

Detail of PARB Ongoing Projects

Sr. #	Project #	Title of Project	Total Budget (Cost in Million)
1	272	Improving Nitrogen Use Efficiency In Agriculture Using Urease Enzyme Inhibitors	17.016
2	288	Development of Sorghum-Sudan Grass Hybrids for Better Forage Yield and Quality under normal and Drought Stress	27.288
3	379	Developing guidelines for improving water use efficiency and testing of locally developed water soluble fertilizers under drip irrigation system for various crops	32.596
4	426	Development of transgenic cotton with multiple genes resistant to cotton leaf curl virus	23.235
5	437	Development of bio-pesticides for the control of soil-borne diseases of tomatoes and chillies caused by <i>pythium</i> and <i>phytophthora spp.</i>	29.91
6	445	Redesigning, Fabrication and Adoption of a Self-Propelled Sugarcane Stripper for Improving Labour Productivity and Sugar Recovery	8.785
7	453	Use of Distillery Waste Product as a Growth Promoter in early weaned Male Calves	7.58
8	469	Nutritional Enhancement of Agricultural Wastes and its use in Animal Feeding) to enhance productivity	17.278
9	492	Identification of superior buffalo bulls of nili ravi breed for increasing milk production through selection by estimation of breeding values and genome analyses	41.51
10	509	Milk Production Potential, Reproductive Efficiency and Milk Nutraceutical value of Brelia Camel (<i>Camelus Dromedaries</i>) of Cholistan kept under Intensive Management	48.652
11	532	Development of short duration, high yielding and disease resistant mungbean cultivars for Rice-Wheat Cropping system	30.44
12	538	Impact of managed pollination by <i>Apis mellifera L.</i> on the yield of different crops	13.012
13	563	Development of Drought Tolerant doubled haploid maize hybrid for Plant Breeding & Genetics	29.137
14	576	Enhancing growth and productive performance in native aseel chickens employing integrated selective breeding and identification of growth markers for poverty alleviation in rural areas	26.21
15	582	Utilization of poultry farm litter and dead birds compost as livestock feed ingredient and agriculture fertilizer	22.8873
16	594	Collection, characterization & maintenance of germplasm of indigenous forest, medicinal and endangered plants in Punjab	26.5529
17	599	Pre and Post Harvest Management of Aflatoxin in groundnut Contamination in Groundnut	39.532
18	600	Development of short duration, sunflower hybrids with better yield	31.767

19	638	Development of inactivated polyvalent vaccines for the control of mastitis in dairy cattle	10.905
20	645	Production of Foot & Mouth Disease (FMD) Recombinant Vaccine	32.47
21	650	Development, Evaluation and Promotion of Straw Based Pelleted TMR for Enhancing Quality Mutton Production	27.991
22	752	Development of high oil content cotton lines/genotypes through conventional breeding strategies	20.000
23	799	Growing Vegetables Hydroponically under Conventional High Tunnels	4.988
24	851	Development of a new herbicide trait and its transformation into wheat and cotton	32.088
25	888	A comparative integrated scientific approach for the development of sustainable management strategies of pink bollworm (<i>Pectinophora gossypiella</i>)	36.195
26	889	Management of Whitefly by integrated strategies and development of resistant cotton germplasm through genetic engineering	39.671
27	890	Training of Agriculture Extension Wing, Federal seed certification & Registration department and private sector personnel in detection, identification and quantification of BT cotton	10.878
28	894	Cost Effective Improvement in the Nutritive Value of Rice and Wheat Crops Through Nanoparticles Doped Biochar in Saline Sodic Soils	21.902
29	900	Acceleration of maize breeding through inducer line mediated double haploid inbred line for the development of climate smart, high yielding maize hybrids	40.81
30	904	Nutrition enhancement of crops, fruits, vegetables and their products under climate change scenario	349.8
31	906	Crop diversification through Soybean and Sesame adaptability studies under changing climate	31.297
32	908	DNA barcoding/fingerprinting for identification of Cotton, Wheat, Maize, Potato, Tomato and Date Palm varieties	22.77
33	909	Weeds management in chickpea through identification of post-emergent herbicides and development of herbicide tolerant genotypes	27.498
34	910	Development of Weedicide tolerant lentil germplasm and identification of different weedicide for weed control in lentil	16.551
35	911	Diversification of cropping by promotion of Sohanjna (<i>Moringa olifera</i>), Caster bean, Barley, Taramera (<i>Eruca sativa</i>)	32.252
36	913	Enhancement of mungbean and gram production in Thal through development of improved genotypes and technologies to reduce pulse import bill	28.741
37	914	Development, Optimization and Technology Dissemination of value added products of selected fruits and vegetables	14.309
38	916	Development and commercialization of tomato hybrids and varieties suitable for sowing in tunnels and open fields of Punjab	29.113
39	919	Nutrients management to control citrus decline	6.723
40	921	Advance training programme in UK for up skilling Punjab Agriculture Extension Staff (ATP-UK)	29.482
41	922	Development of cotton variety suitable for mechanical picking	22.00

