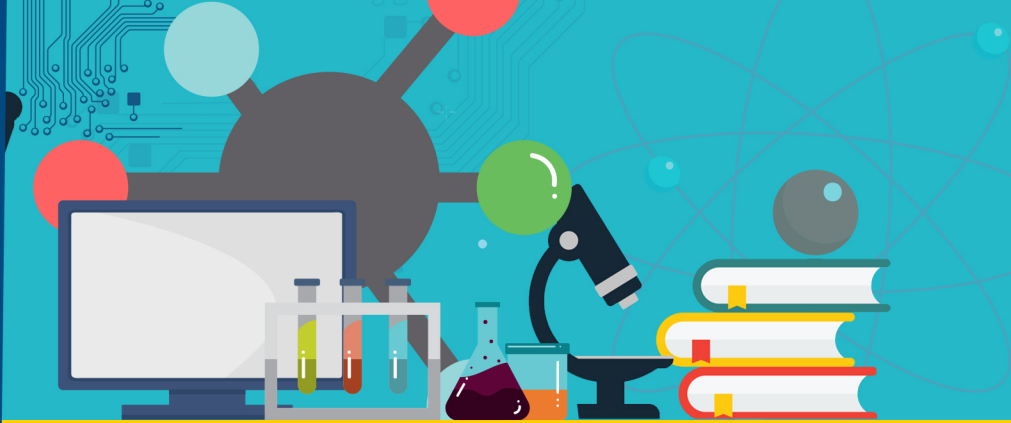




AGENCY BUDGET NOTES

For FY 2023



DEPARTMENT OF SCIENCE AND TECHNOLOGY



P23.76B

TOTAL NEW APPROPRIATIONS FOR 2023

COST STRUCTURE

P1,855.0M (7.8%)

General Admin and Support

P334.8M (1.4%)

Support to Operations

P21,572.5M (90.8%)

Operations

ALLOCATION TO MAJOR AGENCIES

OSEC

P6,042.1M
(25.4%)



SEI

P7,208.0M
(30.3%)



PSHS

P2,940.7M
(12.4%)



PAGASA

P1,103.8M
(4.6%)



PCAARRD

P1,434.6M
(6.0%)

Other Agencies

P5,033.1M
(21.2%)

BREAKDOWN OF OPERATIONS BUDGET



P7,068.2M (32.8%)

S&T Scholarship Program



P3,546.9M (16.4%)

Strategic S&T Program



P2,754.2M (12.8%)

STEM Secondary Education on Scholarship Basis Program



P2,218.7M (10.3%)

S&T Program for Regional and Countryside Development

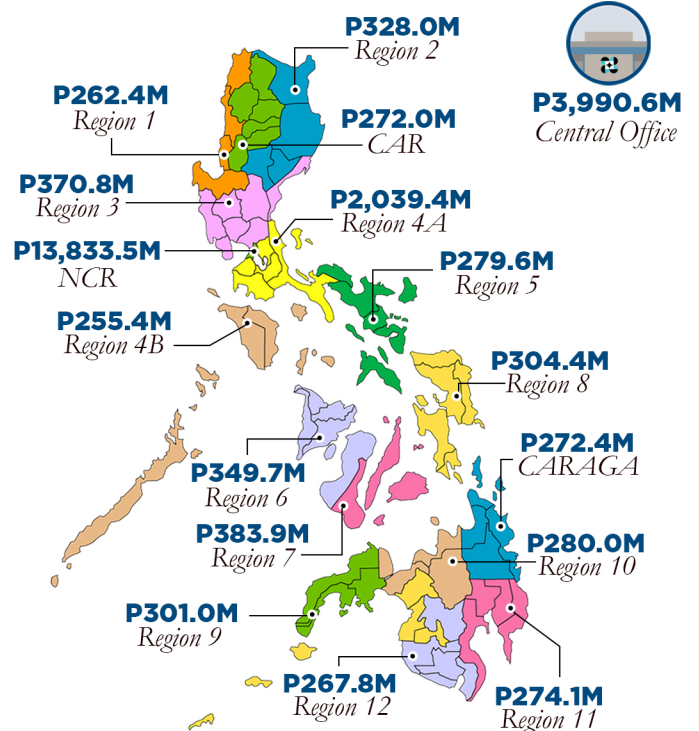


P1,329.5M (6.2%)

National AANR Sector R&D Program

Other Programs **P4,655.0M** (21.6%)

REGIONAL ALLOCATION OF THE 2023 EXPENDITURE PROGRAM (P24,064.9M)



QUICK FACTS

KEY SECTOR INFORMATION

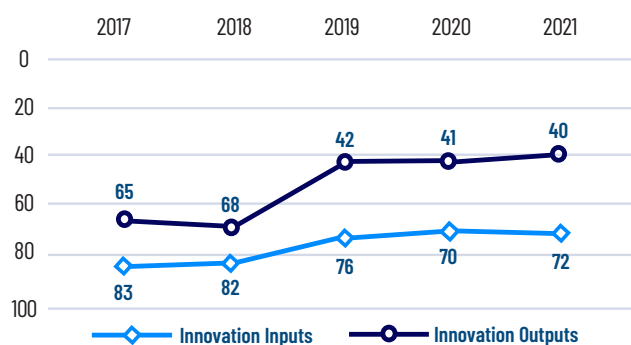
The Philippines' Performance in Science, Technology and Innovation

Global Innovation Index (GII) & World Digital Competitiveness (WDC) Reports, 2020-2021

	GLOBAL INNOVATION INDEX RANKINGS		WORLD DIGITAL COMPETITIVENESS RANKINGS	
	2020 (out of 130 countries)	2021 (out of 132 countries)	2020 (out of 63 countries)	2021 (out of 64 countries)
Overall Ranking	50 (↑4)	51 (↓1)	57 (↓2)	58 (↓1)
ASEAN Ranking	5 out of 10 Selected AMS (=)	5 out of 10 Selected AMS (=)	5 out of 5 Selected AMS (=)	5 out of 5 Selected AMS (=)
Human Capital & Research	86 (↓3)	80 (↑6)	-	-
Infrastructure	63 (↓5)	86 (↓23)	-	-
Business Sophistication	29 (↑3)	33 (↓4)	-	-
Knowledge & Technology Outputs	26 (↑5)	24 (↑2)	-	-
Creative Outputs	57 (↑6)	65 (↓8)	-	-
Total Expenditure on R&D (%)	-	-	58 (↓9)	58 (=)
Graduates in Sciences	-	-	16 (↓3)	14 (↑2)
Female Researchers	-	-	3 (↓4)	4 (↓1)
Scientific & Technical Employment	-	-	55 (↓7)	60 (↓5)
High-Tech Patent Grants	-	-	16 (↓4)	23 (↓7)
Scientific Research Legislation	-	-	48 (↓2)	48 (=)
Intellectual Property Rights	-	-	54 (↑2)	54 (=)
Funding for Technological Development	-	-	43 (↑10)	47 (↓4)

Note: Highest possible ranking in each indicator is 1=best innovation performer. "↑" is an improvement, "↓" is a deterioration, or "=" implies no change in ranking compared to previous report. | Source: IMD & WIPO

The Philippines' Performance in the Innovation Subindexes of Global Innovation Index, 2017-2021



In terms of innovation output, the Philippines continues to improve from 65th in 2017 to 40th spot in 2021. The innovation input of the country, although generally improving, still lags behind innovation output at 72nd place in 2021. Innovation output pertains to the results of innovative activities within the country, while innovation input captures elements of the national economy that enable innovative activities including infrastructure and human capital and research.

