

Ministry of Science & Technology

PSDP 2022-23

Rs in million

Sr. No	PSDP No.	Name of Project	Approved by Forum with date of approval and Admin Approval	Approved Cost	Revised PSDP Allocation 2022-23	Likely date of completion	Project Objectives
1	2	3	4	5	6	7	8
		PCSIR					
1	1046	Cultivation and Processing of Medicinal and Industrial Cannabis on Experimental Fields and Establishment of testing and product developmnet facilities at PCSIR Laboratories Complex, Lahore, Peshawar and Karachi	DDWP 06-05-2021 Starting Date 13-07-2021	1896.820	633.661	13.07.2024	<ul style="list-style-type: none"> • To develop experimental fields / land for cultivation of industrial cannabis. • To cultivate industrial cannabis on experimental fields and it's processing. • To develop and validate analytical methods for testing of industrial cannabis.
2	1048	Development of Computer Controlled Fermentors and Production of Biochemicals & Bioproducts	DDWP 06-05-2021 Starting Date 03-09-2021	1981.607	360.000	03.09.2023	<ul style="list-style-type: none"> • Establish a design and manufacturing facility for computerized automated fermenters. • Develop indigenous metabolic engineering capability. • Develop and upgrade the existing essentially required facilities and infrastructure at PCSIR and ICC/ PAEC. Thus providing establishment of national level integrated bio-processing infrastructure.
3	1049	Digital transformation, strengthening and automation of PCSIR	DDWP 27.5.2021 DDWP Rev. 17.12.2021 Starting Date 25-08-2021	960.710	69.388	25.08.2023	<ul style="list-style-type: none"> • To implement a modern digital organizational network through replacing existing/ obsolete IT equipment with modern I.T. equipment including servers, routers, switches, computers etc. • To develop Key software with data driven management dashboards to track and monitor progress towards organizational goals.
4	1050	Establishment of Material Resource Centre and development of additive manufacturing and Reverse Engineering Centre at PCSIR	DDWP 27.5.2021 DDWP Rev. 17.12.2021 Starting Date 03-08-2021	1951.683	314.215	03.08.2023	<p>Part A: Establishment of “Material Resource Center” at PCSIR Labs Complex Karachi</p> <p>Part B: Development of Additive Manufacturing & Reverse Engineering Center. PCSIR Labs Complex Peshawar.</p>

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5	1067	Research, Development and Innovation Program in PCSIR	DDWP 27.5.2021 Starting Date 04.08.2021	1500.000	36.004	04.08.2023	Establishing an RD&I Programme facility for a variety of purposes in the domain of scientific/ technological/ industrial research such as new technology initiatives, cutting-edge/ advanced R&D, commercialization, digitalization, marketing, industrial-business linkups/partnerships, etc. leading to indigenous commercial/industrial ecosystem.
6	1072	Up gradation of Calibration Centre Capabilities at PCSIR Peshawar	DDWP 11-05-2020 18 Months Starting Date 03-08-2021	35.000	3.386	03.02.2023	To enhance the existing capabilities of Calibration Centre for the facilitation of Local Manufacturers and Public / Private Organizations. in the fields of Mass, Dimensional, Temperature, Electrical/Electronics, Mechanical and Chemical
7	1073	Up gradation of Machinery, Equipment and Renovation of Buildings of IIEE & PSTC Karachi.	DDWP 02-04-2020 Starting Date 15-10-2020	125.000	17.241	30.06.2023	<ul style="list-style-type: none"> Project is being executed by PCSIR and is related to up gradation of its technical institutes (IIEE and PSTC) for the productivity of human factor to cope up with the rapid developments in the field of Engineering & Technology. Addition of Lab Trainers, General Lab Equipment, Machinery,
8	1074	Up gradation of Medicinal Botanic Centre as National Centre for Herbal Medicine, PCSIR Labs. Complex, Peshawar	CDWP 02.05.2018 24 months DDWP Rev. 04.08.2021 Starting Date 15-08-2018	286.000	25.121	30.06.2023	<ul style="list-style-type: none"> The main objective of the project is to establish National Center for Herbal Medicine (NCHM) at PCSIR Laboratories Complex Peshawar. To upgrade research facilities according to WHO guidelines
		Sub Total PCSIR		8736.820	1459.016		
		PSF					
9	1044	Competitive Research Programme	CDWP 04-12-2017 DDWP Rev. 04.08.2021 Starting Date 20-06-2018	1964.500	163.973	30.06.2026	<ul style="list-style-type: none"> Provision of the Research Grants to address the mega national issues and promote world class research. Development of the new processes/ products/ applications/ technologies through native knowledge / skills of the researchers working in the universities and R&D Institutions. Multi-disciplinary Research on the mega issues of national

