

List of completed CSIR Funded Projects:

Sr. No.	Project Name	Total Cost (in lakhs)
1.	Preclinical Efficacy Validation in Non-Human Primate Stroke Model of Anti-Thrombin-Clot Specific Streptokinase (ACSSK), With Dual Properties of Fibrin Specific Clot Dissolution and Prevention of Arterial Re-Occlusion, for the Treatment of Acute Myocardial Infarction and Ischemic Stroke	792.04
2.	iPRESS: Integrated Plant REgulomics Software & Server	174.540
3.	Genetic improvement of high value medicinal plants (NCP)	373.650
4.	Functional characterization of the host (plant) and vector (whitefly) proteins in systemic immunity and transmission of virus and virus-like pathogens	217.090
5.	Exploration of Himalayan Plants for Novel Antimalarial Agents: Charaterization of potential molecules (Phase-II)	194.600
6.	High resolution NextGen remote sensing for medicinal, aromatic and commercially important crops	288.090
7.	Next generation genomics for genetic improvement of <i>Stevia rebaudiana</i> Bert	376.560
8.	Introduction, Charaterization and cultivation of <i>Ferula assa- foetida</i> (Heeng) in cold desert regions of Indian	378.752
9.	AI based methodology for grading machine Harvested tea leaves	71.800
10.	Development of bare-root seedling simulations system and automatic seedling transplanted for stevia (FBR)	26.440
11.	Up-scaled production of disease free corms of saffron (<i>Crocus sativus</i>)	45.270
12.	Development of processes for edible and industrial dyes from plant sources for enhanced income	111.040
13.	Biostimulants Network Project titled "Bio-stimulants for stress amelioration, enhanced plant productivity and soil health	18.740
14.	Biostimulants Network Project titled "Bio-stimulants for stress amelioration, enhanced plant productivity and soil health (FBR)	280.000
15.	Development of botanical formulation using <i>Artemisia maritima</i> extract for the control of aphids in cabbage/cowpea (DBAM)	50.000
16.	Genome-Editing Network Project entitled "Genome-editing for crop improvement (GE-Crop) (FBR)	148.000
17.	Endophytes Network Project entitled "Deciphering the mechanism(s) of host-endophytes' coevaluation, enhanced secondary metabolite production and crop productivity (FBR)	244.860
18.	Conservation of threatened plant species of India (FBR)	299.72

Sr. No.	Project Name	Total Cost (in lakhs)
19.	Development of microalgae based protein and micronutrient rich animal feed (FTT)	70.100
20.	Trapping glycation intermediates for the modulation of diabetes and its complications: a natural product derived therapeutic approach	67.65
21.	Corona Sample Testing Project	38.45
22.	Characterization of reverse transcriptase (RNA dependent DNA polymerase) activity from greenhouse whitefly <i>Trialeurodes vaporariorum</i>	90.08
23.	Bioprospecting kinetically stable lytic polysaccharide monooxygenase(s) (LPMOs) for accelerated degradation of lignocellulosic biomass	95.58
24.	Investigating mechanisms underlying transgenerational heat stress adaptation in plants	100.00
25.	Revealing the Chloroplast Oxi-proteome and Engineering ROS-insensitive Photosynthetic Apparatus	95.00
26.	What makes 'asafoetida' – understanding the specialized terpenoid metabolic pathway?	87.9216
27.	Design and development of Dry Bio-Toilet (DBT) for the Himalayan region [Renamed as "Utilization for compost booster for newly designed and developed sanitary dry toilets with the recovery of fertilizer from human urine in the Himalayan region (ComSan-DT)"]	126.00
28.	Low Temperature Adapted Methanogenesis (LTAM) process for sustainable sewage management in Himalayan and Sub-Himalayan climates (LTAM-HIMS)	45.78
29.	Technology upscale for production of naphthoquinone red pigments using <i>Arnebia euchroma</i> leaf-induced adventitious roots in indigenized bioreactors	134.14
30.	CSIR Aroma Mission (Phase II)	1361.09
31.	Advancing Technological Leads for Assuring safety of food (ATLAS)	18.430
32.	Immuno Modulatory Function of Nutritionals and Nutraceuticals for Health and Wellness (Immunity Mission)	605.97
33.	CSIR Floriculture Mission	3832.38609

List of Completed Consultancy, Grant-In-Aid and Sponsored Projects:

SNo	Title of the ongoing Project
1.	Fortification of mountain crops for value addition
2.	Exploring epigenetic control of grain filling in wheat under heat stress
3.	Development of Herbal Formulations from Seabuckthorn
4.	Genetic dissection of micronutrient content and composition in foxtail millet grains for identification of novel genes and their characterization
5.	Tea genome sequencing
6.	High throughput genotyping to expedite the genetic characterization and dissection of important agronomic traits of tea
7.	Development of novel functional foods for amelioration of Oxi-Inflamm-Aging and its pathogenesis in progression of inflammatory disorders during aging
8.	Bringing back the real green: eradicating invasive species and restoring ecosystem through community participation
9.	Understanding the nature of alpine timberlines of Himalaya: integrating ecological and scenario studies for assessing the impact of climate change
10.	Advanced Diploma Program in Plant Tissue Culture
11.	In vitro adventitious root cultures of Picrorhiza kurroa as an alternative source of nutraceutical ingredients
12.	Indian Bioresource Information Network (IBIN) Geoportal Phase III: Enhancing BioResource Services, Institutional Linkages and Outreach
13.	Exploring cold active pectinases bacteria of Western Himalayan regions for industrial applications
14.	Exploring the molecular mechanism of plant adaptation along an elevational gradient in Picrorhiza kurroa a high altitude medicinal plant through proteomics approach
15.	Commercial Scale Production of Tea Catechin from Green Tea Leaves, Development of Formulations as Nutraceuticals and their Human Intervention Studies
16.	Development of rapid and cost effective 'on-farm' diagnostics for plant viruses
17.	Development of geo-tagged digital database and spectral library of medicinal plants in cultivation in the foothills of western Himalaya
18.	Valorisation of bioactive phytochemicals from underutilized tea plant parts and sustainable development of nutraceuticals/formulations
19.	Application of Improved Tea Agrotechnologies for Higher Productivity, Quality and returns for Upliftment of Small Tea Growers In Himachal Pradesh
20.	Study the role epigenetics in Capsicum F1 hybrid heterosis and development of epigenetic markers to be used in future capsicum breeding programme
21.	Improvisation of the traditional practices of night soil composting using microbiological intervention for sustaining agro-ecosystems in the Lahaul valley of western Himalaya
22.	Characterizing Patterns and Processes of Alpine Ecosystem in Indian Himalaya with Special Emphasis to Himachal Pradesh
23.	Value addition and characterization of traditional food crops of Western Himalayan for livelihood enhancement
24.	Ex-situ conservation and development of gene bank of commercially important threatened medicinal plants in the high altitude areas, Himachal Pradesh
25.	Promoting conservation of declining life support forest tree species in Himachal Pradesh
26.	Genomic Services under Analytical Services
27.	Improvement of Biomethanation in anaerobic digesters in cold regions with interventions of anaerobic psychrotrophic bacteria

SNo	Title of the ongoing Project
28.	Elucidating the role of host transcription factor (s) in disease development by cucumber mosaic virus
29.	Studies on Technology and Innovation Management
30.	Himalayan Alpine Biodiversity Characterization and Information System - Network
31.	Rapid and onsite diagnostic for viruses and viroid infecting apple
32.	Studies to identify host factors that are manipulated by cucumber mosaic virus for disease development and spread
33.	Comparative structure modeling and simulation approach to improve the bio-physicochemical properties of industrial important enzyme Superoxide dismutase obtained from <i>Potentilla atrosanguinea</i>
34.	Establishment of small and Hi-Tech nurseries of Bamboos at CSIR-IHBT, Palampur under restructured National Bamboo Mission (RNBm)
35.	Preparation of People's Biodiversity Register (PBR) of seven blocks of Kangra District, Himachal Pradesh
36.	Metagenomic exploration for efficient and stable bacterial L-asparaginase and its nano-conjugation for therapeutic application
37.	Identification and purification of antifreeze proteins and peptides from barley and unveiling their role in cryopreservation of RBCs
38.	Skill Vigyan Program
39.	Cisgenetic engineering of rice (<i>Oryza sativa</i>) susceptible elite cultivars for enhanced disease resistance using genome editing CRISPR/Cas9 technology
40.	Evaluation of micronutrient fortification and menu diversity on the health indices of anganwadi attending children aged between 3 and 6 in Panchrukhi block, Palampur tehsil, Kangra dist., Himachal Pradesh
41.	Developing bioplastic blends for food packaging using polyhydroxyalkanoate and violacein from Himalayan bacterium <i>Isolobacter</i> sp
42.	Taxonomic characterization and geospatial distribution of the genus <i>cremanthodium</i> Benth. In Indian Himalaya
43.	Evaluation of role of endophytes in mogroside production of <i>Siraitia grosvenorii</i>
44.	Investigation of Novel Formulation Approaches for Improving the Bioavailability of Dietary Phytochemicals
45.	Does it take two key regulatory genes ASYMMETRIC LEAVES1 and REVOLUTA to make a pitcher in <i>Nepenthes khasiana</i> ?
46.	DBT City/Regional clusters for covid-19 Testing-phase II: Scaling up of Covid-19 testing by hub and spoke model
47.	Agro-ecology in Himalayan States with Special Emphasis on Marketing
48.	Next generation genomics for conservation and improvement of an endangered medicinal herb, <i>Angelica glauca</i>
49.	Introduction of Monk Fruit cultivation: A new initiative in Himachal Pradesh
50.	Bio-prospecting and product development from <i>Curcuma longa</i> (turmeric) in Uttarakhand
51.	Establishment of bamboo treatment & seasoning plants and incense stick making
52.	Preparation of People's Biodiversity Register (PBR) at Panchayat level for Himachal Pradesh
53.	Elucidating the thermoresponsive pathway underlying the regulation of flowering in saffron (<i>Crocus sativus</i>)
54.	Deciphering the mechanism of epidermal cell differentiation leading to prickly formation in <i>Rosa hybrida</i>
55.	Evaluation of thermostable variants of copper, zinc superoxide dismutase in combating oxidative stress in <i>Arabidopsis thaliana</i>

SNo	Title of the ongoing Project
56.	Next-generation genomics for genetic improvement and conservation of endangered Himalayan medicinal herb, <i>Saussurea costus</i>
57.	Exploring stress sensitivity and nutritional quality of underutilized grain amaranth (<i>Amaranthus</i> spp.) under climate change
58.	Entrepreneurship Skill Development on Enzyme Bioprocessing
59.	Genome-wide association study for anti-nutrient traits in pearl millet to harness maximum health benefits
60.	Promotion and post-harvest value addition of four important herbs for improvement of livelihood security in cold desert areas of Himachal Pradesh
61.	Genomic Surveillance program for SARS-CoV-2: Consortium of India and Sri Lanka (Ref: 223547/Z/21/Z Dated: 24.01.2022)
62.	Modelling forest phenological parameters from time series remote
63.	Assessment of Carrying Capacity of Eco-sensitive Zone (ESZ) of Renukaji Wildlife Sanctuary, District Sirmaur, Himachal Pradesh