Note: Highest possible ranking in each innovation subindex is 1=best innovation performer | Source: Global Innovation Index, WIPO

ASEAN Member States Ranking in Gross Expenditure on Research and Development (GERD), 2020 - 2021 GII

AMS	2020		2021	
	Ranking	GERD* as Percentage of GDP (%)	Ranking	GERD* as Percentage of GDP (%)
Singapore	17 (↓4)	1.9	19 (↓2)	1.8
Malaysia	24 (↓1)	1.4	37 (↓13)	1.0
Thailand	36 (↑10)	1.0	39 (↓3)	1.0
Vietnam	64 (↓3)	0.5	64 (=)	0.5
Brunei	71 (2019 no data)	n/a	84 (↓13)	0.3
Indonesia	85 (↑24)	0.3	89 (↓4)	0.2
Philippines	95 (↓23)	0.2	95 (=)	0.2
Cambodia	110 (↓8)	0.1	102 (↑8)	0.1
Myanmar	129 (2019 no data)	0.0	114 (↑15)	0.0

Note: Highest ranking of country is 1=best innovation performer. "↑" is an improvement, "↓" is a deterioration, or "=" implies no change in ranking compared to previous report.

*Total domestic intramural expenditure on R&D during a given year divided by the GDP and multiplied by 100.

Source: IMD & WIPO

HIGHLIGHTS

- ❑ **Expenditure Program.** The total available appropriations of the Department of Science & Technology (DOST) in the proposed 2023 budget will amount to P24.06 billion, of which P23.76 billion are new appropriations. The Maintenance and Other Operating Expenses (MOOE) of the DOST will corner the bulk of the budget by general expense class at 76.4% amounting to P18.38 billion, while Personal Services (PS) will have 19.7% with P4.74 billion. The Capital Outlay (CO) of the DOST will get the lowest share of the total budget amounting to P944.3 million (3.9%).
- ❑ **New Appropriations by Cost Structure.** The operations of the DOST will receive the largest chunk of the total new appropriations accounting for 90.8% (P21.57 billion). A total amount of P1.86 billion will be appropriated for the DOST's General Administration and Support (GAS) and P334.8 million for Support to Operations (STO).
- ❑ **Allocation by Major Programs.** The *S&T Scholarship Program* of the SEI constitutes the largest share with 32.8% of total amounting to P7.07 billion. The *Strategic S&T Program* of the Office of the Secretary (OSEC) will be receiving the second highest share (16.4%) of the budget for programs amounting to P3.55 billion, followed by the STEM secondary education on scholarship basis program of the Philippine Science High School (PSHS), amounting to P2.75 billion.
- ❑ **Status of COVID-19 Releases.** As of December 31, 2021, the DBM had released the amount of P53.2 million by virtue of the Bayanihan I to the DOST for the production of 1,300 COVID-19 testing kits for 26,000 tests, including their delivery, training of those who administered the tests, and the cost of genome sequencing. Said allotment was fully disbursed by the agency. The Philippine Textile Research Institute (PTRI) also received an allotment under Bayanihan II amounting to P77.7 million for the establishment of the Medical Textile Testing Center.
- ❑ **Budget Utilization and Unused Appropriations.** The total obligation to appropriation ratio of the DOST and its attached agencies showed an increased ratio of 94.1% in 2021 compared to 93.4% in 2020. The same year shows only Technology Application and Promotion Institute (TAPI) had a 100% budget utilization, while Food and Nutrition Research Institute (FNRI) had the lowest ratio of 71% among the agencies.
- ❑ **Compliance with Audit Recommendations.** The DOST had the highest number of implemented and unimplemented Commission on Audit (COA) recommendations totaling to 165. Unimplemented recommendations of the DOST include the remittance of unutilized funds for scholarship and completed projects/activities, liquidation of cash advances, and timely submission of reports by DOST regional offices, among others. The Philippine Institute of Volcanology and Seismology (PHIVOLCS) also recorded 73.7% of COA recommendations not being implemented. In contrast, the Industrial Technology Development Institute (ITDI) recorded an implementation rate of 84% among the attached agencies of the DOST.

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DEPARTMENT OF SCIENCE AND TECHNOLOGY¹

I. MANDATE AND ORGANIZATIONAL OUTCOMES

- 1.1 Executive Order No. 128 mandates the Department of Science and Technology (DOST), through its Office of the Secretary (OSEC), to provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results therefrom are geared and utilized in areas of maximum economic and social benefits for the people.
- 1.2 The DOST has 18 attached agencies. There are seven research and development institutes, six service institutes, three sectoral planning councils, and two advisories.
- 1.3 **Research and Development Institutes.** The agencies involved in research and development include the following: Advanced Science and Technology Institute (ASTI) – research and development on information and communications technology and microelectronics; Food and Nutrition Research Institute (FNRI) – on food and nutrition; Forest Products Research and Development Institute (FPRDI) – on forest-based industry; Industrial Technology Development Institute (ITDI) – on food, materials, chemicals, energy, biotechnology, environment and packaging; Metals Industry Research and Development Center (MIRDC) – on metals and engineering industries; Philippine Nuclear Research Institute (PNRI) – on application of radiation and nuclear materials; and the Philippine Textile Research Institute (PTRI) – on the textile industry.
- 1.4 **Service Institutes.** The agencies that provide services are as follows: Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) provides protection against natural calamities; Philippine Institute of Volcanology and Seismology (PHIVOLCS) predicts occurrence of volcanic eruptions and earthquakes; Philippine Science High School System (PSHS) offers free secondary course on subjects pertaining to science;

Science Education Institute (SEI) undertakes science and education training; Science and Technology Information Institute (STII) undertakes training on science and technology information; and the Technology Application and Promotion Institute (TAPI) promotes commercialization of technologies.

¹ This document was prepared by Madrigal P. Macadato Jr. as input to the deliberations of the House Committee on Appropriations on the FY 2023 proposed National Budget. The report benefited from discussions with and inputs of EPRS Director Elsie Gutierrez, SERB Executive Director Manuel Aquino and from overall guidance of CPBRD Director-General Romulo E.M. Miral, Jr., PhD. The layout/design of the infographics by Alexiz S. Taaca and Carla P. Soriano are also acknowledged. The views, opinions, and interpretations in this report do not necessarily reflect the perspectives of the House of Representatives as an institution or its individual Members. This Agency Budget Notes is available online at <http://cpbrd.congress.gov.ph/>.