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10	1059	Financial Support to Scientific Societies in Pakistan (Phase-II)	DDWP 02-04-2020 Starting Date 02-08-2017	125.000	24.750	30.06.2024	To strengthen the role of Scientific Societies in Pakistan by providing them financial assistance for: i. Holding National and International Conferences, Seminars, Symposia, Workshops and Lectures on important scientific topics ii. Publication of Scientific Journals / Books iii. Develop and maintain the international linkages
11	1062	Launching of STEM in Pakistan, Phase-I	DDWP 10-12-2020 DDWP Rev. 04.08.2021 Starting Date 31-03-2021	993.784	87.000	15.10.2024	• To officially launch STEM, the modern tool for promotion of Science, Technology, Engineering and Mathematics Education in Pakistan. In the 1st phase, the project shall be launched initially in 50 pure government Higher Secondary Schools (HSSs) including 06 Cadet Colleges [total 50] from different districts of Pakistan, further extendable to another 400 schools in the next phase.
12	1065	National Digital Archive of Research published in Pakistan Journals	DDWP 02-04-2020 Starting Date 22.08.2020	56.000	5.782	30.06.2023	• Development of National Digital Repository of S&T Journals publish in Pakistan • Development of National Consortium of S&T Journals publishers of Pakistan • Capacity building of publisher's/researchers toward application/content utilization
13	1068	Science Talent Farming Scheme (STFS) for Young Students– Phase-I (Component-I)	CDWP 09-06-2015 06-07-2017 DDWP Rev. 17.12.2021 Starting Date 05-12-2015	1517.071	120.000	30.06.2025	• To identify the young students, interested and passionate towards science education through appropriate selection criteria like 3rd Party evaluation via written test, computer based IQ test and interview. • To groom and support the selected students all the way to the highest degrees by progressively exposing them to advancements in science and mathematics
		Sub Total PSF		4656.355	401.505		

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		PCST					
14	1060	First Industrial National Innovation Survey, PCST	DDWP 04-04-2016 Ext. 27.05.2021 12 Months Starting Date 01-07-2017	42.651	15.535	30.06.2023	<ul style="list-style-type: none"> To conduct a national survey of manufacturing sector for gaining insights into the industrial innovation process and gauging extent & nature of its innovation activities. To identify the factors hampering the innovation activities at the firm-level. To find out the motivational factors for firms for undertaking innovation activities.
15	1066	Need Assessment of S&T Human Resources for Driving Innovation and Achieving Vision 2025, PCST	DDWP 04-04-2016 Ext. 27.05.2021 12 Months Starting Date 01-07-2017	22.811	9.468	30.06.2023	<ul style="list-style-type: none"> To review and update current status of highly qualified S&T human resources i.e PhDs and M.Phil /MS (minimum 18 years of education), working in public/private sector universities, R&D organizations and industry. Tracking of PhDs produced in different disciplines during the last five years to gauge their gainful employment/ unemployment status.
		Sub Total PCST		65.462	25.003		
		NUST					
16	1043	Cloud Enabled Infrastructure for Research & Innovation	DDWP 02-04-2020 Starting Date 31-12-2020	57.000	0.000	31.12.2022	<ul style="list-style-type: none"> Upgrade of end-of-life and end-of-support NUST Main Data Centre facility from Tier-II to Tier-III standard. Enablement of OpenStack Cloud Infrastructure to Enable university IT horizon shift from traditional IT environment to contemporary / futuristic cloud computing environment, leveraging benefits of scalability and virtualized resources.
17	1052	Establishment of Additional Production lines for Research and Development of Indigenous Electromedical Devices at NUST	DDWP 26-03-2021 Starting Date 23-07-2021	396.363	105.300	23.07.2023	Establishing facility for indigenous research and development of electro-medical devices such as ventilators, PAPRs and syringe pumps etc. Later on these indigenously developed, cost effective and good quality electro-medical devices will be commercialize which will cut down hefty foreign exchange being spent on import of medical devices via import substitution.

