

Department of Biotechnology

1. Industrial and Entrepreneurship Development (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2022-23	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
300	1.	Promoting biotechnology park for the development of biotech industry in the country	1.1 No. of new Biotech Park established in the current year	2 ¹	1. Enhancement in the innovation and entrepreneurship in the biotech sector, to create a knowledge translation ecosystem and to promote and support public private partnership innovation programs	1.1 Total no. of patents filed/granted	62
			1.2 No. of Biotech Parks supported in the current year	4		1.2 Total no. of products/technology developed/commercialized	80
	2.	To promote linkages between universities, research institutions and industries	2.1 Total no. of existing Bio-clusters supported	2		1.3 Total no. of beneficiaries utilizing the resources established in the cluster	1218
			2.2 Total no. of startups/Entrepreneurs supported and Industry Academia linkages established	5		1.4 Total no. of manpower supported/trained	826
			2.3 Total no. of new facilities developed	9		1.5 Total no. of Entrepreneurs, Startups/SMEs/Industry supported	1005
	3.	To promote and support public private	3.1 No. of entrepreneur, start-ups supported in	1000		1.6 Total no. of startups getting follow on funding	32

¹ NB: Annual- 2 means, frequency of the indicator is 'Annual' and the target of the indicator is '2.' Similarly, all noting may be understood in preceding line.

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24			
	2022-23	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
	partnership innovation programs		the current year				
		3.2	No. of bio-incubators supported in the current year	70			
		3.3	No. of Small Business Innovation Research Initiative (SBIRI) supported in the current year	40			
		3.4	No. of Biotechnology Ignition Grant (BIG) grantees supported in the current year	300			
		3.5	No. of Biotechnology Industry Partnership Programme (BIPP) projects supported in the current year	36			
		3.6	No. of Promoting Academic Research Conversion to Enterprise (PACE) projects supported in the current year	45			

1. Biotechnology Research and Development (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24				
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24	
	1. To promote the research and development.	1.1	No. of ongoing projects as on 1 st April of current year	2759	1. Development in research and innovation in the biotechnology sector.	1.1	No. of projects completed in the current year	687
		1.2	No. of new projects sanctioned during the current year	645		1.2	No. of publications resulted from completed projects in the current year	892
		1.3	No. of products or technologies developed/transferred/commercialized (including software and databases) resulted from completed projects in the current year			66		
		1.4	No. of Patents filed/granted/commercialized resulted from completed projects in the current year			84		
a. Knowledge Generation & Discovery Research, New Tools and Technologies								

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
	1.	Basic Research in Modern Biology, Biosystems & Bioprocess Engineering, Nano-Biotechnology, Genetic Engineering & Technologies and Bioinformatics	1.1 Databases/softwares developed	45	1. Basic Research in Modern Biology, Biosystems & Bioprocess Engineering, Nano-Biotechnology, Genetic Engineering & Technologies and Bioinformatics: Enhanced research and innovation	1.1. Genome Edited Events/Model Organisms/Cellular Systems generated	4
			1.2 Bioinformatics centers supported	45		1.2. Development of nanotized products/nanotization of existing products with enhanced efficiency	3
	b. Medical Biotechnology: Frontier research & innovation in Modern Biology for Healthcare						
	1.	Infectious Disease Biology	1.1 No. of workshops/symposia/Brainstorming meetings/trainings organized in DBT funded projects	12	1. Affordable Healthcare (Rare and Genetic Disorders)	1.1 Number of newborns screened for Genetic Diseases (in Aspirational Districts) under the UMMID Initiative	90000
	2.	Affordable Healthcare (Genomics)	2.1. Microbiome Profiling of a subset population under Microbiome India	820		1.2 Screening for Genetic Diseases (in Aspirational Districts) under the UMMID Initiative	180000
			2.2. No. of genomes sequenced under Genome India	4000			
	3.	Affordable Healthcare (Rare and Genetic)	3.1. No. of Nidan Kendras Established/supported under UMMID Initiative	20			