- 1.5 **Sectoral Planning Councils.** The following are the agencies involved in the development of policies by sector: Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) formulates strategies for science and technology development in agriculture, forestry, aquatic and natural resources sectors; Philippine Council for Health Research and Development (PCHRD) formulates strategies for health science and technology development; and Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) develops national research and development competence in strategic areas of industry, energy and emerging technology.
- 1.6 **Advisory Bodies.** The following agencies provide advisory services on basic research: the National Academy of Science and Technology (NAST) provides incentives to engage in scientific and technological research; and the National Research Council of the Philippines (NRCP) promotes basic research programs (*Note: See Appendix for the full description of mandates of attached agencies*).

II. SOURCES OF APPROPRIATIONS

- 2.1 Sources of funds for the DOST comprised of new appropriations, automatic appropriations, continuing appropriations, and budgetary adjustments. For 2023, the total available appropriations of the DOST will be reduced by P1.40 billion or 5.5% compared to 2022 owing in part to a slight 0.9% decrease in the department's proposed new appropriations compared with its 2022 budget of P23.99 billion and the absence so far of continuing appropriations in 2023 (Table 1). Automatic appropriations of the DOST on the other hand, showed an increase of 6.9% (P302.6 million) compared to its 2022 budget (P283 million). The continuing appropriations² in 2022, which consists of unobligated releases from existing law (i.e., R.A. No. 11518) also showed an increase of 3% from the 2021 budget of the DOST.

TABLE I
DOST SOURCES OF FUNDS, 2021-2023
(AMOUNTS IN MILLION PESOS)

Particulars	Amounts (In Million Pesos)			Share to Total Appropriations		
	2021	2022	2023	2021	2022	2023
New Appropriations	24,916.0	23,985.2	23,762.3	93.5	94.2	98.7
Supplemental Appropriations	-	-	-	-	-	-
Automatic Appropriations	284.1	283.0	302.6	1.1	1.1	1.3
Continuing Appropriations	1,160.5	1,195.6	-	4.4	4.7	-
Budgetary Adjustments	282.8	-	-	1.1	-	-
Total Available Appropriations	26,643.4	25,463.8	24,064.9	100.0	100.0	100.0
LESS: Unused Appropriations	1,582.1	1,195.6	-	-	-	-
Total Obligations	25,061.4	24,268.2	24,064.9	94.1	95.3	100.0

Sources of basic data: NEP2023

² Continuing appropriations refer to appropriations available to support obligations for a specified purpose or project, such as multi-year construction projects which require the incurrence of obligations even beyond the budget year (www.dbm.gov.ph)

III. EXPENDITURE PROGRAM

3.1 The expenditure program is the programmed amount out of the total appropriations that enables the national government to contract delivery of goods and services in a given fiscal year. Table 2 shows the total proposed budget of the DOST amounting to P24.06 billion which is lower by 0.8% compared to 2022's P24.27 billion, which was already pared down from the total available appropriations by almost P1.2 billion in unused appropriations. Of the proposed 2023 budget for DOST, the bulk of the budget will go to the SEI (30% or P7.21 billion), followed by the OSEC (25% or P6.10 billion), and the PSHS (12.6% or P3.04 billion). Note that while the budget of the SEI and PSHS will get an increase in 2023 compared to 2022, the OSEC's budget will be reduced by 9.3% in 2023.

TABLE 2
DOST EXPENDITURE PROGRAM BY AGENCY, 2021-2023
(AMOUNTS IN MILLION PESOS)

Particulars	Amounts (In Million Pesos)			Share to Total (%)		
	2021	2022	2023	2021	2022	2023
OSEC	7,022.8	6,720.5	6,093.1	28.0	27.7	25.3
ASTI	494.6	519.1	429.8	2.0	2.1	1.8
FNRI	440.6	552.5	560.6	1.8	2.3	2.3
FPRDI	230.5	216.2	220.2	0.9	0.9	0.9
ITDI	426.0	414.4	448.5	1.7	1.7	1.9
MIRDC	239.4	258.5	246.8	1.0	1.1	1.0
NAST	94.4	109.9	124.2	0.4	0.5	0.5
NRCP	165.7	199.6	141.9	0.7	0.8	0.6
PAGASA	1,642.5	1,385.2	1,142.7	6.6	5.7	4.7
PCAARRD	1,416.2	1,409.5	1,447.3	5.7	5.8	6.0
PCHRD	955.6	778.0	774.6	3.8	3.2	3.2
PCIEERD	868.9	820.3	839.8	3.5	3.4	3.5
PHIVOLCS	537.2	554.4	491.9	2.1	2.3	2.0
PNRI	372.1	421.2	450.7	1.5	1.7	1.9
PSHS	2,800.9	2,499.0	3,036.1	11.2	10.3	12.6
PTRI	172.6	138.4	143.0	0.7	0.6	0.6
SEI	6,922.0	6,962.9	7,211.3	27.6	28.7	30.0
STII	112.0	111.0	109.5	0.4	0.5	0.5
TAPI	147.3	197.7	152.8	0.6	0.8	0.6
TOTAL Department	25,061.4	24,268.2	24,064.9	100.0	100.0	100.0

Source of basic data: BESF 2023

3.2 **By General Expense Class.** The expenditure program of a department by general expense is composed of Personnel Services (PS), Maintenance and Other Operating Expenses (MOOE), Capital Outlay (CO), and Financial Expense (FinEx). For 2023, MOOE amounting to P18.38 billion will constitute a chunk or 76.4% of the DOST budget (Table 3). Nonetheless, MOOE will be reduced by 2.5% in 2023 compared to its allotment in 2022. MOOE refers to an expenditure category for support to the

operations of government agencies such as expenses for supplies and materials; transportation and travel; utilities (water, power, etc.) and the repairs, etc. (www.dbm.gov.ph). On the other hand, although CO of the DOST will get the lowest share of the total budget amounting to P944.3 million (3.9%), there will be an increase of 6.4% compared to the 2022 budget.

TABLE 3
DOST EXPENDITURE PROGRAM BY GENERAL EXPENSE CLASS, 2021-2023
(AMOUNTS IN MILLION PESOS)

Particulars	Amounts (In Million Pesos)			Share to Total (%)		
	2021	2022	2023	2021	2022	2023
PS	4,325.6	4,536.8	4,738.7	17.3	18.7	19.7
MOOE	18,699.6	18,843.6	18,381.9	74.6	77.6	76.4
CO	2,036.2	887.8	944.3	8.1	3.7	3.9
Fin Ex	0.0	0.0	0.0	0.0	-	0.0
TOTAL Department	25,061.4	24,268.2	24,064.9	100.0	100.0	100.0

Source of basic data: BESF 2023

- 3.3 **Unfilled Positions.** Total authorized permanent positions of the DOST increased to 5,632 in 2021 from 5,610 in 2020 and hiked to 5,656 in 2022. Of the total authorized positions of the DOST in 2021, the PSHS accounted for the largest share at 26.7%, followed by PAGASA (17.1%), and the OSEC (14.7%) (Table 4). The same agencies had also the most number of unfilled positions from 2020 to 2022. With unfilled vacancies to authorized posts consistently above 12% per annum over the reckoning period, unfilled positions need to be evaluated in terms of the necessity of retaining them to free up the agencies' resources for use in more productive programs and/or projects.