42	924	Acquisition of advance technologies for cotton production and characterization of Cotton Germplasm	0.49
43	926	Evaluation of Efficacy of PB Ropes in different ecological zones of Punjab	0.5
44	932	CRISPR/Cas9 based virus resistance in cotton	0.907
45	933	Genetic Engineering for Enhancing Salinity tolerance in Wheat	1.008
46	934	Agricultural Input Marketing in Pakistan: Implications for Food Security	1.3552
47	935	Metagenomics and whole genome sequencing for characterizing indigenous chickpea root associated rhizobia from Thal region of Pakistan for diversity analysis and bio inoculant development.	0.812
48	936	Transgenic approaches for the development of drought and salt tolerance in wheat	1.5678
49	937	Genetic Improvement of Sorghum as Biofuel Feedstock Using High Throughput Phenomics and Genomic Approaches	2.4976
50	938	Identification of drought responsive genes through transcriptional profiling of drought responses in Chickpea.	0.4502
51	939	Prediction of Sustainable Soil and crop management practices under climate change scenarios in upland of Balochistan	1.5662
52	940	Climate smart wheat: Development of heat and drought tolerant wheat for Pakistn	2.6992
53	941	Implementing climate-smart dry chain technology for improving livelihoods of the maize farming community in Pakistan.	1.244
54	942	Modiling approach for assessing the impact of climate change on growth and yield of wheat and groundnut and possible adaptation/management strategies under raianned condition	1.8948
55	943	Metagenomics of Mosquitoe vectors and abundance of Mosquito-borne pathogens in different Agro-Geoclimatic Areas of Punjab.	2.0787
56	944	Variable rate agro-chemical application system in citrus orchards using on-the-go sensor	0.8512
57	945	Sensor based precision irrigation systems for improving water productivity of cereal crops	0.784
58	946	Development of real-time weed detection system for spot application of herbicides in Maize	1.092
59	947	Designing and Implementing Irrigation Management Information System using Cellular Communication Network in the selected area of Punjab.	0.5376
60	948	Use of ICT in Marginal and Disadvantaged regions as an alternate strategy for agricultural technology transfer: challenges and opportunities.	1.013
61	949	Youth And Gender Mainstreaming In Agricultural Activities Through Need Based Capacity Building In Punjab And KPK	1.5333
62	950	Developing climate-resilient plant-based recombinant subunit vaccine against Foot and Mouth Disease Virus of Livestok.	6.1388
63	951	Improvement of berseem clover (<i>Trifolium alexandrinum</i>) seed quality by managing fungal seed infections and infestations with a special emphasis on stem and crown rot	5.3038
64	952	Resistance gene analogues based molecular identification for	6.673

		dieback disease resistance in Shisham (<i>Dalbergia sissoo</i>)	
65	953	Development of DNA based markers for identification and improving food safety of meat and meat products.	5.184
66	954	Integrated management of guava (<i>Psidium guajava</i> L.) dieback in Pakistan	4.8288
67	955	Production and dissemination of heat tolerant rural chicken for egg and meat production	5.7842
68	956	Microbial based Pest management Program for Tephritid Fruit flies	4.42
69	957	Improving fruit quality and reducing postharvest losses in strawberry fruit	6.1559
70	958	Development of drought and heat tolerant wheat germplasm by dynamic assembly of leaf surface structural traits to self-irrigate with fog water	4.6995
71	959	Rapid development of high yielding drought tolerant line of wheat through introgression of stable QTLs/Genes based on novel 90K Iselect snp ASSAY AND Circular Consensus Sequencing (CCS)	5.992
72	960	Efficient Management of fruit flies (<i>Bactocera</i> spp.) by nano based pheromone trap technique	5.6602
73	961	Increasing soybean adaptability, yield and oil content by conventional plant breeding and genetic improvement practices	6.3861
74	962	Screening of exotic and local accessions for the development of forage and seed production technology of alfalfa.	8.26
75	963	Development of solar assisted multi-crop dryers and energy efficient storage structures for value addition and food security	5.3825
76	964	Genotyping and development of heat stress tolerant cotton germplasm with enhanced quality traits	5.1552
77	965	Characterization of <i>Dalbergia sissoo</i> and <i>Dalbergia latifolia</i> seed progenies for dieback tolerance	0.871
78	966	Composite flour technology; A step towards managing malnutrition and food security in Pakistan	6.1784
79	967	Policy perspectives regarding value Chain and marketing issues of Apricot and Apple	0.1983
80	968	Farm to Market Policy options for the promotion of Chickpea in Punjab, Pakistan.	0.193
81	969	Commodity analysis of selected vegetables i.e. onion, chillies, potatoes and tomatoes	0.1716
82	970	Policy paper on cotton: The back bone of agricultural sector and textile industry	0.172
83	971	Policy paper on high value crops (Guava and Strawberry): Constraints and Opportunities	0.25
84	972	Policy Paper of Oilseed Crops: Problems and Prospects	0.1883