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2023-24			OUTCOMES 2023-24				
	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24	
	Disorders)	3.2	Number of Doctors trained under UMMID Fellowship in Genetic Diagnostics	28				
	4. National Biopharma Mission	4.1	No. of completed projects supported for development of affordable biopharmaceuticals (vaccine/biosimilars)	8	2. National Biopharma Mission.	2.1	No. of vaccine candidates/Biosimilars accelerated through various stages of development	8
		4.2	No. of ongoing projects supported for development of affordable biopharmaceuticals (vaccine/biosimilars)	2		2.2	No. of diagnostic kits/medical devices developed	9
		4.3	No. of completed projects supported for development of affordable diagnostics kits/ devices.	9		2.3	No. of manpower trained	200

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
		4.4	No. of completed projects under Scientific Research	5			
		4.5	No. of ongoing projects sanctioned under Scientific Research	3			
		4.6	No. of workshops / trainings conducted	12			
	c. Bio resources, Clean Energy and Environmental Biotechnology						
					1. Capacity building and scientific advancements	1.1. Development and demonstration of algal biofuel at pilot scale, scale up of cellulytic enzyme and testing at 2G ethanol pilot plant	1
						1.2. Scale up of Clean technologies for treatment of municipal solid waste (biomethanation) and sewage (cavitation and algal photobioreactor, constructed wet	3

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
						land	
	d. Agriculture biotechnology and allied areas: Support R&D Scientific advancements						
	1. Agriculture biotechnology and allied areas: Support R&D Scientific advancement	1.1 No. of Facilities (Speed Breeding & genomic selection) established		2	1. Gene Editing (Nutritionally Enriched and Climate Resilient Crops) & Release of Crop Varieties	1. No. of improved varieties/gene edited varieties	5
	2. Animal Biotechnology: support R&D and Scientific Research	2.1 No. of workshops/symposia/Brainstorming meetings/trainings organized in the DBT funded projects	4		2. Animal Biotechnology: New Diagnostics and vaccines under	3.1 Number of new/improved veterinary products/biologicals/devices/technologies (including software and databases)	4
3.2 Number of new/improved diagnostic kits/assays for livestock & animal diseases						4	
3.3 Number of new/improved veterinary						4	

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
						vaccines/ vaccine candidate for livestock & animal diseases	
e. Human Resource and Development							
	1. Human Resource Development (HRD): Provide support to star colleges, PG teaching programs, STP training programs, JRF, RA	1.1 No. of colleges supported under star college scheme	120	1. Creating skilled human resource	1.1 No. of students opting for PG courses from STAR Colleges	1000	
		1.2 No. of PG student trained	1200	2. Generation of knowledge and highly trained manpower for teaching and R&D Recognize and nurture researchers	2.1 No. of students got placement after receiving BITP/ /Skill training	100	
		1.3 No. of DBT-JRF fellowships awarded in the current year	400	3. HRD: Recognize and nurture researchers: activities supported for Accelerate Vigyant	3.1 No. of researcher benefitted through CTEP activities	4000	
		1.4 No. of DBT-RA fellowships awarded in the current year	100				
		1.5 No. of DBT-JRF-SRF ongoing Fellows supported	1000				
	2. Activities supported for	2.1 No. of Faculty Development/ Training programs conducted	12				

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
		Skill Vigyan Programme	2.2 No. of students trained under BITP	200			
			2.3 No. of students trained under students Students Training/Technician Training Programme	200			
	3.	HRD: Provide support to researchers for undertaking innovative research & development activities in field of biotechnology	3.1 Total number of projects/women scientists supported under Bio CARE	50			
			3.2 No. of Ramalingaswami Re-entry fellowships selected	75			
			3.3 No. of Tata Innovation fellowships awarded	10			
			3.4 Innovative Young Biotechnologist Fellowship awarded in the current year	15			
			3.5 National Bio-Science Fellowship for Career Development	10			
			3.6 National Women Bio-Scientist Fellowship	3			
			3.7 National Biotechnology Innovation Award (NBIA) given in current year	2			
			3.8 MK Bhan-Young Research Fellowship Program	50			
	4.	HRD: Recognize and nurture	4.1 No. of CTEP activities: Conference	150			