TABLE 4
NUMBER OF AUTHORIZED AND UNFILLED POSITIONS BY AGENCY, 2020-2023

Agency	Authorized Positions				Unfilled Positions			
	2020	2021	2022	2023	2020	2021	2022	2023
OSEC	834	829	829	829	113	105	93	93
ASTI	90	90	90	90	9	5	6	6
FNRI	186	186	186	186	29	28	29	29
FPRDI	192	192	192	192	21	23	11	11
ITDI	369	370	370	370	50	56	63	63
MIRDC	228	234	234	234	9	26	24	24
NAST	18	18	18	18	-	0	1	1
NRCP	42	42	42	42	1	5	7	7
PAGASA	958	965	965	965	171	148	136	136
PCAARRD	256	256	256	256	45	41	43	43
PCHRD	65	65	69	69	8	8	14	14
PCIEERD	78	78	78	78	7	8	8	8
PHIVOLCS	252	252	252	252	50	29	37	37
PNRI	262	262	262	262	45	47	33	33
PSHS	1,505	1,505	1,525	1,525	216	149	158	158
PTRI	89	95	95	95	8	13	13	13
SEI	58	58	58	58	10	8	10	10
STII	60	60	60	60	2	1	2	2
TAPI	68	75	75	75	3	7	7	7
Total	5,610	5,632	5,656	5,656	797	707	695	695

Source: Staffing Summary 2021-2023, DBM

3.4 **Regional Distribution.** The NCR will have the bulk of the regional budget in 2023 amounting to P13.83 billion (57.5%), followed by the Central office (16.6% or P3.99 billion), and Region 4A (8.5% or P2.04 billion). According to the DBM, the Central Office fund pertains to the allocation being managed by the Head Office of department/agencies for their respective units. The rest of the regions will be receiving shares which are only slightly over one percent of the whole budget. BARMM, on the other hand will have no share in the 2023 budget since its establishment as a new autonomous region by virtue of Republic Act No. 11054 authorized it to have fiscal autonomy (Table 5).

TABLE 5
REGIONAL DISTRIBUTION OF THE DOST BUDGET, 2021-2023
(AMOUNTS IN MILLION PESOS)

Region	2021		2022		2023	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Nationwide	-	-	-	-	-	-
Central Office	4,553.4	18.2	4,079.7	16.8	3,990.6	16.6
NCR	14,176.1	56.6	13,989.6	57.6	13,833.5	57.5
CAR	254.4	1.0	279.2	1.2	272.0	1.1
Region 1	296.4	1.2	274.7	1.1	262.4	1.1
Region 2	358.0	1.4	358.0	1.5	328.0	1.4
Region 3	356.8	1.4	425.2	1.8	370.8	1.5
Region 4A	1,987.5	7.9	1,957.2	8.1	2,039.4	8.5
Region 4B	261.0	1.0	259.3	1.1	255.4	1.1
Region 5	318.4	1.3	294.9	1.2	279.6	1.2
Region 6	399.7	1.6	348.1	1.4	349.7	1.5
Region 7	370.1	1.5	307.5	1.3	383.9	1.6
Region 8	255.0	1.0	282.8	1.2	304.4	1.3
Region 9	237.8	0.9	253.7	1.0	301.0	1.3
Region 10	313.8	1.3	310.2	1.3	280.0	1.2
Region 11	327.4	1.3	316.2	1.3	274.1	1.1
Region 12	280.4	1.1	273.0	1.1	267.8	1.1
CARAGA	315.1	1.3	258.9	1.1	272.4	1.1
BARMM	-	-	-	-	-	-
TOTAL	25,061.4	100.0	24,268.2	100.0	24,064.9	100.0

Source of basic data: BESF 2023

IV. SPENDING FOR COVID-19 INITIATIVES

4.1 As the Philippine government continues to respond to the challenges of the COVID-19 pandemic and by virtue of *Bayaniban I*, the DBM had released to the DOST the amount of P53.2 million, which was in turn fully disbursed as of December 31, 2021. The said allotment was utilized to produce 1,300 COVID-19 testing kits for 26,000 tests, including their delivery, training of those who administered the tests, and the cost of genome sequencing. The PTRI also received an allotment under *Bayaniban II* amounting to P77.7 million. As per record of the DBM dated December 31, 2021, there is still P3.3 million unobligated fund to be utilized for the establishment of the Medical Textile Testing Center (Table 6).

TABLE 6
STATUS OF COVID-19 RELEASES TO DOST-OSEC & PTRI, AS OF DECEMBER 31, 2021
(AMOUNTS IN MILLION PESOS)

Particulars	Purpose	Allotment	Obligations	Disbursement	Unobligated Allotment
BAYANIHAN I					
I. FY 2020 GAA, RA No. 11469					
DOST	For the production of 1,300 COVID-19 testing kits for 26,000 tests, including their delivery, training of those who will administer the tests, and the cost of genome sequencing.	53.2	53.2	53.2	-
BAYANIHAN II					
I. FY 2020 GAA, RA No. 11465					
DOST - Philippine Textile Research Institute	For the establishment of the Medical Textile Testing Center.	77.7	74.4	17.3	3.3

Source: DBM COVID-19 Budget Utilization Reports

V. NEW APPROPRIATIONS

By Agency and Cost Structure

- 5.1 The operations of the DOST will receive the largest chunk of the total new appropriations accounting for 90.8% (P21.57 billion) of the total (Table 7). Among the agencies that will have the biggest budget for operations are the following: SEI (P7.16 billion), OSEC (P5.77 billion), PSHS (P2.77 billion), and PCAARRD (P1.33 billion). The budget for operations will be utilized for the direct production of goods, delivery of services and/or direct engagement in regulations.
- 5.2 A total amount of P1.86 billion will be appropriated for the DOST's *General Administration and Support (GAS)*. Of the said amount, the PAGASA will receive the largest budget amounting to P288.1 million, followed by the OSEC (P231.1 million), and PSHS (P172.9 million). NAST, on the other hand, will receive the smallest budget among the attached agencies of the DOST amounting to P19.1 million only. GAS consists of the activities and projects dealing with the provision of overall administrative management and operational support to the entire agency operations.
- 5.3 Only five attached agencies of the DOST will have a budget for Support to Operations (STO) in 2023, namely, PAGASA (P185.9 million), PNRI (P92.3 million), OSEC (P45.3 million), NRCP (P10 million), and PHIVOLCS (P1.3 million). The budget is necessary for the agencies to augment activities and projects which provide staff, technical, and/or substantial support to operations, but do not produce goods or deliver services directed at a target population or client group external to the agency.

