52nd	50th	50th	GII Annual Report	CHED, DOST, DTI, State universities and colleges (SUCs), DND, DA	World Intellectual Property Organization (WIPO), Philippine Association of SUCs (PASUC), CHED, DOST, DTI, SUCs, DND, DA	
Aggregate Outputs																
			Number of joint or collaborative research increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of sponsored or commissioned research increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of consultancy arrangements increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of technology centers or science parks established increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of spin off technology-based companies from university laboratories increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of programs or curriculum revised as a result of industry engagement increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	CHED	TBD	
Aggregate Outputs																
			Number of innovation hubs increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	TBD	
			Number of technology business incubators increased	2022	31	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	CHED, DOST, DTI, SUCs	DOST	
			Number of regional inclusive innovation centers increased	2022	9	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	CHED, DOST, DTI, SUCs	DTI	
			Number of TESDA innovation centers increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TESDA	TBD	

Chapter 8: Advance Research and Development, Technology and Innovation

Objectives/Results	8-Point Socioeconomic Agenda	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End-of-Plan Target ^a	Means of Verification	Responsible Agency ^c	Reporting Agency ^d	Assumption and Risks
				Year ^a	Value	2023	2024	2025	2026	2027	2028					
			Number of technology business schools increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DA	TBD	
Chapter Outcome 3																
Technology adoption, utilization, and commercialization scaled up			Public R&D products adopted by users increased (%)	TBD	TBD	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Final reports from R&D grantees, Startup grantees, Products demonstrated in National Science and Technology Week, Philippine Startup Week, SUC Fairs, regional inclusive innovation centers, DA Fairs	TBD	DOST	
			Public R&D products utilized by users increased (% annual)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	DOST	
			Public R&D products commercialized increased (% annual)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	DOST	
			Patent applications filed by Filipinos increased (% annual)	TBD	TBD	5	5	5	5	5	5	5	TBD	Intellectual Property of the Philippines (IPOPHL)	IPOPHL	
			Utility models filed by Filipinos increased (% annual)	TBD	TBD	2	2	2	2	2	2	2	TBD	IPOPHL	IPOPHL	
			Industrial designs filed by Filipinos increased (% annual)	TBD	TBD	2	2	2	2	2	2	2	TBD	IPOPHL	IPOPHL	
Aggregate Outputs																
			Number of qualified technology or creative startups supported with financing increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST	DOST	
Chapter Outcome 4																
Innovation and entrepreneurship accelerated			GII ranking improved	2022	59th	57th	54th	52nd	49th	46th	43rd	43rd	GII Annual Report	TBD	TBD	
Aggregate Outputs																
			Number of qualified technology or creative startups coached and mentored increased	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST, DTI, DICT, NEDA	DTI	

Chapter 8: Advance Research and Development, Technology and Innovation

Objectives/Results	8-Point Socioeconomic Agenda	SDG Tier 1 Indicators	Indicator	Baseline		Annual Plan Targets						End-of-Plan Target ^a	Means of Verification	Responsible Agency ^c	Reporting Agency ^d	Assumption and Risks
				Year ^a	Value	2023	2024	2025	2026	2027	2028					
			Number of successful startups increased	2022	TBD	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Increasing	Philippine Startup Week participation, other government-recognized startup events/fairs, ISA registry of startups, NDC startup grantees	DOST, DTI, DICT, NEDA	DTI	
			Number of incubators and accelerators increased	2022	35	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST, DTI, DICT, NEDA	DOST	
			Number of venture capitalist increased	2022	40	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	DOST, DTI, DICT, NEDA	DTI	
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.																