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18	1054	Establishment of Centre for International Peace and Stability (CIPS) at NUST	DDWP 26-03-2021 Starting Date 14-07-2021	483.972	150.000	14.07.2023	<ul style="list-style-type: none"> • Serve as a bastion of Peace & Conflict Studies integrating Peacekeeping Training of military, police and civilian personnel for UN missions. • Promote civil-military diplomacy and interconnectivity with UN and International Agencies, UN Country Teams and other associated organizations; and Undertake research on current and prospective international / regional crisis and issues.
19	1070	Strengthening and Upgradation of Research and Development facilities and Accreditation of Laboratories in Accordance with ISO (17025 Certified) Standards (NUST)	DDWP 02-04-2020 Starting Date 09-08-2021	80.000	4.642	30.06.2023	<ul style="list-style-type: none"> • To Strengthen the Research & Development Activities at NUST through up gradation of labs. • To upgrade the engineering and research labs at NUST to cater for the requirement of greater integration of advanced lab work. • To enable NUST to pursue high impact research and commercialization ventures.
20	1076	Establishment of NUST Chip Design Centre	DDWP 11-05-2022 Starting Date 16-03-2023	912.000	70.000		
		Sub Total NUST		1929.335	329.942		
		NIO					
21	1064	Monitoring theSea Water Intrusion, Sea Level Rise, Coastal Erosion and Land Subsidence along Sindh and Balochistan Coast	CDWP 19-03-2018 DDWP Rev. 02-04-2020	730.000	147.582	22.08.2025	<ul style="list-style-type: none"> • To investigate Sea Water Intrusion along the coastal zone of Pakistan through scientific observations to assess rate of Sea Level Rise and Land Subsidence. • To find out causes of erosion through scientific observations and relevant data for assessing its impacts on coastal areas. • To develop mitigation strategy for countering Seawater Intrusion and Coastal Erosion.
22	1071	Strengthening Of Oceanographic Research Sub Station Gwadar Pakistan	DDWP 06-05-2021 Starting Date 23-07-2021	300.000	23.040	30.06.2023	Strengthen the Gwadar Sub-Station, adding 1 more laboratory (2 labs in total- refurbish the existing), computer lab/library /Seminar room, field and laboratory instrumentations and facilities. Improve the living accommodation for out of station
		Sub Total NIO		1030.000	170.622		

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		PCRET					
23	1056	Establishment of PAK-KOREA Testing Facility for PV Modules & Allied Equipment, PCRET - <i>Local share: Rs. 71.000 Million to be funded through PSDP</i> <i>KOICA Share: USD 8.00 Million (Rs. 1319.550 M)</i>	CDWP 06-05- 2019 Starting Date 08-08-2019	1391.179	6.833	08.08.2024	<ul style="list-style-type: none"> • Establishment of Accredited Testing Laboratory to facilitate the introduction of PV standards for imported and locally developed PV modules in Pakistan • To improve the quality and curtail the import of sub-standard PV modules in Pakistan • To raise awareness of “Performance /Safety standards” in PV technologies/products among the masses; through Seminars/Conferences etc.
		Sub Total PCRET		1391.179	6.833		
		NIE					
24	1069	Semiconductor Chip Design Facilitation Center	DDWP 02-04-2020 Starting Date 16-10-2020	169.500	15.001	30.06.2023	<ul style="list-style-type: none"> • To increase the availability of highly skilled professionals in the field of Semiconductor Chip Design. • To develop capabilities for the design of commercial grade digital ICs.
25	1075	Up-gradation of Printed Circuit Board (PCB) facility	DDWP 02-04-2020 Starting Date 16-10-2020	93.500	9.363	30.06.2023	<ul style="list-style-type: none"> • To add new equipment, to support micro-level PCB etching and manufacturing. • To have small scale state of the art fabrication facility with a precision level of 4 mils.
		Sub Total NIE		263.000	24.364		
		PSQCA					
26	1045	Construction of Offices & Labs, PSQCA at Quetta.	DDWP 26-8-06 Rev 9-7-07 Rev.II 01-09-16 Rev. III 16.01.18 Starting Date 01.05.2017	53.730	0.000	30.06.2023	<ul style="list-style-type: none"> • The primary objective of this project is to establish offices and labs of PSQCA at Quetta. Following are the specific objectives: (1) To provide testing facilities for products standards to cater provincial, national and international requirements and organization will generate revenue from the testing facility. (2) Department will save the rental expenditure amount of SDC Regional Office, Quetta. (3) Information Network System for instant availability of