TABLE 7
DOST NEW APPROPRIATIONS BY AGENCY AND COST STRUCTURE, FY 2023
(AMOUNTS IN MILLION PESOS)

Agency	Amounts (In Million Pesos)				Share to Total Agency (%)			
	GAS	STO	Operations	Total Agency	GAS	STO	Operations	Total Agency
OSEC	231.1	45.3	5,765.6	6,042.1	3.8	0.8	95.4	100.0
ASTI	69.2	.	355.3	424.5	16.3	0.0	83.7	100.0
FNRI	79.6	.	472.0	551.6	14.4	0.0	85.6	100.0
FPRDI	105.7	.	104.9	210.6	50.2	0.0	49.8	100.0
ITDI	114.4	.	316.5	430.9	26.5	0.0	73.5	100.0
MIRDC	105.1	.	130.2	235.4	44.7	0.0	55.3	100.0
NAST	19.1	.	103.8	122.9	15.5	0.0	84.5	100.0
NRCP	34.5	10.0	95.5	140.	24.6	7.1	68.2	100.0
PAGASA	288.1	185.9	629.8	1,103.8	26.1	16.8	57.1	100.0
PCAARRD	105.1	.	1,329.5	1,434.6	7.3	0.0	92.7	100.0
PCHRD	25.2	.	746.0	771.2	3.3	0.0	96.7	100.0
PCIEERD	46.7	.	788.0	834.7	5.6	0.0	94.4	100.0
PHIVOLCS	127.4	1.3	352.9	481.6	26.5	0.3	73.3	100.0
PNRI	167.5	92.3	176.8	436.6	38.4	21.1	40.5	100.0
PSHS	172.9	.	2,767.8	2,940.7	5.9	0.0	94.1	100.0
PTRI	45.9	.	93.0	138.9	33.1	0.0	66.9	100.0
SEI	44.3	.	7,163.7	7,208.0	0.6	0.0	99.4	100.0
STII	36.7	.	69.3	106.0	34.6	0.0	65.4	100.0
TAPI	36.4	.	111.9	148.3	24.6	0.0	75.4	100.0
TOTAL Department	1,855.0	334.8	21,572.5	23,762.3	7.8	1.4	90.8	100.0

Source of basic data: NEP 2023

5.4 **DOST Programs.** The total budget for operations by programs of the DOST for FY 2023 amounts to P21.57 billion. Of the said proposed budget, the *Se&T Scholarship Program* of the SEI again constitutes the largest share with 32.8% of total amounting to P7.07 billion. The program is 3.2% higher than its 2022 level of P6.85 billion (See Table 8). This program of the DOST-SEI aims to stimulate and entice talented Filipino youths to pursue lifetime productive careers in science and technology.

The *Strategic Se&T Program* of the OSEC will be receiving the second highest share (16.4%) of the budget for programs amounting to P3.55 billion, followed by the STEM secondary education on scholarship basis program of the PSHS, amounting to P2.75 billion. The *Strategic Se&T Program* of the OSEC aims to increase the benefits to Filipinos from scientific knowledge and cutting-edge technological innovations through funding of projects, and supporting grantees, among others.

TABLE 8
SUMMARY OF PROGRAMS FOR 2021-2023
DEPARTMENT OF SCIENCE AND TECHNOLOGY

Implementing Agency/Program	Amount (In Million Pesos)			% Share to Total Program			Growth Rates 22-23 (%)
	2021	2022	2023	2021	2022	2023	
Strategic S&T program (OSEC)	3,333.2	3,633.2	3,546.9	14.9	16.8	16.4	-2.4
S&T program for regional & countryside development (OSEC)	2,673.6	2,718.8	2,218.7	11.9	12.6	10.3	-18.4
Advanced S&T transfer program (ASTI)	331.4	356.7	150.3	1.5	1.7	0.7	-57.9
Advanced S&T R&D program (ASTI)	136.8	93.2	205.0	0.6	0.4	1.0	120.0
Nutritional assessment & monitoring program (FNRI)	377.3	374.2	370.5	1.7	1.7	1.7	-1.0
Food and nutrition R&D program (FNRI)	70.3	60.3	63.9	0.3	0.3	0.3	6.0
Food and nutrition technology & knowledge diffusion program (FNRI)	36.7	34.3	37.6	0.2	0.2	0.2	9.7
Forest products R&D program (FPRDI)	74.9	71.1	64.4	0.3	0.3	0.3	-9.4
Forest products S&T services program (FPRDI)	18.2	17.7	20.9	0.1	0.1	0.1	17.6
Forest products technology transfer program (FPRDI)	20.1	19.0	19.7	0.1	0.1	0.1	3.6
Industrial technology technical services program (ITDI)	102.0	77.2	102.0	0.5	0.4	0.5	32.1
Industrial technology R&D program (ITDI)	172.0	181.9	182.6	0.8	0.8	0.8	0.4
Industrial technology transfer program (ITDI)	26.7	30.3	31.9	0.1	0.1	0.1	5.3
Metals industry research program (MIRDC)	82.8	85.5	83.3	0.4	0.4	0.4	-2.6
Metals industry science and technology services program (MIRDC)	23.5	24.5	25.4	0.1	0.1	0.1	3.6
Metals industry technology transfer program (MIRDC)	22.8	23.1	21.5	0.1	0.1	0.1	-7.0
S&T recognition & policy advisory program (NAST)	91.0	90.1	103.8	0.4	0.4	0.5	15.3
Basic R&D management program (NRCP)	117.6	143.2	94.1	0.5	0.7	0.4	-34.3
Policy development for S&T advisory program (NRCP)	1.7	2.4	1.4	0.0	0.0	0.0	-40.6
Weather & climate forecasting and warning program (PAGASA)	876.5	643.7	502.7	3.9	3.0	2.3	-21.9
R&D on atmospheric, geophysical & astronomical and allied sciences program (PAGASA)	125.9	74.9	69.9	0.6	0.3	0.3	-6.6
Flood forecasting & warning program (PAGASA)	194.2	84.4	57.1	0.9	0.4	0.3	-32.3
National AANR sector R&D program (PCAARRD)	1,332.9	1,285.3	1,329.5	5.9	6.0	6.2	3.4
National health R&D program (PCHRD)	932.3	737.0	746.0	4.2	3.4	3.5	1.2
National industry, energy and emerging industry sectors R&D program (PCIEERD)	828.2	761.3	788.0	3.7	3.5	3.7	3.5
Volcano, earthquake and tsunami monitoring and warning program (PHIVOLCS)	299.9	280.8	211.1	1.3	1.3	1.0	-24.8
Hazards mapping, risk assessment and R&D program (PHIVOLCS)	94.5	99.6	118.3	0.4	0.5	0.5	18.8
Disaster preparedness and risk reduction program (PHIVOLCS)	22.9	24.7	23.5	0.1	0.1	0.1	-5.1
Nuclear S&T services and advisory program (PNRI)	88.3	87.6	95.7	0.4	0.4	0.4	9.3
Nuclear R&D program (PNRI)	47.7	47.2	58.0	0.2	0.2	0.3	22.8