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24	
	researchers: activities supported for Accelerate Vigyant	4.2	No. of CTEP activities: Travel Grant	415				
		4.3	No. of CTEP activities: Popular Lectures	25				
		4.4	No. of CTEP activities: Exhibitions	10				
f. Biotechnology Research Resources and Facilities								
	1. Activities supported for Infrastructure Development	1.1	No. of national facilities established under DBT-SAHAJ	5	1. Research Resource Service Facility Programme	1.1	Total No. of users utilizing the facilities (academia and external users)	3000
		1.2	No. of universities supported under DBT-BUILDER	10		1.2	No of R&D project using this facility	60
g. International Cooperation								
	1. Research and Development activities	1.1	Total Joint International call for proposals announced in current year	5	Research and Development activities	1.2	No. of New Research Personnel supported in current year	10
		1.2	Total no. of new international collaborative research projects funded in current year	10				

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	2023-24	Output	Indicators	Targets 2023-24	Outcome	Indicators	Targets 2023-24
			1.3 Total no. of workshops organized/supported in current year	10			
	h. Biomedical Research Career Programme/ DBT-WT India Alliance (IC)						
	1. Build strong, world class biomedical research human resource	1.1 No. of research grants provided financial support in current year	18	1. Catalyze high-quality biomedical research and building research capacity in India	1.1 No. of researchers supported with grants/fellowships	72	
		1.2 No. of research fellowships activities supported in the current year	39				
		1.3 No. of research management fellowships supported in the current year	15				
	i. Biotechnology Based Societal Development						
	1. Expansion of rural bio-resource complexes / Technology demonstration centre / Units (Activities supported for Infrastructure development)	1.1 Number of rural Bio-resource Complexes/Rural Technology Clusters supported in Aspirational districts	25	1. Generation of opportunities for self-employment	1.1 No. of self-employment Generated	160	
							2. Diffusion of proven and field-

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		tested technologies through demonstration, training & extension activities	conducted			interventions introduced for application		
		2.2 Total no. of beneficiaries trained / attended workshops		2500				
	3.	Biotech KISAN	3.1 No. of Biotech-KISAN Hubs supported	36	2.	Biotech KISAN	2.1 No. of farmers beneficiaries (under both Demonstration & Training programmes)	50000
			3.2 No. of demonstrations carried out	400			2.2 No. of Women and Tribal farmer beneficiaries	10000
			3.3 No. of interventions carried out	40			2.3 No. of scale up activities carried out KVK's and State Agriculture Departments	50
			3.4 No. of Hands-on workshops and training programmes conducted for farmers	160			2.4 No. of successful bio-entrepreneurs developed	50
			3.5 No. of training programme conducted for bio-entrepreneurship development	40				
			3.6 No. of districts covered	150				
	j. Program for NER (North Eastern Region)							
	1.	Support R&D Scientific Advancements	1.1 Number of Biotech Hubs supported in NER	20	1.	R&D addressing NER specific	1.1 Number of NE specific germplasm /	500

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					challenges	bioresources/ samples collected and deposited in regional /national repositories	
		1.2 Number of NER specific Challenges addressed (in Agriculture/ Medical/ Environmental and allied areas) through network projects	5			1.2 No. of products/technologies developed (new crop lines or varieties, breeding protocols, diagnostic kits, vaccines, value-added products etc)	4
		1.3 Number of endemic bioresources targeted for interventions towards livelihood generation in NER	10	2. NER: Human Resource Development to match evolving needs of the region	2.1 Number of trainings/workshops/symposia conducted	50	
					2.2 Number of UG/PG/PhD students benefitted	1000	
				3. Development of Bioresource for generation of	3.1 Number of technological interventions	10	

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					Livelihood security and Entrepreneurship in NER	introduced / scale up activities/field demonstrations carried out	
						3.2 Numbers of Beneficiaries/Farmers/local entrepreneurs trained	500