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27	1058	External Development of PSQCA Building Gulistan-e-Johar Complex at Karachi	DDWP 04-04-2016 Rev. 04.08.2021 Starting Date 25-09-2017	65.000	0.000	30.06.2023	<ul style="list-style-type: none"> The Main Objective of this project is to protect the building from environmental impact like land sliding and cracks in the Building Structure as well; because the nature of hill soil is decaying type and starting decaying more in rainy season which is affecting the Johar complex building in the form cracking damages, hence essentially require external development to protect this public asset. Since the establishment of the PSQCA Johar complex, it is
		Sub Total PSQCA		118.730	0.000		
		MoST Secretariat					
28	1042	Certification Incentive Program for SMEs under PQI Initiative 2025	CDWP 21-12-15 Rev.I 19.03.18 DDWP Rev. II 09.11.20 Rev.III 04.08.2021 Starting Date 28-01-2016	800.000	100.000	30.06.2024	<ul style="list-style-type: none"> To create awareness among the SMEs for adoption of certification systems to help improve their performance and productivity. To organize training programmes for the stakeholders to develop and implement certification systems covering Quality, Environment, Safety/ Security, GMP & Product Certifications etc.
29	1057	Establishment of Planning, Monitoring & Evaluation (PM&E) Cell in Ministry of Science & Technology	DDWP 27.5.2021 Rev. 04.08.2021 Starting Date 16-09-2021	130.000	0.000	16.09.2024	<ul style="list-style-type: none"> Playing a role of mentor in designing, implementation/ execution and completion of projects received through PSDP, Knowledge Economy Task Force, CPEC and Civil Military. Provision of necessary support through hiring of Project Management experts and establishing specialized units to handle workload of the Ministry
		Sub Total MoST Secretariat		930.000	100.000		
		Task Force					
30	1047	Data Repository of Scientific Instrumentation	DDWP 27-05-2021 Starting Date 27.08.2021	300.000	35.000	27.08.2024	<ul style="list-style-type: none"> To provide funds for instrumental access to the research institutions, universities, R & D organizations, and strategic research centers of Pakistan to carry out sample analysis. To facilitate faculty and research staff of newly developed, as well as existing institutions that lack scientific instrumental facility

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31	1051	Establishment of "National Centre of Failure Analysis (NCFA)" - IST	DDWP 10.12.2020 Starting Date 01-12-2021	550.000	39.800	01.12.2025	<ul style="list-style-type: none"> To develop a center of excellence at national level for "Failure Analysis" of mechanical parts, with an aim to provide in-country support to variety of organizations from SPD, defense and public / private sector industries To provide a centralized platform for comprehensive material advisory services for selection of suitable materials to manufacture parts of high quality standards.
32	1053	Establishment of Centre For Artificial Intelligence (AI) In Health Sciences (Knowledge Economy Initiative)	CDWP 09-12- 2019 Starting Date 06-01-2020	321.450	10.000	30.06.2023	<ul style="list-style-type: none"> To build up the national / provincial level center in AI for research and training purposes. To raise awareness in the masses of people to the use of AI in daily life. To establish a hub of innovation for the applications of AI and to create entrepreneurship in AI areas of research.
33	1055	Establishment of Facilities for Industrial Production of Nanomaterials in Latif Ebrahim Jamal Nanotechnology Center (Knowledge Economy Initiative)	CDWP 06-08- 2019 Starting Date 01-10-2019	714.533	60.329	30.06.2023	<ul style="list-style-type: none"> To develop easy to clean Nano-coated surface on ceramics or glasses through specialized techniques in nanotechnology. To develop metal oxide nanoparticles coat glazing with sterilizing and anti-fouling properties. Similarly, with the help of nanotechnology to develop self-cleaning glass.
34	1061	Gene Editing of Biological Agents for Nutritional Biochemical and Therapeutical purpose	DDWP 10.12.2020 Starting Date 26-04-2021	1799.598	647.943	25.04.2024	<ul style="list-style-type: none"> Establish an advanced gene editing facility at PCSIR along with associated equipment and systems that could be used for a wide range of purposes such as nutritional and therapeutic purposes, leading to indigenous commercial/industrial manufacturing. Develop indigenous strain development genetic engineering capability in terms of R&D and subsequent commercial production
35	1063	Medical Equipment & Devices Innovation Center (MEDICen)	DDWP 27.5.2021 Starting Date 09.11.2021	1989.520	90.000	09.11.2025	<p>The MEDICen will aim to:</p> <ul style="list-style-type: none"> Assist Pakistani Medical and Surgical Manufacturers in research and development of Medical equipment not only to cater for local market demand but also for export. Understand and synthesize the local medical device industry support requirement, skill development, ecosystem, viability of manufacturing in Pakistan.
		Sub Total Task Force		5675.101	883.072		
		Grand Total		24795.982	3400.357		