Continued on next page

Summary of Programs for 2021-2023, Continued							
Nuclear regulations, security and safeguards program (PNRI)	15.7	19.1	23.1	0.1	0.1	0.1	20.4
STEM secondary education on scholarship basis program (PSHS)	2,696.8	2,167.5	2,754.2	12.0	10.0	12.8	27.1
STEM promotion program (PSHS)	13.1	13.1	13.6	0.1	0.1	0.1	3.7
Textile and other textile-related R&D program (PTRI)	20.5	35.1	44.9	0.1	0.2	0.2	27.8
Textile S&T services program (PTRI)	15.5	45.9	37.4	0.1	0.2	0.2	-18.4
Textile technology transfer program (PTRI)	10.8	6.0	10.6	0.0	0.0	0.0	77.8
S&T scholarship program (SEI)	6,850.6	6,846.0	7,068.2	30.6	31.7	32.8	3.2
S&T education development program (SEI)	59.5	65.9	95.5	0.3	0.3	0.4	45.0
S&T information program (STII)	69.6	66.7	69.3	0.3	0.3	0.3	3.9
Technology application and invention development program (TAPI)	105.2	155.7	111.9	0.5	0.7	0.5	-28.2
Total Department	22,413.2	21,584.1	21,572.5	100.0	100.0	100.0	-0.1

Note: Allocations for programs and total operations are inclusive of locally funded and foreign-assisted projects.
Source: GAA 2021-2022 and NEP 2023

VI. PERFORMANCE REVIEW

- 6.1 **Obligations-Appropriations Ratio.** Obligations refer to contracts entered into by the agency with suppliers of goods and services, including obligations for payment of salaries, allowances and other compensation of agency personnel. Appropriation, on the other hand, refers to an authorization made by law or legislative enactment directing payment out of government funds under specified conditions or for specific purpose.

TABLE 9
DOST OBLIGATION-APPROPRIATIONS RATIO
AND UNUSED APPROPRIATIONS, 2019-2021

Particulars	Obligation-Appropriations Ratio (%)			Unused Appropriations (In Million Pesos)		
	2019	2020	2021	2019	2020	2021
OSEC	93.5	94.6	97.4	366.3	294.4	184.9
SEI	99.8	99.2	99.4	8.6	34.9	44.9
ASTI	90.9	95.2	94.5	41.0	15.8	28.8
FNRI	97.0	86.7	71.1	15.3	68.5	179.2
FPRDI	86.7	74.8	85.2	35.3	61.7	40.1
ITDI	91.9	89.7	94.2	46.9	57.1	26.5
MIRDC	98.2	96.4	96.4	4.9	9.3	8.9
NAST	91.1	88.4	84.9	8.1	11.4	16.9
NRCP	97.3	95.3	96.0	2.5	4.1	6.9
PAGASA	92.7	91.1	85.5	161.3	131.4	278.5
PCAARD	78.9	93.4	95.7	256.7	89.6	64.1
PCHRD	99.9	99.5	99.1	0.4	2.9	9.1
PCIEERD	99.3	100.0	99.6	4.8	0.1	3.1
PHIVOLCS	91.4	80.1	82.7	46.8	117.7	112.2
PNRI	98.1	96.9	97.2	7.2	13.5	10.7
PSHS	92.0	87.7	83.4	227.6	330.3	557.6
PTRI	98.5	59.8	96.7	2.1	79.1	5.9
STII	98.7	94.3	96.6	1.3	5.4	3.9
TAPI	99.9	92.2	100.0	0.1	9.9	0.0
TOTAL Department	94.2	93.4	94.1	1,237.1	1,337.2	1,582.1

Sources of basic data: NEP 2021-2023

6.2 Table 9 presents the total obligation to appropriation ratio of the DOST and its attached agencies. In 2021, the DOST showed an increased ratio of 94.1% compared to 93.4% in 2020. This could indicate that the department and its agencies increased their budget utilization and improved their functions as mandated by the law. The same year shows only TAPI had a 100% budget utilization, while FNRI had the lowest ratio of 71% among the agencies.

6.3 **Unused Appropriations.** An increase by 18% to P1.58 billion of the DOST's total unused appropriations was recorded in 2021 compared to P1.34 billion in 2020 (Table 9). The top three agencies with the biggest unused budget in 2021 are – PSHS (P557.6 million), PAGASA (P278.5 million), and OSEC (P184.9 million). Notably, TAPI has no unused budget for the year 2021. The unused appropriations may constitute unreleased appropriations and/or unobligated allotment for a particular budget period. It could represent missed opportunities for the government to fully carry out its functions in accordance with the mandates given to its instrumentalities.

TABLE 10
DOST DISBURSEMENT RATE BY AGENCY, 2020-2021
(AMOUNTS IN MILLION PESOS)

Particulars	2020			2021		
	Appropriations	Disbursements	Disbursement Rate (%) ^{a/}	Appropriations	Disbursements	Disbursement Rate (%) ^{a/}
OSEC	5,417.9	4,590.9	84.7	7,207.7	6,684.5	92.7
ASTI	326.8	248.9	76.2	523.4	377.5	72.1
FNRI	514.4	338.0	65.7	619.8	361.4	58.3
FPRDI	245.3	173.0	70.5	270.6	180.8	66.8
ITDI	552.7	362.9	65.7	452.4	337.7	74.6
MIRDC	256.2	213.7	83.4	248.3	223.3	89.9
NAST	97.7	82.2	84.1	111.3	90.9	81.7
NRCP	87.4	74.5	85.2	172.6	145.9	84.5
PAGASA	1,469.5	868.9	59.1	1,920.9	1,099.3	57.2
PCAARRD	1,366.9	958.8	70.1	1,480.4	943.7	63.7
PCHRD	593.7	580.4	97.8	964.7	921.0	95.5
PCIEERD	675.1	575.8	85.3	872.0	763.4	87.5
PHIVOLCS	593.1	409.7	69.1	649.4	446.6	68.8
PNRI	435.3	275.7	63.3	382.9	318.1	83.1
PSHS	2681.	1,209.7	45.1	3,358.5	2,300.9	68.5
PTRI	196.5	93.8	47.8	178.4	113.2	63.4
SEI	4,533.4	4,463.4	98.5	6,967.0	6,885.9	98.8
STII	95.5	79.7	83.5	115.9	101.9	87.9
TAPI	127.2	102.6	80.7	147.3	121.6	82.6
Total Dept	20,265.6	15,702.7	77.5	26,643.4	22,417.4	84.1

a/ Disbursement rate – ratio of disbursements to appropriations

Source: SAAODB 2020-2021, DBM

6.4 **Disbursement rate.** Disbursement rate refers to the ratio of disbursements or settlement of actual government obligations in the form of cash, check and other modes of payment to total appropriations. In 2021, the DOST and its attached agencies disbursed 84.1% of its appropriations or an improvement from its 77.5% disbursed budget in 2020 (Table 10). By agency, the SEI recorded the highest disbursement rate of 98.8%, followed by PCHRD (95.5%) and OSEC (92.7%). The lowest disbursement rate was recorded by PAGASA with 57.2% in 2021.

6.5 **Budget Utilization by Major Program.** Two of the major S&T development programs of the DOST-OSEC have been receiving a sizeable portion of the total budget for programs in recent fiscal years. In 2021, the *Strategic S&T Program* obligated 99.4% of its P3.92 billion appropriations and disbursed 98.2% of it. In contrast, the *S&T Program for Regional and Countryside Development* recorded an obligation rate of 97% and disbursed 91% of its P2.77 billion appropriations (Table 11).

TABLE 11
DOST-OSEC BUDGET UTILIZATION BY MAJOR PROGRAM, 2021
(AMOUNTS IN MILLION PESOS)

Program / Implementing Agency	Adjusted Appropriations	Obligations	Disbursements	Obligation Rate (%) ^{a/}	Disbursement Rate (%) ^{b/}
Strategic Science and Technology (S&T) Program	3,916.3	3,890.9	3,844.4	99.4	98.2
Of which: Support to the harmonized national S&T agenda	3,916.3	3,726.8	3,844.4	95.2	98.2
S&T Program for Regional and Countryside Development	2,767.6	2,683.3	2,511.7	97.0	90.8
Of which: Diffusion and transfer of knowledge and technologies and other related- projects and activities	1,942.3	1,874.6	1,723.7	96.5	88.7
Enhance of science and technology projects/activities	781.9	766.5	753.6	98.0	96.4

^{a/} Obligation rate – ratio of obligations to appropriations ^{b/} Disbursement rate – ratio of disbursements to appropriations
Source: SAAODB 2021 (FAR No. 1 in Transparency Seal)

6.6 **Performance Indicators of Major Programs.** Table 12 presents the two major programs of the DOST, namely – *S&T scholarship program* (SEI) and *Strategic S&T Program* (OSEC). To reiterate, these two programs will be receiving a large portion of the DOST’s proposed budget for operations in 2023. To ensure that this budget for the department’s program is efficiently utilized, strict monitoring and evaluation is crucial.

6.7 The 2021 actual performance of the outcome indicators for *Strategic S&T Program* surpassed the agency’s targets, due to the accumulated actual performances from prior years. In turn, some targets from 2021 have increased in 2023. Likewise, targets in the outcome and output indicators for *S&T Scholarship program* also increased in 2023, except for the sub-indicator on the number of masters and doctoral scholars supported by the program, which fell short from its 2021 target (See Table 12).

TABLE 12
DOST PERFORMANCE INDICATORS OF MAJOR PROGRAMS, 2021-2023

Program	2021		2022	2023
	Target	Actual	Target	Target
STRATEGIC S&T PROGRAM (OSEC)				
<i>Outcome Indicators</i>				
1. Percentage of projects completed within the required timeframe	96%	162% (cumulative)	96%	100%
2. Percentage of projects completed which are published in peer-reviewed journals, presented in national and/or international conferences or with IP filed or approved	92%	286% (cumulative)	92%	84%
3. Percentage of priorities in the Harmonized National R&D Agenda (HNRDA) addressed	85%	95% (19 / 20)	90%	100%
<i>Output Indicators</i>				
1. Number of projects funded	364	493	348	197
2. Number of grantees supported	352	238	338	108
3. Percentage of programs/projects received that are evaluated and approved within the standard period of 90 days	85%	73% (cumulative)	90%	100%
S&T SCHOLARSHIP PROGRAM (SEI)				
<i>Outcome Indicators</i>				
1. Percentage of scholars employed in STEM-related fields	70%	83%	75%	80%
2. Percentage of municipalities served	98%	99%	98%	99%
<i>Output Indicators</i>				
1. Number of scholars supported				
Undergraduate level	36,452	37,445	45,229	50,518
Masters program	4,503	-4,096	4,308	-3,863
Doctoral program	2,379	-1,886	1,550	-1,045
2. Number of scholars graduating within the scheduled full-time program				
Undergraduate level	85%	87%	85%	90%
Masters program	70%	83%	70%	75%
Doctoral program	40%	71%	40%	50%
3. Percentage of scholarship payments with a variance of actual payment to scheduled payment of more than one day	90%	98%	90%	97%

Source: NEP 2023

VII. COA FINDINGS AND RECOMMENDATIONS

7.1 This section discusses the DOST and its attached agencies' compliance with the Commission on Audit's (COA) audit findings and recommendations. The audit was made to ascertain the propriety of financial transactions, compliance of the Agency with the prescribed laws, rules and regulations. As of December 31, 2021, the COA report only included sixteen (16) attached agencies of the DOST.

7.2 Records show that the DOST had the highest number of implemented and unimplemented COA recommendations totaling to 165. Unimplemented recommendations of the DOST include the remittance of unutilized funds for scholarship and completed projects/activities, liquidation of cash advances, and timely submission of reports by DOST regional offices, among others. Furthermore, the COA found out errors and omissions misstating the year-end balances of the DOST's asset, liability and equity accounts by P67.99 million, P3.61 million and P0.72 million, respectively, as of December 31, 2021 (See Table 13). These observations, unless acted upon by the concerned agency would deprive the government of resources to fund other significant programs, projects/activities of the agency. Similarly, COA reiterated that any

unexpended balance at the end of the year should be returned to the Treasury, otherwise continued retention of substantial amounts of funds will preclude the National Treasury in maximizing the use of scarce government resources by minimizing borrowings and using these funds to finance other priority programs and expenditures.

- 7.3 Among DOST's attached agencies, the PHIVOLCS recorded the highest percentage of unimplemented COA recommendations at 73.7%. Among the findings of the COA, a Notice of Suspension/Disallowance/Charge was issued by the Commission to the agency for various transactions totaling to P8.52 million in January 1, 2021. Of this amount, a balance amounting to P7.59 million still needs to be settled by the PHIVOLCS as of December 31, 2021.

Meanwhile, the ITDI recorded an implementation rate of 84.6% - the highest among the attached agencies of the DOST, consequently earning an unqualified opinion by the COA. Unqualified opinion is issued when the auditor concludes that the financial statements are prepared, in all material respects, in accordance with the applicable financial reporting framework. However, the COA expressed that this audit opinion should not be viewed as a rating, score or grade, with ranking of lowest to highest.

TABLE 13
STATUS OF IMPLEMENTATION OF COA RECOMMENDATIONS
(AS OF DECEMBER 31, 2021)

Particulars	Total	Implemented		Not Implemented	
		Number	(%)	Number	(%)
DOST*	165	83	50.3	82	49.7
ASTI	24	15	62.5	9	37.5
FNRI	20	15	75.0	5	25.0
ITDI	26	22	84.6	4	15.4
MIRDC	30	16	53.3	14	46.7
NAST	17	13	76.5	4	23.5
NRCP	35	20	57.1	15	42.9
PAGASA	84	45	53.6	39	46.4
PCHRD	33	20	60.6	13	39.4
PCIEERD	76	21	27.6	55	72.4
PHIVOLCS	76	20	26.3	56	73.7
PSHS	111	68	61.3	43	38.7
PTRI	11	8	72.7	3	27.3
SEI	68	28	41.2	40	58.8
STII	28	16	57.1	12	42.9
TAPI	46	27	58.7	19	41.3

**DOST include 16 Regional offices and 80 Provincial Science & Technology Centers
Source: Annual Audit Reports 2021 (Part 3)*

References:

COA Annual Audit Report 2021

DBM Budget of Expenditures and Sources of Financing (BESF) FY 2023

DBM COVID-19 Budget Utilization Reports (30 December 2021)

DBM General Appropriations Act (GAA) FY 2021-2022

DBM National Expenditure Program (NEP) FY 2021-2023

DBM Staffing Summary 2021-2023

DBM Statement of Allotment, Obligation and Balances (SAAODB) FY 2020-2021

DOST Transparency Seal (FAR No. 1)

ANNEX I. DOST ATTACHED AGENCIES

Research and Development Institutes

- The **Advanced Science and Technology Institute (ASTI)** is mandated to perform the following functions: scientific research and development in the advanced fields of information and communications technology and microelectronics; undertake long-term researches to strengthen and modernize science and technology infrastructure; conduct research and development works in the advanced fields of studies including biotechnology and microelectronics; and complement the overall endeavor in the scientific field with intensive activities in computer and information technologies.
- The **Food and Nutrition Research Institute (FNRI)** undertakes research that define the citizenry's nutritional status, with reference to the malnutrition problem, its causes and effects; develops and recommends policy options, strategies, programs and projects for implementation by appropriate agencies; and diffuses knowledge and technologies in food and nutrition and provides scientific and technology (S&T) services to relevant stakeholders.
- The **Forest Products Research and Development Institute (FPRDI)** conducts applied research and development in secondary and tertiary processing for the forest-based industry to generate information and technology which can improve the utility value of wood and other forest products. The FPRDI also undertakes the transfer of completed research directly to end-users or via linkage units of other government agencies; undertakes technical services; and provides training programs.
- The **Industrial Technology Development Institute (ITDI)** provides innovative technologies and services in the areas of food, materials, chemicals, energy, biotechnology, environment and packaging to both private and government sectors with the highest standards of quality and reliability, within our capabilities and resources according to customer and all applicable regulatory and statutory requirements. The ITDI is also committed to continually improve the effectiveness of our QMS at all times in order to meet customer satisfaction.
- The **Metals Industry Research and Development Center (MIRDC)** provides both government and the private sector in the metals and engineering industries with professional management and technical expertise on training of engineers and technicians, information exchange, trade accreditation services, quality control and testing of metal products, research and development, and business economics advisory services.
- The **Philippine Nuclear Research Institute (PNRI)** conducts R&D on application of radiation and nuclear materials, processes and techniques in agriculture, food, health, nutrition and medicine and in industrial or commercial enterprises; undertakes the transfer of research results to end-users including technical extension and training services; operates and maintains nuclear research reactors and other radiation facilities; licenses and regulates activities relative to production, transfer and utilization of nuclear and radioactive substances.
- The **Philippine Textile Research Institute (PTRI)** performs the following functions: conduct applied research and development for the textile industry sector; undertake the transfer of completed researches to end-users or via linkage units of other government agencies; and undertake technical services and provide training programs.

Service Institutes

- The **Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)** provides protection against natural calamities and utilizes scientific knowledge as an effective instrument to ensure the safety, well-being and economic security of all the people, and for the promotion of national progress.
- The **Philippine Institute of Volcanology and Seismology (PHILVOCS)** has the following strategic objectives: predict the occurrence of volcanic eruptions and earthquakes and their related geotectonic phenomena; determine how eruptions and earthquakes shall occur and also areas likely to be affected; generate sufficient data for forecasting volcanic eruptions and earthquakes; mitigate hazards of volcanic activities through appropriate detection, forecast and warning system; formulate appropriate disaster preparedness plans; exploit the positive aspects of volcanoes and volcanic terrains in furtherance of the socio-economic development efforts of the government.

- The **Philippine Science High School System (PSHS)** is mandated to offer, on a free scholarship basis, a secondary course with special emphasis on subjects pertaining to the sciences with the end in view of preparing its students for a science career.
- The **Science Education Institute (SEI)** undertakes science education and training; administers scholarships, awards and grants; undertakes science and technology manpower development; and formulates plans and establishes programs and projects for the promotions and development of science and technology education and training in coordination with the Department of Education (DepEd), Commission on Higher Education (CHED) and other institutions of learning.
- The **Science and Technology Information Institute (STII)** establishes a Science and Technology databank and library; disseminates Science and Technology information; and undertakes training on Science and Technology information.
- The **Technology Application and Promotion Institute (TAPI)** serves as implementing arm of DOST in promoting the commercialization of technologies and marketing the services of the other operating units of the department. It provides grants and/or venture financing assistance for new and emerging projects; administers the Invention Development Assistance Fund (IDAF) and the Inventors Guarantee Fund (IGF) for assisting inventors for invention-related activities and commercialization of inventions; assists technology generators, inventors, and researchers avail of the laboratories and other facilities of the Research and Development Institutes including regional offices and other government agencies, offices and instrumentalities; accredits and recognizes inventors' associations throughout their activities.

Sectoral Planning Councils

- The **Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD)** formulates policies, plans, programs, projects, and strategies for science and technology development, in the agriculture, forestry, aquatic and natural resources sectors. PCAARRD programs and allocates government and external funds generated for R&D efforts in the agriculture, forestry, marine and natural resources sectors; monitors R&D projects; and generates external funds for its R&D activities.
- The **Philippine Council for Health Research and Development (PCHRD)** formulates policies, plans, programs, projects, and strategies for health S&T development; programs and allocates government and external funds for R&D; monitors R&D projects; and generates external funds.
- The **Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)** performs the following functions to develop national R&D competence in strategic areas of industry, energy and emerging technology: formulate national policies, programs and implementing strategies for advanced science industry and energy sectors; program and allocate government and other external funds earmarked for advanced science, industry and energy sectors; provide the mechanism for assessment, evaluation and monitoring of R&D programs and updating of the national R&D plan; develop and implement resource-generating strategies to implement and sustain programs for the sectors; provide support for the development of institutions and R&D human resource pool; establish, develop and maintain local and international technical cooperation and linkages; develop and implement programs for the optimal utilization, transfer, and commercialization of technologies and other research outputs; and establish, develop, and maintain an effective system for the acquisition and dissemination of research information.

Advisory Bodies

- The **National Academy of Science and Technology (NAST)** recognizes outstanding achievements in science and technology as well as provides meaningful incentives to those engaged in scientific and technological researches and advises the President and the Cabinet on matters related to science and technology. NAST engages in projects and programs designed to recognize outstanding achievements in science; promotes scientific productivity; and embarks on programs traditionally and internationally expected of an academy of science.
- The **National Research Council of the Philippines (NRCP)** promotes and supports fundamental or basic research and comprehensive research programs. It promotes cooperation in research for continuing total improvement of the research capability of individual or group scientists; provides advice to the government on problems and issues of

national interest; promotes scientific and technological culture in all sectors of society; and fosters linkages with local and international scientific organizations for enhanced cooperation in the development of information.